

[00:00:00] **Stephen Calabria:** From the Mount Sinai Health System in New York City, this is Road to Resilience, a podcast about facing adversity. I'm Stephen Calabria.

[00:00:11] On today's episode, we welcome Alexander Charney, MD, PhD, and Associate Professor at the Icahn School of Medicine at Mount Sinai, with primary appointments in the Department of Psychiatry and Department of Genetics and Genomic Sciences, as well as secondary appointments in the Departments of Neuroscience and Neurosurgery.

[00:00:28] He is the director of the Charles Bronfman Institute for Personalized Medicine and serves as executive director of the Blau Center at Mount Sinai, which provides clinical care and original research into mental illness.

[00:00:40] Dr. Charney has been the lead data scientist on some of the largest genetic studies ever conducted on schizophrenia and bipolar disorder.

[00:00:47] Today Dr. Charney offers insight into how patients and their families may cope with a diagnosis of schizophrenia and how promising new research offers hope for those who are weathering the storm.

[00:00:57] We're honored to have Dr. Charney on the show.

[00:01:00] Dr. Alex Charney, welcome to Road to Resilience.

[00:01:04] **Dr. Alex Charney:** Thanks for having me.

[00:01:05] **Stephen Calabria:** Could you please introduce yourself?

[00:01:07] **Dr. Alex Charney:** My name is Alex Charney. I'm a psychiatrist and a geneticist by training. I work at the Icahn School of Medicine at Mount Sinai in New York City, and I am the director of the Charles Bronfman Institute for personalized Medicine here.

[00:01:22] **Stephen Calabria:** Now, sir, you study schizophrenia and you treat patients with schizophrenia. To start us off, what is schizophrenia?

[00:01:31] **Dr. Alex Charney:** Schizophrenia is a mental illness. It is a mental illness that begins in the early 20s of an individual's life. And the symptoms that generally bring an individual with schizophrenia to the attention of mental health care provider, such as myself, are hallucinations and delusions. Hallucinations are perceptual experiences that are not real.

[00:01:58] So, hearing a voice that is not there or seeing something that is not there. The most common type of hallucination in schizophrenia is an auditory hallucination. So, hearing a voice that is not present. And when an individual begins having this experience in the absence of any type of drug or any other thing that could explain it, we become very concerned that this could be the beginning of schizophrenia.

[00:02:21] Delusion is the other symptom that often is the presenting the symptom of schizophrenia. And a delusion is technically what we call a false fixed belief. And an example of a delusion for illustrative purposes is a patient who believes that she's married to Edgar Allan Poe.

[00:02:41] Well, it's not possible. Edgar Allan Poe's been dead for a hundred years, but you have had patients who have that specific delusion. And in that this is the type of thing you see in schizophrenia and when hallucinations and delusions are present, we become very concerned.

[00:02:55] **Stephen Calabria:** Now, sir, how do we determine what is a delusion or what is a voice in our head and what is just people acting normally? Like, we all have an internal monologue, for example. How is it possible to, from a clinical perspective, determine what is a delusion and what isn't?

[00:03:15] **Dr. Alex Charney:** Yeah, this is a great question. So let's, let's start with hallucinations. Like you said, we all have an internal monologue, picture yourself reading a book.

[00:03:24] That's the kind of most, what I would say, linear internal monologue that we have. Our thoughts are not quite linear. Our thoughts are sort of all over the place, but when we're reading, there's this inner voice in our head that's reading sentences and completing thoughts. And this is different than what a person with schizophrenia experiences.

[00:03:43] Now I say this as someone who treats people with schizophrenia, I've never experienced it myself, so I can't say this with 100 percent certainty, but the general consensus is that an individual who's experiencing auditory hallucinations is hearing a voice that sounds like my voice sounds to you right now.

[00:04:03] It feels to the person who's experiencing it like it's coming from the outside world and the individual oftentimes is not able to understand that it's not coming from the outside world. This is very different than if I was to ask you, as

you're alone with your thoughts, Hey, your thoughts feel like they're coming from the outside world?

[00:04:23] You'd be like, no, no, they're my thoughts, right? They're coming from inside of my head, I understand that. individual who's suffering from auditory hallucinations cannot make that leap. And then the voices feel like part of the outside world.

[00:04:34] And now with the delusion, it gets even trickier, especially in today's day and age where fake news, what's real, what's not is sort of on people's minds.

