

Little Evidence To Show E-Cigarettes Help Smokers Quit Real Cigarettes

BY CATHERINE DUNN ON 05/17/15 AT 9:03 PM



Annie Young (left) and Dan Leano smoke e-cigarettes at the Vape Summit 3 in Las Vegas, Nevada May 2, 2015. Researchers at an American Thoracic Society conference in Denver said there is little evidence to demonstrate that electronic cigarettes help smokers to quit. Photo: Reuters/ David Becker

If you think e-cigarettes are going to help you quit smoking for good, not so fast. Researchers at an American Thoracic Society conference said Sunday there is still too little evidence to show that using e-cigs leads to kicking the habit long-term, and the society urged smokers who wish to quit to consider other alternatives, owing to the potential health consequences of the devices.

"Although e-cigarettes are widely promoted and used as a smoking cessation tool, we found no data supporting their long-term efficacy and safety," Riyadh al-Lehebi a respirology fellow at the University of Toronto said in a statement. He is the lead author

of research entitled "Efficacy and Safety of Electronic Cigarettes for Smoking Cessation: A Systematic Review," which was presented at the conference held in Denver.

The studies al-Lehebi's team examined indicated e-cigarette use is associated with negative health effects at a higher rate than the nicotine patch. "Given the potential health risks of using these unproven and unregulated devices, individuals seeking help with smoking cessation should consider other more well-established options until more research is performed," al-Lehebi said.

The researchers looked at four studies on the efficacy and safety of e-cigarettes to help people quit smoking, covering 1,011 patients. They also analyzed 18 studies on e-cigarette safety and adverse health effects that occurred in 1,212 patients.

Their review found e-cigarette users had better odds, compared to a placebo group, of quitting smoking at the one-month mark. But that same benefit couldn't be observed in three- or six-month follow-ups. The studies in their analysis also noted dry cough, throat irritation, and shortness of breath associated with electronic cigarette use.

In another paper presented at the conference, researchers said certain e-cigarette flavors may change vital cellular functions in lung tissue.

"Given the increasing popularity of flavored e-cigarettes, a better understanding of their ingredients, the potential health risks of these ingredients, and the causes of these risks is urgently needed," said Temperance Rowell, a graduate student in the cell biology and physiology department at the University of North Carolina at Chapel Hill.

Rowell's team tested various doses of 13 e-cigarette vapor flavors on human lung epithelial cells. Judging by a number of indicators on cell viability and toxicity, the researchers found five flavors showed overall negative effects on cells, depending on the dose.

For example, the researchers said, the flavors Hot Cinnamon Candies, Banana Pudding (Southern Style) and Menthol Tobacco became toxic to cells at certain doses during a 30-minute exposure test. After a 24-hour exposure test, those same flavors decreased cell proliferation and cell viability.