

September 2023 Let's talk e-cigarettes

## Transcript

Speaker 1 Johnny Berlinger (singer)

Speaker 2 Nicola Lindson

Speaker 3 Jamie Hartmann-Boyce

Speaker 4 Ailsa Butler

Speaker 5 Andrea Leinberger-Jabari

Musical intro

Speaker 1

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 might. Give you a different advice.

Speaker 2

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

Speaker 3

And I'm Jamie and I'm a researcher now based at the University of Massachusetts Amherst in the United States. Until last month, though, I was also at Oxford with Nicola.

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 search 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 have 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're covering searches that we ran on the 1st of August and the 1st of September 2023. We're usually monthly, but we skipped August for holiday and transatlantic move reasons. So over these last two months, we found one new study and one ongoing study we'll tell you about those in a nutshell. So Nicola, tell us about this new study.

Speaker 2

So the new study we found was led by Professor Jed Rose at the Duke University School of Medicine in the US and was published in the Journal of Psychopharmacology. It was funded by the US National Institute on Drug Abuse. The study compared nicotine cigarettes to non nicotine E-cigarettes. The original intention was also to randomize people to nicotine patches or placebo patches, but that got disrupted due to the COVID pandemic and the design was changed mid study so that all participants from that point onward were provided with a nicotine patch. The study was only 8 weeks long, so we are not interested in the quitting outcome for our review. However, they also measured carbon monoxide and serious adverse events. No serious adverse events were recorded that were deemed to be related to the products used in the study, and there was evidence that carbon monoxide levels were significantly lower in the nicotine e-cigarette group compared to the non-nicotine e-cigarette group at 8 week follow up.

Speaker 3

Thanks Nicola. The new ongoing study is sponsored by Reynolds American, which is a tobacco company. It's not just started recruiting participants, but it's due to complete in January of next year. So as you might guess, it's a fairly short term study. It's planning to run for six weeks, measuring changes in cigarettes per day and it's planning to enroll 1845 adults who smoke. Those adults are

going to be randomized into different flavors of E cigarettes are all going to have study provided cartridge cigarettes. One group is going to have tobacco flavor. One group's gonna have menthol flavour and one group is gonna have non tobacco non menthol flavor. So we look forward to seeing that study come out, we'll integrate the results of the study that Nicola told us about in the next version of our review and in this month's deep dive, we've done something a little bit different. Our colleague and podcast producer Ailsa Butler is going to bring us to the Society of nicotine and Tobacco Research, otherwise known as SRNT European Conference, which was held a couple of weeks ago in London to conduct an interview with Andrea Leinberger-Jabari. Over to Ailsa.

Speaker 4

And welcome. I'm very pleased to be speaking to you from the SRNT annual conference and to be able to interview Andrea Leinberger-Jabari, who is going to talk to us today about her study in E cigarettes and heated tobacco products in people in the United Arab Emirates. We're particularly excited to be hearing about this project as there's a lack of data. So could you start by just introducing yourself to us and what got you into studying E cigarettes.

Speaker 5

Sure. Great. Thanks for having me. So my name is Andrea Leinberger-Jabari. And I am the assistant director for tobacco research at the Public Health Research Center at New York University, Abu Dhabi. And I got into studying E cigarettes and heated tobacco products. This is actually part of a larger cohort study.

Speaker 2

Obscure science term definition. Cohort studies are a research design that track people's natural behaviour overtime without scientists intervening.

Speaker 5

Part of a larger cohort study that we're currently running at the public Health Research Center called the UAE Healthy Future study. And through this study, we collected data from Emirati adults who, residing in the UAE, and we collected data on tobacco use behaviors and once E-cigarettes, EC heated tobacco products became legal in the market in 2019, we were able to collect data on their use and so. We saw the need for studying these use pattern.

Speaker 4

Thanks that's very interesting. And as you say, it's a relatively recent time that they've been available. So it would be very interesting to monitor this. So can you tell us a little bit more about how your study has been designed and what it? Sets out to look at.

Speaker 5

Sure, the UAE healthy future study is a population-based cohort study where we've recruited around nearly 15,000 Emirati adults for our tobacco use behaviors. We've collected data from about 7400 and already adults. Yeah. So yeah, the UAE healthy future study is aimed at primarily looking at the causes of diabetes, heart disease and obesity in the Emirati adult population and as a part of that we collect data through surveys through we collect biological samples and clinical measurements on adults. And so some of the survey data, for example, that I really like to focus on is. The tobacco use behavior. Years and so we've actually got a partnership with the ITC project.

Speaker 2

The ITC project is defined as the International Tobacco Control Policy Evaluation Project. It is the first ever international cohort study of tobacco use.

Speaker 5

That is run out of the University of Waterloo in Canada, and so we collaborate with them on our tobacco use behavior, data collection. And so we've collected information on all different types of combustible tobacco. Use in the in the country in the population and also more recently some of the e-cigarette and heated tobacco products used in the country.

