

BrainStorm: Decoding Depression

Episode 1: Youth Depression

A Mental Health Education Podcast hosted by the Center for Depression Research and Clinical Care at UT Southwestern Medical Center

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Please scroll to the end of the document to find *Host Biographies* and *Description of the Center for Depression Research and Clinical Care*

Transcript:

[Speaker- Catherine Huff] Welcome to “BrainStorm: Decoding Depression”, where we will dig into discussions about mood disorders. We are here to change the way we think and talk about depression, in an accessible, approachable way with a leading expert in the field. No topic is off limits. Coming to you from Dallas, Texas, this is “BrainStorm.”

Dr. Trivedi is a Professor of Psychiatry and Chief of the Division of Mood Disorders at UT Southwestern Medical Center, where he holds the Betty Jo Hay Distinguished Chair in Mental Health, and the Julie K. Hersh Chair for Depression Research and Clinical Care. Dr. Trivedi is internationally recognized for his research in mood disorders, with accolades that include the prestigious American Psychiatric Association Award for Research, and the American College of Psychiatrists Award for Research in Mood Disorders. Take note: if you hear us refer to the CBRC, that's the Center for Depression Research and Clinical Care at UT Southwestern, which Dr. Trivedi founded in 2015.

Today we will be talking about adolescent depression and COVID-19. My name is Catherine Huff. Thanks so much for listening. It's May 2021, and for the last year children, teens and young adults have been forced to navigate life online and in their homes. Today's youth have grappled with school closures, disrupted schedules, fewer social opportunities, and have been forced to operate in an entirely new normal. It's no surprise that adolescents are reporting higher levels of anxiety and depression, and experts are concerned about the mental health consequences that will reverberate in the years following the pandemic. How bad is this mental health crisis? Is it temporary? And what can we do to help our young people? Let's dig in.

Dr. Trivedi, there are so many factors that work together to contribute to a person's mental health. What do you see as the primary factors that have impacted adolescents' mental state during the pandemic? Was it school closures, fear of virus, lack of structure?

[Speaker- Dr. Madhukar Trivedi] All of those. I think the fear of school closure actually has a huge impact and, in fact, very certainly we are beginning - towards the end of the virus pandemic - we are just beginning towards a mental health epidemic that's coming. School closures have meant that students have lost one year or more of a very vital period in their lives. This is not a period only about education, although that is something that they lost. But more importantly, this is when they start learning how to behave in the real world, how to interact, how to develop relationships, how to figure out fights, how to figure out solutions. And that has gone. In most other periods of crisis, kids will actually get a lot of social support from every adult and every other child in their lives. This is a pandemic that created the opposite. We told them not to go anywhere, not to interact with anybody— they even couldn't go and hug their grandparents, they couldn't play around even with their neighbor's kids. And so this is a very artificial and an unfortunate reality that kids will now have to start going back to. They may not even recognize how best to interact with other kids as they start school, so this is going to be a very complicated period.

[Speaker- Huff] Yes, it has presented a lot of challenges. Do we have solid research? Have there been studies already to show how COVID-19 has impacted adolescent mental health, or is it too early to really know?

[Speaker- Dr. Trivedi] I think there are two things. One, we already know that the rates of serious anxiety, worries, concerns about the future, etc, for kids, has really increased – doubled in the last year – and that's going to continue. But how long will it last, what is the impact of having COVID in the family, etc – those issues we are beginning to learn and that's going to take some time for us to recognize how long lasting these effects are. One thing is clear: we have to remember that for kids, we will need to think about how to deal with the idea that they last a year of their lives. And a year of the life of a 15 year old is a significant amount. So we will need to retrain them, help them get back to really gaining as much of that as possible in as short a time as possible. That means a lot of intentional attention will have to be paid by parents, by teachers, by students themselves, and by everybody in their lives.

[Speaker- Huff] Absolutely. Do we know if young children, versus teens, versus college students fared differently? Did age have any impact?

