

Young Adults' Perceptions of the Health Effects of E-Cigarette Use

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Introduction. Few data exist regarding users' perceptions of e-cigarettes health effects, yet awareness of effects decreases likelihood of nicotine use. As Emergency Departments (EDs) are a common touchpoint for substance use intervention, identifying user perceptions can guide targeted cessation efforts. It is unclear whether medical education adequately prepares students to discuss potential health risks of e-cigarettes. This study examined e-cigarette use and perceptions of health effects among medical students and similarly aged ED patients as well as students' confidence counseling patients on e-cigarette use.

Methods. A survey examining e-cigarette use and perceptions of associated health effects was conducted among KUMC ED patients aged 18 to 35 who admitted use of e-cigarettes and KU School of Medicine (SOM) students.

Results. Ninety ED patients and 187 SOM students were surveyed. Fewer ED patients than SOM students perceived e-cigarettes to cause lung injury (77.8%, $n = 70$ vs. 94.7%, $n = 177$, $p = 0.032$), cancer (82.2%, $n = 74$ vs. 91.4%, $n = 170$, $p = 0.003$), and heart disease (70.0%, $n = 63$ vs. 84.0%, $n=157$, $p=0.009$). Fifty-four percent of SOM students reported low confidence in e-cigarette counseling. ED patients were less likely to perceive e-cigarette health risks than SOM students. Most participants were generally aware of health risks associated with e-cigarette use. SOM students reported low confidence in counseling patients on e-cigarette use, suggesting room for curricular improvement as reliable data on health effects of e-cigarettes emerges.

Conclusions. This study's small sample size and single SOM inclusion limit generalizability. Understanding ED patients' perceptions is key to developing brief cessation intervention material for use in the ED.