

# Longitudinal associations between smoking cessation medications and alcohol consumption among smokers in the International Tobacco Control Four Country Survey

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## Abstract

**BACKGROUND:** Available evidence suggests that quitting smoking does not alter alcohol consumption. However, smoking cessation medications may have a direct impact on alcohol consumption independent of any effects on smoking cessation. Using an international longitudinal epidemiological sample of smokers, we evaluated whether smoking cessation medications altered alcohol consumption independent of quitting smoking.

**METHODS:** Longitudinal data were analyzed from the International Tobacco Control Four Country (ITC-4) Survey between 2007 and 2008, a telephone survey of nationally representative samples of smokers from the United Kingdom, Australia, Canada, and the United States ( $n = 4,995$ ). Quantity and frequency of alcohol consumption, use of smoking cessation medications (varenicline, nicotine replacement [NRT], and no medications), and smoking behavior were assessed across 2 yearly waves. Controlling for baseline drinking and changes in smoking status, we evaluated whether smoking cessation medications were associated with reduced alcohol consumption.

**RESULTS:** Varenicline was associated with a reduced likelihood of any drinking compared with nicotine replacement (OR = 0.56; 95% CI = 0.34 to 0.94), and consuming alcohol once a month or more compared to nicotine replacement (OR = 0.43; 95% CI = 0.27 to 0.69) or no medication (OR = 0.63; 95% CI = 0.41 to 0.99). Nicotine replacement was associated with an increased likelihood of consuming alcohol once a month or more compared to no medication (OR = 1.14; 95% CI = 1.03 to 1.25). Smoking cessation medications were not associated with more frequent drinking (once a week or more) or typical quantity consumed per episode. Medication effects on drinking frequency were independent of smoking cessation.

**CONCLUSIONS:** This epidemiological investigation demonstrated that varenicline was associated with a reduced frequency of alcohol consumption. Continued work should clarify under what conditions nicotine replacement therapies may increase or decrease patterns of alcohol consumption.

## Recommended Citation

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