[Speaker- Dr. Trivedi] Actually, everybody is affected, but clearly, teens are going to have a significant amount of challenge because that is a crucial period when they were beginning to leave the home to really begin to develop different relationships with other kids who are maturing to be adults, other adults, and most importantly, this is also the active period in their brain architecture development. This is when the architecture of the brain is beginning to lay down, defining what their personality is, how they're going to deal with conflict, etc. And that is now negatively impacted. This is something we are going to really be interested in studying more.

[Speaker- Huff] Absolutely. So you mentioned before about the short versus long term impact. I know that a lot of people who are experiencing troubles, they might get better when they go back to normal life. What is the difference between people who don't get better?

[Speaker- Dr. Trivedi] So I think that is going to require us to be vigilant. There is going to be a large proportion of kids and adults who will go back and it will take some time but there is resilience built in, they learn, they have learned in the past, so they'll figure it out – and that will take some effort, but will happen. There is a proportion of kids and adults who are going to have a harder time going forward and will need attention, may need to be evaluated, may even need therapy. And sometimes, this may be a period when they first find out they have depression, anxiety, and other issues that need to be treated.

[Speaker- Huff]

So as you mentioned before, also, in the past in historical crises, society often comes together and suicide rates actually fall. It's a theory that if it's a common threat, people come together and engage their resilience. How is this pandemic the same or different? Have you seen people doing that as well?

[Speaker- Dr. Trivedi] This time, we are seeing increasing rates of depression and anxiety, at least. For suicide, there are increasing rates, although it's a short period so we'll have to over time see what is going on with suicide. But definitely, that group of people, especially kids but even adults, who are managing their lives fine because of the social support, because they had activities, they had figured out how to seek help when needed – they were able to manage. Because of the pandemic and social isolation and lack of association with people, that has uncovered their symptoms and I think that is the group we need to be most vigilant about.

[Speaker- Huff] So we've seen some of that resilience already. What good things have come out of younger people being forced to confront their mental health? How have we seen students bounce back?

[Speaker- Dr. Trivedi] I think one of the things we forget also is that the flip side of this also has the benefit, and that is they have now really learned how to navigate and deal in a very close family relationship. So parents have been able to devote more time to the kids, so there is also a positive. We should always remember that when adults – loving adults – spend time with kids, it's not negative, it is a positive, so that has been helpful. And a lot of this is also learned behavior on the part of the kids. So they see how their parents are doing. Those parents who were able to figure out ways to remain active, their kids have learned that also. So there are some positives happening. It also allowed a lot of people to be able to explore things that they were not doing in the past: physical activity, maybe going to the park more often than they did in the past, spending some quality time with certain activities that may hopefully stay with them. So there are resilience factors that are built into this, if we can take advantage of it. One of the things our Center is trying to do is also trying to engage with students on how best to build this resilience because resilience can be built.

[Speaker- Huff] And so in a little bit we're going to kind of get to the meat of that issue: how to protect our young people and what parents and teachers and communities can do. But first, let's quickly discuss the trends in adolescent mental health generally. So even before the pandemic, we've seen increasing rates of depression and anxiety in adolescence. What has the research shown?

[Speaker- Dr. Trivedi] So we focus on teens for a very important reason. Boys and girls, for example, have the same rates of depression – very little, but still there before puberty. As soon as puberty hits, actually girls have double the rate of depression than boys do, but boys' rates also remain high. And so the period around puberty and up to finishing high school is a very high risk period for everybody. A large proportion of people who will ever get depression or anxiety have their first episode in this age period. So we should be very vigilant and paying attention to those who really require some help and then put them in the right place for care so that we can avoid a lifetime of problems.

[Speaker- Huff] It's very important.

[Speaker- Dr. Trivedi] This has also when architecture, as I mentioned earlier, of the brain is finally getting really organized. The circuits in the brain are really getting arranged in the right manner. In the process, the brain is also, unfortunately, at the mercy of some of the stressors and trauma that may happen. So we have to be mindful and avoid the trauma or at least deal

with it as soon as we can so that somebody doesn't become – their circuits do not become dysfunctional.