Speaker 4

Thank you very much for that. And if you could sort of summarize maybe some of your findings and tell us for any particular challenges in working within this setting,

Speaker 5

sure. So basically what we found, we looked at people's tobacco use behaviors and So what we found is that overwhelmingly combustible tobacco use. So that's using products. Like cigarettes shisha. And another product that is very, very endemic to the UAE, which is called dokha tobacco, it's a pipe tobacco that smoked. We found that overwhelmingly men tended to smoke more than women. We had about an overall smoking rate of about 30%. And as the self-reported data. From the population. What was also interesting is, again with the combustible tobacco use, we found that of those who smoke combustible tobacco, about over half of them actually smoke more than one type of combustible tobacco. So then then we wanted to look at who's using e-cigarettes and who's using heated tobacco products, we did find that. Overwhelmingly, most e-cigarette users are people who already smoke combustible tobacco. They tended to be men. They tended to be younger and college educated at least. So, this is kind of interesting. We didn't really see a lot around heated tobacco product use in the population, not many people are very familiar with these products, so that was kind of interesting, but I think overall what we also saw was that the perceived harm around E cigarettes is kind of a mixed bag. Like people still aren't quite sure if there are more or less harmful than combustible tobacco, so I think that kind of signals to us the need for kind of more research more monitoring of perceptions as well as these patterns in this population.

Speaker 4

Do you have an idea of the reasons for using electronic cigarettes? Was it just as another form of nicotine or was it actually led to reduce tobacco or?

Speaker 5

Yeah, we did ask and we do have some initial data on the top reasons for using e-cigarette. And so among people who use combustible tobacco, most people cited reasons like they might actually help them quit using cigarettes. They feel that they're more acceptable to use than cigarettes around other people and. That they could use e-cigarettes in places where smoking traditional cigarettes is banned. We did find for those people who do use e-cigarettes, but don't use combustible tobacco. It's more out of curiosity and because they taste good.

Speaker 4

And just for our listeners, if you could maybe explain a little bit about shisha and the other form tobacco that you mentioned?

Speaker 5

Sure. So so there's really three very common types of combustible tobacco that are used amongst people who smoke in the UAE and so cigarettes are definitely common. I think what's kind of slightly edged out cigarettes is a more common form of tobacco is something called dokha or mid. And it's a small pipe where loose tobacco is placed in the pipe and the individual takes one or two puffs, and then it's about equivalent to one cigarette. So it is a highly potent form of tobacco. There's very little research out there on it, but shisha is also very commonly smoked amongst both men and women.

Speaker 4

You mentioned earlier about how many more men are smoking than women, do you have any reasons or any theories about why that is?

Speaker 5

It is a cultural kind of it is a social acceptability. I think it's less socially acceptable for women to use tobacco in public, and so, and this is, this is a cultural consideration. However, I think we do need to keep monitoring this because these trends could change, particularly among the younger population.

Speaker 4

Andrea, do you have any conclusions that you could share with us that might interest our listeners?

Speaker 5

Sure. So overall. The conclusions from our initial look at e-cigarette and heated tobacco product use in this population is that. We found that combustible tobacco use is quite high. It's about 30% of the population self-reporting that they use combustible tobacco with dual and poly tobacco use, it's very

common. E-cigarette users tend to be people who already use combustible tobacco, and they also tend to be a bit younger and heated tobacco product use was less. I think one of the things that we see now from this is that it will be very important for us to keep monitoring the use of this because these products are rapidly evolving and this is a rapidly growing market. So we will continue to watch these trends and see how it progresses over time.

Speaker 4

Great. Thank you very much. You say that your results were self-reported. Did you consider verifying in any way or was that just too challenging?

Speaker 5

We do plan to biochemically verify the self-report data. We did collect urine samples and so we are hoping to biochemically verify run the and biochemical verification. For that, yeah.

Speaker 4

And was there anything that surprised you?

Speaker 5

I think one of the things that surprised me about the results of this initial look at the study was the kind of wide distribution of perceptions of harm of e-cigarettes, I think there's no consensus amongst people in terms of how harmful they are. There's a lot of different opinions and different ideas out there. And so I think that's maybe a challenge that we have to address.

Speaker 4

And as I say, you were presenting a poster at the meeting today. And can you tell us if we can expect a publication.

Speaker 5

Yes, we are. Currently working on a manuscript.

Speaker 4

Good luck with that. And what research other than the research you've just spoken about, do you think should be done following this study and if money were no object, if funders were about to? Is the money what might you try and do?

Speaker 5

So I think it's really important to look at the tobacco use patterns and nicotine product use patterns in the Emirati adult population as well as the young people, and expand this to the entire population of the UAE to look at different trends and different use patterns.

