Podcast Transcript

Understanding Depression and PTSD

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Guest

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- Presenter for the Fitzgerald Nurse Practitioner Certification Exam Review & Advanced Practice Update for family, adult-gerontology primary care, adult-gerontology acute care, and psychiatric-mental health, as well as teaches pathophysiology and pharmacology courses.
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Host

Jannah Amiel, MS, BSN, RN

- Visionary nurse leader with extensive clinical experience in high-acuity hospital settings.
- Education expertise in pre- and post-licensure nursing education, and leading organizational teams in building and developing products and talent.
- The founder and nurse educator of an online bootcamp-style course experience that prepared pre-licensure nursing graduates pass the NCLEX-RN and enter the workforce.
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Transcript

Episode 1 – Depression and PTSD

Hi, and thanks for joining. I'm Jannah Amiel and I'll be your host today. And with me I have Dr. Sally Miller. Dr. Sally Miller, would you like to introduce yourself, just tell us a little bit about yourself before we get started.

I would be happy too. I am a psychiatric mental health nurse practitioner currently practicing here in an outpatient setting in Nevada. I am also board-certified as a family nurse practitioner and acute care nurse practitioner, etc. I've been a nurse practitioner for almost 30 years. In addition to the consistent practice I've always maintained, I'm a clinical professor at Drexel University. I am a lecturer with Fitzgerald Health Education Associates, have been there 21 years. And I am a fellow of the American Academy of Nurse Practitioners, so little bits of everything.

Yeah, awesome. I want to open up our conversation about mental health and wellness, because we hear it a lot, right. So, this is really the whole emphasis of kind of the conversations were happening. We're hearing a lot of this in the general public, in the healthcare workforce, and our healthcare professionals, just kind of this mental unwellness that we're all kind of feeling over these last two years.

So, I was actually reading, Sally, had read this article over the weekend, and it was highlighting a story about a nurse who recently passed from suicide, unfortunately, and in that article is really citing burnout and mental wellness, mental health and kind of that support. And then I was diving in deeper to see more research, and I saw some numbers, some stats, and so I'll share that. And it was from the *Journal of General Internal Medicine*. And it was talking about these different percentages, and I'll tell you what they were. In this, they surveyed 500 doctors, nurses, and other health care workers and in there, 74% said they were depressed, 37% said that they had experienced symptoms of post-traumatic stress disorder, and 15% said they had thoughts of suicide and self-harm. I was wondering if you can help us just start there and better understand not just the data, but if we can start with this depression piece, and then just kind of like talk about all these different ones. But one thing that I think about, what's the difference between "I'm sad", or "I'm depressed"?

It's such an important question. So again, I really am glad for the opportunity to offer some clarity because it's huge. It's the beginning of how we approach the patient. You know, when we were talking about anxiety in previous episodes, I mentioned that anxiety itself is a normal response to a perceived threat. Depression is a normal response to an unpleasant or unhappy event, whether it's, you know, they experience it or observe it or it happens to someone around you. Like really everything in mental health, the things that people feel and experience are normal feelings. It becomes a symptom when the feeling is disproportionate to the stimulus or there isn't a stimulus or it becomes incapacitating.

And so being depressed is something that all of us feel once in a while when something that's depressing happens. That's a normal feeling. It is really important to recognize that feeling depressed does not mean you have a diagnosis of major depressive disorder or major depressive episode. And on the flip side, there are people that do have diagnoses of major depressive disorder and don't feel depressed. Because depression is just one state of mind, so to speak, it's one potential symptom, but a diagnosis of major depressive disorder, or even major depressive episode, a single episode. There are diagnostic criteria for it. It involves a minimum of five symptoms among several domains, and depressed mood may or may not be one of them.

Ah, that's interesting. So sometimes then, we feel like feeling depressed is the actual diagnosis. Like I have depression and that's, that's it. This is who I am forever. This is a lifetime type of diagnosis. So there are steps to just arriving to it. It's not that I'm just feeling kind of down for these last couple days. That's not enough to say this is depression, right?

Absolutely not. And everybody needs to know that including people who are diagnosing people with depression and treating them for it. I mean, in mental health more than any other aspect of patient care, we have to rely on a good symptom assessment from the patient. I don't know if I said this in one of the previous episodes, it's one of my favorite lines, we don't have CAT scans or MRIs or metabolic panels or EKGs to diagnose mental health disorders. We don't have any of that. What we have is our best assessment of symptoms from the patient. But there are validated diagnostic criteria. And in the same way that we wouldn't diagnose hypertension, without documenting a blood pressure under the right circumstances that exceeds 140 over 90 millimeters of mercury on two separate occasions. I mean,
there's diagnostic criteria, one episode of elevated blood pressure doesn't mean you have hypertension. In the same way, feeling depressed does not mean you are having a major depressive episode, and it shouldn't be treated like a major depressive episode, it should be treated like you would treat someone who feels

Yeah, that's a really good point. And so in saying depressed, that if you were treating patients that were feeling depressed, and let's say that you do arrive to a diagnosis of depression, is that something that is lifelong? Is treatment then lifelong, whatever that is, if that's pharmacological or if it's different interventions. Is this for the rest of that client's life?

