

Age as a predictor of quit attempts and quit success in smoking cessation: Findings from the ITC-4 Country Survey (2002-2014)

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Abstract

Background and aims: Past research has found that young smokers are more likely to make quit attempts; however, there are conflicting findings regarding age and quit success. This study examined the degree to which smoker age is related to making quit attempts and quit success.

Design: Ten waves of the International Tobacco Control Policy Cohort survey (ITC-4C) collected between 2002 and 2014, with nine wave-to-wave transitions with predictors at the first wave predicting quit attempts and success by the next wave.

Setting: Canada, the United States, the United Kingdom and Australia.

Participants: Data from 15 874 smokers categorized into four age groups at baseline (18-24, 25-39, 40-54 and 55+ years).

Measurements: Age, quit attempts and success (defined as \geq 30 days abstinence confirmed, if possible, on a third wave for recent attempts).

Findings: Older smokers were more likely to smoke daily ($\chi^2 = 1557.86$, $r = 0.136$, $P < 0.001$) than younger smokers. Daily smokers were less likely to report quit attempts (38.1 versus 58.2%) and to achieve 30 days of abstinence (22.9 versus 34.3%) than non-daily smokers. Older daily smokers were less likely to make quit attempts [0.61, confidence interval (CI) = 0.54-0.70, $P < 0.001$], even after controlling for indicators of nicotine dependence, country, sex, education, income, relationship status and household composition, than younger smokers. Younger smokers (< 25) were more likely to succeed for at least 30 days of abstinence, but only when compared with those aged 40-54 (OR = 0.83, 95% CI = 0.68-0.99). However, when controlling for heaviness of smoking the age effect disappeared. Significant interactions with age were found between age and intention when predicting quit attempts, and age and heaviness of smoking when predicting quit success.

Conclusions: An international cohort study indicates that young smokers are more likely to attempt to quit and appear to have similar levels of success in abstaining from smoking compared with older smokers when controlling for dependence. Quit success in all ages is most predicted by lower levels of nicotine dependence.

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