Tobacco-free world 2

The road to effective tobacco control in China

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The non-communicable disease burden in China is enormous, with tobacco use a leading risk factor for the major non-communicable diseases. The prevalence of tobacco use in men is one of the highest in the world, with more than 300 million smokers and 740 million non-smokers exposed to second-hand smoke. In the past decade public awareness of the health hazards of tobacco use and exposure to second-hand smoke has grown, social customs and habits have changed, aggressive tactics used by the tobacco industry have been revealed, and serious tobacco control policies have been actively promoted. In 2014, national legislators in China began actively considering national bans on smoking in public and work places and tobacco advertising. However, tobacco control in China has remained particularly difficult because of interference by the tobacco industry. Changes to the interministerial coordinating mechanism for implementation of the WHO Framework Convention on Tobacco Control are now crucial. Progress towards a tobacco-free world will be dependent on more rapid action in China.

Introduction

China has undergone rapid demographic and epidemiological changes in the past few decades, including a substantial reduction in fertility and child mortality, along with increases in life expectancy at birth from 69.3 years in 1990, to 75.7 years in 2010.¹ The number of deaths from non-communicable disease—predominately stroke, ischaemic heart disease, cancer, diabetes, and chronic obstructive pulmonary disease-rose from 5.9 million (95% CI 5.7-6.3) in 1990, to 7.0 million (95% CI 6.7-7.3) in 2010, or from 74% to 84% of all deaths.² Tobacco use, including active smoking and exposure to tobacco smoke, is one of the leading risk factors for premature mortality and disability from non-communicable diseases in China. About 12% of all deaths (0.6 million) were attributed to tobacco use in 1990,3 but this estimate has increased to 16.5% (1.4 million) in 2010.¹ In the absence of effective action, the burden of smoking-caused disease will increase, causing enormous premature mortality. If present smoking patterns are maintained (so-called business-as-usual), tobacco will cause about 3 million deaths in China every year by 2050. Of great concern, about 100 million of the 0.3 billion Chinese smokers that are now younger than 30 years will eventually have tobacco-related deaths.3

The need for comprehensive tobacco control in China is clear; a tobacco-free world is crucially dependent on more rapid progress in China. The WHO Framework Convention on Tobacco Control (FCTC) provides a framework to respond to global tobacco challenges. China ratified the treaty in 2005,⁴ and the FCTC came into force in China on Jan 9, 2006; this treaty was potentially a big step for promotion of health in the Chinese population. Although China has made progress on tobacco control (especially at the local level), major gaps in meeting the FCTC requirements remain since it was ratified.

The economic burden caused by tobacco—health-care costs, decreased productivity in the workplace, illness, premature death, and fire damage—is substantial. In 2012,

hospital treatment costs for acute myocardial infarction and stroke alone were estimated to be ¥50 billion (US\$8 billion); the average increase per annum in hospital treatment expenses has been about 20-25% since 2004.5 The total health expenditure was ¥2890 billion (\$466 billion) in 2012,6 although tobacco taxes in 2012 amounted to only a fraction of the cost (¥865 billion or \$140 billion).7 Another study8 also showed that the total health-care costs of second-hand smoke exposure in rural China accounted for 0.3% of China's national health-care expenditures in 2011. More than a fifth of the total health-care costs of second-hand smoke exposure in rural China were paid for by health insurance. The out-of-pocket expenditures per person accounted for almost half (47%) of their daily income.8 Additionally, the tobacco-related health crisis affects mainly the middle-aged population, thus providing a barrier to overall economic growth and negatively affecting the economic wellbeing of individuals and households. Despite the huge economic cost to the

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This is the second in a **Series** of three papers about a tobacco-free world

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Key messages

- The prevalence of tobacco use among adult men in China is one of the highest in the world and is increasing; 1-4 million deaths were attributed to tobacco use in 2010
- During the past decade, social mobilisation for tobacco control has made substantial progress in China, including growing public awareness of the health hazards of tobacco use, changing social customs and habits, revelations of the aggressive tactics of the tobacco industry, and legislative responses to tobacco control
- In 2014, important developments in nationwide legislation were undertaken to protect people from second-hand smoke and ban all forms of tobacco advertising, promotion, and sponsorship; the next challenge will be to increase cigarette tax and changes to health warnings on cigarette packaging to reduce tobacco consumption
- Poor performance in tobacco control has been attributed to interference by the tobacco industry; changes to the interministerial coordinating mechanism for implementation of the WHO Framework Convention on Tobacco Control are urgently needed
- Together with support for tobacco control from national leaders and the growing awareness of people's right to a healthy life, China has the potential to be successful in tackling the pandemic of tobacco use among Chinese people

Chinese economy and the human toll of tobacco on the Chinese people, tobacco control remains a huge challenge, mainly because of the conflict between the tobacco industry and tobacco control policies.

