### Retrospective Analysis of Tobacco Control Measures and Policies in China

Lian He, Associate Professor Xiaoxin Chen, CEO Chunzi Shao, Lecturer

Lian He, Associate Professor in Economics, Business and Administration School, Zhuhai College of Science and Technology, Zhuhai, Guangdong, China. Xiaoxin Chen, Chief Executive Officer(CEO), Zhuhai Huazheng Consulting & Service Limited, Zhuhai, Guangdong, China. Chunzi Shao, Lecturer in Economics, Foreign Language School, Zhuhai College of Science and Technology, Zhuhai, Guangdong, China. Correspondence author: Chunzi Shao: shaochunzi@jluzh.edu.cn

#### **Abstract**

Objectives: Tobacco control measures can be divided into three types: regulatory, economic, and informational respectively. This paper focuses on the role and effect of different types of tobacco control measures during the epidemic prevention and control period in China. Conclusion: Firstly, as strong and powerful measures, economic measures can significantly reduce cigarette sales in the short term. However, the Chinese government did not adjust the cigarette consumption-tax rate during the period. Economic measures thus did not play an important role. Secondly, Due to few people in public places and workplaces, regulatory measures were "out of effect" in a short term. Therefore, there were insufficient evidence to find out whether regulatory measures are effective or not. Finally, China's tobacco production increased slightly during this period. This reflected that informational measures did not play an effective role.

### **KEY WORDS**

tobacco control measures; regulatory measures; economic measures; informational measures

Tob Regul Sci.™ 2021;7(4):295-299 DOI: doi.org/10.18001/TRS.7.4.6

### I | Introduction

In order to promote the construction of a healthy China and improve people's health, the Chinese government introduced the "Outline for Healthy China 2030" in 2016<sup>1</sup>. This is a national strategy to comprehensively improve the health quality of the Chinese people and realize the coordinated development of both people's health and the economy as well as the society. The Outline puts forward specific goals and requirements for tobacco control. That is to reduce the smoking rate to 20% by 2030.

This goal is achievable and based on the experience of tobacco control at home and abroad. Hence, the central and local governments have issued a series of regulatory, economic and informational combined tobacco control measures, which made certain achievements. However, there was a lack of relatively objective evaluation on the role and effect of regulatory, economic and informational measures.

At present, the situation of global epidemic is still severe. Many countries are still working hard to cope with this major public health emergency. Meanwhile, China's epidemic prevention and control measures made some tobacco control measures "out of effect" in the short term. This provides an opportunity for us to analyze and evaluate different tobacco control measures. Therefore, this paper focuses on the role and effect that different types of tobacco control measures played during the epidemic prevention and control period in China.

## 2 | China's tobacco control measures and policies

In 2005, China signed the Framework Convention on Tobacco Control (FCTC) with WHO and was committed formulating and implementing public health policies for tobacco control<sup>2</sup>. By the end of June 2020, 48 of the 53 cities with local legislative power in China have legislated on tobacco control. Among them, 24 cities made tobacco control legislation or revised relevant laws and regulations after the central government ratified FCTC in 2005. 44 cities introduced tobacco control policies specifically aimed at smoking control. 22 implemented local government regulations. 26 cities issued local laws<sup>3</sup>. Throughout all these local tobacco control policies, laws, rules, and regulations, the measures of tobacco control can be roughly divided into three types: regulatory type, economic type and informational type.

Regulatory measures include but are not limited to the follows. Smoking is prohibited public places, workplaces in indoor (including elevator cars) and transports. Smoking is prohibited in public places and outdoor areas of workplaces. Principals and staff members of state organs, institutions, and organizations shall take the lead in banning smoking. Operators and managers of non-smoking places shall fulfill the obligation of prohibiting smoking. Selling tobacco products or electronic cigarettes to teenagers is prohibited. It is also prohibited to publish tobacco advertisements, carry out tobacco promotion or sponsor activities. Financial funds are not allowed to purchase tobacco products. These measures have been proved to be of great effectiveness4 but out of work during epidemic.

The tobacco control measures for individuals. operators and managers of non-smoking places, and suppliers of tobacco products are mainly economic measures. On one hand, Individual smoking behaviors are restrained and corrected by fines. Operators and managers of non-smoking places who fail to fulfill their obligations shall be punished. On the other hand, price and tax measures are recognized as the most effective way to control tobacco, especially for teenagers and low-income people5. For every 10% increase in tobacco prices, the consumption of tobacco in developed countries will decline by 4%, while in developing countries by 8%6. However, a recent study found that a significantly greater likelihood of stores would offer discounts after implementation of the new tax7, so that the actual effectiveness of an increase in price or tax would be reduced.

