

Let's talk e-cigarettes, May 2024

Transcript

Let's talk e-cigarettes

Podcast 32, May 2024, Andrea Villanti

Speaker 2: Nicola Lindson, NL

Speaker 3: Jamie Hartmann-Boyce, JHB

Speaker 4: Andrea Villanti

Musical intro

If asking your mate down the pub about vaping is what they probably say, no one agrees if it's safer or not, so you might as well smoke anyway. Now what your mate needs is a Cochrane review. All the facts have been checked at least twice. They find there's a lot that the experts agree on and might give you different advice.

Speaker 2

Hi, my name is Nicola and I'm a researcher based at the University of Oxford in the UK.

Speaker 3

And I'm Jamie and I'm a researcher based at the University of Massachusetts Amherst in the United States.

Speaker 2

We are both members of the Cochrane Tobacco Addiction Group. Welcome to this edition of Let's talk E cigarettes. This podcast is a companion to a research project being carried out at the University of Oxford, where every month we research the e-cigarette research literature to find new studies. We then use these studies to update our Cochrane Systematic review of E cigarettes for smoking cessation. This is called a living systematic review. In each episode, we start by going through the studies we've found that month and then go into more detail about a particular study or topic related to E cigarettes.

Speaker 3

So this month we ran our searches on the 1st of May 2024, we found one new study and three new ongoing studies. Nicola is going to start by telling you about that new study and one of the ongoing studies in a nutshell.

Speaker 2

Thanks, as Jamie said the one new included study was by Andrea Rabenstein and colleagues and was carried out in Germany and published in the European Addiction Research Journal. This was a non-randomised study and for our purposes we are interested in a single group of 60 participants who are planning on switching from combustible cigarettes to e-cigarettes and were asked to purchase e-cigarettes and liquids of their choice. It reports not having any funding, but it did take place in a hospital. Of the outcomes we are interested in, they only reported adverse events of the intervention. They reported irritation of the throat in those who used e-cigarettes and we'll contact the authors to try and get a bit more information from them on that.

The first new ongoing study is being carried out at the University of Pennsylvania and is funded by the National Cancer Institute. The record of the study is titled 'Alternative Nicotine Delivery Systems as potential harm reduction tools for persistent cigarette smokers'. They aim to recruit 200 participants who will be randomised to switch from smoking combustible cigarettes to either using e-cigarettes or oral nicotine pouches, and that study is due to complete in 2028.

Speaker 3

Thanks, Nichola. So, in terms of those other two new ongoing studies, the first is led by Ricardo Polosa, who's based in Italy. They've published a study protocol for a study that they're calling MAGNIFICAT, which is investigating the magnitude of cigarette substitution after initiation of e-cigarettes and its impact on biomarkers of exposure and potential harm in people who are dually using both e-cigarettes and combustible tobacco, it's funded by the Foundation for a Smoke Free World, which has been linked with the tobacco industry. They plan to recruit 250 people who smoke and asked them to reduce their smoking by adopting e-cigarettes and then a separate group of 50 people who smoke will be asked to continue to smoke as usual. Participants will be followed up for six months, during which biomarker specimens will be collected and clinical endpoints will be assessed. Results are expected in 2025.

The final new ongoing study is a study record that we found from clinical trials.gov. For a study called the Switch or Quit study led by Tracy Smith at the Medical University of South Carolina in the USA. It compares nicotine e-cigarettes with nicotine replacement therapy, or varenicline. In particular, participants in the e-cigarette group will get a choice of e-cigarette branded flavour and in the medication group will have a choice between nicotine replacement therapy and varenicline. People will be followed up at six months to see if they're still smoking. They're aiming to recruit 225 people who smoke with final data collection anticipated to occur in 2027. This study is funded by the National Institute on Drug Abuse, which is a part of the US government's National Institutes of Health.

So, for this month's deep dive, I had the pleasure of speaking with Professor Andrea Villanti at the US E-cigarette Summit, which happened in May in Washington, DC. This is the third year I think that I've had the pleasure of attending the US E-cigarette Summit, and it's always a really nice place to meet up with people and hear about what research is going on. So, I'll hand over to Andrea to tell you about the work that she presented at the summit.

Speaker 4

My name is Andrea Villanti. I'm an associate professor at the Rutgers School of Public Health and Deputy Director of the Rutgers Institute for Nicotine and Tobacco Studies. I'm going to be presenting on nicotine beliefs, and I got into this work after discovering really wide spread misperceptions about nicotine in some young adult data I was collecting.

Speaker 3

Ah, cause I remember seeing a few years ago, a survey of physicians in the US which showed really high levels of incorrect beliefs around nicotine. So that's in young adults as well, yeah.

Speaker 4

5.40

Yes, and it tracks with national data as well. And so what we've been seeing in the US, we're collecting data in the Hints survey, which is run by NCI and they have data from 2015 to 2019, similar to data on e-cigarette perceptions, things are moving in the wrong direction, more people believe that nicotine is a cause of cancer.

Speaker 3

Why do you think it's moving in that direction?

Speaker 4

Well, I think there has been really equating of nicotine and harm from. Yeah. I think as the products have changed, the messaging has really focused on the nicotine in these products, especially e-cigarettes. And so, I think we're just sort of tying closer that connection between nicotine and harm.

Speaker 3

Yeah. And are you doing any work to try and fix this? What are you doing?

