



Invited Review

China: the tipping point in tobacco control

Judith Mackay*

Vital Strategies, Bloomberg Philanthropies

*Correspondence address. Riftswood, 9th milestone, DD 229, Lot 147, Clearwater Bay Road, Kowloon, Hong Kong SAR.
E-mail: jmackay@vitalstrategies.org

Editorial Decision 21 September 2016; Accepted 12 October 2016

Abstract

Background: Tobacco control in China, the world's largest producer and consumer of tobacco, began in the 1980s with the first national prevalence survey and a conference on tobacco held in Tianjin. Since then, there have been dozens of research papers, partial restrictions on smoking and tobacco advertising, public education campaigns, and the ratification of the World Health Organization Framework Convention on Tobacco Control, but progress has been slow. The state-owned tobacco industry remains a major obstacle to tobacco control.

Recent developments: In the last few years, tobacco control efforts have accelerated beyond expectations. The triggering event was the publication on tobacco by the Chinese Central Party School, the ideological think tank of the Communist Party, followed by a spate of activity: directives to government officials; regulations issued by the Ministry of Education, the People's Liberation Army and the Healthy City Standards; tobacco clauses in national advertising and philanthropy laws; the creation of a Smoke-free Beijing; an increase in tobacco taxation; and a national smoke-free law currently in draft.

Areas timely for policy research and action: There is a crucial need for China to build upon these recent developments, in accepting the economic research evidence of the debit of tobacco to the economy; in implementing robust, comprehensive legislation; in increasing cigarette price through taxation and, most challenging of all, to tackle the power and influence of the state tobacco monopoly over tobacco control.

Key words: China, tobacco control, China central party school, tobacco control action in China

A century of struggle

When cigarettes were first invented, the American founder of British American Tobacco (BAT) said 'Bring me the atlas'. When he turned over the leaves, looking not at the maps, but the population figures, he stopped when he came to the figure: Pop: 430,000,000. 'That' he said, 'is where we are going to sell cigarettes'. And 'that' was China. By the end of the 19th century he had achieved his goal.¹

A century ago, BAT had penetrated almost the whole country with sophisticated manufacturing and advertising techniques not hitherto seen in China and unmatched by any other local or foreign product. BAT resorted to illegal and well as legal distributing techniques to circumvent government opposition.²

BAT effectively demolished the national Chinese tobacco industry calling in political friends from high places, including US President Theodore Roosevelt in 1905, during a boycott of foreign goods. The boycott petered out, and as soon as it ended, 'BAT drove almost all 20 existing Chinese cigarette firms out of business or out of the market', by 'unethical tactics'.³

The foreign tobacco companies were banned from China after the Communist government took power, and it is reported their farewell comment was 'We will be back'. When the market was opened up in 1979, their hope became reality.⁴

China thus faces multiple challenges not only due to the epidemic of diseases related to tobacco smoking, but also opposition to controls from a state tobacco monopoly and the transnational tobacco companies.

In the 1970s, Chinese doctors first called for action to be taken against tobacco. In 1984, the first prevalence survey was undertaken by the late Prof Weng Xin Zhi (the grandfather of tobacco control in China),⁵ followed by many studies on the substantial health and economic impact of tobacco in China.⁶⁻¹⁸

In 1987, the first national conference on tobacco was held in Tianjin, as it was thought that the topic—smoking—was too sensitive an issue for the meeting to be held in the capital Beijing.

It was quickly realized at that meeting that tobacco control legislation was needed (the drafting of that started on the spot), and that a national coordinating body on tobacco control was necessary, especially to counter the behaviour of the transnational and national tobacco industries.

Thus, the Chinese Association on Tobacco Control (CATC)¹⁹ was born in 1990 as the then Chinese Association on Smoking and Health. The late Minister of Health Dr Chen Minzhang inaugurated at the ceremony, and in 2015 CATC celebrated its 25th Anniversary. Over the years, CATC has moved from initially being a low-profile organization, organizing annual national tobacco control meetings, to developing outstanding advocacy leadership and political lobbying. For example, CATC was instrumental in persuading the Mayor of Shanghai to refuse tobacco sponsorship for the Shanghai World EXPO in 2010, an action that would have been not only unthinkable but also impossible in 1990.

China introduced its first tobacco control law in the early 1990s, embedded in a law regulating the tobacco monopoly (Law of the People's Republic of China on Tobacco Monopoly, Implementation dated 1st January 1992). Thus the tobacco monopoly has jurisdiction over tobacco control items such as a ban on advertising in the print and electronic media, pack warnings (currently single, text-only and weak), and tar reduction. The granting of self-regulation to the tobacco monopoly has remained a significant barrier to stronger and swifter tobacco control action in China.

