The Globalization of Tobacco Use: 21 Challenges for the 21st Century

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Abstract

The globalization of tobacco began more than 500 years ago, but the public health response to the death, disease, and economic disruption that it has caused is fewer than 50 years old. In this report, the authors briefly trace the history of tobacco use and commerce as it moved from the Americas in the late 15th century and then eastward. They then discuss the wide range of issues that must be addressed, and the equally wide range of expertise that is needed if the global health community is to be successful in reducing, and eventually eliminating, the rising tide of tobacco use, particularly in the low- and middle-income nations that are the target of the multinational tobacco industry. CA Cancer J Clin 2010;60:50–61. ©2010 American Cancer Society, Inc.

Introduction

The children's poem that begins “In 1492, Columbus sailed the ocean blue…” omits an important second verse: “and thus began the globalization of tobacco—sad, but true.” By all accounts, tobacco use had been fairly widespread in the Central American and Caribbean regions, where Columbus first landed and explored, and perhaps through all of the Americas, for as long as 7000 years. However, to our knowledge, there is no known evidence of tobacco use outside of the Americas until the time of Columbus.1,2

Nevertheless, tobacco’s leap from the shores of the “New World,” its eastward journey, and its subsequent spread (with its attendant death and disease) began when Columbus and his crew brought tobacco leaves and seeds back from their first journey to the Americas. Its cultivation and use soon spread rapidly throughout Europe and further east over the next century. What began as a curiosity in Europe soon became a pleasure, then a necessary pleasure (due to the addicting properties of nicotine), and then a source of commerce. The endurance of tobacco use thus became assured: it had moved from an amusement to an addiction to a business.

Tobacco was subjected to considerable scrutiny during the intervening centuries and developed a wide range of both proponents and opponents. French diplomat Jean Nicot treated Queen Catherine de Medici’s migraines with tobacco, whereas English King James I wrote his famous Counterblaste to Tobacco and described smoking as “loathsome.” European physicians recommended tobacco as a cure for all manner of ailments, whereas Turkey imposed a death penalty for smoking tobacco. Russia’s Peter the Great encouraged tobacco use in his court, whereas the Qing Dynasty of China decreed death for violators of a smoking ban.1,3 These counterbalances in the global perspective on tobacco—pleasurable versus loathsome, wonder drug versus dangerous substance, instigator of the slave trade versus economic boon—continued through the first half of the 20th century.

And now, 500 years—half a millennium—after tobacco began its circumnavigation of the globe, it has at least 1.3 billion users, is killing more than 14,500 people every day, and is debilitating and sickening many times that number.3,4 Yet it is only in the past 50 years that tobacco science has caught up with tobacco economics and

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begun, in painstaking, evidence-based fashion, to
detail its chemical composition, the psychology of its
use, its dependence-producing properties, and the
appalling human and economic costs it has and con-
tinues to render.

Although it took nearly a century for tobacco to
make its first trip around the earth, it has, due to the
speed of modern communications, taken consider-
ably less time for word of the dangers of tobacco use
to spread. Although it is difficult to identify a specific
point at which knowledge of the disease conse-
quences of tobacco use was accepted by the global
health community (Dr. John Hill had warned of the
carcinogenic effects of tobacco use as early as 1761),
many believe that it was the series of studies con-
ducted in Germany during the 1930s and early
1940s, culminating in the 1950 publications by
Wynder and Graham and Doll and Hill, that
marked the beginning of the documentation in a
clear, scientifically indisputable way: that tobacco use
was a source of death and disease in humans.

This scientific documentation linking tobacco use
to a wide range of debilitating illnesses and disease
continued and accelerated through the 1950s and
early 1960s (including the key Joint Report of the
Study Group on Smoking and Health, based on the
1957 US panel assembled by the National Cancer
Institute, the American Heart Association, the Na-
tional Heart Institute, and the American Cancer
Society to examine the scientific evidence concerning
the effects of tobacco smoking on health). Then, in
1962 and 1964, respectively, 2 landmark documents,
the Report of the Royal College of Physicians in the
United Kingdom and the Report of the Advisory
Committee to the Surgeon General of the Public
Health Service in the United States, firmly es-

tablished in all but the most jaundiced eyes, as well as
those of the tobacco industry, the causal relation
between tobacco use and disease.

