

## **Transcript – Lourah Kelly**

### **A new *Voices of UMass Chan* podcast episode**

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Thank you for listening to the *Voices of UMass Chan*, featuring the people, ideas and advances of UMass Chan Medical School.

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### **Jennifer Berryman**

Thanks for listening to the *Voices of UMass Chan* podcast. I'm your host Jennifer Berryman, Artificial intelligence has integrated almost every part of our lives, and healthcare is no exception. Here at UMass Chan Medical School, researchers are studying how AI can improve healthcare safely and effectively. Today, we're fortunate to be speaking with Dr. Lourah Kelly, an assistant professor of psychiatry. And welcome Dr. Kelly, thanks for making time to talk to us. Thanks for having me. So, we're going to talk about your research that as I if I understand it right, you have an avatar, and this avatar, the goal is to help young adults who are suffering from mental health problems, particularly at specific times when they are experiencing barriers to getting the support that they might need. Tell us about it.

### **Lourah Kelly**

Sure. So this is part of a Pathway to Independence award that I have from NIAAA, which is the *National Institute on Alcohol Abuse and Alcoholism*. It's an unfortunate title to our institute, because we no longer use those terms, like we don't say alcohol abuse because it's pretty stigmatizing. So, like the DSM, which is our like diagnostic tool that we use for psychologists are would have alcohol use disorder. Sometimes people might say alcohol use issues or they have a problem. Honestly, a lot of young adults, even if they meet criteria for alcohol use disorder, they don't really see as a problem. So that we just say, like alcohol use.

### **Jennifer Berryman**

Well, good to know that the language is evolving. So tell us about the project. This is a mobile health intervention tool?

## **Lourah Kelly**

Sure, yes. So I guess I want to back up, because the tool itself was designed when I was still a postdoctoral fellow at UConn School of Medicine, and right now we're in the second phase of the project where we're starting a usability trial. So during the more formative research stage, when I was still at UConn health, that was the K 99 phase of my award, which is more training and mentorship, and like the early stages. So we did a mix methods, intervention development study, where we meaning, I, interviewed ten clinical experts. So those are other psychologists, social workers, licensed mental health counselors, Ed experts. So those were physicians, like attendings, nurses and then CIS's, who here at UMass Chan, those are folks who are doing mental health evaluations or consultations in the emergency department, and then also emerging adults with actual lived experience, so people who have their own personal perspectives because they've been to the ed for either mental Health or alcohol use problems or both. So, we did lots of one on one interviews and focus groups with these three groups, and all of their feedback, like from these different communities and groups of experts, really informed the avatar guided digital health intervention that we're testing now the technology team house at Rochester Institute of Technology, they did the actual like tech design. So, I'm not an engineer or a computer scientist, I'm a clinical psychologist by training. So, they basically took all of the content that we had in some of the tools and put it into the digital health platform.

## **Jennifer Berryman**

Thanks for that context. It's super helpful to understand the research process. So, can you give us an overview of the pilot project that you're working on now?

## **Lourah Kelly**

Yeah, so the usability trial is really important for digital health research when they're in the emergency department. Does it make sense they know like where to go for different things if they click on things? Is it easy to find the next step. Do they find what they want easily, and are there any actual glitches or tech issues that we could fix now before we start a larger feasibility trial to see, you know, does it help people with their drinking does it help reduce suicidal thoughts, and is it safe to use? So, this usability trials, just 10 people who are seen in our emergency department here at University campus, who are between 18 and 28 and who have some sort of indication in their chart, meaning at triage, people are asked a series of questions about suicide risk, about suicide. All thoughts and behaviors. They're also asked for some information about drinking behaviors. So we're doing the that small usability trial to ask a very basic question, like, can you use it again? Does it make sense?

Are there any glitches that we fix now before we give it to more people and tests more about the efficacy and safety.

**Jennifer Berryman**

What is the issue that you're trying to get at? What are you trying to what is the intervention designed to target.

**Lourah Kelly**

Essentially a digitized version of cognitive behavioral therapy that's designed to help young adults manage their suicidal thoughts and their drinking behaviors. I say manage, because young adults might not have the goal to have complete abstinence, or they might say, you know, I recognize that I just got an injury that was related to drinking, maybe I should take a month off from drinking, sometimes, like a dry January, where sober curious is terms that young adults might use. It's to help young adults with making the health choices that are best for them. It likely would be some reductions in drinking or drinking in less risky situations, and then for suicidal thoughts. Oftentimes, alcohol can increase the severity or duration of suicidal thoughts can also make people more likely to engage in suicidal behaviors, and it's really hard, honestly, for people to find tools that can help them with suicidal thoughts, especially if they're chronic.

**Jennifer Berryman**

I wonder if we can zoom out for a second and talk about what inspired you to focus on this kind of health intervention. Why and why in the emergency department, where, as you said, people, young adults might be coming in for any number of reasons?

**Lourah Kelly**

So why the emergency department is because young adults aren't necessarily accessing professional or like behavioral health treatments for themselves, especially for alcohol use disorder. Unfortunately, though, young adults are more likely to have an inpatient or sorry an emergency department visit related to things like driving under the influence and getting in a car accident, oftentimes, like injuries related to being intoxicated, and then they're seeking emergency department care for their suicidal thoughts or attempts. So they go to the emergency department because they're in like, a mental health crisis, and they either don't know or are having a really hard time accessing care in the community that would fit their needs.

Jennifer Berryman

What kinds of challenges do young adults face when they're accessing traditional alcohol use and drug use treatments?