After signing FCTC, China has raised the cigarette consumption-tax (CCT) rate twice in 2009 and 2015 respectively. Although these two adjustments of tax rate had different responses to cigarette prices, they have had a certain impact on increasing government tax revenue and affecting cigarette market structure and consumption structure. The CCT rate was first adjusted in 2009, but the retail price did not change. After this round of adjustment, the CCT rate was 47%, which was still far lower than 75%, the recommended level by WHO. In May 2015, China adjusted the CCT rate again. The adjustment increased the retail price of cigarettes by 10%. After this round of adjustment, China's CCT rate reached 56%. By the end of 2015, China's cigarette consumption decreased by 2.36%, and by the end of 2016, cigarette sales decreased by 5.6%8. In order to achieve the goal of tobacco control, the Chinese government will adjust the CCT rate in the future. Meanwhile, Chinese government will spend more money out of CCT in carrying out tobacco control. On one hand, informational measures include: Blocking information about cigarettes. Ban on publish tobacco advertisements, carry out tobacco promotion or sponsor activities. In

April 2015, the new advertising law came prohibited the into effect. This law publication of tobacco advertisements in mass media, public places, public transports and outdoors. This means that China has banned all tobacco advertising at the legislative level. On the other hand, informational measures also include: People has the right to complain about those who smoke in non-smoking places. Medical and health institutions provide smoking cessation services for smokers. Medical and health institutions set up smoking cessation clinics. Different types of tobacco control measures have different roles and effects. The central and local governments nowadays use all three types of tobacco control measures in the process of controlling tobacco. Therefore, it is difficult for us to analyze the roles and effects of each type. However, the epidemic provides a special time window for us to review various tobacco control measures and policy effects. This is because, China's epidemic prevention and control measures made some tobacco control measures "out of effect" in the short term. Other tobacco control measures were remain in effect.

### 3 | Impact on tobacco control measures by "tough" social governance measures

The powerful social governance measures are obvious in containing the rapid spread of the epidemic and impacting social and economic activities at the same time. In order to cut off the transmission route of the epidemic, the government resolutely adopted "city lockdown", including closing the access to and from the city, suspending the traffic in the city, canceling social gathering activities, strictly requiring wearing masks, closing all residential areas for home quarantine, centralized distribution of household goods and other measures to further reduce the risk of community infection. However, this has also led to "rapid freezing" of economic activities, which had negative effects on many aspects of people's normal life.

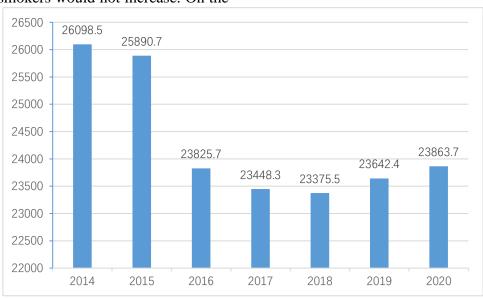
Suspension of urban traffic, cancellation of social gathering activities, closed community, home isolation and other governance measures blocked the communication among

people to the greatest extent. The result was that, there were few people in public places and workplaces. That is to say, regulatory measures such as smoking prohibition in indoor public places, workplaces and public transports in fact did not fulfill their functions. Because of few people in public places and workplaces, there was little difference between the situation implementation and absence of tobacco control measures. Therefore, regulatory measures were "out of effect" in the short term.

As the same time, social governance measures during the epidemic prevention and control period did not reduce smokers' demand for cigarettes. Because cigarettes are a necessity for smokers, smokers' demand for cigarettes is inelastic. Therefore, even though there were great changes in work and lifestyle during the epidemic, there would be no significant adjustment in smokers' demand for cigarettes. On the other hand, the direct impact on the demand for cigarettes is its price, the adjustment of which is determined by the CCT. Since the outbreak of the epidemic, the Chinese government has never adjusted the CCT rate yet. Therefore, we considered that economic measures did not fulfill their functions during the epidemic prevention and control period, either. Theoretically, other conditions unchanged, the quantity of China's smokers and the consumption of cigarettes would not change much during the epidemic.

Moreover, during the epidemic, home segregation was the main style of life for people to live on, and the way to keep in touch with the outside world was mainly through television, the Internet and other communication tools. This made informational measures play a leading role period. during this Due implementation of the advertising law in 2015, the mass media has completely banned tobacco advertising, so people would not be cigarette promotion exposed to any advertising. Theoretically, this would not produce a large number of incremental smokers. On the other hand, if smoking cessation services, ways and means of quitting smoking and other information were effectively publicized through television, the Internet and other communication tools, the stock of smokers would not increase. On the

# contrary, it would decrease during this period. 4 | Retrospective analysis of tobacco control measures and policies



**FIGURE 1** Production of China's tobacco industry from 2014 to 2020 (100 million cigarettes)

Source: Zhiyan Consult. https://www.chyxx.com/industry/202101/925 499.html

As is shown in Fig.1, from the changes of production of China's tobacco industry from 2014 to 2020, we can find out: First, economic measures have a significant impact on tobacco production and sales. In May 2015, after China raised the CCT rate from 47% to 56%, the tobacco production decreased significantly in 2016. reflected that the tobacco production is highly sensitive to the CCT rate. In fact, the adjustment of the CCT rate directly led to an increase of tobacco retail price by 10%, which thus had a significant impact on tobacco sales. In 2015 and 2016, China's tobacco sales were 261 272 million and 230 674 million respectively. Therefore, tobacco consumption is also highly sensitive to its price.

