

# Educational differences in the impact of pictorial cigarette warning labels on smokers: Findings from the International Tobacco Control (ITC) Europe Surveys

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## **Abstract**

**Objective:** To examine (1) the impact of pictorial cigarette warning labels on changes in self-reported warning label responses: warning salience, cognitive responses, forgoing cigarettes and avoiding warnings, and (2) whether these changes differed by smokers' educational level.

**Methods:** Longitudinal data of smokers from two survey waves of the International Tobacco Control (ITC) Europe Surveys were used. In France and the UK, pictorial warning labels were implemented on the back of cigarette packages between the two survey waves. In Germany and the Netherlands, the text warning labels did not change.

**Findings:** Warning salience decreased between the surveys in France (OR=0.81,  $p=0.046$ ) and showed a non-significant increase in the UK (OR=1.30,  $p=0.058$ ), cognitive responses increased in the UK (OR=1.34,  $p<0.001$ ) and decreased in France (OR=0.70,  $p=0.002$ ), forgoing cigarettes increased in the UK (OR=1.65,  $p<0.001$ ) and decreased in France (OR=0.83,  $p=0.047$ ), and avoiding warnings increased in France (OR=2.93,  $p<0.001$ ) and the UK (OR=2.19,  $p<0.001$ ). Warning salience and cognitive responses decreased in Germany and the Netherlands, forgoing did not change in these countries and avoidance increased in Germany. In general, these changes in warning label responses did not differ by education. However, in the UK, avoidance increased especially among low (OR=2.25,  $p=0.001$ ) and moderate educated smokers (OR=3.21,  $p<0.001$ ).

**Conclusions:** The warning labels implemented in France in 2010 and in the UK in 2008 with pictures on one side of the cigarette package did not succeed in increasing warning salience, but did increase avoidance. The labels did not increase educational inequalities among continuing smokers.

## **Recommended Citation**

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