E-cigarette use linked to successful attempts to quit smoking

Findings go against concerns that e-cigs undermine motivation and quit attempts

Growth in the use of e-cigarettes in England has been associated with a higher rate of successful attempts to quit smoking, reveals a study published by The BMJ today.

In 2015, use of e-cigarettes may have resulted in an additional 18,000 long-term ex-smokers in England, the study estimates, and the authors say “although these numbers are relatively small, they are clinically significant because of the huge health gains from stopping smoking.

They explain that a 40-year-old smoker who quits permanently can expect to gain nine life years compared with a continuing smoker.

Nevertheless, as with any observational study, firm conclusions about cause and effect cannot be drawn, they say.

Meanwhile, no clear evidence emerged for an association between e-cigarette use and rate of quit attempts, use of nicotine replacement therapy (NRT) bought over the counter, overall use of prescription treatment, or use of NHS stop-smoking services.
The authors explain that the results "conflict with the hypothesis that an increase in population use of e-cigarettes undermines quitting in general."

However, e-cigarette use in quit attempts was negatively associated with use of NRT on prescription, perhaps because patients using e-cigarettes having already tried NRT, explain the authors. They say more research would be needed to confirm this.

The team of UK based researchers used a time series analysis to explore the relation between changes in prevalence of e-cigarette use and changes in prevalence of quit attempts, success of those attempts, use of licensed and prescribed medication on prescription and over the counter, and behavioural support.

They assessed data from the Smoking Toolkit Study, which involves monthly household surveys of a representative sample of individuals aged 16 years and older in England. Data were aggregated on 43,000 smokers between 2006 and 2015.

Statistics on the use of NHS stop smoking services were obtained from the NHS Information Centre, which reported a total of 8,029,012 quit dates being set with the programme during the same period.

The researchers tried to take account of tobacco control policies, mass media expenditure and smoking prevalence in their analyses.

In a linked editorial, John Britton from the University of Nottingham, says the results suggest that “successful quitting through substitution with electronic cigarettes is a likely contributor to the falling prevalence of smoking.”

A number of potential factors—both those measured and unaccounted for—may have influenced the results, and “it therefore remains unclear whether, or by how much, the
availability of e-cigarettes has influenced quitting behaviour in the UK,” he explains.

Nevertheless, he notes that the significant year-on-year fall in smoking “indicates that something in UK tobacco control policy is working, and successful quitting through substitution with e-cigarettes is one likely major contributor. The challenge for public health is to embrace the potential of this new technology, and put it to full use.”

[Ends]

**Note to Editors:**
Research: Association between population changes in the use of e-cigarettes on changes in quit attempts, the success of quit attempts, use of smoking cessation pharmacotherapy, and use of stop smoking services: a time-series analysis
Editorial: Electronic cigarettes and smoking cessation in England

Link to research: [http://www.bmj.com/content/354/bmj.i4645](http://www.bmj.com/content/354/bmj.i4645)
Link to editorial: [http://www.bmj.com/content/354/bmj.i4819](http://www.bmj.com/content/354/bmj.i4819)

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