eAudiology: Mental Health First Aid for Patients Across the Lifespan

Presenter: Ursula M. Findlen, PhD

All right, thanks so much. I'm gonna change the slide here and we'll get started.

So just to quickly go over a little bit about ourselves, you can see here that we each listed our employers, and I think everyone is has been on camera at some point. So I think you've gotten a chance to see them, and you'll see them throughout the presentation. But basically, our employers are listed here. And then each of us do have some disclosures regarding our volunteer time with aaa.

So to kick this off here, as folks are probably aware that are listening in, in recent years, there has been increasing acknowledgment of discussing and identifying mental health concerns. And the statistics that you see presented here are actually from 2020. So they are a few years old. But I suspect, unfortunately, if we were to find some statistics that were published a little, probably would be similar, if not a little bit higher. And when you look at these stats, they come from the Mental Health and Substance Abuse Administration and also Mental Health America.

And thinking about, because we're talking about the lifespan tonight, you can see here this first bullet point. In June of 2020, 40% of U.S. adults reported struggling with mental health or substance abuse. And then 1 in 6 US youth between the ages of 6 to 17 experience a mental health disorder each year. And the additional bullet points just really highlight the fact that this is something that is definitely at the forefront when it comes to problems that folks are facing across the US and then also just the impacts of the cost of this on the healthcare system.

And tonight, we're really talking to you about. We equated this to first aid, just like you would learn cpr, first aid skills, some of the mental health first aid that we want to think about as talking here tonight, just some symptoms associated with mental health. I'm sure many of you are familiar, but some current concerns that we want to highlight as we talk here tonight are thinking about with our patients when we're interacting with them, if they're having symptoms of confusion, depression, social withdrawal, extreme feelings of pleasure, anger, excitement, fear, or even grief. Those are some of the concerns

that we want to highlight as we move forward here and continue this discussion.

When we think about where audiology and mental health intersect, one of the big things to point out as we start to think about this is a lot of times we're very focused when we work with our patients on, okay, we have a certain amount of time and we need to get through this complicated audiogram. And this patient has a lot, a lot of conditions going on. But really we need to think about people in terms of, and there's a lot of terms that are used out there. Whole person, person centered, patient centered, or even family centered care. And when we think about that, we can talk about it in terms of disease versus illness perspective.

And basically when you think about that, what that looks like is a lot of times healthcare providers are very much focused on a patient comes in, they have a certain set of symptoms, and we're working through those symptoms to identify what disorder is related to our specific subspecialty area. But really when we think about the patient's perspective, it's much more of an illness perspective in terms of we need to think about all the experiences. So that person has a hearing loss, but that may impact the fact that they're going for a job interview, or it may impact a new mom who has a baby that was just diagnosed with hearing loss. So it's really something that it's not just, you know, checking boxes to get to a diagnosis. It's how they're living with that experience.

When we think about how we work with our patients and we think about this disease versus illness perspective, a good way to look at it is do we dominate the space, meaning we're checking all those boxes to get to that diagnosis as quickly as possible. Are we allowing some time to share that space in the appointment so that we can get a little bit more perspective into how this family or how that patient is handling everything that's coming at them? And when we think about audiology and mental health, we again can address this across the lifespan. So it may be that you're someone who works with adults and thinking about what that entails and also what that might entail for their family. But also on the

opposite end of the spectrum, thinking about our infants and the parents that we interact with our children and as they transition from different stages across school, that can be really important.

When we think about audiology in terms of hearing loss, tinnitus and vestibular disorders, we need to think about the fact that when we newly diagnosed, diagnose one of those things, there can be lots of emotions that are entangled with that. You know, anywhere from feeling depressed about it, feeling irritable, panicking, having some anxiety or isolation. Those are things that we really need to consider. And we also need to look at, as we're working through these diagnoses, some at risk behaviors that again, getting back to that mental health first aid, we need to identify and flag as those are bigger concerns. And some of those things might be as we're working through, you know, maybe they're hearing hearing loss or their tinnitus, if they're really having inability to perform daily tasks.

And you might see this across appointments. So it's a pattern of results or they're experiencing a lot of rapid mood swings that maybe they're self reporting or their family members are reporting if they've got increased agitation, if they're, you know, starting to invoke risk taking behaviors or out of control behaviors. And then specifically if you identify these, these would be pretty high up on the, the concern list. But if there are any abusive behav behaviors regarding themselves or how they're interacting with others, those are some things that we need to identify.

And I think a lot of times what will happen as we start to talk about these things is our first thought is, okay, wait a second, we're audiologists. We are not, we don't have degrees in psychology. We're not mental health counselors or licensed, you know, facilitators. But what, what we would say to this is, as we all know, there's a lot of correlations between ANX disorders and depression and hearing loss, tinnitus and vestibular disorders. And what I would just say to you here is it really is important at the end of the day to consult your licensing laws and understand your scope of practice.

