

Putting E-cigarettes to Good Use: Evidence on Smoking Cessation Impact and Population Health - Frankly Speaking EP 34

Transcript Details

This is a transcript of an episode from the podcast series "Frankly Speaking" accessible at Pri-Med.com. Additional media formats for this podcast are available by visiting <http://www.pri-med.com/online-education/Podcast/e-cigarettes-frankly-speaking-ep-34>

Dr. Frank Domino:

John is a 32-year-old male in your practice, who has been smoking since the age of 14. He recently learned that his mother has been diagnosed with lung cancer. And unlike in past visits when you've discussed smoking cessation, he seems ready to quit. He's had multiple attempts in the past but he's been unsuccessful. He's in the action phase of change and asks about using e-cigarettes as a form of nicotine replacement therapy. Joining me today is Kenneth Peterson. He's a family nurse practitioner and an assistant professor at the University of Massachusetts Medical School, Graduate School of Nursing, family nurse practitioner. Welcome to the show, Ken.

Kenneth Peterson:

Thank you.

Dr. Domino:

It's very interesting to think about e-cigarettes and smoking cessation. What does the medical literature tell us about using e-cigarettes as a form of nicotine replacement therapy?

Kenneth Peterson:

Well, it's a bit challenging when you look at the literature. We've, I think in the past few years, have stepped into this place of a bit of controversy, trying to figure out how to digest the

evolving literature. There's been some regulation and policy discussions around e-cigarettes as well, and so that complicates matters. E-cigarettes moved into a regulatory phase in about 2014 through the FDA. But believe it or not, e-cigarettes still are currently not a recommended treatment modality for smoking cessation.

Dr. Domino:

Wow. Is there any evidence to show that e-cigarettes are efficacious in helping patients quit smoking?

Kenneth Peterson:

There is. We're starting to see literature identified internationally actually. And some of the reviews of the literature are looking at the literature across the globe. There's research that shows that there's potential for using e-cigarettes to reduce toxicity. There's also literature that shows that, the opposite, that it may have toxic effects and that it may end up being a gateway drug... A gateway to using more nicotine in the future essentially. And...

Dr. Domino:

Wow, very interesting. Very, very interesting. You brought us this paper on e-cigarette use and changes in population smoking cessation. Can you tell us a little bit about what it had to say?

Kenneth Peterson:

Sure. This study is essentially a population-based study. A nice study where they looked at a large cohort of patients using data from the Current Population Survey-Tobacco Use Supplement, a United States study. And they grouped together several cohorts over a period of five years or they looked at a period of five years with the data. And interestingly, they identified in looking at the 2014 to 2015 cohort against the 2010-2011 cohort, that there was a higher percentage of users versus non-users who were more likely to quit, who had been using e-cigarettes most recently, and who had used their e-cigarettes at some point. And also that there was a higher percentage of users versus non-users who were more likely to succeed in quitting smoking, who had had experience with e-cigarettes either in the past or currently.

Dr. Domino:

This sounds like a large observational study that followed smoking cessation rates and e-cigarette use was one of the things that was tracked. It sounds like it was beneficial. Nonetheless, what are the pros and cons of using e-cigarettes?

Kenneth Peterson:

There's a sense that we can reduce the toxic effects of nicotine by using e-cigarettes. That the potential for harm reduction is greater and so that this would be a potential modality. That there is evidence in some studies, this one in particular, that it has a benefit in terms of smoking cessation. And also, that it's considered safer in terms of public use.

Dr. Domino:

Public use meaning there's a lower chance it's gonna cause some of the morbidity and mortality associated with regular cigarette smoking?

Kenneth Peterson:

Right. And then secondary smoking, the other effects from passive smoking. I guess you'll think of images of people when folks who just smoke on airplanes versus now there's a potential to use these types of devices on airlines, which would be interesting.

Dr. Domino:

It certainly would. The world is evolving with that regard. When you're trying to help someone who's decided they might be interested in smoking, where do e-cigarettes fit into your toolkit?

Kenneth Peterson:

I think that's the challenge. When we look at this study, the key finding essentially or the key conclusion that came about is that this is really the first study, even over studies on other modalities for smoking cessation that showed a statistically significant finding in terms of a 1% increase of getting folks to quit smoking and comparing the data from 2014-2015 to 2010-2011.

That's really, if you think about it, it's a 1% change but it's about 350,000 people who quit smoking over a period of time so, there's potential for e-cigarette use I think but, the challenge for us is that it's not one of the recommended treatments. If you look at the NIDA website and look at the recent recommendations from FDA, they don't include it as a current treatment modality and so, I think as providers, that's where we get into this challenge of "Do we have off-label use? Is it something that we recommend to our patients" now having data, such as this study that shows the potential. And also, looking at some of the other literature that shows the potential.

It's tough, I think. We have to consider all aspects of the research and then, ultimately work with our patients to mutually decide on what the best treatment modality might be and sort of that patient centered approach, and also using the five As approach, or the ABC approach or those types of things that we know are supported in the literature, in having a significant impact on getting patients to quit smoking, or move in that direction.

Dr. Domino:

What I hear you saying is that while the FDA and other organizations have not approved of e-cigarettes as a official form of nicotine replacement therapy, there is some literature that supports it improves smoking cessation attempts and cessation. And using a patient centered approach, it might be something we should consider more positively.

Kenneth Peterson:

Yes, definitely and thinking about this from an observational study that has a significant impact in terms of populations and population health, we as care providers need to step out of our box or step out of the exam room essentially, and think about the ways that we could make some changes in terms of policy or impact the population a bit differently. Moving the state forward at conferences and helping each other understand so that ultimately, in the end we do, if we have enough research supporting it, make a recommendation that this becomes a treatment modality for smoking cessation.

Dr. Domino:

Any thoughts about young adult use of e-cigarettes?

Kenneth Peterson:

Well, that's been the main controversy, and we've even talked about this in the podcast in the past is, we have this fear of adolescence and the adolescent risk behaviour, teens, young adults taking on this new technology, and then abusing it or over-using it and then ending up with more challenges than what we started with. But I guess we have to look at it all and think about what the ultimate impact of smoking nicotine and any of the toxic entities that are in tobacco products, what that does to the body, and think about it in terms of risk/benefit and how we could potentially help this person over time and improve their health over time or reduce the risk for the more lethal outcomes of what we know of smoking.

Dr. Domino:

Well, Ken, thank you very much for bringing this paper forward and helping us move a little bit further down the road. We don't have the definitive answer about using e-cigarettes as a form of smoking cessation, nicotine replacement therapy but it sounds like we're getting closer. I think as you pointed out, taking a patient centered approach and doing everything we can to help patients lower their long-term risks is really our goal, and I can easily see how e-cigarettes are gonna start playing a greater role in that world. Thank you.

Kenneth Peterson:

You're welcome.

Dr. Domino:

Practice pointer: Use of e-cigarettes while not approved by the FDA is becoming more common to help patients for smoking cessation. Consider the pros and cons when discussing this with your patients and take a patient centered approach in helping them stop smoking. Join us next time while we talk about sleep-disorder breathing in children and the role Tonsillectomy plays in its management.