In addition there is a strong historical and political link between tobacco and Chinese culture, with gift-giving for officials, chain-smoking by senior leaders, and endorsement of common misperceptions by political leaders such as Mao Tse Dong, who when reportedly advised by his doctor to cut down, refused, and declared: 'Smoking is also a form of deep-breathing exercise'.²⁰

The holding of the 10th World Conference on Tobacco or Health in Beijing in 1997 led the tobacco monopoly to circulate confidential, internal, written comments ahead of the conference to 30 government departments, including the Office of

the Central Communist Party, the Ministry of Health and the Commission for Economics and Trade, pointing out that:

- (i) tobacco tax had great importance as an income for the government;
- (ii) tobacco was a source of income to many poor people; that the industry employed 100 million people (10% of the population)—in farming, industry, trade and commerce in 23 provinces and regions (even stating that industries such as machinery, electronics, aviation, shipping, paper making, printing, chemical industry, textiles, hundreds of other related enterprises were dependent on tobacco);
- (iii) smoking was a ‘pleasant custom’ for 300 million persons;
- (iv) the health evidence was ‘controversial, and plenty of smokers live a long life’, warning that ‘unscientific anti-smoking publicity would not achieve the objective and would be misleading’; and
- (v) tobacco must be viewed from the aspect of economic and social development.

The letter ended with four recommendations:

- (i) Before and after the 10 WCTOH, China needs to examine and unify the publicity on anti-smoking, and make it objective and appropriate.
- (ii) The tobacco industry is executing the country and party line and should be treated like any other industry and not be over-restricted.
- (iii) Publicity can be strengthened about health hazards and adoption of measures to stop smoking among primary and secondary students and among young people. For adult smokers, there should be education rather than restrictions.
- (iv) Academics and community organisations can freely express their opinion. But when government departments and leadership want to express their opinion, they must be very careful.

This sounds only too familiar to those conversant with the tobacco industry, whether commercial companies or national monopolies: the questioning

of the evidence, the emphasizing of the economic importance of tobacco with no mention of the economic costs to the country, and the calling for education rather than tobacco control legislation. The message to President Jiang Zemin, who opened the Conference in the Great Hall of the People, was to take less restrictive action on tobacco control.

In the end, President Jiang Zemin delivered a rather general and non-committal address, emphasizing issues like ‘peaceful social life’ and ‘improving spiritual civilization’.²¹

On 11 October 2005 China (including Hong Kong and Macau) ratified the World Health Organization Framework Convention on Tobacco Control (WHO FCTC),²² which entered into force ninety days later, with a raft of obligations to take many further steps in tobacco control.

Over the last several decades, government and non-governmental organisations in China have been active in tobacco control: the National Health and Family Planning Commission (ex-Ministry of Health), the China Centers for Disease Control,²³ the Think Tank Research Center for Health Development,²⁴ the Chinese Association on Tobacco Control,²⁵ universities, institutes, and individuals. Joint initiatives included a 4-year tobacco crop substitution project of 458 farm families in Yunnan (THE tobacco growing province of China) initiated in 2008 by the Yuxi Bureau of Agriculture and the University of California at Los Angeles School of Public Health. This demonstrated that farmers, many of whom were not formally educated, were able to learn the knowledge and skills necessary to grow other crops that gave them a higher income than tobacco farming—their annual income increased by 21–110% per acre. This clearly illustrated that the perceived dependence of China’s millions of tobacco farmers on growing tobacco was a fallacy.²⁶

China is not wanting for evidence on the magnitude of the tobacco epidemic and the harmfulness it wreaks upon the country. Numerous studies have been undertaken since the 1984 prevalence survey: the ongoing 2004 China Kadoorie Biobank,²⁷ of which a large component is tobacco; the Global Youth Tobacco Survey in 2005, and in 2010 the Global Adult Tobacco Survey.²⁸ Since 2008, the

International Tobacco Control China Project has researched and published many policy analyses on tobacco control in China.^{29–31}

In addition, many international and regional organisations have assisted China's tobacco control efforts over decades, usually working with local partners, ranging from WHO (which has promoted tobacco control in China for decades), the Bloomberg Initiative to reduce tobacco in low and middle-income countries³² (including Vital Strategies, the International Union Against Tuberculosis and Lung Disease (The Union), the Framework Convention Alliance,³³ the CDC Foundation, the Campaign for Tobacco Free Kids, the John Hopkins Bloomberg School of Public Health), the Bill and Melinda Gates Foundation,³⁴ Emory University and the University of Hong Kong.

