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- [Announcer] You're listening to "Further Together: The ORAU Podcast." Join Michael Holtz and his guests for conversations about all things ORAU. They'll talk about ORAU's storied history; our impact on an ever-changing world; our innovative, scientific, and technical solutions for our customers; and our commitment to the communities where we do business. Welcome to "Further Together: The ORAU Podcast."

- Welcome to "Further Together: The ORAU Podcast." As ever, it's me, your host, Michael Holtz from the Communications and Marketing Department at ORAU. And as has often been the case, this season, I'm joined by my co-host, Matthew Underwood, also from the Communications and Marketing Department at ORAU. Matthew, how are you?

- I'm good, Michael. How are you doing today?

- I'm good. As we record this, and in retrospect, we might have chosen another day, but as we record this conversation, it is Election Day in the United States, so let's talk about mental health issues.

- Might be perfect timing for all involved, at least it is a... I know at least here in East Tennessee, at least it's a warm November day. It's almost 80 degrees, which we don't see very often in November, so that's a plus side.

- That is on the plus side. We have, as our guests, two of my very favorite people from ORAU, Jennifer Reynolds and Kristin Mattson from the Public Health and Healthcare Group. And I made light of mental health issues talking about Election Day, but in all seriousness, we have a lot to talk about that's pretty deep, and really just kind of... It's gonna take us a while, so let's start the conversation. Jennifer and Kristin, welcome back. I know it's been a little while, but welcome back to "Further Together."

- Thank you so much. Happy, excited to be here.

- Thank you, Michael, and thank you, Matthew.

- So glad to have you. And Jennifer and Kristin, if you would just remind us what it is you do at ORAU.

- Sure, I'll kick us off. So, I'm Jennifer Reynolds. I am the Senior Manager of Health Communication, Marketing, and Promotion in ORAU's Public Health and Healthcare Program, and my educational background is public health and behavioral science, and I have the tremendoush... Tremendoush, that's not a word. Tremendous pleasure of leading a team of 12 experienced health communicators, educators, researchers, and evaluators. And we really get to blend our knowledge of human behavior, health communication science, and new technologies with artistic vision to change health behaviors and hopefully create a better world. So, we have the best jobs ever.

- Awesome, I love it. Kristin, tell us who you are.

- Yeah, hi, I am Kristin Mattson. I'm one of our Senior Health Education Specialists here. I work on Jennifer's team within PHH. I have my Master's in Public Health and Community Health Education, I also have a certification in social marketing and qualitative research, and I'm a Master Certified Health Education Specialist. I've been here at ORAU for 15 years, which is absolutely insane. I just celebrated my official 15-year anniversary on the 2nd. So, I'm getting all of the ORAU employee anniversary surveys in my inbox. So, I have been here working with Jennifer for those 15 years, directing health communication, marketing, and research projects for our state, federal, local agencies that we partner with in implementing public health solutions.

- Awesome, and I know we'll get to a lot of the specifics of what your work covers in this conversation, but really wanted to set the stage for why you're here. So, we have a bit of a mental health crisis in the United States. More than 30% of adults report struggling with depression, anxiety, stress, and other challenges, and the pandemic exacerbated and exposed a lot of our struggle with mental health. But, life after the pandemic hasn't really solved the problem. And the US Surgeon General has basically issued two really important advisories over the last couple of years: one focused on an epidemic of loneliness and the other on really an epidemic of parental stress. Like, there's just a lot going on in our lives, in our kids' lives, all of the things. Can we talk a little bit about what those advisories mean and sort of where we're headed?

- Sure, I'll kick us off. So, back in May 2023, the US Surgeon General, as you mentioned Michael, put out an advisory talking about the loneliness epidemic, as he termed it. And what the Surgeon General noted after spending a lot of time traveling around the US is that everyone was talking about loneliness. They may not have kind of used that term, but they just were talking about feeling isolated, not feeling connected. And so what he noted was about half of adults in America actually reported experiencing some degree of loneliness, and that was before the COVID-19 pandemic really cut all of us off from friends, loved ones, support systems, sent us into remote work. And the COVID-19 pandemic really exacerbated that loneliness and isolation epidemic, but what the Surgeon General's report kind of outlined is all of the data and research to support why loneliness is a huge public health issue and why we all need to be focusing really heavily on solutions to mitigate that. So, a few statistics that the Surgeon General outlined in that report. He talked about the physical health consequences of poor or insufficient connection, including a 29% increased risk of heart disease, a 32% increased risk of stroke, and a 50% increased risk of developing dementia for older adults. Additionally, he talked about the fact that if you lack social connection, it increases the risk of premature death by more than 60%. And I think a really startling fact that he included in his report is the fact that lacking social connection can increase the risk of premature death, as much as smoking up to 15 cigarettes a day. So, I think all have been kind of conditioned to know the dangers of cigarette smoke and talked about that for years. And so kind of putting it in that context, really, I think, sends the alarm bells ringing for a lot of folks. Also in the report, beyond just kind of the health consequences, the physical health consequences, they talked about the fact that loneliness and isolation are associated with lower academic achievement for our students and our children, and worse performance at work, which is really important when you're talking about employers. And in addition to just the physical health, we know that, and I think that's the big reason we're here today, is to talk about the impact on sort of the mental health. And so we know that loneliness and isolation contribute substantially to mental health challenges. So in adults, the risk of developing depression among people who report feeling lonely is often more than double that of people who really or never feel lonely. And I think that one really kind of spoke to me and hit a nerve just personally. I was somebody who was able to work remotely even before the pandemic. So, I started off my career at ORAU working, living in Knoxville, Tennessee, going into an office every day. My husband and I moved to Minnesota about a year or two before the pandemic, and I was working remotely I didn't have any family or friends in the immediate town that I lived in. People always talk about how making friends as an adult is hard. It really is. And I kept telling myself, "Okay..." We ended up getting pregnant with my son and I kept telling myself, "I'll make some mom friends. That'll be really easy to meet other moms. There are all these play dates, and things, and events for moms." And that's sort of something that you can meet up with other people who have a common interest and are at a the same life stage as you, and my son actually happens to be, we call them pandemic babies. He was born exactly a month before the world just kind of turned on its axis. So, all of those plans that I had to kind of develop these friendships and get out of that feeling of being isolated in this new location without any immediate family or friends in my area, those dreams came crashing down because all of the mom groups, the meetups, those all canceled. My son wasn't able to get into a daycare because daycares weren't even accepting new kids at the time, if you remember. So, like, I wasn't able to meet people through the daycare. I mean, it was a crazy time. And I remember just the isolation and how that really impacted my mental wellbeing. And I remember feeling extremely depressed to the point where I had to seek out help from my healthcare provider for that. It really truly impacted me on a day-to-day basis, so much so that I ended up moving back to Florida across the country because I realized just how important that connection was and how you needed to have kind of that tribe and social circle around you. And Florida is where my family is, it's where I grew up, and so I felt like in order to be the best version of myself, to be there for my family, my son, like I needed to surround myself with the people who could support me and lift me up. And I can't even begin to tell you what a difference it has made just reestablishing those connections.

