

The relationship of e-cigarette use to cigarette quit attempts and cessation: insights from a large, nationally representative U.S. Survey

Levy, D., Yuan, Z., & Abrams, D.B.

Abstract

OBJECTIVES: While cessation from cigarettes is a top priority for public health, controversy surrounds the role of e-cigarettes for quitting cigarettes. This study examines the role of e-cigarettes in quit attempts and 3-month cigarette abstinence using a large, recent nationally representative US sample.

METHODS: Data from the 2014/15 Tobacco Use Supplement-Current Population Survey (TUS-CPS) on cigarette and e-cigarette use and individual characteristics were supplemented with information on state tobacco control policies. We estimated frequencies and multivariate logistic equations for making a quit attempt among those who smoked 1 year earlier and for remaining abstinent at least 3 months among those making a quit attempt. These two outcomes were related to demographic characteristics, tobacco control policies and different frequency measures of e-cigarette use (ever, at least 1, 5, 20 of the last 30 days, a continuous measure of days use).

RESULTS: Having made a quit attempt was more likely among smokers using e-cigarettes than non-users. Among those making at least one quit attempt, quit success was lower among ever users, but higher among those with at least 5 days use of e-cigarettes in the last month. Both quit attempts and quit success were linearly related to the frequency of e-cigarette use.

CONCLUSIONS: Consistent with randomized trials and those observational studies that measure frequency of e-cigarette use, both quit attempts and quit success were positively associated with increased frequency of e-cigarette use. Frequency of e-cigarette use was important in gauging the nature of these relationships.

IMPLICATIONS: Previous studies have obtained mixed results regarding the relationship of e-cigarette use to cigarette smoking cessation. This study provides a more precise methodology for considering the relationship of e-cigarette use to quit attempts and to quit success, and finds that quit attempts and quit success increase with the number of days use in the past month.

Recommended Citation

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