With the scientific debate about the link between
tobacco and disease conclusively established (al-
though essential scientific investigations in that arena
continue through the present day), a new phase in the
tobacco-disease continuum began: the public health
response to this now-recognized epidemic. Because
tobacco was more common in the Western, indus-
trialized countries (although by no means limited to
them), the earliest and most visible public health
efforts to contain the tobacco use epidemic took place
in those regions. A recent review of public health
efforts to reduce tobacco use in the United States
(which has mirrored similar approaches in, for exam-
ple, Australia and the United Kingdom) captures, in
capsule form, both the successes and the errors made
in these efforts, which, ultimately, have cut tobacco
use by 50% or more in the majority of the high-
income countries since population prevalence peaked
during the early 1960s.

Globally, the data are very clear in indicating
that the tobacco epidemic has now expanded to,
and become more focused on, the world’s low- and
middle-income countries (LMIC), due largely to
the expansion of the multinational tobacco indus-
try’s marketing efforts in Eastern Europe, Asia,
Africa, and Latin America. Fortunately, al-
though the sharply increasing tobacco use preva-

cence rates in these regions is cause for consider-
able alarm, the deadly experience of the high-
income nations need not be wholly repeated in the
LMICs. Resources not available in the mid-1960s
now abound: the World Health Organization
(WHO)’s brilliant Framework Convention on To-
bacco Control (FCTC) and its MPOWER report

and funding sources both large (such as the
Michael R. Bloomberg Foundation, the Bill and
Melinda Gates Foundation, and the Pfizer Foun-
dation) and more modest (such as Canada’s Inter-
national Development Research Corporation, the
Norwegian Cancer Society, the American Cancer
Society, and Cancer Research UK). In addition,
there is a significant body of tobacco-focused pub-
lic health research and intervention experience, as
well as experience in addressing both communica-
table and noncommunicable diseases (NCDs), on
which the LMICs may now draw as they address
the tobacco epidemics in their regions.

The FCTC in particular has been a global galva-
nizing force for the past decade, serving, as its name
implies, as a framework and road map for global
tobacco control efforts.

Now, in the early part of the 21st century, with
the FCTC in force in greater than 165 countries,
covering approximately 85% of the world’s popu-
lation, it is an appropriate time to look anew at the
challenges facing tobacco control. Although there
is good reason to focus on promoting those inter-
ventions that we know to have significant impact
on the reduction of the incidence and prevalence of
tobacco use (eg, increasing tobacco taxes; promoting smoke-free environments; banning tobacco advertising, sponsorships, and promotions), there is also reason (because every opportunity that may contribute to success needs to be exploited and because we need to take advantage of the full range of skills available among those who wish to contribute to tobacco use reduction) to consider the full range of interventions and tools that the data lead us to believe will also contribute to reductions in tobacco use. In some cases, guided by the FCTC and MPOWER frameworks, focus is required on increasing certain activities, policies, or interventions and, in other cases, reducing certain activities, policies, or interventions. Some suggested areas or challenges for increase/decrease are suggested and listed in Table 1 and briefly discussed below (in random, not strategic, order).

### TABLE 1. 21st Century Tobacco Control Challenges

| CHALLENGES TO INCREASE |
|-------------------------|
| ● Support for/adherence to the World Health Organization Framework Convention on Tobacco Control |
| ● Tobacco excise taxes/unit price of tobacco |
| ● Access to comprehensive treatment for tobacco dependence |
| ● Media-based tobacco countermarketing campaigns |
| ● Regulation of all tobacco products |
| ● Health warnings on tobacco packaging |
| ● Availability of tobacco health/economic information to the general public |
| ● Primacy of health over commerce in trade agreements |
| ● Basic and applied tobacco control research |
| ● Extent and accuracy of tobacco epidemiologic data |
| ● Litigation aimed at the tobacco industry |

| CHALLENGES TO DECREASE |
|------------------------|
| ● Physician and other health care provider tobacco use |
| ● Targeting of women for increased tobacco use |
| ● Exposure to secondhand smoke |
| ● Illicit trade and smuggling of tobacco |
| ● Duty-free and reduced-cost sales of tobacco |
| ● Tobacco advertising, promotion, and sponsorship |
| ● Misleading tobacco product claims/descriptors |
| ● Targeting of youth for increased tobacco use |
| ● Subsidies for tobacco production and sales |
| ● Youth access to tobacco |