But when we think about scope of practice, and as you can see here, Both ASHA and AAA's most recent updated scope of practices are listed. There is information specifically in there about screening procedures that we can do and identifying if our patients need outside referrals and how we counsel and how we talk about emotions. So you can see there's some additional resources that are listed here. What I will highlight is the last resource that you see here that is a direct link to state by state information about licensing laws and scope of practice. So you can really get to know that information yourself.

And then in terms of where we go from here, when we're thinking about ourselves as healthcare providers and what our responsibilities, abilities are, it's really important to just think about the fact that it's okay and we should be comfortable with discussing the emotion, emotional side of things. If our patients are, you know, fighting this, this information that we've given them, maybe about the fact that they do have some hearing loss, really, that can become the elephant in the room that just kind of hangs out there the whole time and it prevents things from moving forward or maybe even your patients feeling like you're their trusted healthcare provider that's walking alongside them. And I think it's really important also just be very honest when we're communicating with our patients or our patient's family about what we think is going on. Again, not leaving that elephant just kind of sitting on the side of the room, but really talking about with them that, you know, as I'm going through all of this with you and as we've been doing some testing, yes, there's definitely some hearing difficulties going on, but it also looks like there's some emotions, some pretty heavy emotions that are associated with that. And, you know, if I'm really thinking about you as a whole person, I that's something that maybe it would be more comfortable or more appropriate to talk to a counselor or a therapist about.

And chances are, patients, maybe this is the first time they've heard someone approach something like that with them. So they might feel a little bit uncomfortable or they might say, no, I'm not interested. But I think the important thing to remember is it is our responsibility to have that conversation. And that way

then, if it leads to, I really want to talk to this patient's primary care or pediatrician. It's not something that you've shared specifically with just that referring provider.

You've also shared it with the family and or the patient. So that there really is mutual understanding of what's happening. Again, this is if we go back to the fact that we are not licensed counselors or psychiatrists, but knowing that there is a network that you can establish and have of social workers, of psychologists, psychiatrists, therapists, and again, that communication with the referring healthcare provider. I work at a big university, so I actually am very fortunate that I can walk across the hall and some of these individuals have offices real close to me. But you might be in a private practice or a small clinic where it's audiology standalone.

It doesn't mean that you can't develop and utilize a network. And we'll talk a little bit more about where to go to find some resources for that at the end of the presentation.

And at this point, I'm going to turn it over. Sorry that our slides are changing a little bit slowly. Tonight I'm going to turn it over to Ursula, and she's going to start to talk to you about some of the different considerations with lifespan. All right. Good evening, everyone.

My name is Ursula Finlan. I'm a research audiologist at Nationwide Children's Hospital in Columbus, Ohio. And I'm going to kick off lifespan considerations with looking specifically at the pediatric population, especially if you have been a pediatric audiologist or have experienced providing a diagnosis of pediatric congenital hearing loss. You know that we engage in several types of counseling, and I would say that this actually happens across the lifespan, not just in pediatrics, but we engage in informational and educational counseling in the terms of the fact that we look at the diagnosis, we explain, explain the diagnosis for babies, we explain the ABR setup, we explain referrals and next steps for babies and children, we discuss communication and amplification options either at the time of diagnosis or maybe at a follow up appointment. And then we explain the need for consistent follow up.

But concurrently, in our appointments, we are actually also engaging in emotional, behavioral, or adjustment counseling because we have to recognize the emotion that goes along with that diagnosis. I have been blessed to experience this in multiple different ways. I've had families unfortunately break down and cry, and I've had to shepherd them through this process with a lot of emotions that were negative at first. I've also had deaf families rejoice in having their child be diagnosed as deaf or hard of hearing. So you never quite know what you're going to get.

But if you recognize those emotions and you recognize the impact on the family, you can encourage those families to seek support from other loved ones or other professionals. And there's a real importance in being an active listener. And we can't be afraid of silences during this type of discussion because sometimes that's just the amount of space people need to come up with their next questions or be able to provide their input to you on the right side of the slide. What this really depicts is how as pediatric audiologists, our roles change a little bit over time. In the beginning of diagnosis, whether it's an infant or a child, we provide a lot of emotional support, a lot of informational counseling, and we do a lot of facilitation and advocacy, meaning we're the ones really placing the referrals or making scheduled appointments for follow up, getting them to ents, getting them to early intervention, getting them to speech, language pathology.

But hopefully, as time goes on, that emotional support that we give to the families becomes their emotional strength. And the information counseling becomes knowledge and competency in who their child is and what their child needs, especially during the transitions between EI and school and school and going to college, etc. And then lastly, that facilitation and advocacy that we have to do in the beginning hopefully becomes empowerment for the family so that they can take on their role in trying to make sure their child gets what they need to meet their best outcomes. So one way that you can share potentially unexpected information. Again, sometimes it's not so unexpected, but sometimes, lots of

times, usually it is very unexpected is something called the SPIKES model that refers to setting, perception, invitation, knowledge, emotions, strategy and summary.

So what this means is that during your appointment, if you're sharing information and again, this kind of goes, this is based in counseling of pediatrics and families, but really can be applied to any population whatsoever. In terms of setting, you want to have a private setting with no interruptions. You want to understand the family's perception of the screening results or the diagnostic results that you share with them. You want to invite them to let you know how they want to receive information. Some people want to see receive it only verbally.