Part of a three-part Series on the goal of a tobacco-free world,^{9,10} this Series paper reviews the present status of tobacco control responses in China, identifies opportunities for effective tobacco control policies, explains why insufficient progress has been made in the implementation of the FCTC, and considers opportunities for acceleration of the main tobacco control polices in China. Our analysis is based on publicly available secondary data from 1990 to 2014, including published academic sources and policy documents, other reports from government and public institutions in China and from international organisations, and from the State Tobacco Monopoly Administration (STMA) and China National Tobacco Corporation (CNTC).

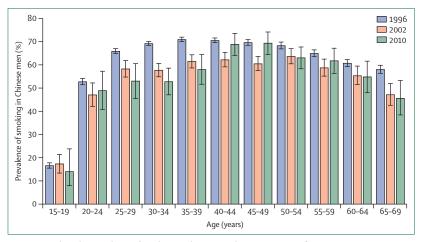


Figure 1: Trends in the prevalence of smoking in Chinese men by age group, 1996–2010 Reproduced from the Global Adults Tobacco Survey China 2010 Country Report,¹¹ by permission of Chinese Center of Disease Control and Prevention.

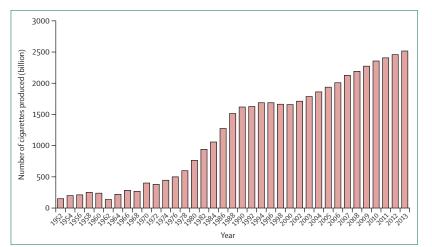


Figure 2: Annual cigarette production by the China National Tobacco Corporation between 1952 and 2013 Records taken every 2 years from 1952 to 2002, and every year from 2002 to 2013. Data sourced from the National Bureau of Statistics of China.²¹

The context

Tobacco use and public awareness of the health hazards

The prevalence of tobacco use in Chinese men is one of the highest in the world, with more than 300 million smokers and 740 million non-smokers exposed to second-hand smoke.¹¹ Tobacco use prevalence in China has been 63% in men since at least 1984, when the first national tobacco use survey was administered.¹² Figure 1 shows the present trends of smoking prevalence in men by age group, from 1996 to 2010. Despite the slow decrease in smoking prevalence overall during the past three decades, the reduction in smoking in men aged 40–59 years has recently slowed down and in fact reversed, with rates increasing since 2002.^{13,14}

The 2010 Global Adults Tobacco Survey (GATS)¹¹ reported that in China 288 million adult men (52 \cdot 9%) and 12 \cdot 6 million adult women (2 \cdot 4%) smoked at the time of the survey.¹⁵ In China, about 20% of students aged 13–15 years (30 \cdot 1% of boys and 8 \cdot 7% of girls) have used tobacco at least once.¹⁶ Furthermore, more than 342 million adult men and 16 million adult women have smoked cigarettes at some time in their lives in China.¹¹

A 2010 survey¹¹ reported that of regular smokers in China, most (95%) smoke manufactured cigarettes, and the mean number of cigarettes smoked each day was 14·2. In 2010, cigarette prices in China followed a skewed distribution. Although some respondents reported buying expensive cigarettes (more than ¥100 [\$20·0] for a pack of 20 manufactured cigarettes), 50% of people spent ¥5 [\$1·0] or less on one pack of cigarettes.¹¹

Overall, awareness of the health hazards of tobacco has improved in the past 15 years in China, but is still relatively poor compared with most other countries in the GATS. The Chinese population's awareness of tobacco hazards was reported to have improved in the 15 years between 1996 and 2010. For example, GATS revealed that the percentage of Chinese people aware that smoking causes lung cancer and heart attack had risen between 1996 and 2010, by 36% to 77.5% for lung cancer and by 4% to 38.7% for heart attack.^{13,17} 64.3% of respondents were aware that second-hand smoke can cause serious diseases in 2010,¹⁷ versus only 24.2% in 1996.¹⁸