- And I have to imagine that from a mental health and just emotional perspective, that it has to be a sea of change, right, from life in Minnesota to life in Florida.

- Oh, absolutely, so different. And I had connections through Zoom, we would chat with our coworkers on a daily basis. And we had FaceTime, and every once in a while, somebody would come visit me, but it's not the same, and I think that that's what the Surgeon General's report lays out is just the importance of the quality of the connections that you have. And I think we can all agree that connecting over FaceTime, keeping tabs with folks on social media, that's not quality connection.

- For sure, yeah. And I know we'll talk more about social media as our conversation goes on, but I, from my own experience as well, have had those moments of loneliness when I moved to Knoxville when I was... I moved to Knoxville to go to grad school, and I literally knew one person in Knoxville. He had been my professor at the University of Wisconsin-Milwaukee where I did my undergrad work, and he was the dean of the College of Communications at UT. And before he left and before I moved to Knoxville, he was like, I was pondering going to grad school, and he said, "Well, if you're going to grad school, you're coming to mine." So, packed up. Packed up my 1987 Buick LeBaron, or 1978 Buick LeBaron, and put everything I owned in the back of a car and drove down to Knoxville. And I remember calling my mom to tell her that I was in my room in the Andy Holt Tower, and as soon as I hung up the phone, I had a come-apart 'cause I'm like, "I'm in this strange city and I know absolutely no one." And of course, fortunately, it was school and I got meet to people really quickly. But as an adult, when you change jobs and you change, often our, right, circles of friends tend to revolve around our work. So, if you move around or you have a pandemic, and suddenly you're cut off from those groups, it definitely makes connection more difficult, so... The Surgeon General also issued another advisory related to caregiver and parental stress. Jennifer, do you wanna talk about that one?

- Alrighty. Yes, I do wanna talk about parental stress. So, in 2024, the Surgeon General released another report titled Parents Under Pressure. And it really spotlighted for the first time the epidemic of parental stress that we face in the US. So, just a few of sort of the key statistics. 33% of parents report high levels of stress in the last month. That's compared to 20% of all other adults. And then of those, 41% say that most days, they are so stressed they cannot function. So, just think about that as folks who are surrounded by parents in our community, in places of our work, that we are surrounded by people that are so stressed by the responsibilities of everyday childcare that they can't function. That's just really hard to wrap our minds around. And when stress is severe or prolonged, it can be harmful to mental and physical health of parents and of children. So, children of parents with mental health conditions face heightened risks for symptoms of depression, anxiety, and early onset recurrence and prolonged functional impairment from mental health conditions. So, this is a big deal, Michael.

- Absolutely, it's a huge deal. I mean, we have so many parents obviously caring for their children, but then you also have this group of people who are caring for their children and also caring for their parents, right? Which has to add, and I know there hasn't been a US Surgeon General's advisory on this yet, but it certainly could be coming for those of us in that sandwich generation of kids and parents being caregivers at the same time.

- Absolutely. I myself, I am a mother of 12-year-old identical twin girls. And then I'm also caring for parents, including my mother who has Alzheimer's, and really complex, challenging, heartbreaking illnesses. And so I think that one of the key pieces that the Surgeon General highlights in his report is just that we, in America, have this vision of parents as unshakeable, right? We see the influencers on social media that their house is always pristine, and their children don't have boogers all over them, and they're doing everything right-

- They're not well-behaved.

- Right. And so we have this standard that is unreachable. And what we're not talking about is the stress, and the pain, and the grief that comes with caretaking of all ages. Vivek Murthy, the Surgeon General, Dr. Vivek Murthy, says childcare caregiving is sacred work. And I absolutely loved that sentiment because I believe that. And I think that we, in the US, and I'd love to hear y'all's thoughts on this, we tend to make this... We pitted against each other, right? You're either a parent or caregiver, or you're childless. And that's really a problematic way to frame something, right? Because I think that one, it puts blame on the parents, right? "Well, you chose this. What did you think, parenting was gonna be easy?" Right?

- Right, right.

- But it also takes a whole group of our society out of the problem at all, right? Well, I don't have children, I don't have a stake in this issue. And that's absolutely not the case. Parents need support of our entire society, as do children. And just because we're highlighting parental stress in no way takes away from all the other mental health issues

- Absolutely.