[00:04:43] In psychiatry, when it comes to delusions, I teach my trainees, don't be sucked into that. Things are not always black and white, you know, what's real to one person is not necessarily real to another. If you take this approach to try and diagnose and treat someone's schizophrenia, you're going to fail them as a clinician.

[00:04:59] Delusion in the setting of a psychotic illness is a clear phenomenon. It's like what if someone's walking around whose arm fell off, it wouldn't be like, Oh, is their an arm there or is there an arm not there?

[00:05:10] Their arm's gone, right? Someone who's experienced a delusion in the setting of a psychotic illness, yeah, this isn't the type of thing it's like, Oh, well, two people may look at the same situation and interpret different ways.

[00:05:20] Delusion in the setting of psychosis is an oftentimes magical belief- that a person could jump off a building and fly. Things like that. The way we describe what a delusion is certainly sounds like, Oh, well in the real world, people who are healthy have beliefs that to someone else may, may seem just straight up wrong. But this is different than what a delusion is and in a psychotic illness.

[00:05:43] **Stephen Calabria:** In the context of schizophrenia specifically, how do you think about resilience?

[00:05:49] **Dr. Alex Charney:** Schizophrenia is, it's a devastating illness. What inspired me to spend my life treating people with this illness and doing research to understand causes of this illness, developing treatments was a few things. One was just the absolute severity of the condition.

[00:06:04] And, starts in your early twenties, is when individuals are first diagnosed, although even before that, when we look back retroactively, you could see that the individuals who develop schizophrenia have been suffering from various neuro and psychiatric deficits throughout their life, even though they weren't to the point where you could diagnose them with something.

[00:06:23] So it's a, it's a lifelong condition. There's no cure. The drugs that we have to treat this condition, they're okay. I mean, they do help, I don't want to underscore the value of medications we do have. For when they were developed in the 1950s, they were transformational.

[00:06:38] At mass in medicine, individuals who, before the development of the drugs that are called antipsychotics, these individuals would have to live in institutions their whole life. The development of these medications allowed those people to live lives in the community. So these medications have had a great impact on individuals with the condition, but they don't work a lot of times.

[00:06:57] And even when they do work, patients don't want to take them. There hasn't really been major advances in new treatments in 50, 60, 70 years. So, it's a condition that's incredibly debilitating for which there are not great treatments for everyone, and perhaps most striking compared to other conditions, is that individuals with schizophrenia are often ostracized by society.

[00:07:23] And as you can imagine, take someone who's got a terrible illness that people generally have empathy for, like, like a cancer. So you have this terrible condition that's upended your life, but at least people have empathy for you, right?

[00:07:36] Schizophrenia, no one has empathy for you. People are scared of you. And oftentimes people think you're violent when you're not. People walk by you on the street thinking you're, you're on drugs when you're not. It's just a terrible condition. And, to have schizophrenia and thrive is amongst the most resilient acts I can think of.

[00:07:57] When I meet an individual who has this condition, but who has somehow found a way to thrive in their life, I'm blown away. It's truly remarkable..

[00:08:05] **Stephen Calabria:** What does the background of your average schizophrenia patient ? Are there certain patients that are far more common than others?

[00:08:12] **Dr. Alex Charney:** Schizophrenia is a condition that is generally accepted to be a constant in its rate of development across time. So, now in the modern day around 1% of people have it, and it's believed that this has always been the case.

[00:08:28] We don't have any compelling evidence to believe that the proportion of people in society who have schizophrenia changes over time, which is itself a bit puzzling.

[00:08:37] Across races and ethnicities, this rate seems to be constant. Doesn't seem to clearly affect one race or ethnicity more than another. Males and females, generally, equally impacted by the condition.

[00:08:52] So the average person with schizophrenia doesn't look any different than the average person in the world at large. Now that's not to say there aren't risk factors for developing the condition.

[00:09:01] Having a family history, someone who has the condition or someone who has related conditions like bipolar disorder, depression. This could be indicative of someone who's at higher risk for developing schizophrenia than the average person in society.

[00:09:15] And things like having a history of trauma. Things that increase your risk for every mental illness. With schizophrenia, there's no exception. There are environmental factors that also impact your risk.

[00:09:26] But generally speaking, one of the things that's known about schizophrenia is how remarkably consistent the rate of the condition is across time and across cultures and on their social demographic variables.

[00:09:37] **Stephen Calabria:** To the casual mental health observer, schizophrenia would often seem synonymous with psychosis. Is there a great deal of overlap between the two or would you say that they're more separate conditions?