Tobacco industry and tobacco supply in China

Tobacco supply in China is regulated and supervised by the STMA, a government institution. The CNTC manages and controls tobacco production and the sale of manufactured cigarettes, which is a 100% state-owned enterprise. The STMA and CNTC are effectively the same organisation, representing the complete absence of separation between the Government and the tobacco industry. The STMA/CNTC has four levels, including 33 provincial level tobacco companies, 16 tobacco industrial enterprises, and many branches employing around 510000 employees.¹⁹ The STMA/CNTC is well connected with other national governmental agencies and is charged with obtaining the greatest profits through this increasingly intertwined and powerful network, thus representing a powerful special interest group.

With reform and the opening of the Chinese economy, the tobacco industry has developed rapidly. Since 1978, China's tobacco production has more than doubled from 20% to more than 40% of the world's manufactured cigarettes.²⁰ Annual cigarette production in China from 1952 to 2013 is shown in figure 2. Cigarette production was about 500 billion cigarettes in 1980, and substantially rose to $2 \cdot 6$ trillion in 2013.²² China is also the world's largest cultivator of tobacco, producing about 3 million tons of tobacco leaf (43% of the global total) in 2009,²⁰ and $3 \cdot 4$ million tons in 2012.²³

The close relationship between the STMA and the CNTC cannot be ignored in discussions of tobacco control in China. The tobacco industry has become a giant state-owned enterprise, with annual net profits of ¥165.0 billion (\$26.2 billion) in 2012, far bigger than the Bank of China or the Petro China Company.24 STMA/CNTC enjoys special advantages by combining government function and business management; this setup effectively allows the STMA/CNTC to undermine the political and legislative processes on tobacco control by exaggerating the economic importance of the industry,²⁵ by organising support through so-called front groups,26 and by funding research, including in universities, to promote pseudoscience (eg, research on so-called safe cigarettes with low tar and Chinese herbs27) to create doubt about the health effects of tobacco use. The STMA enjoys a seat at the tobacco control policy table and sits on the central Government's WHO FCTC implementation committee. This arrangement represents a serious conflict of interest.

Social customs and tobacco use

In China, smoking has long been associated with a positive image; tobacco pipes symbolising civilisation can be found in posters in Shanghai in 2013.²⁸ A major stumbling block to progress is that cigarettes are deemed essential for almost all social events, including weddings, funerals, and

official activities. Leaders being seen to smoke in public places was common and encouraged.29 Furthermore, to offer cigarettes to friends, guests, or visitors is still regarded as a courtesy. Tobacco's role as a social currency is a result of the tobacco industry usurping traditional values and cultural customs to make cigarette gifting acceptable, desirable, and socially reinforced.³⁰ In 2002, when the WHO FCTC was being negotiated, the Tobacco Museum of China was established, receiving ¥180 million (\$21.7 million) from the Chinese tobacco industry to fund it.31 The Tobacco Museum of China, the largest tobacco museum in the world, features smoking stories and images of the great personage, leaders and famous people, to promote and celebrate Chinese culture and civilisation related to tobacco use, and by association, the tobacco industry.32 At present in China, most top leaders do not smoke and some young people hold smoke-free weddings, which could be regarded as a sign that social customs and habits are changing. Although the practice of offering cigarettes to visitors is gradually becoming less socially acceptable, smoking in indoor public places and workplaces is still very common. Expensive cigarettes are still among the most frequently given gifts in China.33 In a 2009 survey that covered eight provinces in China, almost two-thirds (64.2%) of expensive cigarettes were purchased as gifts (eg, as a cordiality or to entertain guests).³⁴

Tobacco control in China: progress and barriers

In 2005, the year that China ratified the WHO FCTC, the STMA published its *Research on countering tactics for WHO Framework Convention on Tobacco Control and impact on tobacco industry in China*, ³⁵ which systematically outlined strategies on how to avoid implementing the main articles of WHO FCTC and how to weaken its effect. In 2007, the State Council approved the establishment of an Inter-Ministry Coordination and Steering Committee for Implementation of WHO FCTC (the Steering Committee).³⁶ The STMA, as a government sector, has also been a member of the Steering Committee (together with the Ministries of Finance, Industry and Commerce, Customs, and Inspection and

