

An evaluation of the effectiveness of the Indian Government's Policies to Strengthen Health Warning Labels on Smokeless Tobacco Products: Findings from the 2010-2019 Tobacco Control Project India Surveys

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Abstract

Background: Smokeless tobacco (SLT) packaging in India had a single symbolic (a scorpion) health warning label (HWL) in 2009 covering 40% of the front surface. In 2011, it was replaced with four pictorial images. In 2016, HWLs were enlarged to 85% on the front and back. This study aimed to assess the effectiveness of the old (symbolic and smaller images) and larger HWLs.

Methods: Data were from the Tobacco Control Project India Survey and included respondents who used SLT in Wave 1 (2010–2011, n=5911), Wave 2 (2012–2013, n=5613) and Wave 3 (2018–2019, n=5636). Using a repeated-measures design, weighted logistic regression models assessed whether there were changes in seven HWL effectiveness measures within the domains of awareness, salience, cognitive and behavioural responses. A cohort design was employed to test whether HWL effectiveness in Waves 1 and 2 was associated with quitting SLT in Waves 2 and 3, respectively.

Results: The 2011 HWL revision did not result in any significant changes in HWL effectiveness. There was no significant change in HWL awareness and salience after larger HWLs were introduced in 2016, but respondents were more likely to consider SLT health risks (Wave 2=17.9%, Wave 3=33.6%, $p<0.001$) and quitting SLT (Wave 2=18.9%, Wave 3=36.5, $p<0.001$). There was no change in HWLs stopping SLT use (Wave 2=36.6%, Wave 3=35.2%, $p=0.829$); however, respondents were more likely to avoid looking at HWLs (Wave 2=10.1%, Wave 3=40.2%, $p<0.001$). Effectiveness of older, symbolic and smaller pictorial HWLs was not associated with quitting SLT.

Discussion: There was no significant change in HWL effectiveness following the revision from a symbolic to a pictorial image, but enlarging pictorial images resulted in some improved cognitive and behavioural effects. Results suggested wear-out of HWL salience and that the effectiveness of warnings depends on both their design and time since implementation.

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