

Commentary

The Importance of Reducing Smoking in China: To Achieve Healthy China 2030 While Reducing the Severity of the COVID-19 Pandemic

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The coronavirus disease 2019 (COVID-19) pandemic is the most devastating threat to global health since the 1918 influenza pandemic. As of May 22, 2020, there have been 5.1 million cases confirmed, with over 333,000 deaths. And we are just at the beginning of a long struggle.

There is a connection between COVID-19 — the greatest infectious disease outbreak in a century — and the greatest chronic disease threat in the world today — tobacco smoking. Smoking has been identified by the World Health Organization (WHO) as the “single greatest preventable cause of death in the world” (1). Tobacco smoking kills 7.1 million people a year (2), with an additional 1.2 million dying from secondhand smoke (2).

What’s the connection? High-risk groups for COVID-19 include those with chronic obstructive pulmonary disease (COPD), cardiovascular disease, and diabetes (3). The importance of protecting those with such chronic diseases as a means for containing the COVID-19 pandemic has been articulated in the *China CDC Weekly* (4). But in addition to containing the pandemic, *there are significant opportunities for preventing and limiting the severity of COVID-19 through reducing smoking.*

Smoking is a significant risk factor for these and other conditions associated with high risk of COVID-19 (5), and has been identified by many health authorities, including the WHO (6), as a specific risk factor for COVID-19.

A recent multinational study of 8,190 COVID-19 patients found that current smokers were more likely to die (9.4%) compared to former smokers and non-smokers (5.6%) (7). A recent meta-analysis of 19 peer-reviewed papers found that smoking was a significant risk factor for progression of COVID-19: smokers had 1.91 times the odds of greater severity than never smokers (8). Thus, smoking cessation is recommended to reduce risk of COVID-19 and to lessen its severity by the WHO (6), the UK National Institute for

Health Care Excellence (NICE) (9), the Canadian Lung Association (10), and health professionals (11).

Smoking in China

About 300 million Chinese people smoke — including over 50% of men (12). We know that one-half of all regular smokers die of a smoking-related disease (13). Putting these two statistics together leads to the astonishing fact that more than one of out every four men alive today in China will die of smoking. Further, each of these smokers who die will lose over a decade of life (13). The toll of smoking in China is already extraordinary — greater than even that of its status as the world’s largest country in population — and it is increasing. The Global Burden of Disease (GBD) Study estimated that in 2017, smoking killed about 2.3 million smokers in China, with an additional 400,000 non-smokers dying of secondhand smoke (14).

China’s high smoking rate and the connection between smoking and COVID-19 threatens to reduce the impact of the impressive efforts that China has expended to combat the pandemic through extreme limitations on population movement, extensive testing, and bolstering its healthcare capacity and supplies. It is therefore even more important than ever to encourage smokers in China to quit through strong tobacco control policies.

China is one of 181 countries that have ratified the global tobacco control treaty — the WHO Framework Convention on Tobacco Control (FCTC). The FCTC obligates China and the other Parties to implement and enforce strong tobacco control policies such as large graphic health warnings on cigarette packages, laws that prohibit smoking in all key public places such as trains and buses, shopping malls, restaurants, bars, and workplaces, bans on advertising, promotion, and sponsorship, higher taxes on cigarettes, and support for cessation. These FCTC policies correspond to the WHO’s MPOWER package of tobacco control

measures, which focus on policies that are aimed at reducing the demand for tobacco products (15).

The Importance of Reducing Smoking Rates to Achieve the Goal of Healthy China 2030

The goal of Healthy China 2030 is to reduce deaths from noncommunicable diseases by 30% by 2030. But this cannot be achieved without great reductions in smoking. Estimates are that it would be necessary to reduce smoking prevalence from 27.7% in 2015 and 26.6% in 2018 to 20% by 2030.

China has taken the critically important step of incorporating tobacco control into the Healthy China 2030 Plan. But it is necessary to strengthen and accelerate implementation of these important tobacco control policies of the FCTC.

The International Tobacco Control Policy Evaluation Project: Evaluating Tobacco Control Measures in China

The International Tobacco Control Policy Evaluation Project (the ITC Project) is the largest tobacco research program in the world (www.itcproject.org). Since 2002, the ITC Project, based at the University of Waterloo in Canada, has conducted very large cohort surveys of smokers and users of other tobacco and nicotine products (such as e-cigarettes) in 29 countries, covering over 50% of the world's population and over 70% of the world's tobacco users.

One main objective of our research is to evaluate the impact of FCTC policies. We found, for example, that when Ireland became the first country in the world to implement a comprehensive smoke-free law, smoking in restaurants decreased from 84% to 2% in a single year (16). When Malaysia introduced large pictorial warnings, smokers who reported putting out a cigarette because of the warnings increased from 21% to 55% (17).

In 2005, the ITC Project created a partnership with the Tobacco Control Office at the China CDC. This partnership led to a 10-year ITC China Project. We conducted a large-scale ITC China cohort survey in major cities (e.g., Beijing, Shanghai, Guangzhou, Kunming, Shenyang) and in rural areas (e.g., Xining, Changxi, Yichun), with 5 data collection waves (2006, 2007–2008, 2009, 2011–2012, 2013–2015), which allowed us to examine trends over time in smoking and

to measure the extent to which China's tobacco control efforts have had an impact on smokers.

Although our evaluation studies have shown that China has seen some progress in local smoke-free laws, taxation, and in restrictions on tobacco advertising, promotion, and sponsorship, we have also found that there is a need for stronger tobacco control laws in China (18–19).

We found that even Chinese smokers themselves would be supportive of stronger tobacco control laws. About 3 out of 4 smokers and non-smokers agreed that the government should do more to control smoking, and over 90% of smokers said that a ban on smoking in restaurants and other indoor places would be “good” or “very good.” (18)

In 2017, we published a study in *Lancet Public Health* that examined the impact of strong tobacco control policies in 126 countries, finding that countries that implemented a greater number of policies such as higher taxes, complete smoke-free, graphic warnings, bans on tobacco advertising, and strong support for cessation experienced much greater decreases in smoking rates (20). In fact, if all of these policies were fully implemented in China, we predict that smoking prevalence would decrease from 27% to 18%, meeting the target for the necessary reductions in smoking for Healthy China 2030. Such a reduction would not only be monumental for China in achieving its goal for Healthy China 2030, it would also contribute to containing and preventing COVID-19.

As the COVID-19 pandemic continues to occupy the attention of China and the world, it is also important to note that since smoking is a very strong and indisputable cause of COPD, as well as cardiovascular diseases and other conditions that are also high-risk for COVID-19, interventions to reduce smoking, such as strengthening tobacco control policies (e.g., graphic warnings, higher cigarette taxes), would not only be beneficial in and of itself to take huge steps forward in meeting the goals of Healthy China 2030, but would *also* serve to reduce the severity of COVID-19.

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