- That may affect individuals who are childless by choice or because they're unable to have children, which is its own trauma.

- Well, and even for those of us who are childless by choice, as we are, my mom is gonna be 76 this year. My wife, Sarah's, mom just passed away from Alzheimer's about a month and a half ago. And being a caregiver to a caregiver, watching the toll of the stress, and the constant worry, and the making sure that the nursing home is providing adequate care, and if there's a problem, having to address that and finding... It always seemed like she was having to find the social worker, or the nurse, or the somebody because something needed to be taken care of. And there's one phone number, and how do you get through? And she's caregiving from a distance, half a week, and then half a week kind of at the bedside. And how do you navigate all of that and deal with the stress? And it really does take, as I'm sure you've seen, it takes the whole family. I mean, Kristin is right in sort of moving back to Florida because you really need the whole group. You need a whole group of people around you, not only to take care of the individual, whether it's a child or a parent, but really to take care of us. And that's where the connection, I think, plays such a critical role. And Matthew, you're a young father.

- Oh, yeah, I was about to say that really does bring up a good point of even the parents needing help. I mean, I'm very fortunate to not have to worry about daycare. Both my parents and my wife's parents are local, so we're able to not have to worry about the burdens of even paying for childcare, which I know is a burden that so many parents deal with. Luckily, we don't have to deal with that, and we have a great both sets of grandparents that are able to watch my Sunday in the week and to not even have to worry about that. But from a whole separate side, you talk about stress, and I think a part of that also comes from just being so busy with kids. I mean, there's always... My kid recently, just this past fall, got into athletics, and so we played our first fall season of tee-ball, and it's like you worry about, "Okay, we have a 6:00 game, that means you have to be there at 5:45." How are we gonna eat? Where do we fit in dinner? You gotta pick the kid up, you gotta feed them, you gotta get them to baseball, you gotta get all this stuff. And I think really, that extra sense of being so busy really does bring along that stress with it. And I think that's something that you really do have to have a full support staff to be able to make that work sometimes. Sometimes, I'd have to text my mom, "Hey, I'm just barely gonna get to the game on time from work. Can you get my kid dressed and get him there?" So, it really does take a full support staff to kind of make that life work, for sure.

- I'm seeing nodding heads from Kristin and Jennifer.

- No, Jennifer and I were actually just messaging before this recording, the fact that, like, your kids got all these school projects. And especially with the holidays coming up, all of the things that are going on in the classroom. And Jennifer made the point that our society just really isn't set up to have working parents manage the school and everything that comes with it. And Matthew, you're making a great point, just trying to get to the practices after work. But I do consider myself fortunate, and I do have to often check my privilege because I realize I am in a two-parent family. We've got two of us that are taking care of my son, but I also do have that larger support system, Matthew, as you mentioned. I know that that is absolutely sadly not the reality for many people across the US, and I just can't imagine... I go back to just how lonely and isolating it was to not have that support system. And I just... My heart goes out to all of the parents and caregivers who are doing this alone.

- Right. Well, and on the subject of privilege, as we're four Caucasian people having a conversation, we know that mental health doesn't affect everyone equally, right?

- That's absolutely right, Michael, and thank you for bringing that into this conversation. Because we know that mental health and stress are worse among those who are marginalized due to race, ethnicity, immigration status, socioeconomic status, health status, disability status, sexual orientation, gender identity. And so I think it's essential for all of us in this field to really view these issues, mental health, stress, loneliness, through the lens of health equity, right? So understanding that these issues affect different segments of our population more severely and in different ways. So, as we think and talk about solutions, we really wanna make sure that we're tailoring those solutions to the specific needs of these groups.

- That makes perfect sense. So, we, again, kind of going back to the beginning, what I said earlier in the podcast, we talked... You might think that in life after the pandemic that mental health might have improved, but that, A, doesn't seem to be the case, and there are a number of contributing factors that contribute to the kind of state of our mental health today. But, you all, and ORAU's Public Health and Healthcare team does a lot of work in these areas. First of all, what are some of the contributing factors? And then what is ORAU doing? How are we working to help solve some of these issues?

- I'll go first. And so I wanna do a quick language check when I talk about this, because the first thing I really wanna talk about is substance use and substance use disorder. And I wanna be careful when we say contributing factor because these are really related issues, right? So we know that multiple national population surveys have found that about half of those who experience a mental illness during their lives will also experience a substance use disorder and vice versa. So then we, through fewer studies of youth, research suggests that over 60% of adolescents that are in community-based treatment for substance use disorders also meet criteria for a mental illness. So, these are both medical conditions, but also highly linked to each other. And they also have very common risk factors, right? We've got the genetic links and then the environmental factors that, of course, we're talking about today. So, what do we do, right? I think that's a really important place to start. So, as my team here at ORAU is committed to reducing overdose deaths, and we've been doing this work for over 15 years, and so step one, we always advocate for medical intervention. We want everyone to know these are clinical disorders, and that seeking clinical treatment, including medication for opioid use disorder, is absolutely essential. We don't want anyone to think that going cold turkey is the way to go, but more and more, we understand there's more to recovery than keeping people alive and keeping people from cravings and withdrawal, right? So, one of my favorite sayings in the field of addiction, and credit goes to Johann Hari, who's a British journalist. He said, "The opposite of addiction is not sobriety, it's connection." And what a beautiful way to frame this topic. And it's absolutely true from all of our work in the field, right? Substance use disorder is not a moral failure that makes someone more susceptible to the dopamine response of a drug, right? If that were the case, then we would have a lot more people who have one glass of wine and then have an alcohol use disorder, right? That's absolutely not the case. So, looking back countless studies, even going back to animal studies in the '70s and '80s, we know that addiction is related to attachment issues in childhood. It's related to lack of connection, lack of supportive environments. And by creating supportive environments in tandem with treatment, we can do a lot more towards solving this problem. So, what has ORAU been doing, you might ask? So, one of the projects that we're absolutely the most proud of is we spent the last five years supporting the NIDA SAMHSA HEALing Communities Study. So, we supported all four of those research sites, the University of Kentucky, the Ohio State University, Boston Medical Center, and Columbia University to design campaigns on a range of topics. So, carrying naloxone, medications for opioid use disorder, and reducing stigma. We created over 8,000 campaign materials tailored to different audiences. And we created a one-of-its-kind YouTube Library of stories of people struggling with substance use, sharing their advice for how to enter treatment and sustain recovery over the long term.