[00:09:50] **Dr. Alex Charney:** So this is a question about terminology we use in psychiatry, which is a science in itself, with an incredibly complex history

and which I will not go into too much detail about, but suffice it to say in that the term schizophrenia itself, where does it come from, why do we use it?

[00:10:08] And just by going down that rabbit hole, you could see how complex the terminology that we use to describe the conditions we treat psychiatry is. So, psychosis has become a term that describes a set of symptoms. The most kind of quintessential or archetypal psychotic symptoms are hallucinations and delusions.

[00:10:29] So how is it different than schizophrenia? Well, you can think of schizophrenia as the archetypal psychotic illness. But there are ways to experience psychosis that are outside the realm of illness.

[00:10:43] If you take certain drugs, you will experience psychosis, right? If you take a high enough dose of psilocybin or more commonly known as mushrooms, or if you take a high enough dose of Ketamine or PCP, which are similar chemical structures, high doses of cocaine or other amphetamines, you can experience the symptoms of psychosis, delusions, hallucinations.

[00:11:03] So, psychosis as a phenomena is not limited to illnesses like schizophrenia. But when it comes to what is the illness where psychosis is the predominant presenting feature, that's schizophrenia. So, that's how you can kind of reconcile the two ideas in your head. They're not separate.

[00:11:19] **Stephen Calabria:** I also imagine the treatment here may perhaps be difficult because there seems to be a certain measure of subjectivity to it. A disease like cancer, for example, I could presumably look under a microscope and see it. How do you navigate these kinds of subjectivity challenges from a treatment standpoint ?

[00:11:38] **Dr. Alex Charney:** There are times when the diagnosis is a bit subjective, but oftentimes it's not. The thing with psychiatrists and, observers of psychiatry often are pretty hard on the field for the fact that we don't have what we might call a biomarker, you know, a blood test or a test you can look at cells under a microscope where we can say, ah, okay, there it is.

[00:11:59] There's that particular cell that, means this is schizophrenia. It's true in psychiatry. We don't have those things. But the set of symptoms that comprise schizophrenia, don't see them in people who aren't suffering from a severe mental illness. Very few people ever experience an auditory hallucination in the way that a person with schizophrenia does or a delusion.

[00:12:18] So, it's usually not that subjective to make a diagnosis. Now, when you start trying to differentiate certain schizophrenia from other psychiatric diagnoses, like bipolar disorder or schizoaffective disorder, now it starts to become a bit subjective.

[00:12:33] And this is a product of the fact that our diagnostic system is not based on a molecular understanding of how the illness develops, but rather based on decades and centuries of trying to make sense of how different clinical presentations relate to one another.

[00:12:52] So, you can have psychosis and bipolar disorder, you have psychosis and schizophrenia, and when to diagnose one versus the other is oftentimes a bit subjective. Even though the diagnostic system we have tries to make it less subjective, it doesn't fully accomplish that goal.

[00:13:08] So as a provider, what does that mean? Well, it oftentimes doesn't matter because our treatment options are limited. If an individual is presenting to my care with hallucinations and delusions and other possible causes of those symptoms have been ruled out, that this isn't someone who takes any recreational drugs or, or has any other reason to be experiencing these symptoms.

[00:13:33] So, at that point, we conclude this person is suffering from a psychotic illness. And if I call that psychotic illness schizophrenia, if I call it bipolar disorder, if I call it schizoaffective disorder, it doesn't really matter with respect to how I'm going to treat this person.

[00:13:49] We're going to treat this person with the only medications we have to treat psychosis, which are the anti psychotics. And, I'm not gonna make the treatment decision based on whether they check the box for schizophrenia or some other psychotic illness.

[00:14:03] **Stephen Calabria:** What are the most common reasons why a given patient might avoid treatment for schizophrenia?

[00:14:10] **Dr. Alex Charney:** Well, the symptoms of schizophrenia oftentimes are permeated by this paranoia. So the paranoia, you can think of it as a symptom itself but it's also like underlying the other symptoms, like the hallucinations, for example, the voices that the patients hear.

[00:14:24] They're not just random voices that can say, Hey, how you doing? Oftentimes the voices are, don't trust that person, they're out to get you.

[00:14:31] What's in that car? Someone's sitting in that car that they're watching you. The hallucinations, the delusions are often kind of permeated by this paranoia of extreme severity.

[00:14:39] We've all experienced paranoia, but not this level of paranoia and that will often prevent them from seeking care, because they may believe that the doctors are trying to poison them.