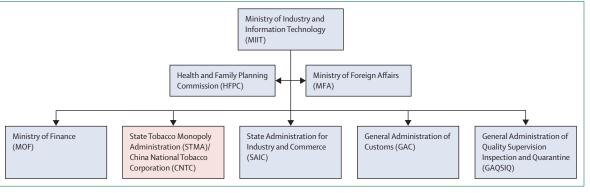


Figure 3: Inter-Ministry Coordination and Steering Committee for Implementation of WHO Framework Convention on Tobacco Control Figure made by authors on the basis of information provided by the State Council.³⁶

	Government regulations and policies	Comments
Health and Family Planning Commission (HFPC)	Article 18 of rules for implementing the regulations on the management of hygiene in public places (2011) ³⁸	Limited sites where smoking is banned, not including indoor workplaces; no implementation measures
General Administration of Quality Supervision Inspection and Quarantine and STMA	Notice on domestic packaging and labelling of cigarette packaging within China (2008) ³⁹	These regulations do not require labelling that is large, clear, visible, and legible, do not mandate a range of distinct warnings and messages, and do not legally require images to be used; these regulations violate the spirit and intent of the WHO FCTC
Ministry of Finance and State Taxation Administration	Notice on adjusting tobacco products excise taxation policies (2009) ⁴⁰	Failed to increase the retail price of cigarettes after adjusting tax rate; cigarettes in China have become much more affordable as average incomes have increased
Department of Maternal and Child Health (HFPC)	Decision on comprehensively banning smoking in the medical and health system in China from 2011 (2009) ⁴¹	Ban in hospitals and health institutes; undercover investigations promoted implementation of this regulation
General Office of the Ministry of Education	Opinion on further strengthening tobacco control in schools (2010) $^{\!\!\!\!\!^{42}}$	Only partly effective; NGOs supervise the implementation with little power
State Administration of Radio Film and Television	Notice on strict control of depiction of smoking in movies and television dramas $(2010)^{\scriptscriptstyle 43}$	Without official implementation measures, but NGOs supervise implementation
Ministry of Industry and Information Technology	China Tobacco Control Plan, 2012–15 (2012) ⁴⁴	Some aspects violated the spirit of the FCTC, such as health labelling, increased tax, and low-tar low-risk cigarettes
Communist Party of China Central Committee and the State Council	Notice prohibiting Party and government officials from smoking in public to set an example for all to follow (December, 2013) ⁴⁶	Setting good leadership and role models
Standing Committee of 13th People's Congress in Harbin	Rules to protect people from second-hand smoke exposure (Sept 5, 2011)	The first law to accord with Article 8 of the WHO FCTC in China
Standing Committee of 5th People's Congress	Rules to control tobacco use revised in Shenzhen special economic zone (Dec 25, 2013)	A strict law according with Article 8 of the WHO FCTC; good implementation
Standing Committee of 14th People's Congress in Beijing municipal	Beijing control smoking ordinance (Nov 28, 2014)	The strictest smoking control law, banning smoking in all indoor public and working places; fully matches the FCTC

Convention on Tobacco Control. NGO=non-governmental organisation.

Table: Tobacco control policies at national and local level in China published by government bodies, 2008-14

Quarantine), and was placed in charge of implementing the FCTC items regarding packaging, labelling, and regulation of the contents disclosures of tobacco products (figure 3). Appointment of the STMA to these items was a clear conflict of interests, violating Article $5 \cdot 3$ of the WHO FCTC.

The Chinese Government has not yet met its obligations to revise tobacco-control legislation at the national level or to raise tobacco taxes.³⁷ Several department regulations do not meet the obligations of the WHO FCTC and clearly violate Article 5.3 of the WHO FCTC (table), which is meant to protect tobacco control policies from commercial and other vested interests of the tobacco industry. A typical case of the violations will be described in the section on tobacco-package labelling.

The 2012–15 China Tobacco Control Plan⁴⁴ was published by the Steering Committee in December, 2012. Although the China Tobacco Control Plan includes ambitious targets for reducing tobacco smoking prevalence (from 28% at present, to 25% by 2015—a reduction of more than 10%), the Plan was weak on the specific policy measures needed to achieve these goals, such as increases in tobacco tax and price, introduction of graphic health warnings on tobacco packets, bans on tobacco advertising, promotion, and sponsorship, and creation of smoke-free environments. At the same time, the STMA has been undermining implementation of the WHO FCTC through the promotion of so-called less harmful, low-tar cigarettes.