- I love the last part of that.

- I was gonna say... I was about to say the same thing, Michael. I do love that.

- Go ahead.

- Just, I mean-

- Go ahead, Matthew.

- Just given people, you talk about all these issues, and it's really different for someone to come from an outside perspective and say, "Hey, we know what you're going through," but to have a personal story that someone can connect with, to personally hear a success story and figure out, "Okay, you went through this. For you to make it through it, I can do that, too." I think it's so powerful.

- Absolutely. We are committed to storytelling, and I think that also reduces stigma, right, that we can... We know stigma is an enemy of addiction, right? When we stigmatize individuals suffering from a medical condition, we isolate them, we further isolate them with all the ramifications that we've just been speaking about, right? We know that individuals who are stigmatized are less likely to enter treatment and less likely to sustain recovery. And so reducing that stigma, showing them another way through support is really the way to go, so... And I have another great project example, if you'll let me-

- Please share. Absolutely.

- So another thing that we're just absolutely passionate about this year is we have a new project that's funded by the Centers for Disease Control and Prevention's National Center for Birth Defects and Developmental Disabilities and the Division of Reproductive Health, and this was an opportunity to address issues of our choice around maternal and child health outcomes. And I wanna share this really staggering statistic that I think a lot of us don't know, and that's the leading cause of pregnancy-related deaths are mental health conditions, including suicide and overdose related to substance use disorders.

- Wait, say that again because-

- I will say that again.

- That's really important.

- So, the leading cause of pregnancy-related deaths in the United States are mental health conditions, including suicide and overdose related to substance use disorders. And I think this ties to everything that we've been talking about in terms of parental stress, that that postpartum period, particularly that first year, first two years, is so unbelievably tough, and we're losing folks because of it, because we're not providing folks with the mental health and substance use disorder support that they need. So, when we thought about this issue and how can we make a difference, we immediately thought of what you were talking about, Matthew, which is peer support, right? How can we show, give someone a support network that may not have someone because they've been struggling with substance use challenges? So, we've partnered with Faces & Voices of Recovery, one of the late nation's leading nonprofit recovery advocacy organizations, recovery community organizations throughout the United States, and an advisory committee of experts. And we're, right now, creating a peer support worker training focused on how can we best support pregnant postpartum and parenting people with children up to age two. So, we are in the second year of that. We spent all last year doing formative research, including surveys, and literature reviews, and engaging experts, and then doing focus groups with pregnant and postpartum people who were suffering with substance use challenges and peers. And armed with all of those insights, we're ready to do the training this year, we can't wait.

- Sounds like a great program. And the statistic that I... The sentence that I asked you to read again, I mean, it's just heartbreaking to think that we live in what is supposed to be the most advanced nation in the world, and the leading cause of infant death is mental health issues. It's mind-blowing.

- It is, and I think Kristin and I have talked about this. We both have talked very openly about our own mental health challenges, and mine occurred in this postpartum period. You're having... It's this perfect storm of hormonal disturbances, right? All your hair falls out, and with it, a flood of chemicals. With extreme sleep deprivation, not taking care of your basic needs, like nutrition, sleep, physical activity, all of those things that we do 'cause you're caring for a newborn. And it can also be loneliness and stress that we've talked about before, and it's just a really critical time that we need to examine and look for avenues to support as much as we can.

- Wow. Yeah, absolutely. It just drives home for me how important this conversation is. Not just for us, I mean, certainly for us as participants, but for the people who are listening. And we, societally, stigmatize mental health issues. And the reality is we probably all have them on some level depending on where we are in our lives and what our situations are, and the stressors that are unique to our own individual lived experience. And, again, that number is startling to me. And I just... I feel like we've got to stop with the stigma, and we've got to give grace to people who... And help certainly to people who need it because everybody needs it in some way, shape, or form.

- Yeah, and it's important to recognize this population of pregnant and postpartum folks who are also dealing with substance use have this dual stigma, right?

- Absolutely, right.

- And have a stigma of addiction and a stigma of mental health, and it makes it even more challenging.

- And Kristin, we talked earlier about the challenges of connectedness, and connectedness kind of flows through the entire conversation, but there are a lot of challenges to that, right?

- Yeah, definitely. We have been working for over a decade with the CDC's Division of Population Health. They have a division of adolescent and school health, formerly known as the CDC Healthy Schools branch. But our work with them has really focused in the last few years on those challenges with connectedness specifically. We've worked with them to really promote the tools and the resources and develop tools and resources that schools and parents can use to increase connectedness among youth. We know that that connectedness is a really important protective factor, as what CDC refers to it as. And we know that studies show that students who feel more connected to school are less likely to engage in risky behaviors, including violence, sexual health, and substance use, as we talked about. The ones who feel connected are more likely to engage in those positive health behaviors, so physical activity and healthy eating. But they're also more likely, and I alluded to this earlier, they're more likely to have higher grades, higher test scores, better school attendance, and more likely to graduate high school. They're also less likely to have emotional distress and thoughts of suicide. And what's even more important, I think, is that the long-term impacts of connectedness among youth. There is a recent study that showed that connectedness during adolescence may have a long-lasting protective effect across a range of adult health outcomes, like emotional distress, suicidal ideation, physical violence, victimization. They're less likely to have multiple sex partners, STI diagnoses, and substance use disorders. So, I think it's really important work that we've been doing is to just kind of focus on that primary prevention opportunity that we have with youth, and kind of helping them to create these strong bonds with people at school, their peers, their teachers. 'Cause our youth spend a lot of their time, a majority of their time, in schools. So schools are really an ideal place to implement these types of primary prevention measures.