For some people it is, and for many, it is not. So speaking to probably primarily a non-mental health focused primary care audience, typically not. You know, if people that have a true biochemical imbalance or real dysregulation that is the primary cause of their depression, unfortunately, for them, it is. It is a chronic illness, a chronic lifelong illness and while they may have times when they can go off medication, just like with GERD, or asthma, or whatever, you know, wax and wane depending on the environment.

But there are people whose symptoms begin really early in the lifespan, typically by adolescents, if not before, and unfortunately, for them, depression is probably going to be something, a feature in their life that requires some sort of management, drug therapy, non-drug therapy, or both for the long haul. And in that circumstance, many times patients will want to try coming off medication, we maximize their non pharmacologic interventions, and we try it, and sometimes they are successful for a few months or a year or even a few years, and then may have to come back on it. So that's a subset whose primary problem is truly physiologic. But the majority of the population that primary care nurse practitioners see is not that person, the majority are people that don't have a history of depression, they weren't depressed as adolescents or even young adults, but at some point in their adult life, or any part in the lifespan, but at some defined period, there is some external event. And I mean, it could be so many things. What you or I may not perceive as catastrophic somebody else would. So it's something whether it's, you know, loss of an income or a partner or a friend or anything, someone becomes depressed, and they don't compensate well, emotionally, and they develop diagnostic criteria for a major depressive episode, then they do have depression, and they should be treated for it.

But very often, the goal is that they get back to their non depressed premorbid state. Very often if they're treated properly, and this is hugely important, if they go through an appropriate treatment trajectory, it is very realistic for the goal to be, in one year, you will not need medication, and you will feel as well as you did before this thing happened to you.

Oh, that's fantastic. So I want to ask then to see if I'm understanding this, as I put together these concepts, right, the relationship between anxiety and depression, is it that a person must be experiencing some type of feelings of like classic symptoms of anxiety in order to get to a point of depression? Or are those things not necessarily related, directly aligned in that way that one doesn't need to be present without the other?

As is usually the case, it's complicated. So the short answer to your question is they are two separate disorders, they are two separate diagnoses, and people absolutely may have one and not the other. But, there's always a but, and the but is that many times there's symptom overlap and some of the symptoms of depression are the same as those of an anxiety disorder and people may have symptoms of both and so, if they have diagnostic criteria for both, then you will see dual diagnoses of depression and anxiety. It's become so common to see them put together alone, this depression, anxiety and sometimes it's valid, and sometimes it's not.

Whereas with anxiety, I think I mentioned that for virtually every, every single anxiety disorder of which there are several but for everyone, two core features must be there: worry and anxiety. And then we differentiate the disorder

based on how long the symptoms have been present, what other symptoms are there, is there a trigger or source or not, you know, that's how we differentiate one form of anxiety disorder from the other, that's anxiety.

But in depression, the diagnostic criteria for depression require, at a minimum, that the patient have either depressed mood or anhedonia or a sense of not looking forward to anything. One or the other must be there and then from among nine other domains, we look for a collection of symptoms, a minimum of five is what the diagnostic criteria is just like, two blood pressures for hypertension, a minimum of five criteria for depression.

But unlike an anxiety disorder, where anxiety as a symptom must be there, with depressive disorder as a diagnosis, depression as a symptom isn't necessarily there and lots of patients will say to me, "I don't feel depressed", "I don't feel sad", "I just have no ambition, no motivation", "I don't want to do anything", "don't look forward to anything", you know, "I'm tired all the time", "I'm hopeless about the future", these are all your other symptoms of a major depressive episode. And if I can add one more thing, when you're talking about these disorders, and almost any mental health disorder, really, there are a handful of neurotransmitters that are at the root of the biologic piece: norepinephrine, serotonin, dopamine, GABA, and glutamate. And there's a few other ancillary ones, but they're the big five. And if they are dysregulated in one neurological pathway, you'll have one set of symptoms and maybe be depressed. And if they're abnormal in another pathway, you may have a different set of symptoms and have anxiety disorder. So it's not a big surprise that if they're dysregulated in one pathway, they may be dysregulated in another pathway as well which is why very often mental health diagnoses, they're comorbid, people have more than one at a time.

Got it. That makes a lot of sense. It's very helpful. So, now then I want to talk about this other piece of data here. We talked about, where I talked about here and I was reading, post-traumatic stress disorder, PTSD. So honestly, I am really guilty, even as a nurse of hearing PTSD and the first thing that comes to my mind, I think about war, right? I think about, like these big type of events. And that's how I envisioned PTSD. And I know that's not it, right? That's just not how people only develop this. And I was a little bit, maybe not shocked but I think surprised and seeing that data pop-up and these type of symptoms and manifestations, people are happening. I thought PTSD is a symptom that's happening now. What is that?

So there's a couple of things there to dissect. One is that these are healthcare providers' self-report, right, of symptoms and so, feeling depressed is a feeling and I'm not surprised that 74% said that because when you are caring for patients that are dying from a new entity that people don't understand, and it's scary, and they're separated from their family, and all of these horrible things are happening, and you're worried about your own health, I'd be worried if you didn't go home feeling depressed sometimes, you know, so that makes sense to me. But PTSD is a medical diagnosis and like every diagnosis, it has diagnostic criteria. We really don't want to use a diagnosis without the patient meeting criteria because that's the beginning of the best practices.

