Invited Commentary

Invited Commentary: The Challenge of Tobacco Control in China

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Smoking cessation is the only way to quickly mitigate the burden of disease and the increased risk of death faced by smokers. In this issue of the Journal, He et al. (Am J Epidemiol. 2014;179(9):1060–1070) document lower relative risks of overall and cause-specific mortality among former smokers compared with continuing smokers in a cohort in China. For China, an immediate increase in the pace of smoking cessation is essential to avoid a rising burden of smoking-attributable disease in a country with the world’s largest number of smokers. These new findings provide nationally relevant evidence of the benefits of cessation. Although China is a party to the World Health Organization’s Framework Convention on Tobacco Control, the government’s implementation of tobacco-control policies as obligated by the treaty has been limited. China needs to be committed to implementing effective measures to promote smoking cessation, a crucial element of both the Framework Convention on Tobacco Control and comprehensive programs for tobacco control.

China; smoking cessation; tobacco control

Abbreviation: FCTC, Framework Convention on Tobacco Control.

Smoking cessation has long been known to reduce the risks of all-cause and cause-specific mortality. The 1964 report of the Advisory Committee to the US Surgeon General (1) commented on the reduced risks of dying prematurely in persons who stopped smoking compared with those who continued to smoke. At that time, the evidence reviewed came from 7 prospective cohort studies, 5 of which provided mortality estimates for former smokers. Subsequently, the epidemiologic and other evidence on the benefits of cessation grew rapidly, confirming the early observations for all-cause mortality and for the incidence of most diseases caused by smoking (2–4). Generally, risk declines as the duration of successful cessation lengthens, and for those smokers who quit before 30 years of age, there is little excess mortality beyond that of nonsmokers (5). Consequently, smoking cessation is an element of all comprehensive programs for tobacco control and the only way to quickly mitigate the disease burden faced by current smokers (6).

In this issue of the Journal, He et al. (7) report on findings about the consequences of smoking cessation in a 35-year cohort study in Xi’an, China. Their study is notable for the duration of follow up and the assessment of cigarette smoking at 2 points in the study: at enrollment in 1976 and again in 1994. Using these 2 assessments, they classified the participants in 1994 as never smokers, continuing smokers, and new quitters and examined the number of deaths over the next 17 years by smoking category. Information bias arising from cessation after the baseline assessment was reduced by the reclassification of smoking status. Additionally, the authors attempted to minimize the consequences of reverse causation, that is, cessation that is motivated by the development of disease. As anticipated, He et al. found lower overall and cause-specific mortality rates for former smokers than for continuing smokers, whereas mortality rates among former smokers were higher than those for never smokers. Also as anticipated, the relative risks among the new quitters were lower for those who had stopped smoking for 8 or more years than for those who had quit for a briefer period of time. As found in other studies of smoking in China and other Asian countries (8, 9), the relative risks for specific diseases in current and former smokers compared with never smokers were below those observed in cohorts in Western countries, particularly the most recent cohorts (10). This difference has been attributed to historical patterns of the age of initiation of
smoking and the numbers of cigarettes smoked. Additionally, He et al. pooled the data for men and women to provide overall estimates, although the former would be expected to have higher relative risks than the latter.

In presenting their study and discussing its findings, He et al. (7) emphasized the need for data on the consequences of cessation from China and other low- and middle-income countries. From the policy perspective, this emphasis is correctly placed. From the tobacco epidemiology perspective, however, the results mesh fully with prior findings and are confirmatory. Given the robust literature on the benefits of smoking cessation, there is no reason to anticipate that findings would vary widely from population to population; manufactured cigarettes are similar from country to country, having the same design features and tobacco content, and strong modifiers of the risks of smoking that would vary greatly from country to country have not been identified. For the purpose of tobacco control, there should not be a need to carry out research to confirm the risks of smoking and the benefits of quitting in every country.