### Increase Challenges

#### Increase Support for and Adherence to the FCTC

There is little doubt that, in the years since the landmark tobacco and health reports of the 1960s and, perhaps, the US Surgeon General’s Report in 1986 (which linked secondhand smoke to elevated death and disease rates), the most significant development in the effort to reduce tobacco’s global toll of death and disease has been the negotiation, entry into force, and implementation of the WHO’s FCTC. The FCTC provides the guidance and the mechanism for both national and multilateral action against tobacco use and the harm that it brings. There is no single action more important in the effort to eliminate tobacco-related death and disease than to maintain and increase support at all levels for the FCTC and encourage all governments not only to ratify it, as more than 165 nations have already done, but also to faithfully implement it.

#### Increase Tobacco Taxes

Raising tobacco taxes is considered perhaps the most effective intervention to reduce tobacco use. Higher tobacco taxes lead to higher tobacco prices and encourage tobacco users to quit or reduce the amount of tobacco used, and prevent smoking initiation among potential new users, especially youth. A widely accepted estimate is that a 10% increase in cigarette prices will reduce demand for tobacco by as much as 7% among youth and 4% among adults. Although the data sources for this estimate have been primarily in the Western, industrialized nations, the greater price sensitivity, due to increased taxes, in the LMICs predict an even greater effect on tobacco use reduction in those countries when taxes on tobacco products are raised. In addition, higher tobacco taxes in the LMICs will significantly affect youth uptake and, importantly, reduce long-term trends in tobacco consumption.

In addition to reducing tobacco use, raising tobacco taxes typically generates higher tax revenues, and tobacco control advocates have urged that some portion of these funds be used to implement and enforce tobacco control policies and pay for related public health programs. This is often referred to as a win-win situation, in which the newly generated funds make it easier for policymakers and politicians...
to justify an added tax. Although there are certainly valid arguments about the regressivity of tobacco taxes, it can also be considered a progressive measure because there are also significant cost savings in health care and less time lost at work for those most affected by tobacco tax increases.

Finally, the FCTC requires ratifying nations to adopt tax and price policies that reduce tobacco consumption and the World Bank recommends that tobacco taxes account for a significant portion of the retail price of a pack of cigarettes, making them less affordable. Complying with the FCTC obligation and the World Bank recommendation will have a significant, lasting effect on tobacco use.

Increase Access to Comprehensive Treatment for Tobacco Dependence

There are more than 1.3 billion tobacco users in the world today. If only half of them wished to stop their tobacco use (and the percentage of would-be quitters is likely higher than that), there would be need for access to tobacco dependence treatment for greater than 650 million tobacco users. Furthermore, the World Bank has estimated that more than 180 million lives could be saved in just the first half of this century if the prevalence of current tobacco users were cut in half by 2020,14 and providing access to adequate treatment would be a cornerstone of that approach.

Although providing access to treatment is in demand from tobacco users and could clearly save lives, there are significant challenges to the delivery of such treatment (eg, trained health care professionals, financial support for health care systems, and even recognition of both the health and economic value of providing tobacco dependence treatment).18-20 Nevertheless, solutions are available. The WHO’s MPOWER report recognizes that national health care systems are the key element in the effective delivery of such treatment and the FCTC’s Article 14 (“Demand Reduction Measures Concerning Tobacco Dependence and Cessation”) calls for national tobacco dependence treatment guidelines to be adopted in all ratifying nations. Doing so will provide a platform for the delivery of such treatment to the hundreds of millions of tobacco users who will benefit from it and make the goal of cutting tobacco use significantly by 2020 within reach.

Increase Media-Based Tobacco Countermarketing Campaigns

Current and prospective tobacco users, regardless of which country they live in, are subjected to nearly ubiquitous messages promoting tobacco use. These messages are both direct (eg, billboard and magazine advertisements) and indirect (eg, tobacco use depicted in movies or tobacco industry-promoted concerts). Campaigns to counter these messages, whether through education, fear, entertainment, or ridicule, have been shown to be an important element in broader campaigns to prevent or reduce tobacco use.21-23

These countermarketing campaigns have been aimed at both youth and adults. They are effective in raising consciousness about the tobacco issue; denormalizing it; exposing tobacco industry tactics; and involving youth and adults in local, regional, and national campaigns to change tobacco policies, such as clean indoor air regulations and channeling tobacco taxes to tobacco control and other health care needs.

