

## Commentary

## The Progress of the Global Tobacco Cessation Strategies

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The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 8 million people a year, mainly through noncommunicable diseases (NCDs) (1). World Health Organization (WHO) set nine voluntary global targets for NCDs to be attained by 2025, including a 30% relative reduction in prevalence of current tobacco use by 2025 (2), which requires a strong commitment by governments to strengthen the national health system responses and to take action against the leading risk factors for NCDs including tobacco use, the single most preventable cause of death. Commitment to strengthening full implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC) is a crucial component of action by governments.

Although global smoking prevalence among people aged over 15 years has fallen from 22.7% to 17.5%, tobacco control still faces major challenges (3). First, smoking prevalence needs to be further reduced to achieve the global target for tobacco reduction. There remain over 1.3 billion tobacco users in the world and over 80% of them live in low- and middle-income countries (LMICs) (4), including 308 million smokers in China (5). Second, tobacco industry interference plays a big role in slowing progress in tobacco control. Tobacco industry has been aggressively promoting new and emerging products such as e-cigarettes and heated tobacco products as “safer” or “smoke-free” alternatives to conventional cigarettes to undermine the implementation of the WHO FCTC globally (3). Finally, lack of government investment and technical resources is common in most countries. To address these challenges, it is critical to improve support for tobacco cessation, advocate for the prioritization of tobacco control on political agendas, implement sustained investment in tobacco control, and address tobacco industry interference.

### TOBACCO CESSATION STRATEGIES RECOMMENDED BY WHO FCTC ARTICLE 14 GUIDELINES

The emphasis on tobacco cessation and treatment

for tobacco dependence as part of a comprehensive tobacco control is enshrined in Article 14 of the WHO FCTC, which requires signatories to “take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence” (6). To further elaborate on these measures, the Guidelines for Implementation of Article 14 of the WHO FCTC call for the development of a comprehensive tobacco cessation and treatment system. This system should offer tobacco users a range of cessation interventions, including brief advice, a national toll-free quitline, specialized tobacco dependence treatment, and evidence-based medications (7). Despite strong demand, implementation of these tobacco cessation measures in LMICs has been inadequate. While approximately 60% of the 1.3 billion tobacco users worldwide have expressed an intention to quit, only 30% have access to comprehensive tobacco cessation services (8).

Therefore, the most urgent task of the global tobacco cessation work is to improve the reach of existing proven tobacco cessation services. To achieve this aim, countries must change their tobacco cessation strategies, reorient, and refocus their efforts to accelerate the impact of their national tobacco cessation services.

### STRATEGIC CHANGES NEEDED IN PROMOTING TOBACCO CESSATION

To address the aforementioned challenges and improve the impact of national tobacco cessation services, the WHO recommends that countries prioritize integration, sustainability, innovation, and a systematic approach. Countries should leverage the unique opportunities presented by health systems and digital technology to establish an inclusive, resilient, and sustainable ecosystem for delivering tobacco cessation services. To create such an integrated and dynamic system, four strategic changes are recommended. These changes will allow tobacco users to access the interventions of their preference at a time that suits them best (8). The specifics of these strategic

changes are discussed in detail below.

### **Implementing Tobacco Cessation Measures Synergistically with Other Tobacco Control Policies**

The optimal effectiveness of tobacco cessation support is achieved when it is implemented in conjunction with other demand-reduction tobacco control policies. These policies include raising tobacco taxes, establishing smoke-free environments, banning tobacco advertising, promotion, and sponsorship, printing pictorial health warnings on tobacco product packs, and developing anti-tobacco mass media campaigns. These measures promote tobacco cessation by encouraging quitting and creating a supportive environment. A compelling example of synergistic efforts is including the quitline number on cigarette packs and mass media anti-tobacco campaigns, resulting in a significant increase in demand for tobacco cessation services (9). This approach is especially important for China, as only 16.2% of smokers in China expressed a desire to quit, according to a 2018 survey of Chinese adults (5).

