Hi, I'm Kelly Cervantes and this is Seizing Life. A biweekly podcast produced by Citizens United for Research in Epilepsy, CURE. Today, we continue our series of remotely recorded episodes during the COVID-19 pandemic by welcoming Dr. Andres Kanner to the podcast. Dr. Kanner is the chief of the epilepsy division and the department of neurology and the Director of the International Comprehensive Epilepsy Center at the University of Miami Miller School of Medicine. Dr. Kanner is considered one of the leading authorities on the behavioral aspects of epilepsy. He's joining us today to talk about a topic that is on the minds of many epilepsy patients during these difficult days, the relationship between epilepsy and mental health. Dr. Kanner, thank you so much for joining us today. Mental health and epilepsy is a topic that we have wanted to tackle on the show for quite some time, and it has just been a challenge to find the right guest. Can you break it down for us just on a very basic level, how mental health and epilepsy are connected?

Yes. Thank you, Kelly. The relationship between mental health and epilepsy is a very important aspect of epilepsy that unfortunately very often is not addressed with the detail and the importance that it deserves. In fact, there is a very close relationship between what we call psychiatric comorbidities in epilepsy. A psychiatric comorbidity is a psychiatric condition that tends to occur more frequent in people with epilepsy than in the general population. And of these comorbidities, the most frequent ones are mood, which includes depressive disorders and anxiety disorders, are the most frequently encountered conditions. What that implies is that when we evaluate a patient with epilepsy, we don't only limit our evaluation to the seizures that the patient is experiencing, but we also have to always investigate what has been the impact of the epilepsy on the psychological profile of the patient.

Now, that would imply that when you suffer from epilepsy, there are psychological consequences. But it's actually much more complex than looking at mental health phenomena as a consequence of the epilepsy. Because very often the person who suffers from epilepsy has already suffered from a history of mood or anxiety disorder or other psychiatric conditions before the onset of epilepsy. And then they may experience these psychiatric conditions after their seizure disorder has become manifested. And the recurrence of the psychiatric conditions, after the onset of epilepsy, may actually be the result of just
natural course of the psychiatric history of this patient that may have been accentuated by the development of the epilepsy or maybe independent of the onset of epilepsy, or it could be in fact, at the nerve occurrence as a consequence of the development of epilepsy. So there is these complex condition.

What we have been finding in recent research that has been published in population based studies. That have been performed in the United States, in Iceland, in the United Kingdom, in Canada, is that not only are people with epilepsy at greater risk of developing certain psychiatric conditions, but if you have a history of depression, anxiety, attention deficit disorder, with an attentive type, you’ve got an increased risk of developing epilepsy. So you can, in fact, start identifying the by directional relationship between these psychiatric conditions and epilepsy.

Kelly Cervantes: 05:09 That, to me, when I was preparing for this episode to learn that, that it's bi-directional, I was shocked by that. And I feel like I'm fairly well informed in terms of epilepsy and causes and nowhere had I learned that mental health can precipitate an epilepsy diagnosis.

Dr. Andres Kanner: 05:37 It's a very surprising phenomenon. If you ask, how can these psychiatric conditions cause epilepsy? Well, the reality is that they don't cause the epilepsy. What there is, is there is an increased. So if you have, for example, a major depressive disorder, your chance of developing epilepsy compared to the general population is two fold higher. If you have a history of having an anxiety disorder, the risk that you have of developing epilepsy compared to the general population is also between two and three fold higher. If you have had a history of suicidal ideation or suicidal behavior, your risk of developing epilepsy compared to the general population is four fold higher. If you've had a history of attention deficit disorder of the inattentive type, your risk of developing epilepsy compared to the general population is 3.5 fold higher.

Now that doesn’t mean that these conditions are causing the epilepsy. The most likely scenario is that the pathogenic mechanisms that are apparent in these psychiatric disorders occur as well in epilepsy. And under certain circumstances, the presence of these psychiatric conditions in the setting of rather risk factors for epilepsy, for example, genetic risk factor or severe head trauma or other exposures to situations that can facilitate the development of epilepsy. Because the fact is the majority of people with depression and anxiety don't develop epilepsy. But when you look at the risk that people who've had
Brandon: 08:02
Hi, this is Brandon from Citizens United for Research in Epilepsy or CURE. For the 65 million people worldwide living with epilepsy, progress is unacceptably slow. At CURE, our mission is to find a cure for epilepsy by promoting and funding patient focused research. Learn more at cureepilepsy.org. Now back to this episode of Seizing Life.

Kelly Cervantes: 08:24
Up until recently, I really do feel like the conversation around epilepsy has been around the seizures. And it’s really only been recently that the scientific community has looked at epilepsy as how it is affecting the entire person, and in this case, mental health. Are steps being taken to connect to these two, to make sure to have psychiatrists available? Because an epileptologist is not a psychiatrist. Those are two very different practices.

Dr. Andres Kanner: 08:59
Yeah.

Kelly Cervantes: 08:59
How do they work together? And is that happening? And how can we make it happen?