Although media-based advertising can be expensive, and the tobacco industry will always far outspend tobacco control advocates, novel, entertaining, cutting-edge tobacco countermarketing campaigns (often supported by local governments and with the help of pro bono support from creative marketing firms) have been shown to attract attention and support far beyond the amount of funds spent on the campaign and, importantly, to have a direct effect on reducing tobacco use.23,24

Increase Regulation of All Tobacco Products

Despite tobacco’s huge societal costs, and notwithstanding the historic passage of US legislation in 2009 giving the US Food and Drug Administration the authority to regulate tobacco products, tobacco products are, around the world, the most unregulated consumer products on the market today. They are exempt from important basic consumer protections, such as ingredient disclosure, product testing, accurate labeling, and restrictions on marketing to children.

Tobacco products contain up to 4000 chemicals: some natural, some added to the product, and some created by combustion. All contain carcinogens and contribute significantly to heart disease and other
ailments. Yet far too few nations require testing of the contents and emissions of the tobacco products sold in their countries, nor do they regulate how these products are advertised, packaged, and labeled. It has been observed that the consumers of canned spaghetti, potato chips, and macaroni and cheese are required to be more informed about the consumption of these products than the consumption of tobacco, which kills as many as half of its users.

The WHO, through its Study Group on Tobacco Product Regulation and elements of Articles 9, 10, and 11 of the FCTC, clearly recognizes the value of promoting and increasing the attention paid to such regulation and encouraging nations to establish, either regionally or within their own borders, the ability to test and report to the public information about the tobacco products that are sold in their country or region and to regulate their advertising, packaging, and labeling to both inform the public and reverse the misinformation that has been prevalent through the auspices of the tobacco industry for so many years.25,26

Increase Health Warnings on Tobacco Packaging

Health warnings on package labeling are the first thing a tobacco user sees on opening the package and the most tactile reminder of the dangers inherent in the product they are about to consume. Over time, and across countries, package labels have become more accurate, more direct, and more graphic. There is clear evidence that, as the warnings become more graphic, tobacco users are more likely to pay attention to them. Specifically, graphic pictorial warnings 1) are more noticeable and dominant than text warnings, 2) heighten awareness about the harms of tobacco use, and 3) motivate some tobacco users to quit.27,28

These findings provide compelling evidence about the effectiveness of graphic, pictorial warnings (as long as they are regularly rotated and updated) and support the strong FCTC Article 11 Guidelines, adopted at the Third FCTC Conference of the Parties held in November 2008, which call for pictorial warnings on at least 50% of the package.

Increase Availability of Tobacco Health/Economic Information to the General Public

There currently are wide gaps in knowledge about the health and economic effects of tobacco use. Whereas in most of the high-income nations, both tobacco users and nonusers are aware of the dangers inherent in using tobacco and, to a lesser extent, the economic costs associated with tobacco use, that is not the case throughout the world. Beyond a general knowledge regarding the connection between tobacco use and lung cancer, many tobacco users, policymakers, and even health care professionals are largely unaware, or only vaguely aware, of the other cancers, heart disease, lung disease, pre- and postnatal conditions, etc that are caused by tobacco use.4

The WHO has made it clear that both governments and civil society have a role to play in providing accurate, objective information about the health and economic effects of tobacco use, particularly in the LMICs. This information can be delivered in a number of ways, such as through counteradvertising, information dissemination, and package warnings, as suggested above. There also is great need for alternative communication methods for less literate populations, those using new media and social media, and those hard-to-reach audiences that are often most in need of unbiased information about tobacco use.

Increase Primacy of Health Over Commerce in Trade Agreements

Due to the ubiquity and lucrative nature of tobacco growth and sales, tobacco products are often included in negotiations surrounding global, regional, or country-to-country trade agreements. For many years, tobacco products were treated no differently than fruits, textiles, or metals. The appalling health effects of tobacco products were not considered as negotiators made arguments about the size of tariffs, the types of tobacco products, and the amount of unprocessed leaf, etc that would be included in a given agreement.

In recent years, however, due to the resistance some countries, such as Thailand, have offered in demanding that tobacco imports not always be a natural part of any trade agreement, there has been a growing recognition that excluding tobacco from free-trade agreements would protect health. Successful arguments have been made that excluding tobacco from trade agreements is compatible with international law, which provides for other harmful products such as landmines to be exempted.29,30 In addition, the World Trade Organization (WTO) has declared
that human health is an important consideration and that if necessary, governments may “put aside WTO commitments” to protect human life.