Worryingly, national scientific awards have been made to a tobacco industry researcher^{46–48} who promotes these low-tar tobacco products;⁴⁹ this researcher was elected to the Chinese Academy of Engineering (the highest honour for a scientist in China) in 2011 and named the Tobacco Academician in Media,⁵⁰ emphasising the deceptive practices and power of the STMA.⁵¹

Even so, tobacco control is slowly improving in China. Tobacco control efforts have included various segments of society-public health professionals and officials, lawyers, journalists, social and academic celebrities, and non-governmental organisations-all of whom worked together to create the smoke-free Beijing Olympics and Shanghai World Expo, which won accolades from all circles. To strengthen the tobacco control efforts, the Ministry of Health published the first official report on the harms of smoking in 2012.52 In 2013, the Central School of the Chinese Communist Party issued a white paper on tobacco control that discussed national strategies from the perspective of state development and government responsibility.53 In December, 2013, a circular message from General Office of the Communist Party of China Central Committee and the General Office of the State

Council, prohibited Party and government officials from smoking in public to set a positive example.⁴⁵ The council also requested government functionaries not to use public funds to buy cigarettes. These steps are notable in the history of China's tobacco control because they suggest that the political will of the top leadership in China is to take tobacco control more seriously than they have done previously (table).

The present status of tobacco control in China Protection from second-hand smoke

In 2010, an estimated 740 million non-smokers were exposed to second-hand smoke in public places in China; these included nine out of ten restaurants, more than half of government buildings, and more than a third of health-care facilities, schools, and forms of public transportation.¹¹

On Nov 24, 2014, the Legislation Office of the State Council sought advice, opinion, and comments on the draft of the first nationwide regulation of the smoking ban for all indoor and some outdoor public spaces.^{54,55} The Chinese Government has taken almost 10 years to reach this stage and the national regulation, if adopted, will be a huge step forwards to protect health and promote cleaner air.

Some of the efforts leading to this positive step include large-scale smoke-free campaigns⁵⁶ (the programme "towards a smoke-free China" supported by the Bloomberg Initiative, covered 64 million people in 20 cities and 20 counties of 20 provinces of China⁵⁷) and health education campaigns to help to change social etiquette and normal behaviour related to tobacco products (the Central Tobacco Control Program office produced 200000 public service posters, suggesting that to give cigarettes as gifts was the same as causing harm⁵⁸ and local tobacco control groups organised smoke-free wedding ceremonies and wedding anniversaries).

An important step for tobacco control was made when the Chinese Ministry of Health and four other ministries called for the ban of smoking throughout the medical-care system in 2009.⁵⁹ The 12th National Economic and Social Development 5 year plan, passed at the National People's Congress conference in March, 2011, adopted a resolution calling for the "full implementation of banning smoking in public places".⁶⁰ These measures, along with the aforementioned notice issued by the General Office of the Communist Party of China Central Committee and General Office of the State Council in 2013 that leading officers should set an example by banning smoking in public places, are encouraging steps taken by the Government to improve tobacco control.⁴⁵

Another positive step taken by the Chinese Government on the lead up to the present draft of the nationwide ban of smoking in all public places was the campaign to promote smoke-free legislation in capital cities; between 2009 and 2013 nearly half of all provincial capitals had passed legislation. These actions received strong support from both the public and Government; more than 80% of Chinese citizens surveyed supported a smoking ban in workplaces, and about half supported banning of smoking in restaurants and bars.61 Many cities now have measures (either complete or partial) to protect people from second-hand smoke exposure. Harbin, the capital city of Heilongjiang province, issued rules to protect people from second-hand smoke exposure in 2011.62 The new law in Harbin has been hailed as the first law to accord with Article 8 of the WHO FCTC in China. Since then, Tianjin, Shanghai, Guangzhou, Qingdao, Lanzhou, Changchun, Tangshan, and Shenzhen have legislated the same law or adopted it by mayoral command, providing protection for about 140 million people from exposure to tobacco smoke.63 Notably, on Nov 28, 2014, Beijing passed the strictest smoking control law: banning smoking in all indoor public and working places, and eliminating smoking rooms at airports.⁶⁴ All of these endeavours have suggested that the time is ripe for nationwide legislation.