So when health care providers say that they feel like they have PTSD, my first concern is no health care providers should diagnose themselves. You have a fool for a patient when you try to take care of yourself, whether you're an attorney, or a health care provider, or oh, I don't know, whatever you do, we shouldn't be taking care of ourselves. We are not objective, and we shouldn't be making our own diagnoses. And aside from that, many health care providers truly don't understand the diagnostic criteria for PTSD. And because it is a specific type of anxiety disorder with a very specific type of treatment to have good outcomes, I'd be a little careful in interpreting that number as truly diagnostic rather than, you know, "I've been exposed to this horrible stuff, and I'm feeling this way".

So having, you know, having said that, I mean, I'm not discounting the way they feel at all, like you said, so many people think of PTSD as this, you know, a major like you served in war, and you know, the people that storm the beach at Normandy, or even some of our more contemporary horrific firefights, and we think of that as causing PTSD. But the thing to keep in mind about PTSD is that amongst the diagnostic criteria, are that the patient has either him or herself, experienced something overwhelmingly traumatic, or observed something traumatic. And so, different people, different things are traumatic to different people. For some people, a really catastrophic divorce is a traumatic event, and can lead to PTSD. For some people, the loss of a pet, you know, maybe like it is hit by a car, or unexpectedly or someone, like anything, it's really what it means to the person. So while you know, the big major stuff, like, you know, major explosions and wars, and all of these major catastrophic things in the world, everybody would agree that there are traumatic events and can produce PTSD in some people, but there are people that live

every day, and experience things that you or I might not normally regard as that level of catastrophe, but it can be to them.

In fact, I'll give you an example. If you don't, I can take two minutes to give you what's just a perfect example of this, and about getting the right diagnosis. I have a patient that I treat for generalized anxiety disorder for years now, several years, and she sees a therapist who is excellent, and they've done great work. And this lady, you know, she is on medication for her Generalized Anxiety Disorder, she also works with a therapist, and for probably the last year and a half, she's been the best she's ever been. She will always be a little anxious. You know, we don't completely obliterate it, and someone for whom it's lifelong, but she feels the best she's ever been. She acknowledges, you know, that, she really feels comfortable and she likes her medicines, and she likes what her therapy is doing for her and everything has been good. So, she has regularly scheduled three month interval visits, which is what we usually do for a maintenance, you know, just to make sure things are well. And she's been that way for about a year and a half. And then, I know about four or five months ago, she had a car accident and I only know it because her employer had some questions about the medicine she was on, so I knew about it for that reason. But other than that, physically, she was fine. She seemed to manage well, and that was that. And then about a month and a half ago, her therapist called me and said, "I think her anxiety is getting worse, we need to do something with her". And she said, "she's just having these panic attacks. She's having bad panic attacks". And I said, "Oh, well, you know, she had that accident. Could it have anything to do with that?" and the therapist said, "I don't think so, she's really self-aware. We've talked about it, I don't think it's the accident". So I saw the patient. She was having new onset panic attacks. That really wasn't what her anxiety focused on before. But now she was having panic attacks. And while I really did believe it was related to the car, it wasn't really clear with her. She was just upset. I trust her therapist, I trusted her. So I changed her medication a little bit. And she came back for a follow up a month later and said it didn't make any difference at all. And I said, "Alright, we have to dig into this car accident". And as we started talking, it became much clearer, it wasn't clear the first time, but it became very clear that her panic attacks were directly related to having to drive somewhere, having to drive, not go somewhere. If somebody else drove her, she was fine, if she was going to take a bus, she was fine. In the rest of her life, at work, at home, she was not having panic attacks. She was having flat out panic attacks at the thought or the action of driving a car. And I said "This is PTSD. This is absolute classic PTSD", she said "but that was months ago?" and I said that's also classic PTSD. One of the diagnostic criteria is there is a distinct time difference between the event and the anxiety. They don't happen right away. If they do, it's not PTSD. So for her, this car accident produced a classic textbook PTSD.

That was a trigger for her. Wow. Wow. That's interesting. So then, in the same kind of token, right, in the same type of vein, I imagine that there's kind of like this cascade, we definitely can slide down. Things like anxiety, depression, PTSD, any of these, and to your point, when you said if you're thinking that you need help, the answer is yes. Right? The answer is yes, you do. And so I'm wondering if there are things that, just as individuals, as just regular people walking about, are professionals, right, that are healthcare workers, NPs, any providers, if there are resources or interventions or things that we can do if we have a patient who's having these thoughts of self-harm or a friend or a colleague, anything that you found most helpful in your practice, right, there's a lot of things we learned to do, even in our education, but things that you have found aside from that that's been very helpful and really impactful with your patients and or, you know, peers?