Some people need writing. Some people want to receive all the information on that first day. Some people cannot want to fathom that information on the first day. And again, not to be concerned with pauses for response or silence because sometimes that's what parents need and what patients need to be able to interact with you and tell you what they need. You share your knowledge, you give the results and the diagnosis.

And then as they understand the diagnosis, you might have to acknowledge some emotions and empathize. And then lastly you want to sum up the information and plan for follow up. So we did a article in Audiology today and we will share the link to that article in the chat. But there is the Spikes framework with a lot more detail provided in that article, as well as a resource guide that's associated with that article for you to look at at a later time. I also wanted to touch on postpartum depression.

Now, obviously we are not family practice physicians, PCPs or OBGYNs, but we spend a lot of time with mothers in the beginning of their child's life and depending upon when the baby comes to you, that mother might be experiencing some postpartum depression. And research has shown us that moms who are experiencing PPD are less likely to follow up on a referred newborn hearing screening, less likely to be able to engage in hearing management. And so we do have a questionnaire that's used

often by primary care and OBGYN called the Edinburgh Postnatal Depression scale. It's a 10 question screener and it's also available for just a quick three question abbreviated form. And if you have significant concerns that mom is really struggling, you know, beyond what you would expect, you can even just ask these three questions and if the answer is yes to any of them, you can provide the input that you're concerned about them and then you can also ask for them to for a release of information, to send information to their own primary care or their ob gyn, whichever they're more comfortable with.

And then you can just refer to that provider and say, I am working with this woman because their child has a hearing loss and I am concerned for her. I wanted to let you know she gave me permission to talk to you and knows that you might be reaching out. Therefore, we're just really making sure that that mom is taken care of. Because sometimes people don't ask these questions and it's very difficult to get through this period of postpartum depression. For older kids, they kind of come with a different amount and type of mental health concerns.

So I'm going to be going through some data that is specific to children who are deaf and hard of hearing. There's an essential called Child assessment of needs and strengths Comprehensive or cans and it's been used to look at the behavioral and emotional needs, cultural factors, life functioning, risk behaviors, and strengths of children with all sorts of different developmental disabilities. And what's been found in children who are deaf or hard of hearing is that when related to their peers, their hearing peers, they have a higher prevalence of adhd, conduct disorder, autism spectrum disorder, and bipolar disorder. When children who are deaf and hard of hearing seek out mental health services, they are typically in treatment for three times longer than their hearing peers. Specifically, deaf children had a moderate to severe risk for abnormal social functioning and suicidal behavior, and they had moderate severe impairment in social relationships, school functioning, and family relationships.

So there's a lot going on with these kids that is beyond something that a typical hearing kid would experience.

So in terms of making sure that we provide the care they need, there is a strengths and difficulties questionnaire that can be used and has been used in research that shows that children using cochlear implants have more difficulties with peer problems, hyperactivity and conduct problems. So you could technically use the same questionnaire to pin pinpoint any concerns that they might have and then refer them to the appropriate provider for treatment. The good news is, is that children using CI with good speech and noise perception abilities had fewer difficulties. Which just really goes to show you how critical communication is when it comes to mental health. If children are having difficulty communicating, it's not surprising to us that they have peer problems or have attention deficit disorder.

And so this is a way for us to be able to identify it. If we identify a concern about it during our appointments with them, and if we find something on this questionnaire that says that they really need some extra support or referrals, we can make those appropriate referrals.

Lastly, we can also look at quality of life. So quality of life is not necessarily the same thing as mental health, but it is a measure that can show you how children and adults are functioning in their day to day and how they view how they're functioning, which can be related to their level of mental health and security. So we have the PEDS ql, which is a health related quality of life rating scale. It looks at physical functioning, emotional functioning, social functioning and school functioning. And that can really tell you how they're functioning day to day.

And the HEAR QL was derived from this questionnaire for children specifically with hearing loss. There's a form that's self report for older children, but there's also parent report options that you can use for younger children. The speech language pathologists at the hearing program at my facility have actually incorporated the hearing into their treatment of children and management of children who are

deaf and hard of hearing. And they have found it very helpful in identifying whether their hearing loss is being managed to where children are feeling that their quality of life is good and functional. And it also has helped them identify some concerns that we've needed to refer other children or refer children to other providers for help.

And with that, I'm going to pass it over to Caitlyn Kennedy to review young adults, middle age and older adults. All right, thanks, Ursula. So like Ursula said, I'm Caitlin Kennedy. I am an audiologist at Mercy Hospital in St. Louis and excited to talk with you all about adults tonight.

So especially like we've hit on already, when it comes to mental health problems, that encompasses a lot of different things. But specifically what most people think of when they think of mental health problems is depression and anxiety. And there's a lot of information available on those in all populations. But specifically adults, NIH has a lot of that information and they kind of have another arm that's the National Institute for Mental Health. And they have a lot of information specific to any mental health disorder you can think of.

