Do cigarette prices motivate smokers to quit? New evidence from the ITC survey

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Abstract

**Aims** To examine the importance of cigarette prices in influencing smoking cessation and the motivation to quit.

**Design** We use longitudinal data from three waves of the International Tobacco Control Policy Evaluation Survey (ITC). The study contrasts smoking cessation and motivation to quit among US and Canadian smokers and evaluates how this relationship is modified by cigarette prices, nicotine dependence and health knowledge. Different price measures are used to understand how the ability to purchase cheaper cigarettes may reduce the influence of prices. Our first model examines whether cigarette prices affect motivation to quit smoking using Generalized Estimating Equations to predict cessation stage and a least squares model to predict the change in cessation stage. The second model evaluates quitting behavior over time. The probability of quitting is estimated with Generalized Estimating Equations and a transition model to account for the ‘left-truncation’ of the data.

**Settings** US and Canada.

**Participants** 4352 smokers at Wave 1, 2000 smokers completing all three waves.

**Measurements** Motivation to quit, cigarette prices, nicotine dependence and health knowledge.

**Findings** Smokers living in areas with higher cigarette prices are significantly more motivated to quit. There is limited evidence to suggest that price increases over time may also increase quit motivation. Higher cigarette prices increase the likelihood of actual quitting, with the caveat that results are statistically significant in one out of two models. Access to cheaper cigarette sources does not impede cessation although smokers would respond more aggressively (in terms of cessation) to price increases if cheaper cigarette sources were not available.

**Conclusions** This research provides a unique opportunity to study smoking cessation among adult smokers and their response to cigarette prices in a market where they are able to avoid tax increases by purchasing cigarettes from cheaper sources. Higher cigarette prices appear to be associated with greater motivation to stop smoking, an effect which does not appear to be mitigated by cheaper cigarette sources. The paper supports the use of higher prices as a means of encouraging smoking cessation and motivation to quit.

**Keywords** Cessation, longitudinal data, prices, smoking, taxation

**Recommended Citation:**