- Yeah, I think that's a good point, Kristin. 'Cause I mean, even talking about moving and stuff, for adults, as you mentioned, can be super challenging. But I mean, I know of a lot of cases where kids are forced to move because different states, and they go to a new school, and they don't know anybody and how hard that is. And from my perspective, it's like I have a ton of friends that I met at a very young age playing sports or whatever, and I still, to this day, have connectedness with them and still, to this day, keep in touch with all them. So, I think it really is important to build that connectedness idea from a super early young age to kind of help maybe defer some of these factors that adults face if you can get it started with these young children.

- Absolutely, Matthew, you're so right, and I think that's one of the big things that we've been trying to promote, along with CDC and our work for CDC Healthy Schools, is these interventions that we can put in place that schools can do that will mitigate some of those negative experiences that come along with isolation. So, recently, CDC identified four school connectedness interventions, including a family and community mentoring program, service learning opportunities for staff. I think when staff really understand social-emotional learning, how important it is to... And how they can make those connections with their students, it makes a big difference. Student-led clubs that really provide a safe place. Matthew, you mentioned your sports activities in school and how those really led to long-lasting connections. I think that that's an ideal environment, and yeah, just really kind of hitting the point home that there are some really great opportunities for us to make an impact on this loneliness epidemic through promotion of these interventions, developing these interventions, doing additional research in these spaces, which I know, Michael, you're actually embarking on a new research study now looking at developing more connection for men who have recently undergone cancer treatment. Is that right?

- Yeah, so with Katherine Chyka, who is also on your team, Katherine is the PI on a project investigating the benefits of peer-to-peer support for men facing cancer. And that really grew out of a white paper that I did a couple of years ago looking at kind of our cancer history, and our capabilities, and my work in the advocacy space. And there are no measures for the benefits of peer-to-peer support for men. But we do know that, by and large, men, particularly as they get older, have what they call a friendship recession. Like, the older you get, you lose friends, partly because as you get older, your friends pass away. But also just attrition of not being able to keep up with friends 'cause it really does take work to build and sustain friendships. And often, what happens is we get married, and we focus on that relationship, and the male friends that we have kind of go to the wayside. And you hear all the time, "I married my best friend." And on the one hand, that's great, but on the other hand, like, should your best friend really be your spouse or should it be the guy that you can count on who you're gonna call at 3:00 in the morning if you're having an issue or there's a family emergency, whatever? And so as we get older, what happens is... And there are guys of all ages even now who can't identify someone as a best friend or that they don't even have a circle of friends. And while we're talking about men, I can joke that size matters, but when it comes to that circle of friends, it really is dependent on how many guys are in that close circle. And the more friends you have, and Kristin, I think it goes back to the school connectedness. Like, the more friends you have, sort of the healthier you are from a mental health perspective, the more balanced your life is. But we've somehow lose those social fitness skills, right, to make those connections and keep those connections. And then, in the case of the study that Katherine and I are working on, you throw cancer in to that, and... We live in a culture where men are supposed to just buck up and be John Wayne, and get through it, and get through it by themselves, and, "I don't need any help." And that attitude is deadly when it comes to cancer. The American Cancer Society released a study earlier this year that loneliness, feelings of loneliness can increase your risk of dying from cancer. If you don't have people around you who are truly supporting you, who you can call or just help you get through your cancer journey, it could kill you because you don't have the emotional and mental health components in place to help you get through it. So, really looking forward to seeing what our study, our pilot study produces from a results perspective. But, I think it's so critical. And from my own experience as a cancer survivor and as a 55-year-old man, I can honestly say that I didn't have a person who I would call my best friend until I was 53 after high school and maybe college. But, and as it happens, my best friend is a Stage 4 cancer survivor who's in active treatment, but it's because cancer brought us together. And the guys in my close circle are guys who are also in treatment who are cancer survivors. And part of that is when you're facing a disease like cancer, when you're facing a trauma, right, you sort of get trauma-bonded to other people. And so the small talk, the stuff that you have to do to build those friendships kind of goes out the window, and you get to a very deep place of friendship very quickly. And it's just... It's a different circumstance. But those relationships are exceedingly genuine, very straightforward, very much emotional. I've got a circle of guys that I'm not afraid to tell them I love them every day and that kind of thing. And that, I think, it's important for people. And we, I think, as a society, forget that those words, and kindness, and... It all matters, it really does.

- Yeah, I'm so glad that you're doing that, Michael, and that you're focusing on men 'cause I think we've done a lot... We've looked at mothers. Jennifer was talking about the postpartum period. We've also done a lot focusing on school age children. So it's really cool to kind of take a look at and do something else with a different audience. And my friends and I often joke that we need to set up play dates for our husbands because... They just, unless we make it happen, they're just not the type of people who will call each other up and say, "Hey, let's go do X, Y, and Z." I don't know what it is about them. I think life gets in the way, and you're tired from work, and you just don't make the effort, I think, as often as women typically do.

- Right.