Dr. Andres Kanner: 09:04
So I think you’re touching about a very important and sad reality of the lack of appreciation of the relationship between psychiatric conditions and epilepsy. The problem is that when you look at the... I tend to understand what I like to call the journey of a person with epilepsy after the diagnosis is made, there are a lot of psychological processes that the patient goes through that we also fail to recognize, and that also have the implication or an emotional reaction that can cause, in these cases, it would be a complication of the diagnosis of epilepsy. And that is not there properly can then perpetuate psychological issues for a long time. And the best example is, for example, the issue of accepting the fact that when you have a seizure and where you’re told that you have epilepsy, you’re losing your predictability in life.

When you’ve told you have epilepsy, you don’t know when you’re going to have another seizure or if you’re going to have another seizure. And the first thing that we as neurologists, epileptologists or clinicians have to help patients and family members deal with is the acceptance of the predictability of life has been lost. And that is super difficult often for patients and family to cope with in the beginning. Because it’s like, "Is it going to happen again? When it’s going to happen again?" And that becomes the big elephant in the room. And the reaction is "Don't talk about it because John is going to get upset. Or
mommy is going to get upset." And that leads to the development or a great apprehension on the part of the patient and family members in coping with a diagnosis of epilepsy. And if you are a parent with a child with epilepsy, parent wants their kid to be safe and to be fine and you want to control that everything is perfect for my child.

And once you take away the predictability of the life of my child, that's gone. And how are you going to cook with it? So that's the first station, if you will, of emotional situation that every single patient and family member has to face and have to deal with. And that, I think in my opinion is the first big error that we as clinicians make in not addressing these phenomena at a conscious level for patients and family members, so that we can help them cope with it. What I tell often patients is, what do you have to come to terms with is that you just suffered a big loss. You suffered the loss of predictability, and you have to just face it, talk about it. You have to mourn it the way that you mourn the loss of a loved one.

Kelly Cervantes: 12:55 Should epileptologist be making referrals to therapists and psychiatrists along with an epilepsy diagnosis?

Dr. Andres Kanner: 13:02 I think epileptologists need to be working with a patient and family members in explaining this phenomenon. I don't think this is something that is necessary to have the therapist or a psychiatrist deal with. That's something that the physician who is making the evaluation of the psychiatric disorder needs to incorporate in the counseling of the patient. Because you don't want to make it more than it is. This is part of the natural process of the disease. And it's not only particular to epilepsy, happens with any condition, any chronic condition, if you suffer from coronary or from any other, you're going to be facing the same situation. So what I'm trying to say is we need to normalize the phenomenon that comes with a diagnosis of epilepsy and not make it a mental condition.

Kelly Cervantes: 14:09 So how should a neurologist present the mental health issues to a patient? And when should they be presented?

Dr. Andres Kanner: 14:23 Okay. I think that's an excellent question, because this is something that should be part of the overall initial evaluation of the patient with epilepsy. I think any patient with epilepsy, just like any patient who goes to the doctor, this is not particular to people with epilepsy, but most are in people with epilepsy, should undergo a careful evaluation as to the previous history of psychiatric illness, mainly mood disorder, anxiety, disorder, attention deficit disorder, and psychosis, but also of the family
psychiatric history. That should be part of the evaluation of any patient with epilepsy. And the reason that that is very important is because the presence of a previous psychiatric history, or a family psychiatric history, should be a red flag for the physician to anticipate that that individual may be at increased risk of experiencing further recurrence of the psychiatric conditions in the course of their life.

And that's just because that's a natural course of these conditions. But if you have a family psychiatric history that also puts you at increased risk of experiencing these conditions under certain situations that put you at increased level of stress, such as having a diagnosis of epilepsy, the big changes that are associated with a diagnosis of epilepsy, where you can't drive, you cannot do a whole variety of things. If you have a genetic predisposition for mood or anxiety disorder that can bring those conditions up to the surface. But also more important thing, if you have a previous psychiatric history or a family psychiatric history, you are already increased risk of developing adverse events of a psychiatric nature when exposed to certain antiepileptic medications.

So there are certain antiepileptic medications that have negative psychotropic properties that is that they can cause psychiatric symptoms. And these include symptoms of depression, anxiety, behavioral symptoms, irritability, poor frustration tolerance. And who do we see more likely these phenomenal? These are in people with a previous psychiatric history or a family psychiatric history. So it is important for me as a neurologist to know, are you in these group of people who if I place you on a medication that has these negative psychotropic properties, you're already increased risk of developing these kinds of psychiatric adverse events.

Conversely, they are antiepileptic medications that have much stabilizing properties and anti-depressant properties. And again, if you have a previous psychiatric history or a family psychiatric history, and you are taking these medications, and then I want to switch you to something else, and these medications were playing a role in keeping your mood or anxiety disorders under control and I removed that medication, I may unmask it, and that can result in a recurrence of the psychiatric condition. So it's of the essence that any treating physician that is prescribing antiepileptic medication always keep in mind the psychiatric profile of the patient, because that will have a very relevant impact on the choice of the antiepileptic medication that you place a patient on. So what I'm trying here to say is, I think it's important that the neurologist who's treating the patient with
epilepsy become part of the evaluation of the psychiatric profile of the patient as part of the comprehensive evaluation of the seizure disorder in the patient and not relegated to the therapist, psychologist or psychiatrist.