Support for smokers to quit

A national study¹⁸ done in China in 1996 concluded that 65% of established smokers did not intend to quit; by 2010, this proportion dropped to 45%.¹¹ However, the relapse rate increased from 12% in 1996,¹⁸ to 33% in 2010.¹¹ The quit ratio in regular smokers in China was 13%, the second lowest of 14 countries taking part in the first waiver GATS in 2010,¹¹ suggesting great scope remained for China to improve its support for people trying to quit smoking.

The first cessation clinic in China was set up in 1996, and now more than 800 cessation clinics have been established around China.65 However, media reports from hospitals in Beijing, Xi'an, Chongqing, Fuzhou, and Guangzhou suggest that only 1-2 patients per week per hospital sought assistance in these smoking cessation clinics. The failure of the efforts by the health services to help people to quit smoking has been caused by the relocation of existing treatment services for tobacco dependence from senior hospitals to the primary health-care system and medical insurance systems not covering the cost of treatment-for example, nicotine replacement therapy is not on the national medicines list. Fortunately, as of 2010, the Health and Family Planning Commission requires medical and health institutions at all levels and forms to provide at least brief advice on smoking cessation and a quitting service.⁶⁶ This measure will only be successful if a sustainable infrastructure exists that motivates people to attempt to quit, ensures wide access to support for tobacco users who wish to guit, and provides sustainable resources to ensure that such support is available.

Tobacco package labelling

Implementation of large, pictorial health warnings on tobacco products is one of the most cost-effective schemes available to governments for tobacco control and realisation of the WHO FCTC. However, the present warnings on Chinese cigarette packs are not large, clear, visible, or legible, do not include a range of distinct warning and messages, are not periodically changed, are not pictorial, and do not advise about cessation, and as such fall short of meeting the Article 11 requirements and guideline recommendations for best practice.67 The present text-only Chinese health warnings are very ineffective and by comparison with those used by the 20 other countries in International Tobacco Control Policy Evaluation Project are ranked as one of the worst for every indicator of warning effectiveness.67 The Cigarette Package Health Warning International Status Report in 2014, ranked China 110 of 198 countries or jurisdictions on the basis of cigarette package warning sizes.68 Evidence from the other studies^{11,69} revealed that China's health warnings do very little to inform the public.

The present health warnings on Chinese cigarette packages are regulated according to the departmental notice on domestic packaging and labelling of cigarettes packages³⁹ issued in 2008 by the STMA and the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) in the name of implementing the FCTC. The notice is the same as that proposed by the Research on Countering tactics for WHO FCTC and impact on tobacco industry in China³⁵ and is clearly a result of the Government being heavily influenced by the tobacco industry. Additionally, the notice39 allows false information about tar, nicotine, and carbon monoxide to be printed on cigarette packages, leading people to believe that so-called light cigarettes are less harmful than regular cigarettes. Based on the GATS, two-thirds of smokers who had seen a warning label did not consider quitting smoking and one-third of respondents believed that low-tar cigarettes were less harmful to health than regular cigarettes. Furthermore, 55% of health-care professionals and 48% of teachers believed that low-tar cigarettes were less harmful than regular cigarettes.11

The tactics of STMA/CNTC have been widely criticised. In 2008, WHO's China Office stated that the promotion of reduced-tar cigarettes as tobacco control achievements equating to reduced harm was a deliberate lie by the industry to mislead consumers.70 At the third session of the conference of the Parties to the WHO FCTC, the Chinese Government delegation was awarded the Dirty Ashtray Award by Framework Convention Alliance for attempting to make a mockery of Article 11 guidelines, including preferring beautiful cigarette packages over the health of its citizens.71 The Chinese delegation finally agreed to the guideline on packaging and labelling of tobacco products for implementation of Article 11 in 2008, but have yet to implement the guidelines. Although the delegates of the National People's Congress and members of Chinese People's Political Consultative Conference have suggested improving the content and form of health warnings on cigarette package labels, no action has yet been taken.