- So, what I think is really interesting, though, Michael, is the fact that as part of your study, you are including a group of guys who have used social media to really increase that connectedness through the Man Up to Cancer support group. And social media is actually one of those contributing factors that we often talk about-

- Yes, right.

- Impacting our mental health. I think Jennifer brought up a really great point earlier with the parental stress. We see all these influencers, and we're very quick to compare ourselves to those influencers and think like, "Gosh, my life is not as great as theirs. I'm not doing as good of a job." That really can take a toll on your mental health, that comparison game. But also, I think increasingly, it's fitting, very fitting, that this is Election Day. Social media is often a place for hate, and vitriol, and a lot of polarization. And we saw that recently with a project that we did with the University of Georgia. So, kind of going back to some of ORAU's, or PHH in particular, our expertise and our capabilities, one of the big components of all of our communication strategies involves social media monitoring and using social media monitoring tools to conduct qualitative research and environmental scans to really kind of understand the people, and the audiences, and the topics that we wanna create interventions to address. So, I mentioned our work with the University of Georgia. We actually were able to use a social media listening tool to take a look at conversations around vaccination on Twitter. And we found some really interesting things in how people talk about vaccine hesitancy. We saw some differences among the way people talk and what they talk about when it comes to childhood vaccinations and some of the hesitancy around that compared to what we see when people use social media to talk about the influenza vaccination or HPV vaccination. So, we actually had a book chapter that got published that we were listed as authors on, which was really cool, that came out of that work. And if you're interested in looking it up, the chapter is called "Vaccine Support and Hesitancy on Twitter: Opposing Views, Similar Strategies, and the Mixed Impact of Conspiracy Theories." So, that was really an interesting project, and we were fortunate enough to get to work on that with some really great researchers over at the University of Georgia. But, gosh, social media listening is a very interesting field. Just being able to get a look at and thematically analyze the conversations that are going on and kind of see that polarization in real time, and really understand the myths, the misinformation, and be able to develop communication strategies for our clients to address some of those in real time, and impact, a lot of this has been really cool.

- Very cool.

- I think that's really awesome, Kristin. You talked about two examples just then of the work that you all use in social media for this, positive impact, and Michael as well with your gathering up all these men who need support using Facebook as a way to create that Facebook group and really build that community, I think, are two great examples 'cause we really do hear about all the negative effects of social media and how it can actually cause some of the things that we're talking about. It can cause loneliness, it can cause those stress factors. So, I think it's really cool to also highlight the other side of that, that these two particular projects are able to take social media and really turn it into a positive benefit for people that may need it as well.

- Absolutely. I mean, you hear all of the horror stories about... And I think there were some recent studies that just came out about social media's impact on the mental health of adolescents, and there have been some calls to put out some limitations on social media usage among youth and adolescents and people whose brains are still developing. But I do think there are some really good positive ways that we can use it. I think it all has to go back to what the Surgeon General said about quality of interaction, and I think there is a way to use it for good and to increase quality of interaction, just like you are doing, Michael. But, it's not always a perfect science.

- No, it's not. And in The Howling Place, which is the Man up to Cancer Facebook group, there are rules. There are things you absolutely cannot talk about in the group, right? We don't do politics, we don't do religion, we don't do things that could be divisive on their face. We don't do medical cures kind of stuff. It's really about offering support, and, "I'm having a bad day. Can someone give me a call?" And then real connections happen in those kinds of instances. And we encourage guys who live in proximity or in the same state to get together, and... Those kind of meetups, in-person connections, get fostered with some of the money that we raise for the organization. So it's... Facebook is the starting place, but really and truly, it's about getting that in-person connection wherever possible. And it's happening. I mean, anecdotally, we hear great stories all the time. So, I'm heartened that we're doing this pilot study, so we can show some data that says connection really works. Guys need this, too. All that kind of stuff, so because it's important. And again, I think societal expectations are... A, when you're facing a difficulty, to get through it alone, but Kristin, even to your point of like getting your husbands together for a play date, like once guys are married, it's like I've reached the pinnacle, and like I'm supposed to have everything I need and in this nuclear unit. And that's just not the case, right? And we need to be honest about that. Hey, you're muted again, Jennifer, sorry.

- I was gonna say, we women want you to have friends. We do not want to eat huge amounts of meat and finish your movie quotes. Please don't put that on us. Men, seek out other men friends, please.

- Right.

- Public service announcement.

- We'll drink the bourbon, that's my wife. She's like, "You need someone to drink the bourbon with? Fine. Find somebody." And Kristin, I know we've talked about social media, we've talked about connectedness, and then there's just this sort of like ongoing, like crap, if I may use that word, is like happening all the time with extreme weather events and crazy news events. Just, like, life sometimes feels so heavy because of all of this stuff going on around us. It's like we're in perpetual continuing crisis.