[00:14:51] And we're giving them medications that oftentimes cause side effects. So when they do take the medications, it just confirms that, because it is like, it's not a poison, but it causes things that aren't pleasant, like weight gain, the symptoms of Parkinson's disease, that the medications we need for schizophrenia cause those.

[00:15:09] So, it's the paranoia itself can be a major barrier to seeking care. And the side effects of the drugs is another one. The earlier drugs that we have caused symptoms of Parkinson's disease. The more recent ones we have caused extreme weight gain. These are both really bad. And so it's kind of like, pick your poison.

[00:15:27] The newer drugs are getting better at minimizing side effects but patients don't want to gain 30 pounds, so a young person who's self-conscious about their appearance, right? People with schizophrenia are no different than anyone else.

[00:15:38] You know, they're, they, they want to look good, right? So, who wants to take a medication that's going to make them just gain a lot of weight? So, the side effects of medications are another, another big barrier. And I'd say, those are the big ones, the paranoia, the side effects of the medication.

[00:15:53] And then there's other barriers to mental health care that everyone faces. It's not always easy to get connected. But generally speaking, when a person seeks care for schizophrenia, they will be able to get it. It's a condition that is taken very seriously.

[00:16:06] **Stephen Calabria:** Now, this being a psychotic illness and therefore affecting patients on a behavioral level, how do you foster a therapeutic alliance with individuals diagnosed with schizophrenia to support their resilience going through treatment?

[00:16:23] **Dr. Alex Charney:** Sometimes it's tough. I work primarily in the emergency room. As a clinician, I do a lot. Most of my time is spent doing

research on these illnesses. But I do treat patients as well. When I do, I work in the emergency room. And the reason is because, often, that's where you'll, as a clinician, get to encounter individuals with schizophrenia most frequently.

[00:16:44] The medications, a lot of patients don't want to take them, and over time they will stop. Actually, some estimates are that around 75 percent of patients will stop the medication over time.

[00:16:55] Whether this is due to side effects or whether this is due to symptoms of the illness itself that the medications don't treat, which include like behavioral disorganization, the inability to behave in a way that is conducive to functioning in society, like taking your medications every day.

[00:17:09] And that's kind of up for discussion, but what's out for discussion is that majority of patients who are prescribed medications will stop taking them over time. So, as the clinician in the emergency room, oftentimes I'm faced with, in many ways, a terrible decision, where I have to treat patients against their will, and I'm the bad guy, and that's something I struggle with.

[00:17:32] But it's necessary. So sometimes it's not possible to form a therapeutic alliance for that reason. And, it's one of the darker sides of being a clinician who focuses on treating this particular condition.

[00:17:41] On the other hand, there are often, just like any other medical condition, the patients who have successful treatment and they're very grateful to their clinician.

[00:17:50] And, that's one of the best things about being a doctor, is when that happens and you get to have that joint experience with your patient. So it's tough. And it varies from patient to patient. And again, there's no one size fits all solution to developing that alliance with an individual that's schizophrenic, when you're responsible for their medical treatment.

[00:18:06] **Stephen Calabria:** We also spoke on our most recent episode about the stigma attached to addiction -coming forward about one's addiction, seeking treatment about one's addiction- and you began by talking about the just incredible pressures that are on your patient population when it comes to judgment that they may receive from people.

[00:18:28] Could you talk a little bit about the interpersonal and societal stigma surrounding schizophrenia and how that may serve as a barrier to treatment and to patient resilience?

[00:18:40] **Dr. Alex Charney:** It's like substance abuse. There's immense stigma around schizophrenia. It's different in some ways, I think, and not more or less severe, just different. With substance abuse, most people know someone personally who has suffered from substance abuse.

[00:18:57] So, it's a bit easier to identify with, and most people in their everyday life, there's something that they do more than they would like to do, whether that's they watch too much TV or they don't exercise enough, you know.

[00:19:07] So there's elements of, I think, just being able to identify with someone who has an illness like substance abuse, you know, more so than an illness like schizophrenia, which for your average person, is oftentimes a mystery as to what it even is.

[00:19:21] The term itself, people have likely heard before, but like the term bipolar disorder, they probably heard it used in a way that is not a reflection of what it means in psychiatry. So the term schizophrenia for whatever reason or schizophrenic has made it into the everyday lingo that has this kind of meaning all over the place or whatever.

[00:19:42] And so, very different than what it means in psychiatry where it's got, it's the specific condition that, if you ask the average person on the street, have you ever heard of schizophrenia, they'd probably say yes. Did you know schizophrenia is generally considered like the most severe mental illness you could have?