**Lourah Kelly**

Young adults are in a unique period of life. There's a lot of really important transitions and milestones. And that term emerging adults, which I think about like 18 to 25 or maybe 18 to 28 or so. It's coined by Jeff Arnett, who's local here at a Clark University in Worcester, is in 2000 so it's relatively and relatively new term, but it's really this, this period of a lot of transitions, and they include things like identity exploration, like instability in in identity and other relationships, a focus on the self, feeling like in between adolescence or feeling like a real adult, and then also just increasing independence from family, and sometimes moving away, like physically moving. And then you have things like education goals or trading goals change. There's a transition from high school to other training or like employment or college, and all of those things are, I mean, there are great opportunities and ways that someone might, you know, use their strengths and make those transitions really successfully. There are also a lot of different points where somebody could, I guess, like, fall through the cracks and have a really hard time accessing mental health care. It's also the period of life where mental health disorders are more likely to become present. So many people have their like their first either episode or their first diagnosed when they're a young adult. They might have had some struggles when they were children or teenagers or like vulnerabilities. But young adulthood is the time period of life when many mental health disorders are first diagnosed. It's also when alcohol use disorder, we have the highest rates of alcohol use disorder among 18- to 25-year-olds.

**Jennifer Berryman**

So, there's this confluence of like personal, personal exploration and maturing with a decreased access to health care in many, in many cases, for many individuals. So how does this intervention mentioned address those barriers.

**Lourah Kelly**

You can access it right in your pocket. So young adults look at their phones hundreds of times a day. They also often use their phones to help with their health care. So not just things like my chart and you know, like traditional health care in office, health care, but also things like apps that can help track their mood or track exercise, track their drinking water. So it's something that they do already, often times with their health and their well being, they also just have competing demands and executive functioning challenges, because our executive functioning, like complex thinking and planning isn't fully on board, you know, in our brain activity until about mid-20s, so there's just normative things in this age group that

would make it challenging to make an appointment with a clinical psychologist or another mental health professional or behavioral health professional. It's pretty confusing to know who's a good health care provider, who would fit that person's needs? What's the best way to go about making an appointment.

**Jennifer Berryman**

And then how will I pay for it? What insurance do I have all sorts of questions. Those of us with kids in this age range certainly can appreciate what you're saying in terms of the challenges.

**Lourah Kelly**

Yeah, so if you have a digital health intervention that you can have right on your phone, then it's just something that can be there for you. And the reality is, there are many challenges, particularly for young adults. So, it's helpful for this age group, because they are open to using digital health tools in general, and it addresses some of the needs that they might have to have something that say, can help them on Friday nights, at 10 p.m. when they would usually pre-game and have a little bit too much and then have an argument with a friend, and then, you know, have more suicidal thoughts, or worse, suicidal thoughts than usual.

**Jennifer Berryman**

Can you walk us through how this works? So, I'm a young adult, I'm in the ED. I'm going to participate in this digital health intervention, what? What am I actually doing? What is it offering me? What am I answering and what are the outcomes that you hope to observe from the study?

**Lourah Kelly**

So the after a young adult completes, say, like the research surveys, so that we could know if they're like drinking, suicidal thoughts and other kind of related things are decreasing over time, they get the avatar platform, and it's an interactive skills based intervention. So on the left hand side, they see a list of different topic areas. So, they're all different skills that can help young adults manage their drinking and suicidal thoughts. So they're things like coping skills, or like mindfulness exercises, problem solving skills, or we submitted social situations if you're interested in cutting down, or are there harm reduction, or if you wanted to stay sober for the night, but you still want to see your friends, and we know from in person treatments that they tend to help young adults reduce their drinking and have like, decreases in their suicidal thoughts, either in their intensity and their duration, or,

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like, reduce the likelihood that they'll engage in suicidal behaviors. And people use self help books all the time so you can go to the bookstore and get cognitive behavioral therapy or other therapy self help books. But this, I think, is kind of in between, that because it's your avatar is talking to you, the young adults are sitting in the emergency department. They get to choose the different topic areas they would start with our introduction, but they can choose, you know, the skills that seem like they're a good fit for them, and then they get some like tips and ideas and ways to cut down on their drinking behavioral activation, which are things that can help replace drinking behaviors, but they can also help you. If you're having difficulties with your mood or suicidal thoughts, they're they're things that make our life worth living there.

14:22

If your value is you know your friends, it's activities that you can do with your friends to help boost your mood and cultivate a life worth living. It was also really important for young adults. They wanted young other young adults to know how to combat myths about behavioral health treatment, that there's not just inpatient treatment in the emergency department or an outpatient therapist once a week or once every other week. There's actually a lot of different options. And if you don't click once with the therapist, you give them a couple of more sessions, but you don't actually have to stay with. Your therapist, you can find another one, and you can ask them to help you find a better fit for you and give them feedback about it.

### **Jennifer Berryman**

How long do you think that you'll be using this in the emergency department, and how do you imagine that this might just be the start of more of these kind of digital health interventions that can help tease out these complex issues like suicidal thoughts or alcohol use in young adults. Yeah. I mean, so next steps for me, I think, are identifying a industry partner who's also interested in going for FDA approval, because the FDA approval process is a little bit of a bear, and it makes me a little bit scared. I have good mentorship here at UMass Chan with mentors who have gone through the FDA process with other digital health tools that help folks with suicidal thoughts and help folks with substance use disorders. And I do have resources.

So, we have a resource list that we give to all young adults in our study, and I'm happy to share it. They're all like national and local resources for young adults who are are looking for, you know, looking for supports.

**Jennifer Berryman**

That's terrific, and we will be putting those resources and links in our show notes. If anyone's interested in accessing them.

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**Jennifer Berryman**

Dr. Lourah Kelly, an assistant professor of psychiatry, here at UMass Chan Medical School. Thank you for your time.

**Lourah Kelly**

You're welcome.

**Voice over artist**

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