

How does the use of flavored nicotine vaping products relate to progression towards quitting smoking? Findings from the 2016 and 2018 ITC 4CV Surveys

Li, L., Borland, R., Cummings, K.M., Fong, G.T., Gravelly, S., Smith, D.M., Goniewicz, M., O'Connor, R.J., Thompson, M.E., & McNeill, A.

Abstract

Introduction: There is limited research on the role of flavors in nicotine vaping products (NVPs) in relation to smoking. We examined patterns of flavor use in NVPs in relation to progression towards quitting.

Methods: Data come from 886 concurrent users of NVPs (at least weekly) and cigarettes who were first surveyed in 2016 and then successfully recontacted in 2018 as part of the ITC 4CV Surveys conducted in Australia, Canada, England and the United States. Participants were asked about their main vaping flavor categorized as: 1) tobacco or unflavored, 2) menthol/mint flavored, and 3) "sweet" flavors (e.g., fruit/candy). We examined whether flavor was associated with progression towards quitting smoking between survey years.

Results: Overall, 11.1% of baseline concurrent users quit smoking by 2018. Compared to users of tobacco flavors, those vaping "sweet" flavors were more likely to quit smoking between surveys (13.8% vs. 9.6%; adjusted OR=1.61, 95% CI 1.01-2.58, $p<0.05$), but those using menthol flavors were no more likely to quit smoking (8.3% vs. 9.6%, aOR=0.87, 95% CI 0.43-1.47, $p=0.69$). Among those who had quit smoking in 2018, 52.0% were still vaping, which was lower than the 65.8% among continuing smokers (aOR=0.60, 95% CI 0.39-0.92, $p=0.02$). Sweet flavor users were no more likely to continue vaping compared to tobacco flavor users, either for those continuing smoking or those having quit smoking by 2018. There was a net shift away from tobacco flavor among those who continued to vape at follow-up.

Conclusions: Use of fruit and other sweet flavored e-liquids is positively related to smokers' transition away from cigarettes.

Implications: With multiple jurisdictions considering limiting or banning the sale of flavored NVPs, it is important to consider how such policies may impact smokers using NVPs to transition away from cigarette smoking. Our results indicate that vapers who used sweet flavors were more likely to transition away from cigarette smoking and quit cigarette use, at least in the short term, compared to those who used tobacco or unflavored NVPs. Randomized clinical trials are needed to establish if the observed association between use of flavored e-liquids and smoking cessation is due to self-selection or is truly causal.

Recommended Citation

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