[00:19:57] They'd probably be like, no, I didn't realize that. So there's this element of like, not even knowing what it is. Now, does that make it more or less stigmatized? That, you know, I don't know. It, it makes it harder to identify with when you don't even know what something is.

[00:20:10] So that there's this barrier to identify and have empathy for someone with schizophrenia and then to at least learn a bit first. What is this thing? What is this condition? To kind of educate themselves and that's a barrier to overcoming the stigma of schizophrenia.

[00:20:24] And even when you're treated effectively, people who have schizophrenia, they're still going to hear voices, often, that aren't there.

[00:20:32] And that's just so hard to identify with when you've never experienced it. I, think about this all the time and how, I've never experienced that. So like, no matter how many patients I treat who have this condition, no

matter how many patients that I've seen who are hearing their voices right in front of me and I could see it because they're talking back to the voice and as if I'm not even in the room. I don't have an experience myself. So there's just this barrier to me really being able to understand what they're going through. And I think that's tough for the, for the patient.

[00:20:59] **Stephen Calabria:** Related to the stigma, you also talked about how this patient population is viewed as violent, whereas the statistics show us that the vast majority of folks suffering from mental illness are not violent. How does that affect a patient's given course of treatment, , and how likely they are to seek treatment themselves?

[00:21:23] **Dr. Alex Charney:** Where a person's been labeled as violent it's a label that sticks with them in the medical record, unfortunately, because patients are violent, and not necessarily schizophrenic patients, but in psychiatry, you know, when you're working in lots inpatient units, with people who are severely mentally ill, you are going to encounter violent behavior.

[00:21:43] And so it's important for clinicians to convey that information to one another so that the nurses and that patient, they would pick patient that care providers that are called PCAs they're individuals who work with the nurses or right next to the patients oftentimes.

[00:21:57] They're kind of the closest to the patient. They need to be safe. They need to know if a person has a tendency to behave violently. So that label does stick with a patient and sometimes it's unfair because we can't really trace back. When was this person actually violent? Are they really violent?

[00:22:13] You know, they're kind of having this label and they're medical record. It has hadn't been violent before, but none of us never seen it. So it does create kind of a situation where providers are judging the patient before they've even gotten to know them. And I imagine this is tough for patients.

[00:22:27] You know, I can't say I have talked about this much with patients specifically, but I would imagine that something that's tough. It's a tough label to shake. But like you said, most people who have this condition are never violent.

[00:22:40] They're loving and they're funny people who are just some of the most interesting individuals you'll ever meet, have a totally different way of experiencing and looking at the world.

[00:22:52] And, uh, it's a shame that more people don't know someone with schizophrenia in their life because, working with people with schizophrenia has been a defining feature of my life. These people are so interesting and have so much to offer the world.

[00:23:03] **Stephen Calabria:** There seems to be a great deal of hope in this area, for individual patients and for this population at large. One of those reasons for hope is that Dr. Alex Charney is conducting some original research into schizophrenia right here at Mount Sinai. Could you tell us a little bit about it?

[00:23:23] **Dr. Alex Charney:** Sure. So, one of the reasons I was inspired to become an expert in schizophrenia was because when you see this condition as a medical doctor, you see every disease there is, and you learn all the treatments options and so forth and so forth.

[00:23:37] And schizophrenia is one of those conditions when you see it, it's an obvious diagnosis and someone who is hearing voices in their head and is talking back to those voices. So once I had a conversation, believes things that are out of this world, not true, had severe delusions. It's a very obvious condition.

[00:23:52] You don't need to be trained for many years to be able to recognize it and make the diagnosis. And that always struck me as very different from our understanding of the illness. So here's something that, it's so striking when you see someone with the condition, yet our understanding of it is so poor.

[00:24:09] So it seemed like here, this seems like an opportunity, that there must be an answer, but what is happening here in the brain that is causing this very severe condition. It can't be so subtle when the condition itself is not subtle. A small child can recognize that there's something wrong with an individual who's talking to himself walking down the street.

[00:24:28] And this continues to baffle me. Now, so what have we learned about schizophrenia? Well, for a long time, we thought that the mechanism of the disease actively related to the mechanism by which the medications we have are able to treat this disease. Like I said, the medications that we have, the anti psychotics, they work.

[00:24:49] They make hallucinations go away in some cases. They don't cure the illness, but when the patient's taking the medications, those hallucinations

will be very down. So we know how these medications work. They work through antagonism at this one receptor called the dopamine receptor.