So like Ursula talked or like Devin talked about earlier, if there's about one in six children who experience a mental health problem, you can actually see that broken down by specific problems. When it comes to adults specifically. If we look at this graph on the right during the pandemic and new data is out for 2021, that hasn't really changed much. But overall, about 8.4, 8.5% of the population of adults 18 and older have experienced a major depressive episode. So what that means is for at least two weeks out of the year, 8% of adults experienced a depressed mood or loss of interest in activities, problems sleeping, problems eating, low energy, difficult concentrating and other things that are included in the DSM 5.

It's more predominant in females than males and the younger a patient is, especially in that young adult population. With college and life transitions, we tend to see a higher incidence of depression in adults.

Numbers look, the percentages are different, but the graph looks really similar for anxiety as well.

This is really important with the population that we see most in audiology, which is that adult population when it comes to audiology and our patients with hearing loss, like Ursula mentioned just a minute ago, a lot of times we think of quality of life indicating indirectly relating to depression and mental health status. And while there is a connection there, it's not a direct link. That correlation is starting to appear and there's some really good research coming out showing it. But right now there's just not enough information to say hearing loss causes depression or anxiety. What it does cause though, and what we know it causes is that withdrawal from social activities and not feeling like you can contribute much to a group or to your family or things like that when you do have hearing loss as an adult.

And specifically talking about that quality of life piece, there is the PEDS QL for children, but for adults we don't have a hearing loss specific quality of life measure. We have some that get close, but they're not exactly the same. So if we go on to look at some of the things or some of the diagnoses we see in adult patients more than pediatric patients, this is really where mental health concerns can become a big problem in the adult population. So tinnitus is one of those diagnoses. And we know very well that there is a relationship between tinnitus and mental health considerations in somewhere between 5 to 20% of patients with severe tinnitus.

Based on the Tinnitus Handicap inventory, somewhere between 5 and 20% of those patients are at a higher risk for depression and anxiety. And up to a third of patients who have tinnitus also suffer from depression. Not it doesn't have to be severe, it's just any kind of tinnitus. Because of the strong connection, there's actually a requirement from Medicare on MIPS that if we do a tinnitus evaluation and bill a tinnitus evaluation, we have to document a depression screening and follow up plan of care. And that's simply allowing us to look at our patients as that whole person know that they have this hearing problem and tinnitus and everything else going on, and take care or be part of that team taking

care of another aspect of their health and documenting that plan of care, which can be as easy as referring back to their physician and providing resources in your community, going on.

The other kind of situation we wanted to talk about is vestibular disorders and mental health, which unless you are really working with the vestibular population day in, day out, may not be one you've thought about much. It is really common in vestibular patients, especially if they have recurrent episodes like with BPPV or Meniere's disease, to have a lot of stress and anxiety surrounding their dizziness, especially when they don't know what's happening and they're still in that diagnostic phase and maybe being passed from their primary to a neurologist to a cardiologist, and finally six months later wind up at the right ent, it becomes really stressful. And sometimes those psychological symptoms and that stress can actually trigger an episode or make it worse.

It has gotten to a point with it where there are those positive correlations noted between dizziness and depression and anxiety. And some of that can come from those symptoms triggering it. Some of it can also, though, come from the fact that these patients, depending on the severity of their dizziness, feel like they're unable to participate in life and other activities. So it's a really impactful thing that we get to work with. Something that's come out fairly recently, I'd say, is 3 PD or persistent postural perceptual dizziness.

And what this is is a sensation of dizziness that can't necessarily be measured and that persists for three months or more. So that patient who walks in and is complaining of dizziness, that is ongoing and not episodic, and they've been cleared by neurology and cardiology, they may fall into this category. 3 PD can occur with other vestibular and neurological problems. And it's actually really common in those patients who have BPPV. About 22% of them will experience 3 PD or if they have multiple episodes.

And about 4% of patients who have a single episode of dizziness, so, like labyrinthitis, will experience 3 PD. I actually had a patient at one point who it was either 3 PD or her anxiety around that episode of

dizziness she had. But we were doing calorics and the caloric irrigations were following that nice pattern that they're supposed to and starting to calm down, and she started to get stressed about that sensation she was feeling being like the episode she had had and that it was coming. And we actually saw her nystagmus tick back up higher than her initial peak from that. So that mental component, that mental health component of vestibular is really, really important.

So despite knowing all of this, you may be asking at this point, what can we do with this adult population when it comes to mental health concerns, specifically depression and a little bit of anxiety. There is a really popular, very easily accessible questionnaire called the PHQ9. I am yet to see a medical record system that doesn't have this built into it. It is that common. It has been around since 2001 and is used by almost all healthcare fields.

It can also be used for that MIPS measure 134 for tinnitus patients. PHQ stands for patient Health Questionnaire. And it's either the first two questions for a screening, like a quick screening, or all nine questions and looks at different aspects of mental health. Using this, we can initiate mental health care. As audiologists, we typically spend a lot longer with our patients, whether it is in one appointment or seeing them multiple times.