But translating all the data and effort into action has been challenging³⁵ and, in spite of all these measures, China remains the tobacco epicentre of the world.

The current situation

(a) *Prevalence and harm*: China is the largest producer and largest consumer of tobacco in the world. There are now more cigarettes smoked in China than all other low and middle-income countries combined.³⁶ There are over 300 million smokers, mostly men, and 700 million non-smokers are exposed to second-hand smoke. Similar to many countries in Asia, the prevalence of smoking among men is estimated at over 50%, while the prevalence among women remains low at under 3%. China is in the third stage of the classic tobacco epidemic curve in that male rates are beginning to fall, but the female rates have stayed surprisingly low up to now.³⁷ Recent research from the Kadoorie Biobank, published in the *Lancet* in 2015,³⁸ confirms over one million deaths annually are caused by tobacco, and the situation is deteriorating with Chinese men starting to smoke at a younger age than their fathers and grandfathers. As a result, smoking will cause about 20% of all adult male deaths in China

this decade. Although overall adult mortality rates are falling, as the adult population of China grows and the proportion of male deaths due to smoking increases, the annual number of deaths in China that are caused by tobacco will rise from about 1 million in 2010 to 2 million in 2030 and 3 million in 2050, unless existing smokers quit and non-smokers are persuaded not to start. These deaths will be primarily from cancer, chronic obstructive pulmonary and cardiovascular disease, although there are many other causes of tobacco deaths in addition to these.

Fortunately, female smoking prevalence remains very low, in spite of greater independence of Chinese women, more purchasing power, and tobacco promotion directed towards women. However, there is no room for complacency, as female smoking may be slowly becoming more socially acceptable.³⁹

- (b) *Economic burden of tobacco*: In addition to the health problems China, as elsewhere, incurs massive economic costs due to tobacco, to the smoker, employers and the government, already amounting to billions of dollars^{40,41} (Table 1).
- (c) *Obstacles to tobacco control*: In spite of decades of effort, multiple reports and many meetings, tobacco control has been a sometimes seemingly hopeless struggle, like battling upstream up the mighty Yangtze River. The major obstacles to tobacco control are universal (Table 2), and have led, e.g. to the establishment of a Code of Practice on Tobacco Control for Health Professional Organizations.⁴²

The tipping point

Although the data have consistently demonstrated both the growing problem of tobacco use and continuing inadequacy of action on tobacco control, no strong, comprehensive and effective action was taken. The 'political' tipping point—that changed 'yes, but' to 'yes' in China came in 2013, with the publication by the Topic Group of Party School of the Central Committee of CPC: 'Tobacco Control: International Experience and China's Strategy'.⁴⁶ The Party School

Table 1 Costs of smoking

Medical and health costs of smoking and second-hand smoke
Decreased productivity in the workplace by smoke breaks, illness and premature death
Costs of fires and accidents (one third of fires in the world are caused by careless smoking)
Damage to fabric in offices, homes and public places
Tobacco growing, which uses arable land that could grow food—and China is no longer self-sufficient in food production
The costs of deforestation, cutting down trees to cure tobacco
Rubbish of billions of cigarettes, cigarettes packs, matches and lighters that are discarded every day.
Costs to smokers and their families of premature death and ill health, health care costs, costs of second-hand smoke on family health and costs of purchasing cigarettes

is the ideological think tank and training school of the Chinese Communist Party. The current President of China, Xi Jinping, was the Director of the Party School when the research on tobacco was initiated.

The history of how this came about is interesting. Johnson and Johnson, US-based and one of the world's largest consumer health, medical devices, biologics and pharmaceuticals companies, was one of the sponsors of the Beijing Olympics in 2008. Following this, J&J were asked by the Chinese authorities if they would be willing to sponsor other health projects in China. A 2-year research project on tobacco undertaken by the Party School was proposed, to which J&J immediately agreed.

The 240-page Party School report is an unprecedented document. A major section is devoted to historical and philosophical perspectives, including human rights (of the smoker versus the non-smoker), the ethos of smoking, obligations, and conflicts. In other places, it is surprisingly frank and direct. It acknowledges that China's tobacco control efforts 'are weak', and that laws that do exist are inadequately enforced. It even states that its own tobacco industry 'may mislead the public'. It dares speak about the conflict of interest with the tobacco monopoly being both in charge of growing and selling tobacco, yet responsible for the WHO FCTC. 'The performance of FCTC and tobacco control undertaken by the State Tobacco Monopoly Administration representing Chinese government causes the conflict of interest within the State Tobacco Monopoly Administration. Under the mixed functions of government and enterprise, it is improper for the State Tobacco Monopoly Administration, the competent department of national tobacco economy, to act as a member for performing the FCTC.'