[00:25:05] So, for many years, it was assumed that whatever's happened, schizophrenia is related to the dopamine receptor. Well, we now know that's not the case.

[00:25:12] Okay, well, that's one step in the right direction. What do we know? We know that schizophrenia is a highly genetic condition. The mechanisms by which your genes increase your risk for schizophrenia remains poorly understood, but we know that there are thousands of genes involved and that for some patients, there could be one gene that is the primary driver of the illness.

[00:25:34] For many patients, that's not the case, but for some patients it is. So, we have learned quite a bit, and the challenge now is how do we take this knowledge of the genetics of schizophrenia and turn that into new treatments?

[00:25:50] And that's something we're working hard on here at Mount Sinai and in the Blau Center is the name of the center where this work is happening.

[00:25:58] And our approach is to use similar technology to the COVID vaccine, which is delivering a gene in this what are called lipid nanoparticles, and in this case, instead of delivering a gene that results in your body's making antibodies against COVID, which is how a COVID vaccine works, here, we're going to deliver a gene that will increase the brain activity in a specific way that we think will treat schizophrenia, based on what we've learned about the genetics in this condition over the last 15 years. So this work is ongoing and we hope to start treating patients with this experimental type of medication within the next one to two years.

[00:26:37] And, there's no guarantees that it will work, but this is the type of work that is necessary in order to move the field forward.

[00:26:44] **Stephen Calabria:** And it is certainly something that would provide hope to a great many patients and their families. While patients are in treatment, until your research is officially put into practice, what coping mechanisms or strategies do individuals with schizophrenia often find most helpful in guiding them through their treatments?

[00:27:05] **Dr. Alex Charney:** Well, when a family is involved, it really makes a big difference in the overall well being of the person who has schizophrenia.

[00:27:14] At the beginning, when an individual first gets their diagnosis, there's usually family who's involved because people are young and the parents are often still involved in their life, siblings or someone in the family.

[00:27:26] But then what happens is over time, just due to the nature of this illness, patients not only become ostracized by society, but oftentimes fall out with their own family.

[00:27:36] And, when that happens, you know, it's, it's, it's tough. You never want to see a patient kind of winds up alone, oftentimes homeless and ends up trying to get by.

[00:27:45] So when a family is able to stay in the patient's life despite everything, which is tough, it's tough for a lot of, you know, I speak with a lot of family members at events along, in the community and just to hear about how difficult it is to remain involved after decades and decades of trying to help their family member through the illness unsuccessfully.

[00:28:04] But when a family does stay involved, it's oftentimes the most powerful thing that can be done for the patient in terms of their long term outcome. For patients who don't have that, there's other programs in the community that could be very helpful.

[00:28:16] Having an ACT team, A C T, I don't remember exactly what that's for, is one example of that where in New York City, individuals can be so assigned, a case worker, a social worker, a psychiatrist, a nurse that all work as one team and meet the patient in the community rather than the patient having to come into the doctor's office. So, this is oftentimes a powerful a strategy for helping people with schizophrenia cope with their condition over time.

[00:28:42] So, there are a lot of programs in the community, as well as having family in the patient's life together. Hope is not lost for someone that has schizophrenia. You can have schizophrenia and have a great life.

[00:28:52] It takes resilience, it takes commitment to your care, taking your meds, trying to overcome the condition just like people trying to overcome any other condition. So patients who get this diagnosis and family members of people who have this diagnosis, it shouldn't feel like all hope is lost because it's not.

[00:29:08] **Stephen Calabria:** It's interesting that you would touch on social support. Social support -family, friends, people who care about you- seems like

such a ubiquitous and helpful thing in almost any situation that is prescribed to a certain degree by professionals like yourself, that you are so much stronger regardless of what it is that you're going through if you feel and know that other people are there and have your back.

[00:29:38] **Dr. Alex Charney:** I couldn't agree more. Yeah, humans are social animals. We're not built to deal with the problems that life throws at us on our own. We can try and we'll experience some success, but ultimately we all need somebody in our lives to help us, help us cope, whether it's someone in your family, whether it's a friend, whether it's a doctor, whoever it is.

[00:30:01] We all need support. We can't handle the problems that we have on our own, and schizophrenia is no exception to that.

[00:30:09] **Stephen Calabria:** Now, how do you collaborate with other mental health professionals and interdisciplinary teams to address both the clinical symptoms and the resilience of individuals with schizophrenia?