Kelly Cervantes: 19:03 Now, are there different types of depression or anxiety that are comorbid with epilepsy?

Dr. Andres Kanner: 19:14 Yes. So the mood disorders have different expressions in severity. You can have major depressive episodes like you see in people without epilepsy, where you have all the symptoms of over depressive disorder, where you have difficulty experiencing any pleasure in the things that you do and you feel that nothing you do is right, and you feel hopeless and helpless, and you develop difficulty sleeping at night, you lose your appetite, your sexual drive, and you may develop even suicidal ideation. And that's a severe form of mood disorder that requires an immediate attention.

Kelly Cervantes: 20:02 What would that look like in a child?

Dr. Andres Kanner: 20:06 Now the trick with kids is that you have to recognize when the child is presenting symptoms that are suggestive of the present disorder, because a child is not going to come and tell you, "Mommy, I feel depressed." A child will act it out. Okay. We become more cranky, irritable, impulsive, restless, and very often these children get misdiagnosed as having attention deficit disorder or conduct disorders. Now you may be able to suspect it also because when a child gets depressed, very often the depression also is associated with symptoms of anxiety, the child develops separation anxiety. They don't want to be left alone. They start seeing ghosts and they don't want to sleep alone, or they don't want to go to school. They quite easily without any reasons and you'll see these mood liability that comes and goes, and they need... It lasts for a period of time then it goes away and then comes back in.

And those are things that have to be brought to the attention of the treating pediatric neurologist. And in those cases, as a child psychiatrist or psychologist has to intervene. In the case of children, I think knowing the family psychiatric history is of the essence, because it will alert you to the likelihood that what you're witnessing may also be the expression of a mood disorder. This is something that we have to recognize, mood and anxiety disorders are not only something that happens in adults, it happens in children and anxiety disorders are frequent in children with epilepsy.
Kelly Cervantes: 22:14 Right. Thank you for that. We are looking through the world right now with a COVID lens and the way that we see everything has changed. We know the UN just put out a report saying that mental illness is, if not already on the rise, it will be as a result of this pandemic. I guess I have two questions to that. Could we potentially see an increase in epilepsy due to an increase in mental health concerns as a result of this pandemic? And also what recommendations do you have for patients with epilepsy, what should they be on the lookout for? Should they be talking to their doctor more about their mental health? What recommendations do you have for patients who have already been diagnosed?

Dr. Andres Kanner: 23:15 Yeah. So that's a very important question that I've been asking since the beginning of the pandemic. The fact is that there is no evidence at this point that the COVID itself, the infection itself, increases seizures in people with epilepsy. On the other hand, we know that stress is definitely a trigger for seizures in people with epilepsy. So stress does not cause epilepsy. But if you have epilepsy and you are experiencing a stressful situation. In a significant percentage of people with epilepsy, stress can increase the risk of having seizures. So it is a well established association between exposure to stress and worsening of seizures. In some case series have established that in up to 60% of people with epilepsy, particularly treatment resistant epilepsy, there is an exacerbation of seizures with exposure to stressful situation. So it's not surprising. And this is something that we had anticipated in our own epilepsy center that patients may experience an increase in seizure frequency associated with the stressors caused by the pandemic.

So what have we done in our center. We are encouraging people to use relaxation techniques and self mindedness exercises, which are extremely useful in teaching patients how to relax, how to cope with increased levels of stress and anxiety. And in fact, in my own practice, I advise patients who have identified an association between stress and worsening of seizures to learn to do self relaxation exercises. And I refer them to learn to do yoga, self mindedness exercises, use breathing exercises with the audio tapes. There are whole variety of ways in which patients and family members can teach themselves how to cope with these stressful situations and they are quite effective. The other thing we tell patients is talk to each other about how you're dealing with your difficulties. Try not to be overexposed to the news, because anybody who is watching the news today can be pretty overwhelmed about what they're listening to.
Kelly Cervantes: 26:22 Dr. Kanner, I cannot thank you enough for coming on and speaking with us today, for sharing your expertise and for being a doctor who treats the whole person and not just the seizures. This conversation has been absolutely fascinating. And we are just so grateful to you as a doctor and for coming on our show and sharing your expertise. It’s invaluable. Thank you.

Dr. Andres Kanner: 26:53 My pleasure. Anytime, I’ll be happy to come back. Thank you.

Kelly Cervantes: 26:56 I love it. Thanks so much. Thank you, Dr. Kanner, for sharing your expertise and insights on the connection between epilepsy and mental health. During these unpredictable times, many of us may be experiencing mental health challenges. Those with epilepsy, live with unpredictability every day and know all too well how it can negatively affect mental health and daily life. Epilepsy is more than seizures, it is also the impact of those seizures on one's quality of life. That's why CURE is dedicated to patient focused research that will bring us new knowledge, therapies, and cures. To help pursue our mission. Please visit cureepilepsy.org/slashdonate. Your support and generosity are hugely appreciated. Thank you.