It looks at five jurisdictions in detail as examples and lessons in tobacco control: Hong Kong, United States of America, Canada, New Zealand and the United Kingdom. It fully acknowledges China's obligation under the WHO FCTC.

The Party School invited a 15-member International Expert Group (the author is the Leader of this Group) to review the document prior to publication. The group was able to contribute international experience, particularly in implementation, but the document was, and is, a product of the Party.

In the 3 years since the publication of the Party School report, tobacco control initiatives have followed one after the other (Table 3).

Challenges ahead

China has ratified the WHO FCTC⁵⁶ and is thus bound under the obligations of an international treaty to introduce stronger measures to reduce the tobacco epidemic, and to meet long-overdue deadlines of the treaty.

Article 5.3 states: 'In setting and implementing their public health policies with respect to tobacco control, Parties shall act to protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law.' In addition, detailed and practical Guidelines have been drawn up elaborating the details of requirements of keeping the tobacco industry out of tobacco control policy.⁵⁷ China has not yet submitted any report on the implementation of the Guidelines to Article 5.3.⁵⁸

Article 5.3 poses a special challenge for China with its State Tobacco Monopoly Administration

Table 2 Obstacles to tobacco control**Medical profession**

The focus of the medical profession is on curative rather than preventive medicine.

Tobacco prevention and reduction is not systematically taught in medical schools.

Often there is no financial remuneration for prevention or for quitting advice, unlike curative interventions.

There is a reluctance to get involved with issues in public, or to fight the tobacco industry, especially when it is owned by the government.

Many health personnel have no media experience, which limits their capacity to become effective advocates.

There is an unfamiliarity with the dimensions of actions needed to bring down this epidemic, e.g. fiscal measures, tobacco smuggling and litigation.

Lack of training in counselling patients to quit.

A significant proportion of doctors still smoke themselves.

Governments

Governments are often preoccupied with immediate issues, even those which cause far fewer deaths than tobacco.

Governments are often preoccupied with other diseases, even those which cause far fewer deaths than tobacco.

There is a focus on tobacco tax revenue but not the economic debit of tobacco.

Ministries of health are less powerful than ministries of finance and trade, who are aligned to tobacco interests.

Tobacco industry

The largest tobacco company in the world is the Chinese government. The China National Tobacco Corporation (CNTC) is under the jurisdiction of the State Tobacco Monopoly Administration (STMA).⁴³

While the STMA manages the monopoly, CNTC is the corporate body responsible for marketing, production, distribution and sales of tobacco products.⁴⁵

The CNTC accounts for about 44% of the world's total consumption of cigarettes, and accrues billions of US dollars of profit annually.³⁶

In 2013 it manufactured about 2.5 trillion cigarettes. Its next largest competitor, Philip Morris International, produced 880 billion.

The tobacco industry accounts for about 7% of the state's revenue each year.⁴⁵

The state monopoly is extraordinarily powerful, wealthy and well-connected, now behaving like the transnational tobacco companies in opposing tobacco control measures.

The general perception both among government and among the population has been that the monopoly provides jobs and pays taxes, and is thus a vital component in China's economy.

The tobacco industry undermines tobacco control efforts by:

- Promotion, lobbying, organizing meetings.
- Attempting to influence the political and legislative process.
- Exaggerating the economic importance of the industry, claiming that: tobacco control will harm the economy, and lead to job and business losses for farmers, factory workers, retailers, and the hospitality industry; tax increases will harm the poor and lead to an increase in illicit trade; and bans on tobacco advertising, promotion and sponsorship will harm the advertising industry.
- Discrediting proven science and economic evidence.
- Manipulating public opinion to gain the appearance of respectability.
- In many places, fabricating support through front groups.

deeply embedded in the Government. Of great concern is that China's internal WHO FCTC implementation mechanism is led by the Ministry of Industry and Information Technology which oversees the tobacco industry and contributes to setting its growth targets. This creates a fundamental conflict of interest

and China needs to reconsider this mechanism in light of the guidelines to Article 5.3. The Party School report did, in fact, recommend no less: 'The State Tobacco Monopoly Administration is also the Chinese National Tobacco Corporation (CNTC), a special body with mixed functions of government

Table 3 Tobacco control initiatives following the publication of the Party School report in 2013

