

US smokers' reactions to a brief trial of oral nicotine products

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Abstract

Background: It has been suggested that cigarette smokers will switch to alternative oral nicotine delivery products to reduce their health risks if informed of the relative risk difference. However, it is important to assess how smokers are likely to use cigarette alternatives before making predictions about their potential to promote individual or population harm reduction.

Objectives: This study examines smokers' interest in using a smokeless tobacco or a nicotine replacement product as a substitute for their cigarettes.

Methods: The study included 67 adult cigarette smokers, not currently interested in quitting, who were given an opportunity to sample four alternative oral nicotine products: 1) Camel Snus, 2) Marlboro Snus, 3) Stonewall dissolvable tobacco tablets, and 4) Commit nicotine lozenges. At visit 1, subjects were presented information about the relative benefits/risks of oral nicotine delivery compared to cigarettes. At visit 2, subjects were given a supply of each of the four products to sample at home for a week. At visit 3, subjects received a one-week supply of their preferred product to see if using such products reduced or eliminated cigarette use.

Results: After multiple product sampling, participants preferred the Commit lozenges over the three smokeless tobacco products ($p = 0.011$). Following the one week single-product trial experience, GEE models controlling for gender, age, level of education, baseline cigarettes use, and alternative product chosen, indicated a significant decline in cigarettes smoked per day across one week of single-product sampling ($p < 0.01$, from 11.8 to 8.7 cigarettes per day), but no change in alternative product use (approximately 4.5 units per day). Biomarkers of exposure showed no change in cotinine, but a 19% reduction in exhaled CO ($p < 0.001$).

Conclusions: Findings from this study show that smokers, who are currently unwilling to make a quit attempt, may be willing to use alternative products in the short term as a temporary substitute for smoking. However, this use is more likely to be for partial substitution (i.e. they will continue to smoke, albeit at a lower rate) rather than complete substitution. Of the various substitutes offered, smokers were more willing to use a nicotine replacement product over a tobacco-based product.

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