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Keeping Up with the Trend: Finally a Randomized Clinical Trial for E – Cigarettes!

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Abstract

E – Cigarettes have been popular with the public since their emergence in the mid 2000s. Often, patients think that e – cigarettes do not carry any major risk and are good alternatives to tobacco products. However, their efficacy in aiding smoking cessation is unknown. A randomized trial from the United Kingdom seeks to compare e – cigarettes to current smoking-cessation treatments (1).

Methods

866 participants were randomized to either nicotine – replacement products of their choice (combinations are accepted) or an e – cigarette starter pack, for up to 3 months. Nicotine replacement products include patch, gum, lozenge, nasal spray, inhalator, mouth spray, mouth strip, and microtabs. The e-cigarette starter pack is called One Kit, and contains 18 mg/mL nicotine concentration. Weekly behavioral support for a minimum of 4 weeks is included in both groups. Primary outcome is abstinence at one year. Secondary outcomes are self-reported treatment usage and respiratory symptoms. Product distribution is not blinded.

Results

- The abstinence rate was 18% in the e – cigarette group, and 9.9% in the nicotine – replacement group ($P < 0.001$).
- At 52 weeks, 80% of the e-cigarette group was still using their products, compared to 9% of the nicotine-replacement group.
- Throat or mouth irritation were reported more in the e-cigarette group (65.3%) compared to nicotine-replacement group (51.2%).
- Nausea was reported more frequently in the nicotine-replacement group (37.9%) versus the e-cigarette group (31.3%).
- No significant difference in incidence of wheezing or shortness of breath between both groups

Discussion

In this study shown by Hajek et al, e-cigarette is more successful at smoking cessation than nicotine – replacement products. However, there are still many important questions about e-cigarettes that are unanswered. At one year, the e-cigarette group had a higher percentage of continuation of the product. The long term effects e-cigarettes have on health are still unknown at this time (2). In addition, both e-cigarettes and nicotine-replacement groups also utilized behavioral therapy as aid, increasing their success rate (3). Therefore, at this time, e-cigarette usage as smoking cessation aid must be considered carefully, rather than being viewed as a risk-free alternative to cigarettes, to avoid potential widespread harm (4).

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