Ministry/organisation	Date	Summary of measures
State Council and Communist Party General Office Directive ⁴⁷	2013	Government officials should take the lead in ensuring existing smoke-free laws are enforced. Officials should promote awareness about the harms of smoking and the importance of tobacco control. Cigarettes should not be given as official gifts. Smoking and tobacco products should be banned from all government functions and events.
Ministry Education Notice regarding nationally banning smoking ⁴⁸	2014	Smoking should be banned or strictly limited in education establishments. There will be bans on tobacco advertisements and sales in educational premises.
Notice on Strengthening the Tobacco Banning and Control in the People's Liberation Army ^{49,50}	2014	This notice requests all levels of the Army Patriotic Health Committee include tobacco control as part of the routine management and education work, to create smoking-free units and offices all over the army, to ask military officers and soldiers not to smoke and to refuse second-hand smoking, to encourage soldiers who smoke to quit smoking, to advocate all military officers and soldiers to take lead not to smoke in public places.
National Healthy City Standards ^{51,52}	2014	These recent standards strengthened tobacco control. (Since 2007, China's 'Healthy cities' have implemented a range of interventions, focused on tobacco, healthy lifestyles, road safety and healthy markets.)
Beijing: Smoke-free legislation ⁵³	2015	Beijing became a smoke-free city on 1 June 2015 with smoking banned in all indoor public places, workplaces and public transportation. While other cities had adopted smoke-free laws prior to this, Beijing's smoke-free law is the first to require 100% smoke-free indoor (and some outdoor) public places, and thus the first sub-national smoke-free law in China to be fully compliant with the WHO FCTC.
National Advertising Law of the People's Republic of China; under the jurisdiction of Industry and Commerce Administrative authority of the State Council. ⁵⁴	2015	Article 22 refers to tobacco: <ul style="list-style-type: none"> • It is prohibited to publish tobacco advertising in the mass media, public places, means of public transport, or outdoors. It is prohibited to distribute any form of tobacco advertising to minors. • It is prohibited to use advertising and public interest announcements for other commodity or service to promote tobacco product name, trademark, package, design and similar content. • Announcement for any change of address, name and job opening, among others, published by tobacco product manufacturer or seller, should not contain tobacco product name, trademark, package, design or similar content.

Continued

Table 3 *Continued*

Ministry/organisation	Date	Summary of measures
Ministry of Finance ⁵⁵	2015	Tax increases were implemented, and these increases were passed on to the consumer—a modest first step in tobacco tax policy.
China Academy of Governance (formerly known as the National School of Administration)	2015	This twin pillar of the Chinese government (along with the Party School) held internal meetings on tobacco control, and one of its senior economists is now on the Board of the Chinese Association of Tobacco Control.
Philanthropy Law	2016	Article 40, Paragraph 2 states: No organization or individual shall use philanthropic donations to unlawfully publicize tobacco products, and no organization or individual shall in any way use philanthropic donations to publicize products and matters whose publicity is prohibited by law.
Ministry/Commission Health national smoke-free law (draft stage)	2016 ongoing	Regulations on smoking control at public places.

and enterprise that undertake the role of developing the tobacco industry as well as acting as an important functional department for tobacco control. Role mixing and conflict of interest is serious. With regard to tobacco control, a fair and independent institute for leading and organizing tobacco control should be established, especially for solving conflict of functions of tobacco control and development. For the setting of performing institute, governmental tobacco control department should not conflict with the aim of tobacco control stipulated in the FCTC. According to Article 5.3 of the FCTC, in setting and implementing their public health policies with respect to tobacco control, parties shall act to protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law.'

This recommendation is only for a separation of the responsibility of the FCTC and tobacco control from the commercial aspects of the monopoly. It does not recommend privatisation of the state monopoly, and tobacco control advocates in general concur. The future of the tobacco monopoly is uncertain; it will certainly not easily fade into history.

It has often been said that implementation of tobacco-free laws would be very difficult in China, but the existing examples of two mega smoke-free cities—Shenzhen and Beijing—prove that not to be

the case. Also, about 50 million visitors from the mainland travel to Hong Kong each year, immediately obeying the much stricter smoke-free laws of Hong Kong. Annually, there are only about 300 fixed penalty notices and summonses for smoking in non-smoking areas issued to the 60 million overseas visitors, 50 million of whom come from China.⁵⁹

There are other formidable challenges, such as the domestic regulation of the e-cigarette market (e-cigarettes originated in China, which is still the world's leading producer). There is also totally inadequate provision of assistance for smokers to quit.

Cultural practices around tobacco, like the gift-giving of cigarettes, can be altered, in the same way that the earlier habit of spitting has significantly declined. Vital Strategies' Mass Media Communications Campaign (part of the Bloomberg project) has produced media spots showing this practice to be inherently harmful to the receiver.⁶⁰

Discussion

The rationale for taking strong public health action against tobacco use in China is unquestionable.