Well, there's a few different things. You know, first of all, in every in every setting in medicine, including mental health, safety first, right, ensuring the patient is safe first is the number one priority. So if, whether it's a bedside nurse or another nurse practitioner, or a therapist, or anyone on the street, whether you're interacting with a patient, or your friend, or your family, or anyone, if they indicate in any way that they are considering self-harm, or suicide, if you have the remotest concern about them, causing physical harm to themselves, they need to talk to someone who is a pro, someone who was really trained to manage that and that's why it's so important that we have like, you know, our national help lines and guidelines, suicidepreventionlifeline.org. It's a website. Younger people seem to be very inclined to do things electronically and with social media and all that so they might want a website. So that's one. There is a 24/7 phone line, it's 800-273-TALK-8255. Try to remember, it's TALK, but the very cool thing is that on July 16th, of this year [2022], a national three-digit suicide hotline goes live. The number is 988. Just like 911 for emergency, 988 is a suicide line. So it's easy for people to remember. 273-TALK, sometimes people will forget that or, you know, is it 273, 275? But 988, everybody can remember: 988. Again, if you find yourself wondering, "Is it that serious?" "Is it that imminent?" The answer is yes. So call, so call. And if it turns out that maybe the person wasn't going to hurt themselves that day? Well, hurray. You know, awesome.

But calling, I mean, I really do believe that suicide is, that there is a biologic component there and redirecting thought and helping the person process can help alleviate that biologic process. I mean, the instinct to live is the most basal, primitive instinct that human beings have and to purposely take action to overcome that, I feel like there has to be some biological dysregulation in the same way that there is anxiety disorders and depressive disorders, etc. And we know that when we process through thoughts, or memories, or when we just process a line of thought, it actually restructures that thought on a biological level.

And so, just getting on that hotline and talking with someone about anything, or nothing, or whatever it is, can get that person past that crisis state and then there's time to get them into the care they need. So that's that. So, 273-TALK, right? 988 the hotline. I think for anybody where you think of self-harm, that's a big deal.

In terms of people who are feeling depressed, because of this overwhelming thing, or feeling anxious or having trouble with the trauma, whether we call it PTSD or not, there are things that everyone at every level can-do. The bedside nurse, the non-psychiatric provider, one of the most important things is to remember that all these tag phrases like "Information is power", "Knowledge is success", "The devil you know is better than the devil you don't", patients and their families need information. Whatever you can tell them to answer any question they have, it just gives them a little bit of a sense of control, you know. Feeling out of control and feeling helpless and hopeless, these are core features of depression and when we don't know, when we just don't know and nobody will tell us, it exacerbates that feeling of hopelessness and helplessness and then the brain will do what the brain does, is try to fill in the blanks and it's usually doesn't go well.

So for the bedside nurse, and again, I know it's easy to say and hard to do. I totally know what it's like to be overwhelmed and understaffed, and your patients are crashing, and you don't have time to spend a half an hour with the family who's scared, or the patient who's alone, I do get it. I'm not saying any of this is easy, because any change is hard, you know, we have to do the work. And so even if you don't have a half an hour to spend with a patient, if you can just take like, time off, two minutes on a clock, if you start counting two minutes, it's pretty long, you can go a long way in giving just some information, a little bit of reassurance, validating the way they feel, answering a question. Sometimes it's as simple as "I need a different glass of water" like it is this phenomenon of feeling out of control that is so devastating to patients and families, and even the nurses and nurse practitioners and everybody else who are taking care of these people.

So one thing we can all do is provide any information we can. And if we can't, if they're asking questions that we just don't know the answer to, to try to help find a way to answer it or give them something that's realistic, that's a plan, that's a direction, it just helps people feel in control. I think that's huge. From the perspective of a nurse practitioner, what we can do, whether it's nurses who are our patients, or our friends or family, or whatever, I would be very careful about you know, yes, validate the feeling. But be careful not to suggest a diagnosis that doesn't exist, because there's this other phenomenon in medicine referred to as anchoring. And when we put it, when we put a diagnosis around somebody's neck, you know, to use the analogy, it just stays there, it's a lot harder to take it off and if we tell people that they're depressed, they think they are, they're now depressed, they now have that diagnosis.

You know, we're the pro, and they're the lay people, and they think we know what we're doing so when we offer a diagnosis, it becomes part of their identity. And then the last thing I'd encourage my nurse practitioner peers to not do, and I know it's tempting, please don't treat your friends, like don't treat them on the side. I've seen several nurses who doesn't really do mental health or isn't really going through a diagnostic valuation, but we'll give them an SSRI because that is commonly prescribed for anxiety disorders and depressive disorders. And they're trying to help and do them a favor and not have them have to miss work, and not have a medical record of all of this stuff. It's not doing anybody any good. You know, be their friend, but you're the clinician first. And if you really think that they need medication, then they really need an appropriate evaluation.

Right? That's an excellent point. This was really good. I've learned a lot. You know, I really think that even in my nurse mind, I jumble up a lot of these concepts so much. And I think that even hearing about what's happening, right, these last few years and talking about all the burnout and anxiety, I definitely am jumbling it up a lot in my mind. So this was very helpful. You know, it's going to ask you those links and the numbers that you shared, especially the 988, that's awesome. Is that something that family members too or friends could use to say, "Hey, I'm just having a concern, is there something that maybe you can help me to do here?"

So this line, the suicide prevention lifeline app, they channel to all sorts of local resources. I mean, it's like the top of the pyramid and there's all sorts of resources available. That is definitely a place to start. I mean, for anyone who just doesn't know, they just don't know what to do. I mean, we see so many people taking their lives. It is just unbelievable. I can't even tell you how many people, not just professionally, but in my personal world I have known, who have lost children. Adult children, adolescents, it's just horrific and so yes, anybody, they need a starting point: 988. Well, after July 16, [2022] 988. Right now, it's 273-TALK. 800-273-TALK.