- Oh, absolutely. And one thing in public health that we pay a lot of attention to is childhood trauma. In public health, we talk about it in terms of adverse childhood experiences, or ACEs, and these are really traumatic events that occur in a child's life, such as abuse, neglect, violence, growing up in a household with mental health issues. But also, you think about exactly what you mentioned, Michael, all of the wild weather that we've been having. And just think about the impact that living through some of those events is gonna have on the youth who may not have the skills and the coping mechanisms yet to be able to process those events. And we know studies show that these ACEs, or adverse childhood experiences, or trauma, whatever you wanna call it, we know that they have a lasting impact on brain development and how people respond to stress. There's a number of negative outcomes associated with living through that trauma, including all of the health problems that we talked about with loneliness, things like cancer, diabetes, asthma, heart disease, mental illness, substance use. So it's really important, I think, that we look at ways in which we can build resiliency, not just of our children, but especially with our children. And we had the pleasure of working on a really impactful project a few years ago with the CDC and the Appalachian Regional Commission where we had an opportunity to conduct research with professionals all across Appalachia who worked with children. So, we talked to teachers and guidance counselors, physicians, coaches, and we convened them in a series of workshops to identify ways that we could build resilience in youth within Appalachia who were more prone to experiencing these adverse childhood experiences because there's so much economic instability. There's higher rates of substance use in Appalachia, all of these things that can contribute to negative experiences in youth. And so we had the opportunity to convene 45 experts in these two virtual workshops and really led them through a series of activities to identify exactly what steps we could take to mitigate some of the impact. And one of the biggest things that really just sticks with me to this day is the impact that the caring presence of a single adult can have in a child's life, and how that was one of the biggest and most important protective factors. So I think it just kind of takes us full circle in the importance of having that connectedness. And if you, as a parent, aren't able to make that connection with your child, how important it is to have somebody else in their life that can bridge that gap, getting them involved in athletics, in church, a teacher at school. I think we can all think back to our own youth, and that one... And we really remember that one person who made such a difference in our lives when we were having a challenging time. So that's the one thing from that project that really sticks with me is just how important those connections are.

- Absolutely. It's amazing to, I mean, we just... That has been so woven into this conversation, just how important that is from the earliest possible age to have those connections in place. And every time we talk, whether we're recording it or not, I learn something new about what you guys do in Public Health and Healthcare. And this conversation has been enlightening in so many ways. And now that we've talked about what ORAU is doing, Jennifer, what can all of us do to improve our own mental health, our own feelings of... Our own wellbeing, our own connectedness? What can we do to make all of that better for ourselves?

- I think issues of mental health, conversations like the one we have today can feel so overwhelming and dark, right? And so I love that we're gonna end this discussion with some light, right, that there is things that we can do, that all of us can do, to make a difference. And so I should preface this by saying that if we are really going to tackle issues of loneliness, of youth mental health, of parental stress and anxiety, we are talking about a huge multi-sector response, right? We need policy, we need government, we need healthcare, we need nonprofit, academia, research, all of the things. So just know that, everyone we know, I encourage all of you to check the show notes and read the Surgeon General's reports because they are a wealth of information about what all these different sectors can do. But, what can you and I do? First and foremost, I encourage everyone who needs me to empower yourself with information about mental health. In our conversation today, we all learn something new. Recognize how mental health challenges can manifest in yourself, and so that you can recognize them in others. I can tell you from personal experience, sometimes when you are in a really dark place, it's hard to see your own way out and that one supportive person who can say, "Hey, how you doing?" Might be that change you need in that day. So, I wanna share a couple of things. We talked about loneliness. You may be listening right now and say, "I don't have someone to talk about my mental health with." That's okay. We have hotlines that you can talk to if you're in crisis. So, one of those is the Maternal Mental Health Hotline. It's a 24/7 confidential support in English and Spanish, and it's 1833-TLC-MAMA. M-A-M-A, which is adorable. And we'll, of course, put that in the show notes. And then of course, the 988 Suicide and Crisis Lifeline. Don't be shy about using that resource. You don't have to be experiencing immediate suicide ideation to call that number. You may have concerns about a friend or a loved one. You may be experiencing other health challenges. So, and those are great resources. The other thing I would encourage everyone to do is learn about and empathize with the challenges others face. So we've talked about it earlier. Social media and political discourse here on Election Day tend to divide us, right, and that doesn't... It doesn't have to be that way, folks. Each of us struggle in our own ways at different times throughout our lives, right? And just because we are calling attention to one person's struggle does not negate the pain or the challenges that you may be facing, right? They're just different. And I may need support today, you may need it tomorrow. Offer practical support when you can, a kind word, a note to a neighbor. Knock on an elder's door and say, "Hello," if you haven't seen them come outside their house. A parent. Offer to watch their kid for an hour while they go sit outside and listen in silence or run an errand. And also know it's okay to not offer that support if you yourself are struggling, right? We don't have to always keep up with the Joneses. It's okay to not be okay. And then healthy screen time, right? As Kristin said, we, in our Health Communications and Marketing Program, really study the science of social media. Please know, everyone, that those platforms are designed to keep us in a heightened emotional state, right? They show us content that makes us have heightened emotions of anger, sadness, anxiety. That is by design. And so ask yourself, "Is this making me feel good, or is this not making me feel good?" And if the answer is it's not making you feel good, or you're seeing sort of behaviors in your children that suggest it's not making them feel good, maybe it's time to reexamine that media use and think about cutting back a little bit. And then I think we talked about it today, seek those connections, and I know, as we've talked about, it's easier said than done. So, I don't know, what are our group advice for how to make friends as adults? 'Cause it is so hard.

- It is hard, but I think... Going to church, going to... Finding a hobby group of some nature, whether it's... Take a class, take a photography class, whatever you're interested in. Because of screen time, I work in communications and I spend a lot of cancer advocacy time in politics, spend a lot of time on social media. And I knew, like, this is gonna rot my brain from the inside out if I don't do something, right? So I started building LEGO. I bought a LEGO build kit. And the cool thing about that is although it's, on the one hand, a solitary activity, I can show pictures to my friends and say, "Look, I built this," and you know. And then they're like... I actually did this. Someone else says, "Well, look, I built this one." And so like suddenly, you're bonded around something that is not the news, and not politics, and not... some of the drugs that you can get in social media world. So I think it's important to be open to finding that something even... There are so many ways we can make connections with each other if we're willing to give it a try. And it is hard. I'm the last person in the world to say I like small talk. I would rather poke pins in my fingers or something than have a conversation around small talk. But that's how connection starts, right? With talking about the weather or talking about what traffic was like on the way to church this morning, or whatever that looks, whatever that is. So, how long you had to wait in line to both.