We spend a lot longer with our patients than a lot of their other health care providers. And therefore we might be the first provider that a patient is comfortable disclosing a mental health concern to. We might be the first provider to notice a change in their mood or a change in their self care that can maybe trigger us asking some of these questions. So using this, and if a patient scores over 3 on it, that is when you make a referral back to their medical home, that's when you can provide those community resources to help them get the help that they need. So what we're going to do now is we have three case examples for you, all of real patients that we've seen and we've been able to use some of these tools with.

So I'm going to turn it back over to Ursula. Great. Thank you so much. So I'm going to start off our case examples with one of our patients named Kira. So Kira passed her newborn hearing screening.

She has a family history of neurofibromatosis type 1, which is not the type that we typically see most often in our clinic. But she was identified as being deaf and hard of hearing. On her kindergarten screening, she was fit with binaural hearing aids for mild to moderate sensorineural hearing loss. And then between the ages of 6 and 12, she had this slow progression in her hearing loss and noted articulation delays. She was receiving special education services through an IEP at the time when she was referred to our facility.

So she was referred to our facility specifically for a cochlear implant evaluation because her hearing had progressed so much so that they were wondering if her hearing aids were actually providing her the benefit that she needed. Our ENT did an otoscope panel and there was no indication of a genetic cause for her disorder. Her MRI was negative for cochlear abnormalities, but she did have some marrow and soft tissue abnormalities noticed. Our physician noted that she has dysmorphic facial features and that her finger joints had some abnormalities. And she had cafe au lait spots noted on physical exam.

So our ENT referred her to hematology and rheumatology and then recommended a cochlear implant evaluation when she was 12 years old. This was in March of 2020. So this is going to be a little bit protracted compared to how we typically do things for our CI patients. But we got there eventually. So, on her CI evaluation, this is her audiogram, you can see that she has moderate to severe and even profound hearing loss on that left side.

Her speech recognition was 24% in each ear, essentially almost at the limits of the audiometer. So she wasn't getting that much in terms of speech perception. She was aided by Neurali with Phonak Sky V70 UPS and was getting 62 and 56 for her SII. So she was getting access to sound, but not stellar access

to sound. We did aided testing for the purposes of her CI evaluation.

You can see that she is getting access to sound, but still having significant trouble with speech perception. Her aided speech perception at 60 DB at SPL was 16 and 8%. So our team recommended bilateral cochlear implants. Her implant was delayed due to the pandemic, but eventually was completed in January of 2021. And she had her initial activation in February of 2021.

So fast forward to one year post information or results. She now is at 60% correct for word recognition and quiet for both ears and was getting pretty good access to sound. I know there was some reprogramming here to get these measures a little bit better, but she was a constant user. Her Data logging was 12.9 hours a day, and she suggested that she got significant benefit from her cochlear implants. So from an audiology standpoint, mission accomplished.

We did all the good things that we needed to get her the speech perception she needed, but meanwhile, this was not the full story. So, six months prior to her cochlear Implant evaluation, they noted her primary care physician noted some peer issues and instances of social media bullying. She had access to a school counselor, but otherwise wasn't receiving any other behavioral health services. The outcome of that rheumatology referral yielded that she actually had juvenile arthritis that they didn't know about. So she started on a methotrexate regimen.

So she had to go through sixth grade with remote schooling that we all remember and loathe. As you can tell, this was during the time where she wasn't implanted. It was before the implant. And with 20 or 16 and 8% perception, I would imagine that remote schooling was very challenging for her. She was receiving counseling services and once school got back into school and wasn't completely remote in the last quarter of the school year, her grades improved and then she attended a summer school program for wraparound services.

Now, in July of 2021, which was, you know, about five months after her initial activation, her primary care noted some major depressive symptoms that her family reported were happening for about a year. She was uninterested in activities, she had major anxiety with new situations, and she had escalating anger issues that really culminated into instances of cutting. So her primary care physician did the PHQ9 and her total score was 18. So in the moderately severe depressive range. She was started on a trial of fluoxetine, which is also known as Prozac.

And after two months of that trial, they noted that she had improved attitude and social interactions and her grooming also improved, which is a telltale sign of, of depression. And so eventually those positive effects wore off. But they had other trials and she's currently on Wellbutrin and Zoloft. So today she continues with counseling at school and pharmacological intervention for diagnosed major depressive disorder and social anxiety. She's still listed at risk for self harm because once you engage in cutting, we want to make sure as a hospital that we are confirming that that isn't happening at any appointments that she goes to.

So there is a banner still in her EPIC to make sure that we have a lookout for that. She's functioning really well with her cochlear implants. Her academic achievement has improved significantly to where she's excelling. She's got no sleep disturbances, normal appetite, and fewer social anxiety issues. So what could we have done?

So the audiologist noted concerns for behavioral health throughout the management of her hearing loss. And we know a lot more about what we should and can do now than we did even three years ago. And four years ago when we first met her. So we could have used a questionnaire like the PHQ9 to identify the risk for her mental health concerns and then made the appropriate referral. Because I work at a large pediatric center, we have great social workers that we can call on to come to appointments if needed at an on call basis if we identify a mental health concern or a risk concern.