[00:30:21] **Dr. Alex Charney:** So, as a psychiatrist, you're not necessarily going to be the most impactful person in the life of an individual with schizophrenia. You're going to be the source of their medication, which is an important role.

[00:30:32] But you're not necessarily going to be the one who's like in the community, meeting the patient where they're at day to day. Oftentimes, this is a caseworker. Or a social worker or a traveling nurse, who's really in the community with the patient.

[00:30:46] And then, psychiatrists, it may be due to just so called visits, and yeah, but oftentimes you're seeing the patient in a doctor's office or in a hospital, like, the last case with me in the emergency room.

[00:30:57] And so collaboration is critical. And in the emergency room, it's a totally collaborative environment. So, when I'm working a shift, I show up at 8 p. m., I work until the next morning, 8 a. m., and while I'm there, my role is to shepherd patients into the emergency room, identify what's the problem, and help formulate a plan on what should happen next.

[00:31:16] What happens next is not something I can do on my own. Oftentimes, we need to find a place for the patient to go if they don't have a home. Social workers in the emergency room are taking the lead on that. And

we need to oftentimes connect with people in the patient's life, calling family members, you know, from oftentimes I haven't seen a patient in years.

[00:31:37] This is something that's done with the senior doctors, the more junior doctors, students who are working in the emergency room, it's a problem we all tackle together. And then of course there's the delivering of medications in the emergency room to the patient. This is something that the nurse takes the lead on.

[00:31:54] So even just in that one environment of care, it's a totally collaborative experience as the provider. And this is the case wherever the patient is being treated. It always takes a team to treat someone who has schizophrenia.

[00:32:06] **Stephen Calabria:** Now, to stick with the social component, resilience in battling schizophrenia, as you've touched upon, doesn't just fall on patients, but it also falls on their families and loved ones.

[00:32:17] What do those conversations with those folks look like? The struggle that those closest to the patient have to go through themselves?

[00:32:26] **Dr. Alex Charney:** So it depends on the setting. Where I'm interacting with a family member of someone who has the condition. If it's the first time someone has been diagnosed with the condition, we call this the first break.

[00:32:38] My role there is to provide education of what's going to happen, what to expect in the years ahead, the days ahead, the months ahead, so that the family member can get prepared without getting overwhelmed, but they can get prepared for how their life is going to change.

[00:32:53] Other times I'll be at a community event and I'm interacting with a family member who's decades into that process. So, no longer trying to prepare them for what's to come. Now they're the expert, right?

[00:33:04] They know what's there. They're teaching me about their experience. And I'm there to listen and I'm there to reassure them that there are people like me who are working all the time, trying to find an answer. Doesn't mean we'll find one, but they can at least rest assured that there are people who are trying.

[00:33:19] It's not something that's being ignored. It's not something that the government doesn't fund, right? Schizophrenia research is well funded. This is a

major societal problem that a lot of people are really working hard and trying to solve. So they can at least rest assured that that's happening, even if they don't see the outcomes of that day to day.

[00:33:35] And some patients find solace in that. Other times, it's really just, I'm there to just, you know, just tell them, keep at it, you know, don't give up, just offer them some words of encouragement.

[00:33:45] To, you know, no matter how hard it gets, try and stay there for their loved one and continue to be a pillar of support for them in whatever way they can, despite how hard that is, oftentimes, and I don't know if that's helpful. Sometimes it is, sometimes it isn't.

[00:33:59] Other times that conversation takes on more of an exchange of information type of thing where patients have a loved one with an illness for many years and they've heard about some new thing in the news that, maybe it's a new treatment or a new study or they have some new option that they think may help their loved one and they ask me about it and I try and get them connected to the right source of information to answer their questions. So, the nature of that discussion can take on many shapes, depending on the context.

[00:34:26] **Stephen Calabria:** Widening the social scope further, how do you promote community integration for individuals with schizophrenia and how would you say that that contributes to their resilience?

[00:34:38] **Dr. Alex Charney:** So there are programs to help people with schizophrenia get back into the workforce.

[00:34:43] These are effective and important. I'd say overall there's not enough work being done in that space, to connect individuals who have schizophrenia to the rest of society. To teach people in society, like, what is schizophrenia?

[00:34:56] Why is it that your average person in our society, they know what Alzheimer's disease is. It's not a disease that you get old and you lose your memory. They know what depression is. It's a condition where you feel sad. They know what cancer is. But why doesn't anyone know what schizophrenia is?

[00:35:10] Right? So part of this is, is an education thing. I don't have a good answer as to like, why is it that there's just like such poor kind of education about this particular condition in society, even though it's a very common condition that's been around forever.

