

## E-cigarettes and smoking cessation

When combined with behavioural support, e-cigarettes might be more effective than nicotine replacement therapy (NRT) in helping smokers quit smoking, according to a recent study.

Peter Hajek (Queen Mary University of London, London, UK) and colleagues did a randomised trial in 886 adults involved in the stop smoking services of the UK's National Health Service, to assess—with respect to smoking cessation—the effectiveness of refillable e-cigarettes compared with NRT provided for up to 3 months, with both treatments given in combination with behavioural support provided every week for at least 4 weeks. Participants were randomly assigned (1:1) to e-cigarettes (n=439) or NRT (n=447).

The primary endpoint was 1-year sustained abstinence (defined as a self-report of smoking no more than five cigarettes from 2 weeks after the target quit date), and was achieved

by 79 (18%) of 438 evaluable participants in the e-cigarette group, compared with 44 (10%) of 446 in the NRT group (relative risk [RR] 1.83, 95% CI 1.30–2.58;  $p < 0.001$ ). In those who achieved 1-year abstinence from smoking, 63 (80%) of 79 in the e-cigarette group and four (9%) of 44 in the NRT group were still using their assigned product at 52 weeks. Throat or mouth irritation was more frequent in the e-cigarette group (286 patients [65%]) than in the NRT group (221 [51%] of 432), whereas nausea was more frequent in the NRT group (169 [38%]) than the e-cigarette group (137 [31%]). From baseline to 52 weeks, the incidence of cough and phlegm decreased more in the e-cigarette group than in the NRT group (for cough, RR 0.8 [95% CI 0.6–0.9]; for phlegm, 0.7 [0.6–0.9]).

Hajek said, “The implication [of this study] is that smokers quitting

with e-cigarettes are more likely to be successful than if they were quitting with NRT.” According to Ann McNeill (King's College London, London, UK), “The research indicates that health professionals and stop smoking services should reach out to smokers who want to use e-cigarettes and support them in making this life-changing step.” However, Lauren Lempert (University of California, San Francisco, CA, USA) pointed out that “youths use e-cigarettes as recreational products, not for cessation and not with behavioural support”. “This is likely the reason why population-based studies show that in the real world, e-cigarettes actually make it harder for smokers to quit”, commented Lucy Popova (Georgia State University, Atlanta, GA, USA).

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