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Developing a Digital Technology Evidence Toolkit and Portal for Mitigating Social Isolation and **Loneliness in Older Adults: A Pilot Study**

Presenter: Nour Elmestekawy

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Transcript for audio/video file on YouTube: https://youtu.be/ chBW19LbnE

Nour Elmestekawy: Hello everyone. Thank you so much for being here for this presentation on Developing Additional Technology Evidence Toolkit and Portal for Mitigating Social Isolation and Loneliness in Older Adults. My name is Nour Elmestekawy. I'm a research assistant with Bruyère, and I just want to acknowledge that this project was funded by AgeWell. Yeah, and I'm completing my master's at the University of Ottawa. Next slide please. So, this is a quick table of contents. It goes over the different things that we're going to go over today. So the background, the objectives, the methods, the analysis, the results, and the conclusion. Next slide. So we're going to quickly go over the background. Next slide.

> So from our literature review, what we found is that social and isolation and loneliness amongst older adults was a really pressing public health issue globally. The COVID-19 pandemic exacerbated this issue all around the world, and particularly older adults, due to physical distancing measures, which led to an increased social isolation and loneliness in this population. Technological advancements have led to increased use of internet connected devices, which made digital and remote interventions viable solutions for maintaining social isolation among older adults. The pandemic also accelerated our reliance on remote methods and digital technology to maintain social connection while there were measures in place for pandemic safety that kept us a bit isolated from each other. Next slide.

What we found the biggest gap was that there was a lack of practical guidance for implementing digital interventions with consideration for equity and accessibility. Next slide. So, I'm going to go over the three objectives that we were trying to accomplish through this project. Next slide. The first one is we wanted to identify effective digital approaches to reduce social isolation and loneliness. The second thing we wanted to do was assess and synthesize evidence on equity considerations for these technologies. And the third thing was to develop and evaluate the equity focus toolkit of effective digital interventions. Next slide.

So, for methods, next slide. We had a few different sections of this project. The first step was the selection of systematic reviews. So we ended up getting three systematic reviews on three interventions from an existing WHO evidence and gap map. On this issue. We used the following criteria, as you can see here on the slides, to determine which three that we were going to focus on. After we did this, we developed a summary template, and we did this by comparing three different summary styles that we researched, and we got feedback from our advisory committee on which one would suit our purpose better. The one that we decided on was the second one here, the Youth Endowment Fund template, and that's kind of what we based our template on. Our third step was completing the first draft of the toolkit. So we created the toolkit landing page on our Ottawa Center for Health Equity website, and we designed the top level and second level images on Canva, and we migrated all the data that we collected and completed from the summary data into this website. Next slide.

The fourth thing we did was composing a panel of reviewers for the toolkit that we created. So, per here, we tapped into our profession, personal networks, and we created a panel of reviewers to participate in the feedback interviews of just assessing how the initial version of the toolkit looked and felt and how usable it was. So, this included researchers, practitioners, policy makers, and community members. We really made sure to include older adults in the process, because we wanted to make sure there was that relational accountability and a person-centered approach in this whole research project. The fifth thing we did was collecting the feedback data itself. So, we conducted eight one-on-one semi-structured Zoom interviews. These were around 30 to 60 minutes each. They were audio recorded and transcribed in order AI, and we made sure to get the consent of every participant for the transcript before we went ahead and used any quotes for publication. The sixth thing we did was identifying the strengths and modifications. So, we coded all the information that we got from the interviews deductively in a homemade framework. So, the first part was just contextual information. The second part was evaluation of the structure and also evaluation of the content. And the third part was evaluation of the exercise itself. Next slide.

And in terms of the analysis, so this is how we examine the data. Next slide. We decided to use Peter Morville's User Experience Honeycomb. So, I have a photo of it here on the right, and this shows the different themes that we were focusing on in terms of getting the feedback from the reviewers. So, there was the usability of the toolkit, its usefulness, desirability credibility, findability value and equity value. The equity value component — and this one was something that we added, because we really wanted to focus on equity in the toolkit. And you'll notice that for accessibility, we made it more of a crosscutting theme across everything, and we made sure to probe for that in each interview to really get more data on the accessibility of the toolkit. The points that we were collecting were points of improvement on the interface itself, the content, the feedback exercise that we conducted. And all of this from the raw data we collected. Actionable next steps that we are going to use to create version two of the toolkit. Next slide.

So, for the results - next slide. Today I'm sharing with you preliminary findings from our results. The work is still ongoing, but you can see here is a photo of the top level of version one on the right over here. So, this is kind of the top level and what it looked like. And what we found is that most reviewers thought that the toolkit was credible, it was understandable, it was useful and it was desirable. So it looked visually appealing as well. And some areas that we could work on was the usability of the toolkit itself and the findability of it. So, those were things that were kind of brought up. In all, we have 30 suggestions to improve the interface, so how people accessed it and what it kind of looked like, and 28 improvements for the content itself. And just one suggested improvement for the feedback exercise for when we do it, when we continued to develop this toolkit and collect more feedback on it. Next slide.

So, in conclusion, for our objectives, so to address our first objective, we did identify three effective digital approaches to reduce social isolation and loneliness. For our second objective, we assessed and synthesized evidence on equity considerations for these three technologies. And for the third objective, we developed and evaluated this equity focus toolkit across Peter Morville's User Experience Honeycomb. So our next steps will be to work on creating the second version of this toolkit from the data that we've collected in this project and also scale up the toolkit by including some more systematic reviews and interventions on social prescribing and other methods for intervention for social isolation and loneliness and healthy aging. And then we will disseminate this toolkit to WHO and other networks that could benefit from it, including community health centers, research centers, knowledge translation centers, and others that might be interested in technology for aging and healthy aging, and reducing social isolation and loneliness. Next slide. So this is just the references for the presentation. Next slide. And I really thank you all for listening to this presentation, and I look forward to all of your questions during the Q&A period. If you have any more detailed questions, you can reach me at that email. Also for the website, if you ever want to check it out, that it is also there. So thank you again for listening, and I look forward to all your questions.