China has up to now been left behind much of the rest of Asia in tackling the tobacco epidemic. Asia has shown that tobacco control is not the prerogative of

western countries. The earliest tobacco control legislation in the world was in Asia (Singapore, 1970) and bans on duty-free cigarettes (Singapore) and on smokeless tobacco (Hong Kong, 1987), as well as the use of tobacco tax to fund health promotion (Thailand) have been world leading. The Western Pacific is still the only WHO region where all countries have ratified the WHO FCTC. Several jurisdictions (Hong Kong, Japan, Singapore) have halved prevalence rates for male smoking over the last 40 years and, to date, the expected increase in female smokers has not materialised.

The Party School report is a welcome analysis, has provided an ideological platform for tobacco control, and illustrates the importance of political will.

There is an oft-repeated mantra in China that 'China is a special case' in relation to tobacco. In fact, China only differs from other countries in the size of the problem. Among a diversity of countries of different sizes, political persuasion and stages of development, the product is the same, the health effects are the same, the obstacles are the same. What needs to be done is the same. The WHO FCTC is testament to this, in that it applies to all countries of all-size populations, forms of governance and stage of development. China must grasp the political nettle and put a stop to the unfolding health, social and economic devastation inflicted by tobacco upon the people of China.

Acknowledgements

I am most grateful to Dr Angela Pratt, Technical Officer, Tobacco Free Initiative, WHO China, for her constructive comments and suggestions on this paper.

The views expressed are solely those of the author, and do not represent those of the China Central Party School or the Chinese government.

Conflict of interest

The author has no potential conflicts of interest.

References

1. Cochran S. *Big Business in China: Sino-Foreign Rivalry in the Cigarette Industry, 1890–1930*. USA: Harvard University Press, 1980, p. 10.
2. Cochran S. *Big Business in China: Sino-Foreign Rivalry in the Cigarette Industry, 1890–1930*. USA: Harvard University Press, 1980, p. 193.
3. Cochran S. *Big Business in China: Sino-Foreign Rivalry in the Cigarette Industry, 1890–1930*. USA: Harvard University Press, 1980, p. 51.
4. Lee K, Gilmore AB, Collin J. Breaking and re-entering: British American Tobacco in China 1979–2000. *Tob Control*. 2004;13:ii88–95. http://tobaccocontrol.bmj.com/content/13/suppl_2/ii88.full, doi:10.1136/tc.2004.009258.
5. Weng XZ, Hong ZG, Chen DY. Smoking prevalence in Chinese aged 15 and above. *Chin Med J* 1987;100:886–92.
6. Jin SG, Lu BY, Yan DY, et al. An evaluation on smoking-induced health costs in China (1988–1989). *Biomed Environ Sci* 1995;8:342–9.
7. Chinese Academy of Preventive Medicine, Chinese Association of Smoking and Health. *1996 National Prevalence Survey of Smoking Pattern*. Beijing: China Science and Technology Press, 1996.
8. Mackay J. Beyond the clouds. Tobacco smoking in China. *J Am Med Assoc* 1997;278:1531–2.
9. Mackay J. The global perspective: a new opium war. San Francisco Forum on Global Tobacco Control Policies. 19 May 1997.
10. Yang GH, Ma JM, Liu N, et al. Smoking and passive smoking in Chinese, 2002. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2005 Feb;26(2):77–83 (Chinese Journal of Epidemiology) [Article in Chinese].
11. De Beyer, Kollars N, Edwards, et al. Research on Tobacco in China: An annotated bibliography of research on tobacco use, health effects, policies, farming and industry. *Health, Nutrition and Population (HNP) Discussion Paper*. Economics of tobacco control, paper no. 21. July 2004.
12. Cheng HG, McBride O, Phillips MR. Relationship between knowledge about the harms of smoking and smoking status in the 2010 Global Adult Tobacco China Survey. *Tob Control* 2015;24:54–61.
13. Chen ZM, Peto R, Zhou M, et al. for the China Kadoorie Biobank (CKB) collaborative group. Contrasting male and female trends in tobacco-attributed mortality in China: evidence from successive nationwide prospective cohort studies. *Lancet* 2015; 386:1447–1456.
14. The China City Adult Tobacco Survey 2013–2014. Chinese Center for Disease Control and Prevention (China CDC), in conjunction with [CITY] CDC, under the supervision of China's National Health and Family Planning Commission.
15. Hu TW (ed.). Economics of Tobacco Control in China: from Policy Research to Practice. 2016 *World Scientific*