Nonetheless, local findings are likely to have greater influence than the broader international findings, as there is no question as to applicability. Thus, the findings of He et al. should be useful in China, where an immediate increase in the pace of cessation is essential to avoid a rising burden of smoking-attributable disease in the country with the world’s largest number of smokers (more than 300 million). In the most recent estimates for China from the Global Burden of Disease project, smoking, including active and passive smoking, was the third leading contributor to disability-adjusted life-years after dietary risks and hypertension (11). This positioning reflects the long-standing high prevalence of smoking among men; surveys carried out since the 1980s have shown that the majority of men smoke cigarettes and that only a relatively small percentage of ever smokers quit. The most recent data on men, obtained in 2009 using the Global Adult Tobacco Survey (12), provide national prevalence estimates of 52% for current smokers and 13% for former smokers. Fortunately, to date, the smoking prevalence in women has remained below 5%, although there is concern that China’s ongoing cultural and economic shifts may lead to greater rates of smoking, particularly among urban women.

Given the high prevalence of smoking among men, the need for aggressive tobacco control is well recognized by the public health community in China. Over the past 2 decades, substantial research has been carried out on the risks of tobacco smoking in China and on strategies for tobacco control. A tobacco-control program has been established within the Chinese Centers for Disease Control and Prevention and some progress has been made, particularly at the local level. For more than 5 years, the Bloomberg Initiative to Reduce Tobacco Use and the Bill and Melinda Gates Foundation have made substantial investments in increasing the capacity of tobacco control programs and in supporting policy initiatives (13). Nonetheless, tobacco smoking remains fully acceptable and engrained in daily life, although some progress is being made regarding the reduction of exposure to secondhand smoke.

Tobacco control in China is complicated by the government’s ownership of the tobacco industry through the State Tobacco Monopoly Administration (i.e., the China National Tobacco Corporation). Tobacco sales and taxes still contribute substantially to government revenues and figure prominently in the finances of tobacco-growing provinces (14). Consequently, there is tension within the government between the health and economic sectors over tobacco-control strategies. Raising prices has been problematic, for example. In 2009, the government raised taxes on cigarettes while controlling the price so that the overall price remained unchanged (15). As a result, the highly effective and no-cost tobacco-control strategy of increasing the price was effectively neutralized.

The government’s tobacco monopoly has also complicated China’s implementation of the Framework Convention on Tobacco Control (FCTC), the World Health Organization’s treaty to accomplish global tobacco control. China ratified the FCTC in 2005 and incurs certain obligations as a party to the treaty. It has moved forward slowly with implementation of the FCTC guidelines and has given the responsibility of leading implementation to the Ministry of Industry and Information Technology rather than the Ministry of Health. As the Ministry of Industry and Information Technology houses the State Tobacco Monopoly Administration, there is a clear conflict of interest (16).

Not surprisingly, in the most recent World Health Organization Report on the Global Tobacco Epidemic (17), China did not score well. It was found to have smoke-free policies only for public transportation, with a moderately low compliance score of 3 out of a possible 10. Some smoking cessation programs were available, as was nicotine-replacement therapy, although the cost of treatment was not covered by any national health service. Written but weak health warnings were present on cigarette packs. Bans on tobacco advertising on national television and radio and in print media were in place, and national anti-tobacco campaigns were delivered via mass media (17). At the local level, survey data from several provinces showed little indication that the various articles of the FCTC had reached the general population (18). A 2011 report, Tobacco Control and China’s Future, called for the needed aggressive implementation of the FCTC (19).

Thus, the findings of He et al. (7) will be received in a policy context that has not been highly responsive to evidence (19). It does document, as anticipated, that smoking cessation will be beneficial in China. Through its ratification of the FCTC, China has committed to the requirements of Article 14, which call for “. . . effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence” (20, p. 13). Additionally, China is undertaking an ambitious program of health-care reform, and tobacco use should be considered as a major, avoidable driver of health-care costs. Over the past 2 decades, China has made tremendous gains in life expectancy (11). The findings of He et al. provide a nationally relevant reminder that further gains can be made through effective smoking cessation programs.

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REFERENCES