And although she didn't exhibit those behaviors, just doing a questionnaire ourselves or having our social worker do it would have been really helpful. We could have also had the recommendation of referring to behavioral health for assessment and for adjustment counseling, because even though she was getting counseling at school, the type of school counseling that kids typically get is very different than the type of counseling kids who have depression and anxiety actually need from an adjustment situation. So that is also a recommendation that we could have made, and that is often the recommendation we make now when we get these types of cases. And then lastly, we can seek out local specialists with expertise and people who are deaf and hard of hearing. We don't currently have a person in our area that specializes in that, but in a previous facility I worked at, we had a really wonderful psychologist who specialized in children and adults who were deaf and hard of hearing.

And he even saw one of my Meniere's patients to work through the mental health concerns that that patient had throughout her treatment. So I know it's really difficult to find these people, but if you start looking around, you might be able to kind of build your village for who you would refer to or who you would reach out to to get services for your patients.

So now I'm going to pass it back over to Caitlin. All right, thank you. So my case has to do with, I think what we're all taught, all taught in school, is a case of a likely mental health concern or something more going on, which is a malinger. This patient, when I saw her, was a high school freshman just for. Just turned 14, and she had started having some new behavioral problems at school and grade issues at school in the current quarter.

That just kind of came out of the blue. Additionally, she had referred on a school hearing screening in her left ear. She came in, I'm talking to her just like I do all my teenage patients. And while we're talking, she tells me it's her right ear. So I take it and go along with it.

And mom provided most of the rest of the case history for me. So we do the testing. And like any good malinger, she gave me a total hearing loss in one ear. And perfectly normal hearing in the other ear without any MIS asking. So we did a stinger.

It was positive srts. She was giving me half words for everything and really trying hard to hear those words. And word rec at her SRT. What I suspected was her true SRT plus 5 or no sorry. At the SRT she gave me plus 5 was 60%, which we'd expect a patient to get much better than that at an SRT plus 5, considering 50% is about what we'd expect at SRT.

So I talked to her a little bit and we swapped out her inserts for headphones, retested, and the results were much, much better. Nearly normal in both years. So with that following the protocols we had in place in the hospital I was in at the time, I explained that results weren't consistent and we needed objective measures. And just with faking and her age, there were some kind of alerts going off in my head that there might be something more going on. And knowing teenagers, sometimes they're hesitant to share things in front of their parents.

So the way our clinic was set up there, I was able to take her out of the booth and mom agreed and we went to a different room to do OAEs and reflexes. And during that time, the patient and I were talking and she disclosed that her parents were going through a divorce and it was really, really hard for her when she disclosed that. With the malingering, I decided to do a PHQ9, and I don't have the score because I'm no longer at that facility, but she scored very, very high. And specifically she responded positively to question nine, which is asking about self harm. As soon as she did that, a conversation I had with another audiologist who's at a VA came back to mind.

And at her va, they're trained to ask the veterans anytime they answer positively to that question if they have a plan in place. My patient responded in this case when I asked her that that she had attempted suicide in the past and had plans to attempt again. When she told me that, I knew that action needed to

be taken, but I didn't know what our policies were. So we finished up that objective testing, everything was normal, and she went back to mom. Prior to going back to mom, my patient and I had talked about that we needed to tell mom the scores of this test and that she had some plans in place to hurt herself.

And the patient agreed to that, but she didn't want to tell mom, so she agreed to me telling Mom, I took the patient back to her mom and told them I'd be back in a minute, I needed to write up some things for their report. I closed the door and I frantically started looking for every single manager I could find to figure out what I needed to do. Because as a staff, we had never discussed what to do in a mental health emergency for a patient. Finally, the recommendation was made that I contact our social worker, which I messaged her and then called her right away. And her recommendation was to refer this patient to the emergency department for a suicidal plan.

She spoke with her colleague who was in the ED that day, and that colleague was going to keep an eye out for when this patient showed up. So I went back, talked to my patient, and mom told them hearing looked great. But there was this other concern that came up during testing. When we started talking about it, mom just kind of shrugged it off and said, oh, she's tried that multiple times. At this point, it's nothing to worry about.

And they left. So social work waited about two hours for the patient to arrive, and after two hours she hadn't arrived. They called mom. Mom didn't answer. They called dad, caught him up on the situation, and dad was doing kind of the same thing mom did.

So at that point, social work had to tell the parents that if they did not arrive within two more hours, CPS would need to get involved. Finally, dad and the patient arrived at the ed. She was there, got a psychiatry evaluation, and their recommendation was for her to attend a day program, which to my knowledge, they never followed through with. But takeaways from this that I had personally were in any facility, whether it's a hospital, a private practice, a clinic. It's important to have a plan in place for what

to do in a mental health emergency with a patient, just like we do if there's any other kind of emergency.

It's also important to know mandated reporting rules in your state. In most states, any healthcare workers are mandated reporters. In Texas, specifically, where this happened, any adult is a mandated reporter. And especially young kids. It's always important to take those disclosures of self harm seriously.

