



Pharmacists' Perspective on Education and Intervention to Address E-Cigarette Use and Vaping among Adolescents

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Background

- Electronic cigarette (e-cigarette) use among adolescents has raised concerns over their potential health risks, such as worsening lung function, stunted brain development, and addiction.¹
- Over 2.5 million adolescents use e-cigarette.²
- Healthcare providers are important stakeholders in addressing the youth vaping epidemic but have had little to no education and training around vaping.⁵
- Pharmacists are widely accessible in the community, have experience with traditional cigarette smoking cessation, and are well-positioned to engage with adolescents and families.^{3,4}

Objectives

Examine pharmacists' existing knowledge of adolescent vaping, preferences for training and education, opinions on what pharmacists' role would be, and feedback on a pharmacy vaping educational tool.

Methods

Participants and Recruitment

- Pharmacists were recruited from the Pharmacy practice Enhancement and Action Research Link (PearlRx) and Pharmacy Society of Wisconsin (PSW)
- Recruitment and data collection took place from September to December 2022
- Pharmacist participants' practice settings consisted of 73.3% community pharmacies and 26.7% ambulatory care

Data Collection

- A total of 30 pharmacists participated in a semi-structured interview online via Zoom
- Audio recordings from interviews were transcribed verbatim

Data Analysis

- One researcher, using NVivo software, used an inductive approach to thematically analyze the data to generate the most prevalent codes/themes

Educational Handout

"Good mix of images and wording. You know, you've got **short, quick pieces of information**. It's not, like, long paragraphs to read, so I think that's good." -P03

"I think it gives [parents] **good talking points** of how it's damaging[...] the breathing problems, the mental concern, and then the resources, so it kind of **covers all your bases**." -P09

"We see plenty of parents who come in without their teenagers. I wouldn't mind including, you know, a piece of paper that you staple on about **'talk to your kids about vaping'**" -P08

Implementation

Educate Parents to Talk to Teens

"So I think **gearing it towards informing the parents** of the health risks, so that they can talk to their kids." -P01

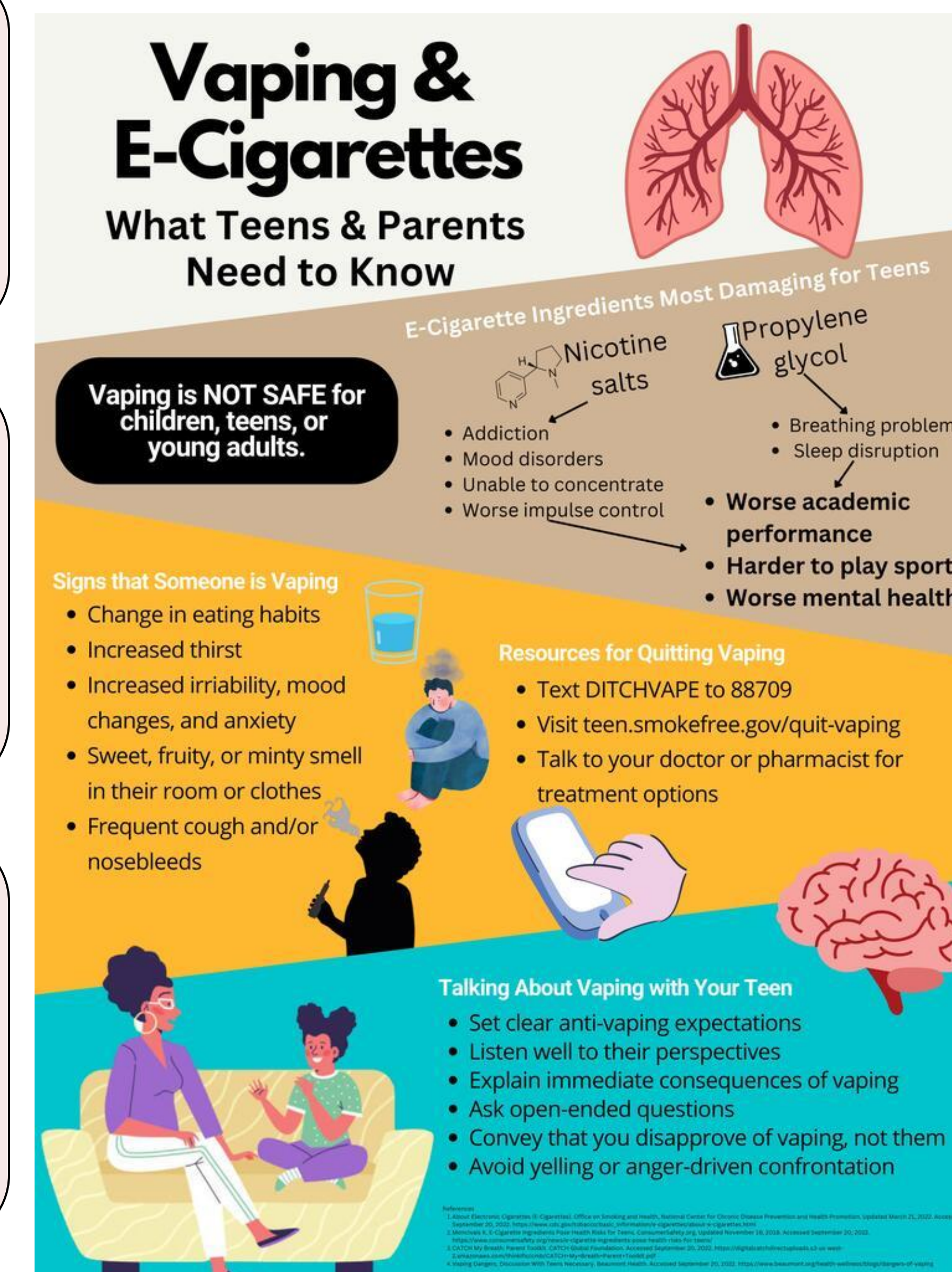
Pharmacist Presentations in Schools

"So I don't know if we could like, potentially **reach out to high schools** and offer up services to like discuss, like the dangers of vaping." - P02

Ask About Vaping in Health Questionnaires

"We ask for all of our initial patients, when we first see them, like, if they're tobacco users, and that **includes any tobacco products, smokeless or not**." - P13

Results



Continuing Education

Topics

- "The actual health consequences of it, like, I can list, you know, offhand a bunch of consequences of smoking cigarettes because that's, like, built into my pharmacy school background, into the curriculum. Vaping, though, it's not as much." - P05
- "I think it should include, like, a background of just, like, the vaping or e-cigarette products and the risks associated with it." -P07
- "Counseling techniques and therapies that are used to help anyone get off of it." -P09

CE Format

- "I would say probably either a video or a podcast." -P13
- "Personally, me, I want to read it, and I want to do a test and be done with it." -P14
- "CE is always nice, if you can include that, because everyone needs the credit." -P09

Conclusion

- Pharmacists are keenly interested in learning about e-cigarette and vaping through continuing education programs
- Pharmacists found the vaping educational tool to be useful in their practice and provided valuable feedback on its implementation and potential future improvements
- The insight gained from this study can be used in the development of continuing education programs and interventions that address adolescent vaping in a variety of practice settings

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