[Speaker- Huff] Very interesting. In terms of those increasing rates that we've been seeing in the past years, do you have any answer or theory as to what's driving that? Why is it worse now than before, or does it just seem that way?

[Speaker- Dr. Trivedi] So one thing that is important, I'm glad you asked that, because it is true that teen depression in the United States, unfortunately even unlike most of the other westernized countries, teen depression in the United States has been going up steadily in the last 10 years, which is a worrisome phenomenon. And suicide rates have been going up. And the exact causes are not yet very clear. One of them obviously is the increasing social isolation that families are experiencing. There is a lot of, less amount of adult support structure around every kid when they're growing up than there used to be 30 years back. But the exact causes are not very clear.

[Speaker- Huff] Do you have any other personal theories? Or is that too sticky to get into?

[Speaker- Dr. Trivedi] I think one of the major things that I advise in our Resilience Program is the part that – the personal theory at least I feel is something we will need to pay attention to – and that is: 20 years, 30 years back, most kids used to be able to figure out a way, either with the help of parents or otherwise, some parent substitutes that played a big role in their lives— their coaches, their neighbors, their uncles, aunts— and that circle is shrinking in the last 20 years for a lot of reasons. And therefore, I think that their ability to get some of this support structure built outside of just the parents or somebody close to them is really a major issue. And I think what I advise mothers when they are worrying about their kids, especially in the teen years, is to really engage the teen with some other adult substitutes, where they can go to feel safe and comfortable. Kids, teens especially, are not going to tell their parents everything. So if they have an outlet like that...

[Speaker- Huff] They need a community network.

[Speaker- Dr. Trivedi] A community network— it's almost like they have a larger family around them, even if it's an uncle or a distant aunt— that actually serves the purpose much better than keeping them cocooned.

[Speaker- Huff] Very good. In terms of the trends of depression and anxiety in adolescents, do rates tend to differ between demographics or cultures or environments? Is anyone most at risk?

[Speaker- Dr. Trivedi] So the rates of depression and anxiety remain the same in Eastern cultures, Western cultures, amongst different racial/ethnic groups. The one factor that overrides a lot of this is socioeconomic status. Social determinants of health with having lower means and lower socioeconomic status does increase the risk.

[Speaker- Huff] So we obviously need to pay better attention to our youth and equip them with the tools to navigate these challenges, so we'll move on and talk about advice. Is it possible to actually prevent depression, and if so, how can we start doing that?

[Speaker- Dr. Trivedi] So that is the kind of work we are doing at the Center. We are really interested in pursuing all efforts to try to figure out at least the early markers of the disease and therefore prevent it. That is going to be the big issue. One aspect that has gained attention, and we are doing a large set of projects in schools, is building resilience. So we can build resilience and that may be what actually gives teens the tools to deal with stressors and prevent the onset of depression.

[Speaker- Huff] Fantastic. So parents might wonder: what are the warning signs to look out for in adolescents?

[Speaker- Dr. Trivedi] So first and foremost, I think that any change in behavior, especially in teenagers. In our culture, we have to totally remove the myth and not explain it away as teens being teens. That is a wrong approach because in the process what ends up happening is most kids whose depression/anxiety begins to onset in the teen years get ignored. And so the change in behavior for the teen is the first signal. So if they were very friendly but now are not going out, or if they were very involved in sports and they're not participating, they are not going to meet their friends on weekends and evenings, if they're becoming more isolated, they don't come out of the room, they sleep less, or sleep too much, and then they don't begin to engage with the family or their usual social circle. That should be a big sign. And the biggest thing is: ask them. They will feel extremely relieved if you ask them.

[Speaker- Huff] So, earlier you were saying that some parents actually, you know, had more time with their kids and were able to observe these differences more easily. But then there's the flip side of that where during the pandemic parents were on the clock 24/7, they're a little overwhelmed, maybe distracted. Do you have specific advice about how they can stay engaged and observant and connected? Should they set up specific checking times? Or what do you advise?