### **Using Existing Infrastructure to Develop Cessation Support**

Integrating brief advice into primary health care systems is a crucial measure for countries seeking to provide comprehensive cessation support. Given that en masse infrastructure, like primary health care, is available in almost all countries, this implementation is both practical and economical. The systematic distribution of brief advice across health care systems has the potential to touch base with over 80% of all tobacco users annually in a country if it is consistently delivered (10). Where feasible, cessation interventions should be incorporated into existing health programs like primary care, as well as those aimed towards specific populations and diseases like national tuberculosis programs, non-communicable disease programs, oral health programs, HIV/AIDS programs, mental health programs, and programs addressing the health requirements of women, children, and teenagers.

Countries should consider utilizing their pre-existing infrastructure to implement national toll-free quitline services. Several countries have well-established call centers, existing coronavirus disease 2019 (COVID-19), or other health-related hotlines with the potential to expand and offer tobacco quitline services.

### **Prioritizing Population-Level Tobacco Cessation Approaches**

Prioritizing population-based tobacco cessation interventions can help reach as many tobacco users as possible at the lowest possible cost and have the most impact on reducing the prevalence of tobacco use at the population level. Government should consider implementing the three “best-buy” interventions as recommended by WHO Global NCD Action Plan 2023–2030: integrating brief advice into primary care, national toll-free quitline services and cessation interventions delivered via mobile text messaging (mCessation) (11). The maximum impact of the three population-level tobacco cessation interventions occurs if they are part of a dynamic integrated tobacco cessation ecosystem.

In 2021, WHO developed the global investment case to explain why countries should invest in tobacco cessation from health and economic perspectives. A return-on-investment analysis of 124 LMICs shows that these population-level interventions cost little but have significant returns (12). On average, countries only need to spend 0.21 USD per person per year on these interventions to witness an estimated 88 million individuals quitting smoking by 2030, leading to 1.4 million lives saved. Over time, a total of 9.3 million lives can potentially be saved among those who quit smoking by the age of 65. It is evident that these three population-level interventions are exceedingly cost-effective.

### **Embracing More Innovative Approaches to Improve the reach of Tobacco Cessation Interventions**

Effective interventions to aid in tobacco cessation have been identified; however, not enough tobacco users are currently benefitting from them. To increase accessibility and outreach of these interventions, it is imperative to leverage emerging technologies. The popular digital platforms, in conjunction with mobile technology, can be effectively employed to deliver tobacco cessation services. For instance, WeChat, the most widely-used social media platform in China, has demonstrated to be a viable and efficient tool to administer cease-smoking interventions to a wide range of smokers through extensive research (13–14).

Research and development into other innovations such as artificial intelligence (AI) should also be encouraged. During the COVID-19 pandemic, WHO developed an AI-based digital health worker (Florence) to provide brief tobacco cessation advice (15). Florence

is now available 24/7 in multi-languages. The next step is to get more people to use this tool.

## IMPLICATION FOR CHINA

China has the largest smoking population and is suffering the highest burden of tobacco-related diseases in the world. Tobacco cessation and treatment for tobacco dependence are key measures to reduce smoking rate and relevant hazards. China has made some efforts on cessation services, such as setting up quitlines, training medical professionals to persuade smokers to quit by brief advice, and establishing hundreds of cessation clinics. Some studies on mCessation were conducted and offering tobacco users cessation support in some primary care facilities was piloted. In 2021, “CHINA QUIT PLATFORM” was developed by Chinese Center for Disease Control and Prevention, which refers to available cessation services by each province including hotline, cessation clinics and mCessation tools. It is time for China to consider developing a national tobacco cessation strategy to provide direction and scope for Chinese tobacco cessation program based on WHO FCTC Article 14 Guidelines. It is also imperative to ensure that government provides sustained investment to strengthen comprehensive tobacco cessation services in China, such as a national toll-free quitline and government endorsed and validated mCessation services, integrating brief advice into existing health care systems, and providing cessation services in communities. For example, due to the shortage of financial support, tobacco users in China have low awareness and utilization of the current existing quitlines. Besides tobacco cessation services, other tobacco control strategies should also be put in place to increase smokers’ willingness to quit, such as increasing the price of cigarettes, placing pictorial warning labels on cigarette packages, implementing smoke-free policies, and implementing media campaigns aimed at persuading smokers to quit.

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