Enforcement and revision of advertising law in China

According to Article 13 of the WHO FCTC, each Party shall undertake a comprehensive ban of all tobacco advertising, promotion, and sponsorship. The Chinese Government did not start to revise the Advertisements Law of the People's Republic of China published in 1995, until 2014, in which tobacco advertisement was prohibited in only five kinds of media (broadcast, films, television, newspapers, and periodicals) and four kinds of places (waiting rooms, cinemas and theatres, meeting halls, and sports sites and gyms). Article 13 of the FCTC was time-based, requiring Parties to have enacted a comprehensive tobacco advertising, promotion, and sponsorship ban after 5 years of the FCTC coming into force. For China the deadline would have been January, 2011, but the Article of comprehensive bans on tobacco advertising is still in the process of deliberation. The tobacco control circles who have been monitoring tobacco advertisement, promotion, and sponsorship have taken the past 10 years to reveal the limitations. These efforts have partly curbed the overflow of tobacco advertising, promotion, and sponsorship.72,73

Sponsorship especially is the common means for tobacco marketing. For example, Shanghai Tobacco Company sponsored the 2010 Shanghai World Expo, which returned the funds when the donation was exposed and criticised by international and domestic protests.⁷⁴ Other examples of sponsorship by the tobacco industry include the HaoRiZi (Happy days) marathon races,75 the election of Jiaozi (panda) cigarettes youth leader,76 the 2012 Top Model of the World,77 YuXi National Individual Championships,78 and the Wu Ye Shen cultural touch programme, which covers serious cultural events. Other violations of the FCTC include prominent displays of cigarette products at the point of sale, free samples of tobacco products, advertisement of brand names of tobacco products on clothing and accessories, and advertisement of tobacco products on television. The CNTC has sponsored at least 69 elementary schools in naming themselves a Tobacco Hope School, and thousands of students are exposed daily to pro-tobacco propaganda, names, and messages. The motto of the Tobacco Hope Schools reads: "Genius comes from hard work/Tobacco helps you to be successful"; this promotion has been widely criticised internationally.20 Unsurprisingly, in the face of such advertisements, promotion, and sponsorship of tobacco products, 20% of Chinese adults surveyed in 2010 had noticed tobacco advertisements and promotions in the media or in public places and 48.8% had noticed tobacco advertisements on television.¹¹ 86% of 5 and 6 year-olds could identify at least one cigarette brand logo in China.79

Since 2006, tobacco control circles, a substantial proportion of the National People's Congress, and the Chinese People's Political Consultative Conference representatives have been urging a revision of China's advertisement law to incorporate a comprehensive ban

on all tobacco advertising, promotion, and sponsorship. By contrast, STMA has impeded revision of the advertising law and has changed the wording in the Chinese version of the FCTC from "comprehensive ban" to "extensive ban", so as to leave room for tobacco advertising, promotion, and sponsorship; this amendment was regarded a success by the STMA.³⁵ Modifying the bans on advertisement of tobacco products through amendments to the advertising law remains a game played out between tobacco control circles and the tobacco industry. Although the present draft revisions of the law include bans on tobacco product advertisements in most indoor and outdoor public places and all mass media, they do not cover such things as tobacco advertisements at cigarette shops, brand-extension activities, and tobacco industry sponsorship.⁸⁰ After the review, some National People's Congress representatives have called for banning all forms of tobacco advertisement, promotion, and sponsorship to meet the requirements of the WHO FCTC, however, the proposed advertising ban has yet to be finalised by the National People's Congress Standing Committee.⁸¹

Increasing tobacco taxation

Raising tobacco taxes and the retail price is the single most effective policy to reduce tobacco consumption. At present, excise tax on cigarettes in China is very low: 56% for class 1 and 2 (top-graded) cigarettes and 36% for class 3, 4, and 5.82 In 2011, the tax rate was estimated to be between 40% and 46% of the tobacco product retail price,⁸³ far below the FCTC recommendation of 70%. Higher excise taxes alone are insufficient; they must be passed onto the retail price of cigarettes.84,85 Most cigarettes in China are still very cheap: in 2010 the median cost of 20 manufactured cigarettes (one pack) was \$5.0 (around \$0.74).¹¹ Furthermore, tobacco in China has become much more affordable than it was as average incomes have increased with China's rapid economic growth and development. In 2000, 14% of the mean annual income per person was needed to buy 100 packets of the cheapest cigarettes in China; by 2010, the same number of packets of cigarettes could be purchased for just 3% of the mean annual income per person.20 About 22% of smokers have considered quitting because of the price of cigarettes and this proportion is much lower than other countries (for example, in Australia the comparable figure is 78%, Thailand 72%, Canada 66%, Malaysia 64%, and Germany 60%).86 An increase in tobacco taxes and retail price to reduce demand for tobacco will help China to not only increase the overall number of successful quitting attempts by its citizens, but also change the most common reason for quitting from the contraction of a smoking-related disease (after the damage has been done) to the high price of cigarettes (which is more preventive).

