Role of e-cigarettes and pharmacotherapy during attempts to quit cigarette smoking: The PATH Study 2013-16


Abstract

Background: More smokers report using e-cigarettes to help them quit than FDA-approved pharmacotherapy. Objective: To assess the association of e-cigarettes with future abstinence from cigarette and tobacco use. Design: Cohort study of US sample, with annual follow-up. Participants: US adult (ages 18+) daily cigarette smokers identified at Wave 1 (W1; 2013-14) of the PATH Study, who reported a quit attempt before W2 and completed W3 (n = 2443). Exposures: Use of e-cigarettes, pharmacotherapy (including nicotine replacement therapy), or no product for last quit attempt (LQA), and current daily e-cigarette use at W2. Analysis: Propensity score matching (PSM) of groups using different methods to quit. Outcome measures: 12+ months abstinence at W3 from cigarettes and from all tobacco (including e-cigarettes). 30+ days abstinence at W3 was a secondary outcome. Results: Among daily smokers with an LQA, 23.5% used e-cigarettes, 19.3% used pharmacotherapy only (including NRT) and 57.2% used no product. Cigarette abstinence for 12+ months at W3 was ~10% in each group. Half of the cigarette abstainers in the e-cigarette group were using e-cigarettes at W3. Different methods to help quitting had statistically comparable 12+ month cigarette abstinence at W3 (e-cigarettes vs no product: Risk Difference (RD) = 0.01, 95% CI: -0.04 to 0.06; e-cigarettes vs pharmacotherapy: RD = 0.02, 95% CI: -0.04 to 0.09). Likewise, daily e-cigarette users at W2 did not show a cessation benefit over comparable no-e-cigarette users and this finding was robust to sensitivity analyses. Abstinence for 30+ days at W3 was also similar across products. Limitations: The frequency of e-cigarette use during the LQA was not assessed, nor was it possible to assess continuous abstinence from the LQA. Conclusion: Among US daily smokers who quit cigarettes in 2014-15, use of e-cigarettes in that attempt compared to approved cessation aids or no products showed similar abstinence rates 1-2 years later.

Recommended Citation


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