When a tax increase fails as a tobacco control policy: the ITC China project evaluation of the 2009 cigarette tax increase in China

China ratified the WHO Framework Convention on Tobacco Control (the WHO FCTC) in 2006 and thus has the obligation to increase the prices and taxes of cigarettes. In May 2009, China raised cigarette excise taxes, which was cited by a Chinese government official as a measure of FCTC implementation. Researchers noticed that cigarette retail prices in China did not change after the 2009 tax adjustment; however, their conclusion was based on observations but not survey data.

We used the International Tobacco Control Survey (the ITC survey) data to examine trends in cigarette prices in China after the 2009 tax adjustment. The ITC survey is a prospective survey of tobacco use. Its overall objective is to measure the effects of key tobacco control policies. In China, the first three waves of the ITC survey were conducted in six cities: Beijing, Shenyang, Shanghai, Changsha, Guangzhou and Yinchuan. In each city, 800 smokers and 200 non-smokers were surveyed. To date, three waves of the ITC China survey have been conducted: wave 1 (April to August 2006), wave 2 (October 2007 to January 2008) and wave 3 (May to October 2009). In July 2010, a short phone survey was conducted among the wave 3 respondents to examine changes in cigarette prices. During each survey, smokers were asked about the brand and cost of cigarettes they bought last time. Typical brands of cigarettes were bought by the study team via test purchases from three typical cigarette stores in each city during each survey, and the retail prices of those cigarettes were recorded. Two indicators were used to examine trends in cigarette prices in the six ITC China cities: (1) the average self-reported cost of 18 top brands of cigarette in the six cities (the top three brands in each city) from 2007 to 2010 (wave 2, wave 3 and the phone survey); and (2) the average retail prices (Yuan/pack) of 18 cigarette brands that have been purchased in all the three retail store surveys from 2007 to 2010.

As shown in the table 1, both indicators remained almost unchanged during the study period. After adjusting for inflation, both indicators decreased from 2007 to 2010.

Table 1 Prices of cigarettes in six cities in China from 2007 to 2010

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average self-reported cost of 18 top brands of cigarettes (Yuan/pack)</td>
<td>7.80</td>
<td>7.79</td>
<td>7.83</td>
</tr>
<tr>
<td>Real prices (in 2007 Yuan)</td>
<td>7.80</td>
<td>7.44</td>
<td>7.30</td>
</tr>
<tr>
<td>Average retail prices of 18 cigarette brands that were purchased in all the three retail store surveys (Yuan/pack)</td>
<td>6.26</td>
<td>6.40</td>
<td>6.28</td>
</tr>
<tr>
<td>Real prices (in 2007 Yuan)</td>
<td>6.26</td>
<td>6.12</td>
<td>5.85</td>
</tr>
</tbody>
</table>

(1) In total, we purchased 280 packs of cigarettes (28 brands×10 packs) in 2007, 928 packs in 2009 and 713 packs in 2010.
(2) Numbers of smokers who completed each wave of the International Tobacco Control China surveys were: 4627 in wave 2 (2007), 4410 in wave 3 (2009) and 1190 in the phone survey (2010).

That is, the nominal prices of cigarettes did not change after the tax adjustment and the real prices of cigarettes in China decreased from 2007 to 2010.

Theoretically, if an increase in the cigarette excise tax is not transferred to cigarette retail prices, then cigarette consumption will not decrease. Thus, the 2009 cigarette excise tax adjustment cannot be considered as a measure of FCTC implementation at this time. China is home to one-third of the world’s smokers. One of the major reasons for the high smoking prevalence in the nation is the low price of cigarettes. China needs to make further progress to increase tobacco prices, as the WHO FCTC has been in effect in China for more than 5 years.

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Competing interests None.

Patient consent Obtained.

Ethics approval Ethics approval was provided by the Research Ethics Board at the University of Waterloo and the Institutional Review Boards at the China National Centers for Disease Control and Prevention.

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