Excellent. Awesome. Sally, I appreciate you so much for joining me again today. Another great, great dialogue around mental health and wellness, and learning about what these concepts really mean. So thank you again for always imparting so much knowledge on us.

Thank you for having me!

Absolutely and thank all of you for tuning in. We definitely hope that you'll join us again next time for another discussion about all things mental health, and how we can put into work every day in our practice and in our lives. So I'm Jannah Amiel and on behalf of myself and Dr. Miller, thank you for joining and goodbye for now.

Episode 2 – Looking Ahead at Mental Health

Hi, and thanks for joining the mental health meetup episode four. I am Jannah Amiel. I'll be your host today and with me, I have Dr. Sally Miller. Dr. Miller, would you like to introduce yourself to the audience,

I will just take a moment is say that I am a nurse practitioner with multiple board certifications but psych mental health is the most recent, five years ago now and I do see patients in the mental health outpatient setting one day a week, I am a clinical professor at Drexel University where I teach nurse practitioner students, primarily pharmacology and psychopharmacology and physiology and I have been with Fitzgerald Health as a faculty person for 21 years, and am a fellow of the American Academy or fellow of the American Association of Nurse Practitioners.

This is what happens when you have so many things under your belt, you can't even say it anymore. So Sally and I, we've had a ton of great talks together. And I personally have learned a lot. And I want to piggyback on what we ended up speaking about last time, we talked a lot about depression, PTSD, those types of concepts. So we're going to get back into that. And then also kind of talk about, you know, where do we go from here? And what can we do with this information that we have? So Sally, could you talk to us a little bit about the treatment, so treatment for depression, and then we can talk about treatment for PTSD? What do we need to know about that?

So as always, the starting treatment really requires recognizing when drug therapy is appropriate and when it's not. And so once you confirm your diagnosis of major depressive disorder, or major depressive episode, very often drug therapy is helpful, hopefully not for the long haul. But you know, remember,

Priority One is to establish expectations with your patient, have that conversation based on their history, based on the symptoms right now. Do you expect this drug therapy to go on for four months, six months, a year? Or do we expect it to be chronic. So those are just, those are all the prefaces to really having successful pharmacotherapy.

Another thing that is hugely important and I feel like I'm stating the obvious here to the health care providers, because we know it, but we have to remember that patients don't. And an important part of pharmacotherapy for depression is it takes many, many weeks to even begin to be able to make an assessment as to whether or not it's going to work. Remember, a lot of people who are coming into the healthcare system for the first time for help with depression, it could be that their only experience with medication is three days of an antibiotic for UTI. They take it for three days, they're cured, symptoms are gone, they feel great, you know, life is good.

And then when they come to us, typically at their lowest low, by the time somebody's depression gets to the point where they make an appointment, and it's usually the primary care setting. Usually our primary care providers that see this, by the time they make that appointment, whatever has been going on has usually been going on for a while, now they're at their low, so we're seeing them for the first time that they've been feeling this for weeks,

months, who knows. And then one of the first things that we have to make sure they understand is that easily four weeks before we even begin to make an assessment of whether or not something is working. So, once you commit to starting an antidepressant, it's really important to try not to stop it unless it's absolutely required so we want to make sure that patient is prepared for all eventualities like how long it will take, that there might be some adverse effects early on, laying that foundation really is the key to having successful therapy, you know, for the long haul.

One of the biggest trials, evidence trials in treating depression is called STAR*D. The mental health providers listening know what it is, the primary care providers may not, but STAR*D was a big trial about the treatment of depression and evaluating combinations, etc. And one of the things we learned from that trial, and it has its critics, it wasn't perfect, but one of the things we did learn is that the first drug therapy has the best chance of remission, just based on the way brain cells respond to changes in neurotransmitters.

We give an antidepressant, we are changing the concentration of those neurotransmitters, serotonin, norepinephrine, the ones I keep talking about. And when you change the concentration, brain cells actually adapt to that change in concentration. So there will be physiologic neuroplastic changing. So the first time we give patients medication, that's the best chance we've got at getting a remission.

Every time we change therapy, the likelihood of achieving remission drops just a little bit. That's not to say we don't do it. That's not to say we can't give people help, but the best chance with the best outcomes comes with the first approach to drug therapy so it's really important to try to pick the best one. So then having said that, we look at the classes of medications. The selective serotonin reuptake inhibitors are pretty much the first line in the primary care setting. They are very effective for especially what we call functional depression, the patient that wasn't depressed before and then something happened and now they meet criteria, and we want to help them through this event.

The SSRIs are extremely helpful. They tend to be very well tolerated but they're also not the appropriate drug for a more major non-functional phenomenon. Some people present as non-functional, meaning that maybe they've lost their job, because of their depressed mood, maybe they've lost a relationship, or, you know, some major thing has happened in their life. I mean, I've met people who were incarcerated. And so the depression led them to a place where they wound up being incarcerated. These are major life events. For them. an SSRI might not be the first choice.