No one is really likely to lie about those things. So if they say something, we need to do something. And questionnaires really just give us a more comfortable way to ask those uncomfortable questions. But it's really important to not just do the questionnaire and regardless of results, move on. If there is something that comes out of it, we need to do something with it.

And like we've been saying all night, we're not mental health providers. We all know that as audiologists, but we do spend a lot of time with our patients. So if something seems off, it is within our scope and ability to look into it a little bit more and inform the rest of their team. So at this point, I'm going to turn it over to Devin for her case. Great.

Thanks, Caitlin. All right, so this case is an adult, a 48 year old female, who, when she came in, reported that she was employed as a certified nursing assistant. However, was currently in the process of filing for disability. And basically her symptoms stemmed from about 18 months ago suffering an intense attack of vertigo. And the way that she explained it is basically she woke up one morning and just felt very off.

And, you know, most healthcare, like most healthcare providers, went to work. As the day progressed, unfortunately, things just continued to get a lot worse. Part of her job involved, you know, checking in patients and getting some of those important intake things that nurse, that nurses do. And she was having a lot of trouble just kind of stumbling around hugging the wall as she was trying to get patients to

appropriate rooms and basically was sent home by her clinic manager because of safety concerns with her own patients. Unfortunately, after going home that evening, she ended up going to the ER because again, symptoms were not getting any better, if anything, getting worse.

And the ER did the typical and rightfully so workup of making sure that it wasn't a stroke. That was definitely ruled out. And basically she was told her diagnosis was vertigo. She was given meclizine, which as most of us who were with VISTA patients know, that's pretty common for helping to potentially subside some of those dizziness symptoms, and then was told if she still has vertigo or symptoms afterwards to follow up with her primary care. What she reported was that the vertigo thankfully got better after a couple days.

But then after that she noticed these lingering severe symptoms of imbalance. And really that imbalance or that dizziness was definitely made worse. Anytime she moved, even if it was a slow movement like turning her head, she was definitely having trouble. Additionally, we talked a little bit with her about, you know, the hearing side of things. And she did report that during this time, maybe things were going on, but she was so focused on the vertigo that it was an afterthought.

But she did report that maybe a couple days prior she was experiencing kind of like upper respiratory or cold like symptoms where one of her ears felt a little full, felt a little muffled in terms of hearing, and she did have a little bit of ringing. But again, those were definitely afterthoughts compared to what was going on with that Vertigo.

So when she came to see us, basically one of the things I will say about our front office is they're very observant of our patients and they're very in tune with what's going on with patients. And this was a patient who, when she was getting scheduled, asked a lot of questions, seemed a little bit anxious about scheduling the appointment. And then when she arrived for the appointment, continued to feel a little bit anxious. This. And when we finally brought her back for her appointment at unc, we spend a lot

of time doing some bedside testing, which if you aren't familiar with the stib, that's more like functional assessments where a patient standing sometimes with their eyes open or eyes closed on an uneven surface, sometimes just trying to get a sense of, you know, what was going on with the fact that she wasn't moving much or was she able to do what we would normally consider our simple tasks.

And there was a lot of reassuring, there was a lot of breaks during that time. So it really took a while. She did ultimately do those things. But overall, with all the testing, it was definitely an appointment that went, you know, as long as it could possibly go during that time slot. Overall, her results when we did all of our vestib testing were normal.

And what was interesting was that previously she had testing done three months right after that initial assault insult, vestibular insult, excuse me. And just remember, we're now 18 months out, so we're continuing to see this pattern of test results are coming back normal. What I will tell you about the testing prior, it was done at outside ENT clinic and it was basically just a summary sheet from ent, but again, it said results were essentially normal. This patient was referred for vestibular rehab. And what she reported was she did go for two sessions and she just said it was very anxiety ridden.

She felt like it made things worse, so she discontinued. And one of the things that kind of struck us through all this and something that I didn't reveal yet is something's missing here. And one of the things that we use in our clinic that can be really helpful and we've talked about through throughout the evening here is subjective questionnaire info. So just like if you're not familiar with working with the stead patients, just like when we work with hearing patients or tinnitus patients, there's the Dizziness Handicap Inventory. And this is 25 questions.

And what's nice about it is it doesn't just look at physical symptoms, it looks at functional and emotional impacts of dizziness. And basically the higher the score, the more that that person is impacted. And this patient's score was a 92 out of 100. So not knowing anything about that, that's a really high score. What

was interesting is that the two questions that she didn't answer, or.

I'm sorry, the two questions that she answered no on, were actually just. Because those were things she avoided, like going to the supermarket or. Or heights, because she was already having this significant dizziness. So in reality, she probably was about a hundred. She probably was a hundred of 100 on this.

This inventory. And some of the questions that are really. That really stick out on this are. One is like, are you feeling depressed? Another is, is this impacting your family situation?