- Yeah, you mentioned there's... I mean, there's so many community groups, too, and volunteer organizations. Find something like... Like Jennifer was talking about, find something that really you do and you think to yourself, "This makes me happy. This is my escape from all these things that we've talked about." Social media stress, and Election Day, and all the other things that may be stressing you out. You really do have to go and find time. So, find that one thing that really does make you happy, and build a group around other people that they have similar interests. Or like Kristin said, "Kick your husband out of the house and make him go find friends to play with for a little while." Whatever it takes.

- Ax-throwing is a fun-

- Ax-throwing, there you go.

- It's a fun activity. Just throwing it up.

- And of course, just again, as a mental health advocate, we say all of this joking, but sometimes we know that that clinical support may be needed, and that's okay, too, right?

- Absolutely.

- So, absolutely, if you are struggling, if seeking connections, if decreasing social media is not working, absolutely see a healthcare provider because you are not at all alone

- Absolutely.

- In the way that you are feeling, as we've talked about today. There are so many people struggling with these issues. And the more... We'll all be healthier if you take steps to be healthier as an individual.

- I had to start taking anxiety meds during the pandemic because... And I'm sure a lot of people did, but I think it's important to talk about that and say... There are lots of us who are in the position of getting help, whether it's through medication assistance or it's therapy, which I have had in my past, and counseling sessions, and really whatever it takes. And you're not alone. You may be listening to this and think you are the only person. A, you've heard all of our stories at various levels, but there are other people all around you who may not be talking about it, but they're struggling too. They may look perfect on social media or they may present to the world as they've got their stuff together, but we all have a little bit of that, and some of us just have more of the struggle than others, and that's okay. And it's okay to ask for help for it.

- Yeah, and I just go back to what Jennifer said things that we can all do. Checking in on a friend or a coworker. The two times that I needed to seek out professional help for depression and anxiety, it was because someone sat me down and said, "I feel like you're spiraling. I feel like your sadness is more than normal sadness. I think you would benefit from talking to a professional." And so, it made all the difference, it really did, but it took somebody outside my immediate household saying, "I think you would benefit from speaking with a professional."

- And it was a connection who could say that to you in a loving, caring way without traumatizing and stigmatizing you for the conversation, right?

- Right.

- So, it's... We also have to give each other grace, right, and be able to say, "I think something's not right. Something's, yeah, so..." We have covered a lot in this conversation. Is there anything we haven't talked about that you wanna make sure that we say? Well, before we go, I wanna ask everyone, I wanna end on a little bit of a lighter note. So, I'm gonna ask the question: What brings you joy?

- Oh, God.

- And Kristin, I'm gonna start with you. Kristin, what brings you joy?

- I was afraid you were gonna bring it back to Election Day, and I was like, "I'm not ready to talk about..."

- Pick your poison, Kristin. No, I'm just kidding.

- Yeah-

- No, what brings you joy?

- What brings me joy is seeing my son happy. There is nothing better than seeing, getting to watch him experience new things. So, as I mentioned, he's a pandemic baby, so he'll be five in February, which is absolutely crazy. But, the last few years-

- Amazing.

- Has been amazing getting to see him grow, and learn new things, and experience new things.

- Awesome. Jennifer?

- So I have two. One of them is sort of... It's very real, but, so my biggest joy right now is stealing my kids' Halloween candy while they're at school. So I encourage all the parents out there. They are not good at hiding it, you can find it, you can make it look like you haven't been eating it for at least a week or two. So, that's certainly one of them. And then second, truly, is to be with my husband and my two kids out in this beautiful place that we call Asheville, North Carolina. I have never been happier to live somewhere than I am in my community right now. We have showed up for each other in ways that are beautiful, and that I will never forget for the rest of my life. So, that's what's bringing me joy right now even amidst chainsaws, and sadness, and community grief, and lots and lots of damage. That is something to celebrate as well.

- Talk about resilience right there. Matthew, how about you?

- Having this whole conversation just really makes me think about my community, talking about circles and having people I mentioned earlier. My parents live three minutes from my house, and I can easily take my son to them when I need a break. But, and then my wife and my three-year-old little boy also bring me joy. Like Kristin said, that every day of watching them learn something that they didn't know before, or my son right now saying a word and I'm like, "Where did you even learn that word? Like, who taught you that?" And they just pick up on things, and it's just joyous to see like him mispronounce a new word or try to figure out what he is talking about, or just all those little things in life that you sometimes take for granted. But it really is those little moments of joy that get you through the day.

- Awesome. Well, and for me, it's my wife Sarah. We're actually in Atlanta this week because she had a business trip. Her company has an office here, and she asked me to come with her just 'cause she wanted to have me with her. And the good thing about being a hybrid workspace is we can literally work from every anywhere. So, I'm in Atlanta working, but also just enjoying time with Sarah. And especially after the couple of years she's had caring for her mom, recognizing how precious that time is together. So, lots of joy happening here in Atlanta this week, so... Well, I just wanna thank you Jennifer and you Kristin, for joining us today, and Matthew, for sharing and having this conversation. This may be one of the most important conversations we've ever had on the podcast, and I can't wait to share it with our listeners. And hopefully, we can help some people who maybe can find some connection, who need help with things that they're struggling with and not make them feel like they're alone. So, thank you so much for your time, I appreciate it.

- Well, thank you for having us, Michael and Matthew. And just a little plug. May is Mental Health Awareness Month, so hopefully you'll have us back, and we can report on progress for some of our ongoing initiatives in the mental health space then.

- Let us plan to have that happen, absolutely. So, thank you so much, have a great day.

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