Allowing and encouraging trade negotiators to permit health to “trump” trade would not only directly protect the health of citizens affected by trade agreements, which are expected to increase as the world recovers from the global recession that occurred between 2008 and 2009, but also would provide a clear message to policymakers and all citizens that tobacco needs to be treated differently, similar to any inherently dangerous product such as weapons or landmines.

Increase Basic Biomedical and Applied Tobacco Control Research

Objective, evidence-based research is the foundation of tobacco control success. It was research that brought global attention to the health risks and worldwide spread of tobacco use and it was research that brought attention to the deadly toll that tobacco use first took in industrialized countries and is now taking in LMICs. However, as effective, evidence-based interventions have been developed to address tobacco use, and basic biomedical and economic research have made global understanding of its health and economic costs more well known, there may be an increasing belief that attention can now largely be taken off research and refocused on applications of what we know to work in reducing tobacco use.

Although the temptation to reduce the attention and support for research is understandable, there being no doubt that global tobacco control efforts do need to focus on applying what we know to work, there remains much to learn about, for example, tobacco use control; the constituents of tobacco products; effective responses to tobacco industry strategies; and, especially, which interventions that have been useful in the industrialized countries will and will not be useful in the LMICs, and what new ones need to be developed, as they undertake the task of preventing the global tobacco epidemic from spreading throughout their regions.

The FCTC recognizes the need for continued and expanded research, and Article 20 of the FCTC carefully lays out a roadmap for the expansion of these activities. Article 20 promotes the need for national research plans and capabilities, but also promotes the concept of coordinated research at the regional and international levels to achieve economy of scale and take advantage of the small, but growing, number of international tobacco control researchers.

Increase the Extent and Accuracy of Tobacco Epidemiologic and Surveillance Data

The need to increase the extent and accuracy of global, regional, national, and local epidemiologic and surveillance data goes hand-in-hand with the need to increase research efforts, as discussed earlier. As the WHO MPOWER report points out, without careful monitoring data, the other elements of the MPOWER plan cannot be successful. Objective, accurate data are needed on a continuing basis to track tobacco use prevalence, determine the impact of interventions, and monitor the activities and plans of the tobacco industry.

However, due to the cost and expertise required to collect and interpret quality epidemiologic and surveillance data, it is clear that collaboration across countries, regions, and even globally will be necessary and that models, such as the Global Youth Tobacco Survey and the Global Adult Tobacco Survey, already exist as examples of how to accomplish this extraordinary level of collaboration.

Increase Litigation Aimed at the Tobacco Industry

Litigation against the tobacco industry has proven to be an especially effective way of exposing tobacco industry practices, calling attention to the health dangers of tobacco use, causing the tobacco industry to pay out billions of dollars in damages and settlements, and involving the legal community as an important ally in the effort to reduce tobacco use. In addition, legal actions against the tobacco industry have caused companies to reveal millions of pages of company documents, thus offering insight into both their deceptions and future plans, and have caused them to reverse some of their more destructive tactics and modify others.

Although using litigation as a channel for tobacco control (as well as a way of achieving some measure of recompense for current and former tobacco users deceived by the tobacco industry) largely originated in the United States and other Western, industrialized countries, lawsuits against the tobacco industry have been instituted in Argentina, Israel, India, Nigeria, Sri Lanka, and many other countries in recent
years. This approach has now spread around the globe to countries in which it can be an effective tool for addressing tobacco control issues.

**Decrease Challenges**

**Decrease Tobacco Use by Physicians and Other Health Care Providers**

Physicians and other health care providers will be the front line in any effort to increase the global rate of tobacco use cessation. They are, in most countries, opinion leaders and are essential elements in the global effort to reduce the death and disease associated with tobacco use. They serve as nontobacco-using role models, as first-line treatment providers for their tobacco-dependent patients, and as advocates for policy change designed to promote tobacco use cessation and tobacco control more broadly.