- Series in Global Healthcare Economics and Public Policy*. Vol. 4. Singapore: World Scientific, 2016. ISSN 2010-2089. <http://www.worldscientific.com/worldscibooks/10.1142/10007>.
16. International Tobacco Control Project. Identifying the challenges to tobacco control in China: Findings from the International Tobacco Control (ITC) China Project. *Tobacco Control*; 1 October 2010; Vol. 19, No. Suppl_2. [entire supplement is on China] http://tobaccocontrol.bmj.com/content/vol19/Suppl_2?etoc.
 17. Samet J. Invited commentary: the challenge of tobacco control in China. *Am J Epidemiol* 2014;179:1071–3.
 18. Kostova D, Chaloupka FJ, Yurekli A, et al. GATS Collaborative Group. A cross-country study of cigarette prices and affordability: evidence from the Global Adult Tobacco Survey. *Tob Control* 2014;23:e3, doi:10.1136/tobaccocontrol-2011-050413.
 19. Chinese Association on Tobacco Control. <http://www.catcprc.org.cn/index.aspx?language=en>.
 20. <https://herodotuswept.wordpress.com/2008/01/28/fun-mao-quotesfacts/>.
 21. President Jiang Zemin. Opening Address. *10th World Conference on Tobacco or Health*. Beijing, China; 24th August 1997.
 22. WHO Framework Convention on Tobacco Control. <http://www.who.int/ftc/en/>.
 23. China Center for Disease Control and Prevention. <http://www.chinacdc.cn/en/>.
 24. ThinkTank Research Center for Health Development. <http://en.0430.com/cn/web234140/>.
 25. Chinese Association on Tobacco Control home page. <http://www.catcprc.org.cn/index.aspx?language=en>.
 26. Li, VC, Wang, Q, Xia, N, et al. Tobacco crop substitution: pilot effort in China. *Am J Public Health* 2012; 102: 1660–3. <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2012.300733>.
 27. China Kadoorie Biobank. <http://www.ckbiobank.org/site/>.
 28. Global Adult Tobacco Survey data: China 2010. <http://www.who.int/tobacco/surveillance/survey/gats/china/en/> And <http://nccd.cdc.gov/GTSSData/default/default.aspx>.
 29. World Health Organization Western Pacific Region, University of Waterloo, ITC Project and ThinkTank Research Center for Health Development. *Tobacco Health Warnings in China: Evidence of Effectiveness and Implications for Action* Manila: World Health Organization Regional Office for the Western Pacific, 2014; http://www.wpro.who.int/china/mediacentre/releases/2014/tobacco_health_warnings_in_china_en.pdf?ua=1.
 30. World Health Organization Western Pacific Region and University of Waterloo, ITC Project. *Smoke-Free Policies in China: Evidence of Effectiveness and Implications for Action* Manila: World Health Organization Regional Office for the Western Pacific, 2015; http://www.wpro.who.int/china/tobacco_report_20151019_en.pdf?ua=1.
 31. ITC Project. Continuing challenges to tobacco control in China. *Tob Control* 2015;24:iv6-13. Published Online First: 29 September 2015. doi:10.1136/tobaccocontrol-2015-052616 (10 articles). http://tobaccocontrol.bmj.com/content/24/Suppl_4.toc.
 32. Bloomberg Global Tobacco Control Partners. <http://www.globaltobaccocontrolpartners.org/>.
 33. Framework Convention Alliance. Home page <http://www.ftc.org/>.
 34. The Bill and Melinda Gates Foundation. <http://www.gatesfoundation.org/What-We-Do/Global-Policy/Tobacco-Control>.
 35. Mackay J. Battling upstream against the tobacco epidemic in China. *Tob Control* 1997;6:9–10.
 36. Eriksen M, Mackay J, Schluger N, et al. *The Tobacco Atlas*, 5th edn. Atlanta, GA/New York, NY: American Cancer Society/World Lung Foundation, 2015; <http://www.tobaccoatlas.org/topic/tobacco-companies/>: Chapter on Consumption; 21.
 37. Thun M, Peto R, Boreham J, et al. Stages of the cigarette epidemic on entering its second century. *Tob Control* 2012; 21:96e101, <http://tobaccocontrol.bmj.com/content/21/2/96.full.pdf+html>, doi:10.1136/tobaccocontrol-2011-050294.
 38. Chen ZM, Peto R, Zhou M, et al. for the China Kadoorie Biobank (CKB) collaborative group. Contrasting male and female trends in tobacco-attributed mortality in China: evidence from successive nationwide prospective cohort studies. *Lancet* 2015; 386:1447–56. <http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2815%2900340-2.pdf>.
 39. Sansone N, Yong HH, Li L, et al. Perceived acceptability of female smoking in China. *Tob Control* 2015;24: iv48–54. http://tobaccocontrol.bmj.com/content/24/Suppl_4/iv48.full, doi:10.1136/tobaccocontrol-2015-052380.
 40. Yang L, Sung HY, Mao Z, et al. Economic costs attributable to smoking in China: update and an 8-year comparison, 2000–2008. *Tob Control* 2011;20:266–2. <http://tobaccocontrol.bmj.com/content/20/4/266.full>, doi:10.1136/tc.2010.042028.
 41. Yao T, Huang J, Sung HY, et al. Determinants of smoking-induced deprivation in China. *Tob Control* 2015;24: iv35–iv39. http://tobaccocontrol.bmj.com/content/24/Suppl_4/iv35.full, doi:10.1136/tobaccocontrol-2014-051542.
 42. World Health Organization. *Code of Practice on Tobacco Control for Health Professional Organizations*. Adopted and signed by the Participants of the WHO Informal Meeting on Health Professionals and Tobacco Control, Geneva. 28–30 January 2004.
 43. He P, Takeuchi T, Yano E. An overview of the China National Tobacco Corporation and State Tobacco

