

Dual-use: Helpful or harmful?

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DEAR EDITOR,

Mix use of electronic and combustible cigarettes, referred to as 'dual-use', is perceived as a win by those who are working towards quitting smoking, while others observe it as an absolute health hazard. The latest data from the Population Assessment of Tobacco and Health (PATH) study confirms that dual-users are exposed to higher levels of nicotine and other carcinogens than people who exclusively smoke cigarettes¹.

An ongoing study among 46000 Americans stated that 792 dual-users were exposed to the highest concentrations of toxic substances compared with 247 people who only vaped and 2411 who only smoked¹. People who exclusively use electronic cigarettes were exposed to the lowest amounts of lethal substances compared to exclusive smokers and dual-users. Yet, there is ambiguity in the conclusion that dual-use is a dangerous option than smoking alone¹.

A study on retrospective PATH data stated that cigarette smoking frequency could be a reason for high concentrations of toxicants among dual-users. Out of 982 dual-users in that study, 82% reported daily cigarette smoking, which was positively correlated with the presence of carcinogens².

It was also hypothesized that, among dual-users, the additional nicotine from electronic cigarettes may replace nicotine levels of smoking traditional cigarettes and thereby decrease cigarette consumption³. However, in all actuality, electronic cigarettes deliver lower levels of plasma nicotine in contrast to traditional cigarettes, which could leave dual-users unsatisfied and prone to titrate their nicotine intake⁴. Along these lines, it is unclear whether dual-users are smoking fewer cigarettes per day and lessening their exposure to tobacco smoke and nicotine, or they are smoking to the same extent and merely introducing more toxicants and nicotine from the additional use of electronic cigarettes⁵.

A cross-sectional analysis of electronic cigarette use, among 449092 never and current traditional cigarette smokers, found that the odds of cardiovascular disease were 36% higher among dual-users in comparison with current

traditional cigarette smokers who never used electronic cigarettes⁶. Therefore, dual-use is more dangerous than smoking alone, and has to be considered as a major public health concern.

Given that FDA-approved drugs for tobacco treatment in combination with behavioural counselling remain the most efficient means of tobacco cessation, it appears that there is an earnest need to train healthcare providers to develop strong anti-vaping messages in tobacco cessation programs and increase the acceptability of FDA-approved medications among tobacco users. Dual-users should be encouraged to stop smoking cigarettes and electronic cigarettes to reduce health risks. There is also an urgent need for developing more effective tobacco cessation modalities rather than promoting vaping as a safe alternative to smoking.

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CONFLICTS OF INTEREST

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