Yet many physicians and health care providers continue to use tobacco, with use reported to be as high as 50% or more in some countries, and many others are not aware of either the full spectrum of disease and illness associated with tobacco use or the range of treatments available to them in guiding their patients to become tobacco free. In addition, many other physicians and health care providers, although aware of the dangers of tobacco use and how best to treat tobacco dependence, would like to use their knowledge more broadly to help other health care providers, and policymakers, expand their efforts in tobacco control.

An essential element of any effort to reduce tobacco use, whether at the local, national, regional, or even global level, must begin with the education of physicians and other health care providers about the broad health and economic effects of tobacco use and the need for them to respect their position as role models by refraining from using tobacco at all and by ensuring that their own health care institutions are smoke-free environments.

**Decrease Targeting of Women**

Although global trends in tobacco use among men have begun a slow decline, the epidemic among women may not reach its peak until well into this century. The WHO has estimated that the prevalence of smoking among women worldwide will be 20% by 2025, compared with the 12% of the world’s women who currently smoke. Even if smoking rates remain unchanged, the raw number of women smokers will increase sharply in the coming decade in the LMICs.

The multinational tobacco companies are aggressively marketing cigarettes and other forms of tobacco use to women, not only in the LMICs, but also in those countries (such as Japan) in which women’s tobacco use rates have historically been low. This is an essential element in their effort to attenuate the loss of customers, through death and the continued decline in tobacco use, in most of the world’s industrialized countries. And there are data that make it clear that the tobacco industry’s efforts to recruit more women is bearing fruit: tobacco use rates among women in a number of countries in South America and Africa, which have long had relatively low rates of tobacco use among women, have begun to increase in the past decade, while increases in use among women in many Asian countries began even earlier.

Unless these trends in the increased use of tobacco among women are reversed (through education, counteradvertising, higher taxes, confronting the multinational tobacco industry, and other approaches outlined in the FCTC), the social and economic progress that women have begun to achieve in many parts of the world may be reversed and lost.

**Decrease Exposure to Secondhand Smoke**

The US Environmental Protection Agency, the US National Toxicology Program, the US Surgeon General, and the International Agency for Research on Cancer, among other organizations, have classified secondhand smoke as a known human carcinogen. Inhalation of secondhand smoke, in addition to causing cancers among nonsmokers, also causes coronary artery disease and numerous illnesses among infants and children. Nevertheless, in many parts of the world, daily exposure to secondhand smoke is an ordinary and pervasive occurrence.

However, there is growing support globally for reducing exposure to secondhand smoke. The MPOWER report and the FCTC, through the clear guidance of Article 8 (“Protection From Exposure to Tobacco Smoke”) have outlined specific measures and approaches to reducing population-wide exposure and there is widespread public support for them.
Local ordinances and regulations to reduce exposure have been increasing for some time, and spreading from the industrialized countries to the LMICs. Beginning with Ireland’s nationwide effort to reduce secondhand smoke exposure in 2004, an increasing number of nationwide bans have begun taking effect. It is vital, not only for the health of nonsmokers but also for smokers who may be encouraged to quit or reduce their smoking due to the reduction of opportunities to smoke, for the prevalence of smoke-free areas to continue to spread and, eventually, become the norm.

Decrease Illicit Trade and Smuggling
Cigarette smuggling and other forms of illicit trade encourage smokers to continue to smoke and youth to start, due to the lower cost of these cigarettes, and reduces legitimate and needed government revenues. The tobacco industry also exploits fear of smuggling in its efforts to defeat tobacco tax increases around the world. A recent report released during the course of FCTC’s illicit trade negotiations found that nearly 12% of the global cigarette market is illicit, which is equivalent to 657 billion cigarettes a year. The report notes that if the global illicit trade of tobacco were eliminated, governments would gain $31 billion. In addition, in just 6 years, more than 1 million lives would be saved.

Vigorous governmental and civil society support for and cooperation surrounding Article 15 of the FCTC, which focuses on illicit trade in tobacco products in addition to greater oversight of the multinational tobacco industry’s complicity in tobacco product smuggling, will be a significant step forward in recouping lost tobacco taxes and raising the price of tobacco, with its consequent reductions in consumption and lives lost.

Decrease Duty-Free and Reduced-Cost Sales of Tobacco
Duty-free and reduced-cost sales of tobacco (eg, for military personnel, in hospitals, etc) have a dual, negative effect on tobacco control efforts. First, as noted above, the reduced cost of tobacco products results in increased consumption. Second, the visibility of low-cost, duty-free tobacco products (as well as low-cost tobacco products in other venues) counteracts efforts to “denormalize” tobacco use; hundreds of millions of global travelers and consumers of low-cost tobacco products are regularly exposed to the implied message that tobacco is not only a broadly accepted product, but also that its ubiquity and low cost must make it acceptable, both socially and with regard to its effects on health.