- Monopoly Administration. *Environ Health Prev Med* 2013;18:85–90. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3541807/>.
44. Todd A. “Turning Over a New Leaf”, USDA Rural Development, January 2007. *Report on tobacco production in China*.
45. Martin A. *The Chinese Government Is Getting Rich Selling Cigarettes*. 11 December 2014. <http://www.bloomberg.com/bw/articles/2014-12-11/the-chinese-government-is-getting-rich-selling-cigarettes>
46. Topic Group of Party School of the Central Committee of CPC. *Tobacco Control: International Experience and China’s Strategy*. Beijing, China: Central Party School Publishing House, 2013.
47. General Office of the CPC Central Committee and General Office of the State Council Releasing Notice on Officials Shall Take the Lead in Making Public Places Smoke Free. 29 December 2013. www.gov.cn.
48. Ministry of Education of the People’s Republic of China. http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_1793/201401/163289.html.
49. People’s Liberation Army. *PLA Daily*. 6 June 2014.
50. Ministry of Defence. http://news.mod.gov.cn/headlines/2014-06/06/content_4514290.htm.
51. The National Patriotic Health Campaign Committee Office under the Disease Prevention and Control Bureau of NHFPC. National Health City Standards (2014). Released 15 May 2014.
52. WHO Western Pacific Region. *Healthy Cities: Healthy Cities in China*. http://www.wpro.who.int/china/media/centre/factsheets/healthy_cities/en/.
53. WHO Western Pacific Regional Office News release. *Landmark tobacco control legislation in Beijing benefits millions*. June 6, 2015. Manila, Philippines, 5 June 2015.
54. Presidential Order No. 22. People’s Republic of China. http://www.gov.cn/xinwen/2015-04/24/content_2852812.htm. Advertising Law of the People’s Republic of China. (First adopted at the Tenth Meeting of the Standing Committee of the Eighth National People’s Congress on October 27, 1994, and amended at the Fourteenth Meeting of the Standing Committee of the Twelfth National People’s Congress on April 24, 2015). http://www.gov.cn/xinwen/2015-04/25/content_2852914.htm.
55. Ministry of Finance. Press Release in Chinese: http://szs.mof.gov.cn/zhengwuxinxi/zhengcefabu/201505/t20150508_1229069.html.
56. World Health Organisation Framework Convention on Tobacco Control. <http://www.who.int/fctc/en/>.
57. Guidelines for implementation of Article 5.3 of the WHO Framework Convention on Tobacco Control on the protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry. http://www.who.int/fctc/guidelines/article_5_3.pdf.
58. WHO FCTC Implementation database. *Treaty Provisions*. <http://apps.who.int/fctc/implementation/database/article/article-5/indicators/7004/reports>.
59. Department of Health, Tobacco Control Office, Government of the Hong Kong Special Administrative Region of the People’s Republic of China. *Tourist Numbers From Tourism Commission*. http://www.tourism.gov.hk/english/statistics/statistics_perform.html.
60. Huang LL, Thrasher JF, Jiang Y, et al. Impact of the ‘Giving Cigarettes is Giving Harm’ campaign on knowledge and attitudes of Chinese smokers. *Tob Control* 2015;24:iv28–34. http://tobaccocontrol.bmj.com/content/24/Suppl_4/iv28.full, doi:10.1136/tobaccocontrol-2013-051475.