Second, we can also find out that, during the epidemic, China's tobacco production increased slightly, but basically unchanged. As mentioned above, under the situation that

regulatory measures were "out off effect" in short this reflected the term, informational measures did not play an effective role during the epidemic prevention and control period. Although people would not be exposed to any cigarette promotion advertisements, smokers did not actively obtain smoking cessation services through television, Internet and other communication tools, either. In fact, smokers did not have any incentive to quit smoking voluntarily. On the contrary, the epidemic caused people more anxiety and thus made tobacco consumption increase slightly.

Third, during the epidemic prevention and control period, because regulatory measures were "out off effect" in the short term, we did not have enough evidence to find out whether regulatory measures were effective or not. Even if it is effective, there was insufficient evidence to support its effect.

### **5** | Conclusions

To sum up, this paper focuses on the role and effect of different types of tobacco control measures during the epidemic prevention and control period in China. First, Because of few people in public places and workplaces, regulatory measures were "out of effect" in

the short term. Second, since the outbreak of the epidemic, the Chinese government has never adjusted the CCT rate yet. We considered that economic measures did not fulfill their functions during this period, either. Third, China's tobacco production increased slightly, but basically unchanged. This reflected that informational measures did not play an effective role during this period.

The guidance of many local tobacco control legislations in China have changed from preventing smokers from smoking to preventing non-smokers from being harmed by second-hand smoke, from banning smoking in some indoor public places to banning smoking in all indoor public places, from banning smoking in some outdoor public places to banning smoking in most outdoor public places. The goal of conduct propaganda has been set from "Smoking is bad for your health" to "Smoking affects the urban civilization". The aim of controlling tobacco has been set from management to social governance. As a result, tobacco control measures shall gradually transform from mainly regulatory both regulatory measures to informational measures as main measures. Tobacco control actions need the full participation of the society, governments, households and individuals. All participants are encouraged to carry out extensive and effective activities on tobacco control, so that more and more people know the harm of smoking and second-hand smoke and their self-discipline cultivate Meanwhile, persuade others, especially family members, not to smoke, not to ask others to smoke, and create a smoke-free environment. Finally, as strong and powerful control measures, economic measures can significantly reduce cigarette sales in the short term, but the space for increasing the CCT rate is limited after all. The current CCT rate is 56%, while the desired rate recommended by WHO is 75%, which means that there is a little room for tax rate adjustment. However, at present, China's smoking rate is still far from reaching the

goal of 20%. Therefore, it is important that informational measures shall play a greater role in the future.

#### **Author Declaration**

The authors declare that this research is not funded by any organization related to tobacco production.

### REFERENCES

- 1. Xinhua News. "Outline for Healthy China 2030". 2018-04-03. http://www.gov.cn/zhengce/2016-10/25/content\_5124174.htm
- 2. Li M. The Framework Convention on Tobacco Control and Local Legislations on Tobacco Control. People's Congress Studying. 2015; (11):40-42. doi:10.13755/j.cnki.rdyj.2015.11.012
- 3. Qiu D, Song F, Feng Z, et al. Local Tobacco Control Policies in China Based on Text Analysis. Modern Preventive Medicine. 2021; 48(4):681-684.
- 4. Haig TR, Akawung AK, Rajabi AA, et al. Reductions in Secondhand Smoke Exposure among Non-smokers Post-legislation. Tobacco Regulatory Science. 2019; 5(5):463-479. doi: 10.18001/TRS.5.5.7
- 5. Chaloupka FJ, Straif K, Leon ME. Effectiveness of tax and price policies in tobacco control. Tobacco Control. 2011; 20(3):235-238.
  - doi: https://www.jstor.org/stable/41320112
- 6. WHO. WHO report on the global tobacco epidemic, 2015: Raising taxes on tobacco. 2015.
- 7. Henriksen L, Schleicher NC, Johnson TO, et al. Mind the gap: changes in cigarette prices after California's tax increase. Tobacco Regulatory Science. 2019; 5(6):532-541. doi:10.18001/TRS.5.6.5
- Xie L, Jiang Y. Healthy China Will Be Smoke-free China. Chinese Journal of Prevention and Control of Chronic Diseases. 2019; 27(7):481-483. doi:10.16386/j.cjpccd.issn.1004-6194.2019.07.001