Article 7 of the FCTC calls for Parties to the treaty to consider measures “prohibiting or restricting, as appropriate, sales to and/or importations by international travelers of tax- and duty-free tobacco products,” and the Framework Convention Alliance recommends that Parties be required to prohibit all sales of tax-reduced, tax-free, duty-reduced, and duty-free tobacco or tobacco products to international travelers, not only those occurring in free-trade zones. Adopting these measures, and extending them to all venues in which tobacco products are discounted in price, will aid in reducing consumption and provide a clear message that tobacco use is a non-normative behavior.

Decrease Tobacco Advertising, Promotion, and Sponsorship
There are clear and compelling data, from a broad array of sources, indicating that complete bans of tobacco advertising and promotion can not only protect against youth starting to use tobacco and adults continuing to use, but also provide a clear message to tobacco users and nonusers alike that tobacco use is not an acceptable social norm.

The recently adopted provisions of Article 13 of the FCTC require the Parties to the treaty to adopt a wide range of measures that will substantially or completely eliminate tobacco advertising, promotion, and sponsorship. Implementing and enforcing these measures, in light of the relatively scant progress on this issue to date (despite the availability of data indicating its potential effects) will be a key element in global efforts to reduce tobacco use and denormalize its image.

Decrease Misleading Tobacco Product Claims/Descriptors
One of the most significant challenges facing both consumers and regulators is the freedom of the tobacco industry to label its products in such a way as to deceive the public about their contents and inherent dangers in their use. Many millions of smokers in the United States, for example, were convinced nearly 3 decades ago by the tobacco industry
(through marketing and “scientific” claims) to switch their use of so-called “full-bodied” cigarettes to “lower tar,” “light,” “mild,” and similarly characterized products, in the belief that these products would be less harmful. However, as data from the US National Cancer Institute demonstrated many years later, these products were not less harmful in any way and millions of smokers who might otherwise have quit smoking went on to use what they thought to be “safer” cigarettes for many years and are now suffering the health consequences of the tobacco industry’s deception.57

The FCTC contains several articles that address the issue of misleading characterizations of tobacco products: Articles 9 and 13, for example, and, most notably, Article 11. Implementation and adherence to the recommendations in these Articles have the potential to be both a powerful educating force for prospective and current tobacco users and a means of preventing the tobacco industry from further duping its customers into believing unscientific and self-serving claims about their products and thus unnecessarily starting or continuing tobacco use in the belief that they will be protected from its harms.

Decrease Targeting of Youth

The multinational tobacco industry has made the targeting of youth for increased tobacco use a priority. This is a necessary marketing effort on their part, because “replacement smokers” are needed for those smokers and tobacco users who quit their use or die from it. The tobacco industry is also well aware that the earlier in life one becomes dependent on tobacco, the more likely one is to maintain tobacco use into adulthood.58-60

Youth-specific marketing strategies include sales of single cigarettes or other tobacco products, sponsoring cultural and sporting events with large youth fan bases, advertising near schools, advertising in youth-oriented media, and similar approaches. These strategies have proven successful: as many as 100,000 youth per day begin to use tobacco worldwide, approximately one-fourth of whom will be younger than 10 years of age.

Although many of the elements of the FCTC will affect both youth and adults (eg, advertising, sponsorship, and promotion bans; the elimination of misleading descriptors; etc), there are also many subtle ways in which youth will continue to be targeted (eg, through the continued informal availability of single cigarettes and single-product packaging, logo-driven clothing and promotional items, depiction of smoking in movies, flavored and candy-like smokeless tobacco products, etc). Vigilance and commitment will be necessary to eliminate these efforts to secure another generation dependent on tobacco.