Speaker 4

Finally, is there anything we haven't covered that you want to add or anything you want to leave on listeners with?

Speaker 5

Sure, so I guess first of all I would like to thank all of the people who participated in this study and gave of their time and efforts to provide us with this information. I'd like to thank the NYU Abu Dhabi Research Institute and Tom Keene for funding this ongoing research.

Speaker 4

Well, thank you very much, Andrea. The really interesting to hear about tobacco use in another part of the world. It's always important to hear about other studies and wider geographic locations.

Thank you very much, thank you.

Speaker 5

Thank you very much.

Speaker 4

Thank you, Andrea. And yes, we'll enjoy the rest of the conference, yes.

Speaker 5

You too.

Speaker 3

So I thought it was great to hear more from another region of the world. Nicola and I actually supervise Andrea's doctoral work, so we know a lot about her program of research. And it's just

really refreshing because we know with a lot of research, and that includes research into E cigarettes, most of it tends to be based in North America and Western Europe. And it's really, really good. See research coming out of other areas. Nicola. You were at SRT. Unfortunately, I wasn't, because we're just settling in here stateside. So, I missed seeing you and colleagues in London, and I know you had a busy week of presenting and listening. Do you want to tell us about it?

Speaker 2

Yeah, I can tell you a little bit about it. So, the reason I was so busy was because I was giving 2 presentations at SRNT, Europe I was lucky enough to be invited to give what's called a keynote speech, so this was one of the main talks at the conference. A bit longer than some of the other talks, and that was actually focused on the Cochrane Tobacco Addiction group. So, it was quite nice to take a trip down memory lane and look at the history of the group and talk about some of the kind of notable projects that we've carried out over the years, and one of those was obviously this review, the living systematic review of electronic cigarettes for smoking cessation. And so, it was kind of exciting to go through that and I talked a bit about the kind of methods that we use for getting the message out there as well. So, this podcast was mentioned because I think, you know, people hear a lot about the results, but sometimes it's good to tell people about the actual process that we go through and in case they might want to do something like this themselves, and the ways that we, as I say, use to get the message out there, that might be a bit different to what we do with other reviews. So that was really interesting and a bit different to what I would normally be doing. The other thing that I was presenting at the conference is a notable project that both myself and you, Jamie worked on and finished earlier this year, which was a really big systematic review, looking at all the different medicines that can be used to help people to stop smoking, but also e-cigarettes. So, we were basically looking at the methods that are approved for use anywhere worldwide and those are varenicline, cytisine, bupropion, nortriptyline, nicotine replacement therapy. And as I said, e-cigarettes and what we wanted to do was look at how effective those methods of quitting are compared to one another. We don't have many studies at the minute. For example, well, we don't have any studies looking at cytisine versus e-cigarettes, for example. And we only have one study in our review looking at varenicline versus e-cigarettes. So basically, the way this study works is that we look at both direct comparisons. So that's looking at studies that have directly compared to different methods of quitting smoking, but we also draw on what we call indirect evidence. So, if we have a common comparator in some of the studies. So, for example, if we have a study looking at nicotine patches versus placebo and we have a study looking at varenicline versus placebo we can use those studies to look at the indirect effect of nicotine patches versus varenicline. It's a very complex method, so don't worry if you don't get it. You may just have to trust me that basically it helps us to look at the comparison of these different methods to one another, even if we don't have direct trials comparing the two. But basically, the exciting bit of this is the findings, so I'll move on to that with no further ado. It's basically that we found that the most effective ways to quit cigarettes, so the ones that result in the highest quit rates were varenicline, cytisine and e-cigarette. And then closely followed by combination nicotine replacement therapy and what we mean by combination nicotine replacement therapy is using two types at once. So that's a nicotine patch and then another form such as gum or lozenge. It's particularly an interesting finding because of the situation we currently find ourselves in, in the world, which is that actually varenicline and cytisine, two pill based medications are actually quite difficult to get at the moment in a lot of different places in the world, so they are available in some places, but for example in the UK and many places in the US, cytisine and varenicline aren't currently available. So, if we take those out of the equation, what this study is basically telling us is that e-cigarette is the most effective available medication, closely followed by two forms of NRT used at the same time. So that was what I was there kind of trying to spread the message on. And that paper got published while I was there. I presented it on it while we were there and it's got quite a bit of press coverage, which is nice because it just gets the message out there about our research.

Speaker 3

Awesome. Well, thank you so much, Nicola. Thank you to Ailsa and Andrea for a great interview and thank you all very much for listening. We look forward to checking in with you again next month on our October edition of Let's talk e-cigarettes. Please subscribe on iTunes or Spotify and stay tuned for our next episode.

Speaker 1

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 Livingston-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 Cochrane Tobacco Addiction Group also receives infrastructure funding from the National Institutes for Health Research, the views expressed in this podcast are those of Nicola and I and do not represent those of the funders.