[Speaker- Dr. Trivedi] So I think the fact that you have more time, and you use it to spend with kids is wonderful. That should not be always the time to be always continuously be overbearing and vigilant, so therefore figuring out a process so that you're spending quality time when you have the time, but not always being scared and being vigilant and continuously fearful of what's happening. Trying to drive that balance, and most parents actually try that, but being mindful of it so that you allow

space for the teen when needed. But participating with them is the right approach. Getting them engaged with other activities, even if they are remote through zoom or etc, places of worship, places of entertainment, that are mutually fun and beneficial may be another approach.

[Speaker- Huff] Awesome. So you said that if parents do see these worrying behaviors, they should ask them. They should confront their kids. Is that what you're saying, the best thing is to approach it?

[Speaker- Dr. Trivedi] I think that it is a – I want us to think of removing this myth immediately and permanently. If your 16 year old is limping, you will never hesitate to ask what's going on. And never think that in so doing, you're going to create a fracture in the teen's foot. Same thing applies here. If you see a change in behavior, asking is actually the right thing to do. And it never puts the thought of depression or suicide in their heads, it actually makes them feel like their parents or their loved ones care for them. And then it will give them permission to tell you more about what they're experiencing.

[Speaker- Huff] That's really important, so I'm just going to reiterate that. Asking someone if they're depressed or thinking about suicide will not encourage them or put the idea in their head. It just makes it easier for them to open up about it. So it's really important to talk about it rather than ignore it. And to do that in the right way.

[Speaker- Dr. Trivedi] Parents should think, close your eyes and think about all the times they asked their kids to do something and they didn't do it. That should give them confidence that every time they do ask them to do something, they're not going to put a new thought in their heads. [laughs]

[Speaker- Huff] [laughs] Good point. When it comes to identifying individuals who are at greater risk for suicide, there are still challenges. What is being done to combat that or better anticipate who is at risk?

[Speaker- Dr. Trivedi] That is the research that a lot of us, that we are engaged in at the Center. That is a big dilemma and a challenge. We know general risks for suicide: past suicide attempt, depression, etc, drug use, alcohol use. But immediate risk for 'what is the risk in the next 6-8 hours or 6-8 weeks' – that research is the kind of biological research and cognitive research we are doing currently at the Center.

[Speaker- Huff] And currently, you're doing, I think, a study for AFSP?

[Speaker- Dr. Trivedi] So we are doing two large studies. One is a study looking at protein markers in the blood to be able to identify the signature of those teens who have attempted suicide who can be identified as those who have a continued risk. Unfortunately, teens who attempt suicide, 25% of them actually re-attempt suicide within the following six months, even in the best of treatment settings in the country. That means if we can find some blood-based markers at that first time point, so that we know who those 25% are and pay more attention to them, then we can reduce that rate. That is the research we're doing that is funded by the American Foundation of Suicide Prevention. And a sister study we are doing is to give these teens drug called ketamine to see if that can be used to reduce the rates.

[Speaker- Huff] Wonderful. And so that's coming as a solution after the fact. Before you were talking about building resiliency and some of the programs in schools. Can you tell us about that program?

[Speaker- Dr. Trivedi] So we have actually partnered with researchers at Karolinska Institute in Sweden, and we have a very elaborate, extensive program which is easy to do. It's a five session program for teens in high schools, where our counselors go there and work with the whole classrooms. And they get a really hands-on experiential resilience building program that improves their mental health awareness, their vocabulary, who to go to for help. And we've shown it reduces depression, suicide, and anxiety in these kids. We have reached about 14,000 students in the last three years. And now we are embarking on the next phase. The next phase we will train-the-trainers in these school districts. And we have an ambitious agenda, we'll try to actually do this across the state if any school district wants to send their counselors or teachers to us to be trained.

[Speaker- Huff] Wonderful. So that program is called Youth Aware of Mental Health, or YAM for short. If you are listening and are a school district interested in learning more about YAM or partnering with us, please email CDRC@UTSouthwestern.edu. So this has been a really impactful conversation about what we're seeing in the trends in adolescent mental health, what we can do to assist them, and how COVID-19 is affecting things. We do have a few questions from our listeners. The first is: Are children and adolescents picking up on their parents stress and how can we prevent that?