[00:35:23] And I think that's a major barrier to better integration of individuals who have this illness into society. And we're working on trying to overcome that in our, in our little way here in New York City, hosting events that bring people with schizophrenia together with other people in the community.

[00:35:37] And I think more activities like that. Why is it there's always walks for breast cancer but there's never a walk for schizophrenia, right? A walk for psychosis, things like that.

[00:35:47] We need to make schizophrenia more of an understood and accepted condition out there in the world. And then I think that that hopefully would help people who have the condition feeling more accepted by their community.

[00:35:56] **Stephen Calabria:** Another very common aspect of resilience is the sense of meaning and purpose, providing a given patient with the reason to keep going, to keep fighting, to keep showing up to treatment. Is that something that you focus on in your treatment and in your research?

[00:36:15] **Dr. Alex Charney:** Me personally, I'm, like I said, I work in the emergency room, so I don't oftentimes have the luxury of being able to have discussions like that with my patients. I'm more helping them through an immediate crisis, trying to figure out where to go next.

[00:36:25] But yes, when you're working with patients in the community in a less hectic setting, you're able to kind of really talk about what's going on in their life, as is the case when we're working with patients in a research setting.

[00:36:36] You try and find, what drives you? It's probably no different than anyone else in that way. How would I help someone who doesn't have schizophrenia recognize what are the things that drive them, what make them want to get out of bed in the morning?

[00:36:48] You know, what, what are the things they feel passionate about and how can I help guide them towards turning those passions into either hobbies or careers. So that's kind of the overall strategy I take with individuals who have schizophrenia. Like I said, hope is not lost in any way.

[00:37:02] It's an illness, it's lifelong, it's not going away. So, it's accepting those realities, but then recognizing, this illness is not my destiny. And it's, I can have a fulfilling life in spite of it. It's not going to be easy, but it's, it can be done.

[00:37:17] There are many examples to point to individuals who have had the condition and have led inspiring lives and patients being made aware of those could sometimes help.

[00:37:26] The person people maybe are most familiar with is the Nobel Prize winner John Nash, who was a mathematician and economist that had schizophrenia. Yeah. So there are examples of people who have, who have done exceptional things with their life despite their illness.

[00:37:40] **Stephen Calabria:** If someone was listening to our show and they recognize in themselves or in a loved one, the symptoms of schizophrenia, what should they do?

[00:37:50] **Dr. Alex Charney:** Go to the emergency room is the short answer. New onset schizophrenia is considered a psychiatric emergency. It doesn't mean we're going admit you to the hospital or what have you. But for someone who's not sure who to call, not sure what to do, thinks their loved one might have schizophrenia, it's very simple.

[00:38:06] Bring them to the emergency room, call 9 1 1. It is considered a psychiatric emergency. And what happens is they're brought to the emergency room. Most people don't know there's a psychiatric emergency room that's usually part of the main emergency room.

[00:38:17] They generally don't see it, but we're there. And when someone is brought into the main emergency room and they tell the person at the front desk, My loved one is experiencing symptoms that I think are schizophrenia or they're acting strange and we don't know what to do, , they'll connect them to us in psychiatric emergency room and we'll take it from there.

[00:38:35] **Stephen Calabria:** Well, doctor, that was it for my questions. Was there anything else you wanted to say?

[00:38:39] **Dr. Alex Charney:** Nope. Just, thank you for shining a light on schizophrenia and the individuals who have this condition, who are amongst the most resilient people that you'll ever meet.

[00:38:49] **Stephen Calabria:** Dr. Alex Charney, thank you so much for your time, sir.

[00:38:52] **Dr. Alex Charney:** Thank you.

[00:38:53] **Stephen Calabria:** Dr. Alexander Charney is an Associate Professor in the Departments of Psychiatry and Genetics and Genomic Sciences at the Icahn School of Medicine at Mount Sinai. He also serves as the Director of the Charles Bronfman Institute for Personalized Medicine and as the Executive Director of the Blau Center, which aims to increase understanding and research of serious mental illness, primarily schizophrenia and related disorders.

[00:39:16] That's all for this episode of Road to Resilience. If you enjoyed it, please rate, review, and subscribe to our podcast on your favorite podcast platform.

[00:39:24] Road to Resilience is a production of the Mount Sinai Health System. It's produced by me, Stephen Calabria, and our executive producer, Lucia Lee. From all of us here at Mount Sinai, thanks for listening, and we'll catch you next time.