And she was answering yes on all those questions. So a lot going on there just besides those symptoms that she was experiencing. So to kind of bring this case full circle and talk about, okay, we did all this testing. We found she was essentially normal on our very objective tests. One of the things was, during the discussion of results, it was a much bigger conversation than just, hey, your results are normal.

Good luck with things. And one of the things that we did talk about, because she had mentioned this, is she was have having some lingering hearing. Hearing loss and tinnitus. But again, those were very much afterthoughts. So really talking about there are other things going on that need to be addressed.

We can certainly talk about those, and we can certainly address those, and then additionally talking about the fact that these results were normal. But if we look at that subjective questionnaire and just how things are impacting your life, clearly there's much more going on here. And working as a team, this was a great case where ENT was involved the whole time because that was the initial referral. Our physical therapy team was involved because they've had a lot of referrals of patients who have tried VRT before, and it's been unsuccessful. And then also having a conversation with her about counseling and seeking out counseling services.

And she was actually very open to that because she had been struggling so much, and she was about to go on disability for work, and she didn't want. She was 48. That was not something that she had considered she would ever need to do. So it was very much a conversation of, you know, focusing on the fact that there is this dizziness going on, but at the same time, there's a lot of other components associated with it. And basically just some further thoughts on the case.

We felt initially she probably did have some type of vestibular labyrinthitis because she had Those hearing and the stib symptoms, however, we currently gravitated towards as the team, what Caitlin talked about earlier, this 3 PD diagnosis, and basically just to give you some takeaways from this case, honestly, I feel like the subjective questionnaire really helped pinpoint what was going on with her and that hadn't been something that had been utilized when she previously had testing done. And just again, I will reiterate this. I think sometimes when these VISTA patients come in and their emotions are pretty high and their anxiety level is pretty high, it's very easy for that to set the, I guess, tone in the room, but just, just staying calm as the audiologist and patient and really reassuring and validating what she was experiencing. Because those of us who work with dizzy patients know it is not fun to have vertigo or dizziness. And then also being very honest and open about the results, it would have been really nice to find something on this because she was having such significant symptoms.

But the objective testing didn't show that. But that doesn't mean that there wasn't something more that we could do. And also talking to her about the fact that your subjective testing shows there's a lot of emotions with this, there's probably more that can happen and that's not my area of expertise, but I do have great, you know, colleagues that can help with that. And just when you think about 3 PD and what Caitlyn talked about earlier, she really hit all the big triggers or things that we think about when we think about 3 PD. And interestingly, what came up is that both her mom and her sister have an anxiety disorder that is diagnosed.

So there's a family history of high stress. So something to think about. She probably did have this vestibular insult originally and her symptoms were definitely reoccurring on a daily basis. And really what we have learned with 3 PD is it is a team effort. It's a combination of medications, it's a combination of counseling because we really want to get them back to that vestibular therapy, therapy with PT so they can get moving again and their vestibular system can start to recompensate and that dizziness isn't so severe in the end.

And with that, we are probably right, I think at the hour here. So just to conclude a little bit about what we talked about today, hopefully over the last hour, we have really hit home that mental health is definitely a part of hearing and balance healthcare. And being patient centered means really acknowledging those emotions that can occur with those different hearing and balance difficulties that we know our patients across the lifespan face. And then also thinking about how we can make this a part of our practice. Questionnaires can be super helpful.

And then also developing a resource guide. And I'm going to move to the next slide here because this looks very small on the screen here. But again, the link that we posted earlier is to the Audiology Today article. It's from the September, September, October 2023 issue and it has a link for mental health resources, both national resources. And then if you're trying to identify local resources, there's a good starting point there.

There's also a link about mental health first aid official training, just like we get CPR training. And then additionally we have in there a table that highlights some of those questionnaires that we've talked about and even additional ones beyond throughout the evening. And with that we will say thank you for attending and we will stay on if anyone has questions. I think all the presenters are back on, but thank you for attending tonight. And I will pause and we'll see if we have any questions.

Great. If you have any questions for the presenters, you can go ahead and post that in the chat box or if somebody has a question they think of later, is there a good way to reach out to you, contact you if they, they want some additional information?

Absolutely. We can probably, if we have, if everyone wants to stand, we can probably put some contact information in the chat here because I don't think we have it listed in the slides. But also all of us are, I would say if you probably Google us, you can find us at our different universities or clinics, but we can certainly take time to do that too. Great, thank you. And while people are thinking, I'll go ahead and just some wrap up information.

Just a reminder, if you want to get the certificate for the live video, you can go ahead and make sure you write down the verification code that I put in the chat box and you can get the live certificate. Everyone else make sure you also go back to the page on eaudiology. Make sure you do the evaluation and the assessment in order to get your CEUs for today's program. Looks like we have some questions or. No, those are okay.

You put your. There you go. Great. Thank you so much. That's perfect.

If you have any questions for the presenters, you can go ahead and google them or they've posted their email information in the chat box for you.

Good. Well, we're going to go ahead and wrap up for today. Thank you to our presenters. This was a very interesting and important topic for audiologists, and we thank you for your expertise. Take care, everyone.

Thank you so much, everyone.