Decrease Subsidies for Tobacco Production

In general, there is a global tradition that LMICs earn revenue from tobacco production by taxing export earnings, whereas high-income countries such as the United States, those in the European Union, and China provide price supports and other subsidies to their tobacco farmers. The reasons for providing such subsidies and support include maintaining high prices for farmers, supporting small farming operations, controlling tobacco imports, and maintaining the political support of the tobacco farming community.14,32,61,62

Although the World Bank acknowledges that subsidies such as this tend to raise tobacco prices, which could result in lower consumption, the Bank also estimates that subsidy programs raise prices by no more than 1%, thus having little effect on consumption.14 And the subsidies do not always have their intended effect. In China, for example, subsidies for growers were increased by 18% in 2007, but grower income declined by 4%.63

The World Bank sees little or no gain from subsidy programs, especially as more sound agricultural practices and policies are put into place and trade policies continue to evolve. The FCTC, through Article 17, encourages economically viable alternatives for tobacco growers and workers, rather than continuing subsidies. Greater cooperation between the public health community and the tobacco-growing community is an approach that may address some of these issues.

Decrease Youth Access to Tobacco

As noted earlier, the multinational tobacco industry is targeting youth in their efforts to secure “replacement smokers” (and tobacco users) and thus maintain and expand their global markets. Although efforts to reduce or blunt the effects of these marketing efforts are addressed in the FCTC, the success of these
efforts will also depend on the effectiveness of strategies to reduce the ability of youth to easily access tobacco products.

Unfortunately, for most youth, in both the high-income nations and LMICs, access to tobacco products is relatively simple. The WHO/Centers for Disease Control Global Youth Tobacco Survey found that greater than 70% of youth around the world reported that they can buy tobacco in a store without providing proof of age. In addition, youth can access tobacco from their homes, from friends, from vending machines, and in single- or limited-number packets from street vendors.

To complement efforts to decrease the targeting of youth by the multinational tobacco companies, access points and loopholes must be addressed and closed whenever possible. This would include, as recommended in Article 16 of the FCTC (“Sales to and by Minors”), establishing and enforcing a uniform minimum age for tobacco purchases, eliminating access to tobacco vending machines, vendor enforcement of purchase restrictions, and the elimination of single- and small-packet sales.

Conclusions

There are certainly many other challenges to global tobacco control in addition to those discussed above and, in particular, many broad needs and challenges. These overarching issues would include, but certainly not be limited to, the challenges of:

- Developing a new generation of tobacco control leaders
- Raising the profile of tobacco control on global health and development agendas
- Considering strategic alliances with NCD efforts
- Harnessing and integrating modern communications technology into global tobacco control efforts
- Developing new and more sophisticated methods of tracking and countering the plans of the multinational tobacco companies
- Focusing more effort on linguistic needs and culturally appropriate interventions
- Promoting the development of strong advocacy skills
- Obtaining additional resources, both financial and in-kind.

Challenges and needs other than those 21 suggested herein will undoubtedly be identified by others. And resources, despite the recent, generous influx from both the Michael R. Bloomberg Foundation and the Bill and Melinda Gates Foundation, will never be enough to address all of these challenges. Although, as noted earlier, global tobacco control in the future will largely focus on “high return” interventions such as increasing tobacco taxes and promoting smoke-free environments, it will also be important for individual regions, countries, or specific geographic or administrative portions of a country to also selectively and strategically address those challenges suggested in this report that are most compatible with their unique skills and needs; the nature of the tobacco challenges they face; their unique cultural attributes; and the status of their legal, economic, and health care systems.

A final consideration is an issue that rises above all others when considering the potential to reverse the global tobacco use epidemic: the need for skilled, dedicated people to work in this field. The success of the Framework Convention Alliance in attracting a wide range of committed organizations and talented individuals to the tobacco control arena and then helping to meld their skills into a strong, cohesive advocacy force that played a significant role in shaping the FCTC is the primary example of tobacco control bringing individuals with strong, but disparate, skills into a field and then enabling them to work together effectively.

Tobacco control is unique in the public health and disease control field because it encompasses such a wide range of issues. Because of this, which makes the field alternately fascinating, frustrating, and challenging, the skills currently represented in global tobacco control and those that are needed are equally wide-ranging. These skill needs require physicians, nurses, attorneys, psychologists, teachers, product engineers, chemists, agronomists, economists, epidemiologists, biostatisticians, health care system engineers, and many others to not only enter the field but also to work together in a veritable “Peaceable Kingdom.” If global tobacco control can continue to attract such individuals, the challenges involved in addressing the issues outlined in this report will be eased and the tide of global tobacco use begun more than 500 years ago, with its attendant death and disease, can be turned.
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