Background
In a 2016 study, our team found that pictorial health warning labels (HWLs) with messages about smokers harming others were more effective than messages about smokers harming themselves. To test the effectiveness of pictorial HWLs with more specific messages about smokers harming others, we conducted a follow-up survey in Shanghai, Beijing, and Shenzhen in 2017.

The new HWLs tested included messages about self-harm, harming family or children, harming others in smoke-free places, and anti-cigarette gift giving. Effectiveness was assessed with the following indicators: (1) Thinking about quitting, (2) Concerned about smoking near my family, (3) Concerned about smoking near children, (4) Comply with smoking bans, and (5) Stop cigarette gift giving.

Key Findings
- All pictorial HWLs perform reasonably well for each indicator
- Irrespective of the effectiveness indicators, the HWLs with messages about harming family or children have the highest ratings

Effectiveness Ratings of HWLs with Messages About Harming Others, By Indicator
Study Design

Data were collected in December 2017. Approximately 1066 adult (18+) residents from each city were recruited via street intercept to complete our 25-minute tablet-based survey (50% smokers, 50% male, and 50% <40 years of age). Participants were randomized to one of the four groups of HWLs and viewed eight HWLs corresponding to the assigned message theme. All HWLs were evaluated using each of the indicators of effectiveness. Comparisons between HWL groups were analyzed using t-tests.

<table>
<thead>
<tr>
<th>Self-harm HWL</th>
<th>Harming family or children HWL</th>
<th>Harming others in smoke-free places HWL</th>
<th>Anti-cigarette gift giving HWL</th>
</tr>
</thead>
<tbody>
<tr>
<td>警告 吸烟导致肺癌</td>
<td>警告 二手烟导致气喘</td>
<td>警告 二手烟导致气喘</td>
<td>警告 吸烟导致肺癌</td>
</tr>
<tr>
<td>无论您的年龄或吸烟时间长短，戒烟都可能降低罹患肺癌的风险，帮助您延长寿命。今天就戒烟！</td>
<td>保护您的孩子：不要强迫他们吸你的二手烟。</td>
<td>遵守法律：在公共场所以吸烟伤害的不仅是自己。</td>
<td>当您送给家人朋友祝福，同时也送了肺癌，停止赠送危害。</td>
</tr>
</tbody>
</table>

Translations of primary and secondary statements

- Smoking causes lung cancer
- Secondhand smoke causes asthma
- Secondhand smoke causes asthma
- Smoking causes lung cancer

- No matter your age or how long you have smoked, quitting may lower your risk of lung cancer and help you live longer. Quit today!
- Protect your children: Do not force them to breathe your smoke.
- Follow the law: Smoking in public spaces hurts more than just you.
- You give your family and friends blessings, together with lung cancer. Stop gifting harm.

Discussion

- All HWL messages tested may be effective in China.

- Harming family or children messages performed modestly better than the other messages for all indicators of effectiveness.

- These findings are consistent with our previous findings that showed messages about smokers harming others performed better than self-harm messages.

Photo Acknowledgements

1. Courtesy of Dr. Prakit, Action on Smoking and Health Foundation, Thailand
2. Her Majesty the Queen in right of Canada, represented by the Minister of Health (2013)

The work was supported with funding from Bloomberg Philanthropies’ Bloomberg Initiative to Reduce Tobacco Use (www.bloomberg.org)