So we have many tiers of medication. Typically, the SNRI is considered the go to drug for the patient who doesn't respond to an appropriate trial of an SSRI, and a patient who presents as non-functional. But beyond that, we have lots of other options and even in primary care, antipsychotics are becoming more and more commonly used for treatment resistant depression, people who don't respond to those lesser therapies. So there are lots of options out there for primary care. If the primary care provider is well informed and understands the medications and their usage, then it's very appropriate to use them in the primary care setting.

Very good. What about then PTSD, treating that? Is that very different than the treatment for depression?

PTSD is really different. And again, you know, there is the evidence-based way, there's the best way according to the literature, and then there is the routine that so many fall into. I do it too. I mean, we're all guilty of, we see things through our lens. So medication prescribers see things through the lens of prescribing medication but PTSD really is different. It is one of the family of anxiety disorders. It is an anxiety disorder in that the core symptoms are worry, that perseverative thought, and anxiety, that physiologic fear response, that hyper vigilance, you know, palpitations, shortness of breath, all of that. But what makes it PTSD is that the patient has a history at least a month prior, a remote history, it could be a month ago, it could be 10 or 20 years ago, but a remote history of something bad that happened to them or something bad that they observed, that for some reason now, the brain is making associations and triggering a response to that.

The really interesting thing about PTSD is that it is commonly recognized that the memory of this bad thing is stored deeply in the hippocampus, right? The hippocampus is one of those deep subcortical structures, it's got a pathway to the amygdala, which is the fear gland, right? I mean, the amygdala is fear central in the brain, when you perceive something that that could frighten you, and respond to it with those physical responses. That all

happens in the amygdala. I mean, like we say, people that have no fear, you know, thrill seekers, people that jump off buildings and stuff like that, they have no amygdala, they are incapable of defeat. So if you think of the amygdala as the fear processing place, and it has a direct pathway, deep in the brain to the hippocampus, which is command central for memory storage, when you store a memory deep in the hippocampus, and all of these are subcortical structures, your conscious brain is not aware of this at all.

But all of our memories are stored in there somewhere. Sometimes they come out as a dream. Sometimes they never rise to the surface. But our memories are stored in the hippocampus, which articulates very directly with the fear response center. And so the theory with PTSD is that there are people who for some reason have a biologic predisposition that they will trigger these memories and it's usually some unknown unconscious thing, like just a vague change in scent or temperature or atmosphere.

Sometimes we'll see veterans that experienced horrible things decades and decades ago and just by way of example, Vietnam was notorious for being very wet. You know, the jungle, lots of rain. And we've seen people with PTSD, who would have panic attacks, when, in retrospect, we can see that it's because the weather like was wet, or maybe it had just rained and created like something that triggered that environment. And so this deep seated memory was triggered in some way and produced this fear response. It's a biologic abnormality, it doesn't happen to most of us. I mean, most of us have had bad things happen and while it's not pleasant, we don't have PTSD, but some fraction of the population does and so the most successful treatment is centered around the presumption of that event and it's not a drug therapy.

Unlike many of our other anxiety disorders, where medication therapy is the mainstay ad then non-medication therapy with a therapist is an ancillary or additional treatment with PTSD, non-drug therapy is the mainstay of care, and truly the best response to a patient, if someone makes an appointment and they say they're having anxiety or panic attacks, or whatever the complaint is and we drill down, in that effort, to really have the right diagnosis, if we find out that there is a remote event in their world, and we think they may be having PTSD, the best thing to do is to refer them to a therapist, and not just a therapist, but one who is a trauma therapist and the primary modality they use is something called EMDR.

It's eye movement, desensitization and reprocessing and I will tell you, the first time I ever heard about it, it was like an hour-long class at some conference and the instructor wasn't very interesting, I thought, "the last hour of my life back" like this is all junk and I don't believe it and I just, I never give it another thought. Like most people, if I don't understand it, it can't be any good, right? Nothing narcissistic, but I didn't understand it so I just blew it off. And then thank goodness, I had the opportunity at some point later in my career, to connect with an EMDR therapist, and learn to not only really what it does, but how effective it can be and so it's based on the premise that the optic nerve is also very closely related in terms of conducting sensation to the hippocampus.

I mean, the hippocampus is this area about learning and brain memory, subconscious, unconscious memory, all of these stimuli that come in, get stored deeply in the hippocampus and it has just been supported over and over again, in the literature, that rapidly moving eyes back and forth, just like the name implies, eye movement, lateral movement back and forth, it actually re-processes thought, and people that have, like every time you re-experience a memory, it's biological, it changes something about it changes.

So good memories in our world, we like to remember them, we think about them a lot. You know, like, I don't know, the day that you won a million dollars or the day that you got married or you know, held your baby for the first time or whatever the happy thing is, we think about that a lot, not realizing that every time we experienced that thought, there is some subtle impact on brain chemistry, those same neurotransmitters, dopamine, serotonin, etc. I think we all can identify things that we remember that didn't happen, or they didn't happen that way. I mean, were you ever certain you remembered something and you find out it happened very differently. Because the more we remember a thing, it will change. But the negative memories, the traumatic memories, we don't remember that, we try not to. So we don't have the opportunity to change them or process them. And so there is apparently a biologic response that occurs with rapid eye movement that is linked to processing in the hippocampus.