Conclusion and recommendations

In around the past decade, social mobilisation for tobacco control has made progress in China. More and more volunteers from all walks of life participate in the tobacco control campaign. The movement has been helped by mass media, which can quickly communicate the importance of tobacco control. People in China are increasingly aware of their right to a healthy life. The Party School of the Communist Party of China Central Committee recently published Tobacco control: international experiences and strategies in China,⁴⁹ which clearly states the importance of tobacco control to improve the health of millions of Chinese people. Following the UN High Level Meeting on Non-Communicable Diseases in 2011,87 and the WHO Global Action Plan on Non-Communicable Diseases, China has agreed to a voluntary reduction of 30% in the prevalence of tobacco use by 2025.⁸⁸ Steps to achieve this target will need action in the following areas as a matter of urgency.

Strong leadership by the Head of State is crucial to ensure a strong commitment to comprehensive tobacco control.⁸⁹ A first step would be for State leaders to announce the Chinese Government's commitment to accelerated implementation of the FCTC by passing effective legislation and enforcing comprehensive tobacco control with the aim of achieving the highest possible level of health for all Chinese people.

China lags behind many other countries in its implementation of the WHO FCTC.⁵⁰ However, hope is on the horizon with regards to nationwide legislation to protect people from second-hand exposure to smoking and implement a comprehensive ban on all forms of tobacco advertising, promotion, and sponsorship. The National Tobacco Control Plan includes an ambitious target of reducing adult smoking rate (sexes combined) from the 2010 rate of 28%, to 25% in 2015.⁴⁴ Only strong policies to reduce demand for tobacco, especially in Chinese men, will help China to achieve its national targets for reduction of smoking rates.

Reform of the fiscal and tax system, including strengthening the regulatory function of excise tax, offers an excellent opportunity to address the economics of tobacco control. At the same time as reducing death and disease, tobacco taxes increase revenue to governments, which can be reinvested into health or other government priorities. Tobacco taxes are therefore good for health and good for economies: raising tobacco taxes is a win–win policy.

According to the estimations of experts, an increase in the excise tax of ¥1 on a pack of cigarettes, with a price elasticity of -¥0.50 (eg, smoking participation elasticity at -¥0.20), would increase the Chinese Government revenues by ¥65 billion (\$8 billion), save 3.42 million lives, reduce medical costs by ¥2.7 billion, and generate a productivity gain of ¥9.9 billion (\$1.2 billion) for the Chinese economy.⁹¹

Governmental tobacco control activities should be separated from the tobacco industry. The weak progress of tobacco control in China is strongly related to the interministerial coordinating mechanism for FCTC implementation, with the Ministry of Industry and Information Technology as the head and the STMA/ CNTC as a member. The department in charge of tobacco products sales should not be associated with the institution responsible for tobacco control.⁹² Ideally, a new National Tobacco Control Bureau should be set up directly under the State Council so as to be charged with coordinating tobacco control actions.

The Chinese Government should restrain from further development of the tobacco industry and plan appropriate strategies to reduce the effect of a reduction in tobacco demand. This strategy would accord with the transformation of economic development patterns mainstreamed in the 12th Five-Year Plan, with economic restructuring as a key priority. In the existing monopoly system, the industry's scale, investment, and production indicators will need to be strictly controlled, and alternative industrial production and diversification of operations encouraged; multiple policy instruments, such as non-price policy, subsidy and production replacement policy, and trade policy should be used to organise and support tobacco growers to switch to alternative crops, enter secondary or tertiary industries, or move into urban areas for employment. Assistance with diversification should be offered to wholesale, monopoly, and retail businesses.

China can become a leader in tobacco control by successfully addressing the world's largest tobacco epidemic and working towards the rapid reduction of the tobacco industry's devastating effect on the health and wellbeing of the Chinese population. The world is watching and waiting with hope that China will take strong actions and set timed and measurable goals towards ending the tobacco epidemic.

Contributors

GY organised and participated in the Series paper conception, writing, and discussion. YWa, YWu, JY, and XW took part in the data interpretation and discussion of the Series paper. JY and XW also took part in the scientific literature search, drawing of figures, and discussion of the Series paper.

Declaration of interests

We declare no competing interests.

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