Speaker 4

We're doing some nicotine corrective messaging. So, we ran a randomized controlled trial in adults in the US and we exposed them to a series of eight messages about nicotine three times over a 12 week period. So, they saw the same messages in the same order. At exposure and what we found was that if people were exposed to all three doses, we dramatically reduced their false beliefs about nicotine but also about e-cigarettes, nicotine replacement therapy and reduced nicotine content cigarettes.

Speaker 3

What was the content of the messages like?

Speaker 4

So, the messages sort of took people through a story about nicotine. So, the first message was something like 'nicotine is the addictive substance in tobacco products, nicotine makes it appealing for people to start smoking and keep smoking, makes it harder for people to quit'.

Speaker 2

Yeah.

Speaker 4

Nicotine does not cause cancer, it is the harmful substances and cigarettes and cigarette. Smoke that that caused the bulk of tobacco related harm. And then we had a couple of messages, one about the fact that e-cigarettes did contain nicotine.

Speaker 3

Yeah.

Speaker 4

And one that was about NRT, that nicotine could be used safely long-term in products that were designed to help people quit.

Speaker 3

Yeah. Ohh exciting that I work. Yeah, yeah. Has it been published yet?

Speaker 4

That has been published. That is an E pub in Tobacco Control, and then we we're continuing with a lab-based study that's still on-going where we're actually measuring behavior. OK, so people in that study are both the messages or not, and they're exposed to normal-nicotine content cigarettes or low nicotine-content cigarettes. And we're going to see their understanding of nicotine effects their choices.

Speaker 3

Interesting. OK. OK.

Speaker 4

Their use of the products that they're assigned to.

Speaker 3

And do you have any other next plans? What do you think? What do you hope happens on the back of this research.

Speaker 4

Well, I am really excited about continuing to work in this area and I feel like as we're just continuing to see the ways that these nicotine perceptions are playing out in behavior, and especially in young people. Yeah, we've heard anecdotally a few years ago that young people were using cigarettes as harm reduction strategy for their vaping behavior.

Speaker 3

I saw mention of that in the Guardian Australia article as well which really alarmed me a lot.

Speaker 4

Yes. And there's some focus group data just out this year that really says the same. So, this is something we urgently need to address because we certainly don't want young people believing that nicotine exposure is the greatest harm that they need to be picking up smoking to reduce. It's so scary.

Speaker 3

Yeah. Oh, well, thank you so much. Thank.

Speaker 4

You for having me.

Speaker

I can't wait to hear the full talk tomorrow.

Speaker 2

Well, that was something a little bit different, Jamie, and really intriguing to hear about. It's something that there is a lot of concern about because obviously and our review is part of it, we want to know about the safety profile of these devices, but we want that to be based on evidence and the facts around you know, the risks of these different products. And it is concerning if people are, you know, getting a false idea of any risks. And it's kind of been a kind of age-old story with nicotine really, because I think when other nicotine products like nicotine replacement therapy were first introduced, people had concerns about that then. But obviously what we know is that it's the other kind of ingredients in combustible cigarettes that are really, really dangerous. And when these ingredients are burned, the chemicals that they give off are really problematic. So, it's I think people have heard of nicotine and that's the thing they're most familiar with. So, they assume that that's what's causing the issues. But obviously we know that's not really the case and it's great to see that there's some work being done to kind of address these issues, especially as we see it, it is getting worse.

Speaker 3

Absolutely. And I think this particular moment in time is absolutely the right time to be doing this research about communicating relative risks of nicotine compared to the ways in which it's delivered, partly because we know we have all of these new commercial nicotine products emerging, whether they be e-cigarettes or heated tobacco products or oral nicotine pouches. All of which will have different risk profiles and also in the US, where I'm now based, we have a lot of conversations and research going on about the possibility of a very low nicotine standard for cigarettes. And what we don't want is people thinking that that makes the cigarettes safer, will make them less addictive. But it won't necessarily reduce the harm from smoking them in terms of all the nasty things that get released when you burn tobacco. So, lots of reasons other than the quite simple moral imperative that we are scientists and we should spread correct information. But lots of reasons that right now we really need to be worried about what people know about nicotine.

Speaker 2

Hmm. Yeah. And it sounds like the summit was fun. I'm really sorry that I couldn't be there.

Speaker 3

Yeah, it's a really nice event. It's in a really nice area of Washington, DC with fantastic food, which helps as well. But there are a lot of really interesting talks including not only around policy of e-cigarettes around the evidence when it comes to relationships between e-cigarettes and smoking. But also, more this year on vaping cessation as well, which we know is a new area of research that we're looking at really closely to. So, it was great to hear from so many different groups.

Speaker 2

And I believe I'm right in thinking that you were presenting our review there.

Speaker 3

I was, and that was one of the things that I touched on in my presentation.

Speaker 2

Well, thank you for doing that.

Speaker 3

My pleasure. All right, that is it from us this month. We look forward to checking in again with you next month. Thanks so much, as always, for listening and for your support

Please subscribe on iTunes or Spotify and stay tuned for. Our next episode.

Musical outro

Vaping is safer than smoking may help you quit in the end. But remember to mention the findings we have can't tell us what will happen long term, even though we know vaping is safer than smoking, we may still find cause for concern, if you're thinking about switching to vaping do it. That's what the experts agree. Smoking so bad for you they all concur that vaping beats burning there's much to learn of effect long term yet to be seen.

Speaker 3

Thank you to Jonathan Livingstone-Banks for running searches to Ailsa Butler for producing this podcast and to all of you for tuning. In music is written with Jonny Berliner and I and performed by Johnny. Our living systematic review is supported by funding from Cancer Research UK. The views expressed in this podcast are those of Nicola and I and do not represent those of the funders.