And so I mean, this is a multiple step process, you don't just sit somebody down and say, start moving your eyes back and forth, there is a preparation phase there is helping the patient prepare to re-experience the traumatic event. But while they are re- experiencing it, under the supervision of someone who is there to help them, they literally rapidly move their eyes back and forth and that sensory input is believed to actually alter the response to this negative memory and I can't tell you how successful this, I mean, I've seen it be successful in people, some people that were living for decades with PTSD and weren't even certain about what that traumatic event was.

There is a Vietnam veteran that comes to mind that went through his whole life being you know, medicated with, you know, alprazolam and Ativan and this and that and nothing really helps ad we don't we really don't see a role for a benzodiazepine in that kind of panic attack because that blunts your ability to reprocess that memory. Whereas in say, panic disorder or other anxiety disorders, sometimes a benzodiazepine is very necessary and helpful. In PTSD, it actually can be counterproductive so that's not to say we never prescribed medication, I'm sure some of the people listening are saying, wait a minute, every patient I've ever seen with PTSD, we put them on an SSRI. Truly the best way to manage PTSD, if you make the diagnosis that PTSD is the origin of symptoms, is to refer the patient to a therapist, that is the mainstay of care.

Sometimes the therapist will reach out to you or send the patient back to you and say, "Hey, you know, we've been working on this, he's he or she's still really having trouble. Can we use some medication to augment the process?" And of all of the medications out there, there are only two that are really been studied and demonstrated to offer any meaningful support in the treatment of PTSD and one of them is an SSRI Zoloft and the other one is an old tricyclic antidepressant, one of the older school medications imipramine and while others may or may not do it, they just have not been studied extensively. But EMDR, now it's being used for migraine pain, chronic pain, other forms of anxiety management, and it really appeals to me, because it does capitalize on the abnormal biology which is part of almost every mental health problem that we see.

That's not to say, it's the only problem that people do sometimes need help with just general coping skills as well but it's a very physiologic phenomenon, it has really been successful and there have been lots of studies, the critics will say, well, doesn't the patient just benefit from the counseling, whether they move their eyes or not, they're still seeing a therapist and but there have been numerous studies that put people into groups where one group gets everything except the eye movement, and the other group gets the eye movement, and the eye movement group, it demonstrates clear statistically significant improvement. So it's just a very cool capture on what we know about the physiology of this abnormal storage of memory, and how it can trigger that panic response in an unexpected way.

That's really interesting. I had never heard that technique ever before and also I think maybe one of the people that assume that everything gets a pill thrown at it, I think about PTSD is also going to get a pill thrown at first. So that's nice and reassuring, too, because I think about some of like, my own patients I've had as an registered nurse, right? Or I think about peers that way that are resistant, right, to the idea of throwing pills at me, right? Like, is there something else I can do? And so that's nice. I think that's nice and reassuring to hear that there are alternatives if there is like a real fear or apprehension to starting with medication therapy, if in fact, it was appropriate to not start it that way. That's very interesting. So then, I think Sally knows all this stuff because right, she's an expert in this field. But I'm wondering, do you think just even in your opinion, that we're going to be seeing more, those who are providers, NPs like yourself, other providers, are we going to be seeing more patients come in with these mental health symptoms, or diagnoses that they might receive all the things that we've really been talking about? And in saying that I asked, because is it important that we all know? We all understand this and that we all have the wherewithal to at least help get our patients to where they need to be, you know, in that moment?

100%. I mean, what's happening in healthcare right now, no one could have anticipated. I mean, it really is unprecedented in our lifetime. I know that, you know, decades and decades ago, there had been other pandemics, but you know, and they're just as important, but in this day and age, not only do we have this pandemic, but we have information, probably too much information sometimes, that is immediately available 24/7 and so people are just overloaded not just with the having to help people through this thing that is so frightening, but also not knowing what to believe and you hear stuff at every turn. I mean, how many channels are there? How many cable

channels and satellite channels, it's not just three, six and ten anymore, or not just, you know, I don't know what it is, the Pony Express.

Perhaps through the last pandemic 100 years ago, there's so much information everywhere. There's so many strong feelings about it and people are afraid to talk because what if somebody else yells at them and you know, like, for instance, know that there are patients who just choose not to have the COVID-19 vaccine. And it is not for me or any health care provider to impose our personal value system or judgment on that patient. It's our job to make sure that they have information available that is evidence based, and that we counsel them in accordance with standards of care and then they decide what they will or don't do about it.

But I can tell you that even having spoken with some of my patients, I find that there appears to be some level of prejudice in the hospital setting when they get sick and go into the hospital. If they get COVID-19 and go into the hospital and have not been vaccinated, there is at least a perception about being treated differently and I mean, I don't doubt it to be honest with you, treated differently than those who did get vaccinated and then wind up sick and get in the hospital. And so no, it's not for us to go down that road at all, except to remember as healthcare providers, it's not about our value system, it's about the patients and our job is to make information available, you know, make good evidence-based, accurate information available.

