

Teens who use e-cigarettes more likely to try the real thing a year later

But regular smoking linked only to higher levels of e-cigarette use to start with, findings show

Teens who use e-cigarettes are more likely to try the real thing a year later than those who don't vape, indicates research published online in the journal ***Tobacco Control***.

But subsequent regular smoking is linked only to higher levels of e-cigarette use at the outset, the findings show.

Nevertheless, the study indicates that it may be beneficial to restrict teens' access to e-cigarettes, conclude the researchers, who carried out their study in light of the ongoing heated debate about the public health benefits of e-cigarettes and their potential impact on teen smoking prevalence.

In a bid to find out if vaping among teens is linked to a heightened risk of taking up smoking subsequently, or if it might help teen smokers to quit, the researchers quizzed 2,338 teens at seven high schools in 2013, and then again a year later, about their vaping and smoking activities.

In 2013, the teens, all of whom resided in Hawaii, were 9th and 10th graders, with an average age of just under 15 years.

They were asked in depth about the frequency of their e-cigarette and tobacco use, from never; through a few times a year; right up to daily, at both time points.

Factors known to influence uptake of smoking, such as home environment, parental educational attainment, and degree of rebelliousness were also assessed by the survey.

The results showed that those teens who had used e-cigarettes in 2013 were almost three times more likely to have started smoking a year later than those who had not vaped at the time of the first survey.

This was irrespective of other factors that influence smoking uptake.

Just under a third (31%) of the sample, overall, had used e-cigarettes by 2013, rising to just under four out of 10 (38%) by 2014. Some 15% had smoked at least one cigarette in 2013, rising to around one in five (21%) by the following year.

Most (98%) of those quizzed in the first wave of the survey had heard of e-cigarettes, and over two thirds (68%) considered them to be healthier than smoking.

Among non-users of e-cigarettes and tobacco at the study outset, one in 10 had tried e-cigarettes by the second wave, while 2% had experimented with cigarettes, and fewer than one in 20 (4%) had tried both.

Transition from non-user of either e-cigarettes or tobacco to use of both by 2014 was associated with older age, white or Native Hawaiian ethnicity, and greater rebelliousness. Teens with greater levels of family support and education were less likely to make this transition.

A supplementary analysis showed that any level of e-cigarette use in 2013 was associated with smoking once or twice, or three or four times, by 2014.

But regular smoking - defined as yearly or monthly - was only associated with higher levels of e-cigarette use in 2013.

E-cigarette use among initial smokers was not linked with a reduction over time in their smoking frequency.

This is an observational study, so no firm conclusions can be drawn about cause and effect. Nevertheless, the researchers point out that their findings echo those of other studies looking at teen smoking behaviour.

"This suggests that e-cigarette use among adolescents is not without behavioural costs," they write. "These findings should be considered for policy discussions about the availability of e-cigarettes to adolescents," they conclude.