If there's ever a time that we ourselves personally, because there are 200,000 NPs in the country, chances are some of them have some questions or their own personal religious or philosophical value system is not consistent with the evidence that is currently being presented to us or advocated by the CDC and we can't force anybody to practice counter to their own value system. but what we do have to do is make sure that the patient has access to someone that can counsel them in accordance with current evidence-based recommendations because that's our professional responsibility. So with all of this going on, of course, people are, they just feel overwhelmed. Our healthcare providers feel out of control and we know one of the things that we can do to help them is just break it down into small manageable pieces on, what's that saying, how do you eat an elephant? And the answer is in small chunks, you know, little bits at a time. So I'm sure we're going to see more clearly. I hope we will see more people in the healthcare system, because, you know, understandably they are and I mean, health care providers, I hope that we will see them reach out for care. I know I've had a number of patients that were nurses were referred by other nurses who had come in, and not everybody needs a medication, and not everybody has a lifelong diagnosis but sometimes they just need some help recognizing what's going on and just to even talk about some of those non pharmacologic ways to get to try to manage this particular crisis.

Yeah, and I like that you said that, right? Because it reminds me of, you know, it's okay to not be okay. I hear that and I say it a lot to even our peers in nursing and your welcoming, saying that, I hope that we do, right, see more, that just means that it's okay. It's okay, and if you're feeling any type of way, you should reach out and that's a good thing in that way and so we advocate for our patients really well, we'd always advocate for ourselves so hot and so I'm wondering, what do you imagine that NPS could do to advocate for our own selves, taking care of all these patients? How do we do that? How do you do that? I mean, it's always easier said than done, it is always, always easier said than done. But just, you know, if you're not feeling a particular strain, I mean, any nurse that's listening, or NP, truly feels like their anxiety symptom, or depression is getting to that place where it's interfering with their ability to do their job or interact in their in their non-job life, they should reach out for help. But for somebody who isn't there yet, but they're just understandably feeling, you know, overwhelmed by some of what they see and do every day, you know, one of the basic foundational principles of health is that diversity is the strength of everything. I mean, it's a blanket statement.

That's true in every aspect of our life, whether it's your friends, or your interest, or your income stream. Diversity is strength. So get away from it at the end of the day. You go to work, you give 110% and then come home and do something completely different. Don't come home and be online all night, looking at all of that information overload that's available, don't come home and talk all evening about your day. I mean, if you're getting to that place where you are just starting to feel like "oh, man, I don't know it's gonna be a bit much" something else. Diversity in terms of stimulation. I think that's huge. It's something that a lot of healthcare providers don't do. They do come home all night and try to find the answer to the next day. Better to just, you know, watch something like Impractical Jokers or some other mindless thing that just takes you off in a different direction.

Yeah, I'm super guilty of that. So that's actually good advice. It's true. We come home and we want to do more of that and I don't know why nurses in particular are so very bad at that but I think that's really good advice to step away and kind of separate that. So is there anything that you could share with us about how you decompress or distress if you've had a day where you're feeling like "I can't, today was just a day"? What are things that just are helpful for you to get through that. You're not googling anything, I know you're not doing that, you're not talking all night about it. So, what are you doing?

I really do watch Impractical Jokers. But the other the other thing that really works for me, are my dogs. Yeah, I mean, I take them outside and you know, throw the ball with that, chuck it thing and I just love to watch them have such a good time. I say "Ball!" and their ears go up and the tails wag and they get so excited and for the next hour, I don't think about anything else. I go outside with my dogs and I watch them run around, and I throw it by accident in the water. And they love that because I have to go get it and it's just really, just totally decompressing and so that's my way.

That sounds really nice. That sounds really nice. So before we wrap, I'm wondering, is there anything that you want to share with our NP audience about any of the conversations that we've had over these last episodes?

Well, I guess, we just sort of scratched the surface on so many different things and there's so much more about all of these topics, I mean, as you can probably tell, I could go on ad infinitum about anyone. But what it really comes down to truly is, if you are a nurse or a nurse practitioner, or whatever your healthcare profession is, don't try to be that professional to your friends or family because it's a disservice. If you recognize something in them that they need a nurse or a nurse practitioner, then they should be referred to one that's not you. I mean, that really is just, that's a big deal.

And then for the people that are listening for their professional capacity, how we manage our patients, I guess, you know, the highlights are, be very careful about putting a diagnosis on not just somebody's chart, but on their mind, without really ensuring that you've evaluated diagnostic criteria in the same way that you wouldn't diagnose asthma without doing pre and post bronchodilator. spirometry. We wouldn't diagnose an MI without an EKG and cardiac enzymes. We don't want to diagnose depression or PTSD or anxiety without paying particular attention to the criteria because only once you have a really good assessment of what's wrong, then we can pursue the right treatment.

Excellent, excellent. I am a smarter person, because I have hung out with you and I appreciate you so much for imparting knowledge on myself and everyone that's listening, and really being a big advocate for mental wellness, in the professional space and also in the patients', in the world and community that we serve. Thank you so much Sally for spending all this time with me and really dropping all of this knowledge on us. I appreciate it so much.

My pleasure and I'm really glad to have the opportunity.

Awesome. Well, everybody who's listening in our audience right now, thank you so much for tuning in and we look forward to doing much more of these conversations and having these dialogues. I'm Jannah Amiel, and on behalf of myself and Dr. Sally Miller, thank you so much for joining us, and take good care, everybody.