[Speaker- Dr. Trivedi] So, children and adolescents pick up on their parents stress, absolutely. And parents pick up on their children's. We are all social animals, we live in a social environment, so we pick up each other's stresses. And how you deal with it is to learn to develop tools so that you know how to deal with stress, whether it is coming from your own thoughts or from your interactions with loved ones. And our YAM program is an example of where we concretely teach students or kids how to develop these tools— what to do when this happens or that happens— and then you actually try that out and eventually build on it so that it becomes a lifelong learning message.

[Speaker- Huff] Our next question is: How can we help the influx of full hospital beds for teen youth in crisis? So it sounds like

when kids are going to treatment centers or hospitals in a mental health crisis, currently, during the pandemic, they're finding they can't get a bed, it's full. What's going on with that and what can we do?

[Speaker- Dr. Trivedi] So I think that is a challenge that remains. And there are obviously many issues with it. One of them is to have enough beds, although that is a longer term issue. And there is another solution that's even more fruitful. Because remember, putting somebody in a hospital is only a very temporary fix, it does not solve the problem. So, our solution has been to really attack this problem early on. So you screen for depression, anxiety, any kind of mental health issues, you also screen for suicide, train people to deal with stresses, and in fact, in the process, prevent people from attempting suicide. That is our best hope to change the course because 30 years of research focusing only on those who have attempted suicide has not really changed the equation. So, I am committed, through our Center, to transform this so that we are not doing more of the same. The only way to do that, like we have done with other medical illnesses. We did not really cure breast cancer by just focusing on stage four breast cancer. We started actually changing it so that mammogram is a routine thing now. Similarly for suicide, we have to start early, do the prevention, hard work of prevention. That's the work to be done to solve that problem with hospital beds.

[Speaker- Huff] Our final question is about your thoughts and advice for kids who feel a pressure to catch up, that missed a year of school in person like you were saying. They might be behind academically, and socially. How do they get around that? Should we be cutting them a little more slack or should we have the same expectations for them?

[Speaker- Dr. Trivedi] I think we have to let them all do it at their pace. There is one other issue to remind them is: everybody's gone through this. So this is not just them who have had the absence of school, all the others did. So how gradually they get back to this should be really intentionally worked with each student and each parent has to figure that out. In going back to school, one of the aspects that we have to recognize is be honest and transparent with our kids. Let them know that we understand that this has been a stressful period. Also, do not be afraid to confess that it has been tough for you also so that they recognize that this is not something they are uniquely experiencing, everybody is. And then pay attention to the fact that if there are responses that they're having that are different, then at least acknowledge it, work with them and discuss with them, rather than just telling/ordering them to start behaving like everything is fine.

[Speaker- Huff] That's all been really great advice. That's it for this episode of "BrainStorm: Decoding Depression" with your hosts from the Center for Depression Research and Clinical Care. My name is Catherine Huff. Be sure to follow us on social media @UTSW_CDRC so you don't miss our episode announcements. If you have suggestions for topics or questions you'd like answered, email CDRC@UTSouthwestern.edu. Thanks for listening and see you next time!

Host Biographies and Center Description

The Center for Depression Research and Clinical Care (CDRC)

The CDRC was established in 2015 out of the Mood Disorders Research Program, building on more than 30 years of research in mood disorders. The CDRC focuses on understanding the neurobiology and psychology of depression and bipolar disorder, with a particular focus on identifying biological and psychological abnormalities. Dr. Madhukar Trivedi, M.D., the founding director of the CDRC, has been a leading expert on mood disorders across Texas and nationwide during his 30 years at UT Southwestern. Dr. Trivedi has taken an innovative approach to doing research in the community by actively creating and maintaining partnerships. The CDRC has established two cornerstone networks that work within the community in quality improvement, outreach, and research missions related to depression: the Mood Disorders Network, which focuses on early identification and best care, and the Risk and Resilience Network, which focuses on prevention through resilience building.

The CDRC conducts research in mood disorders across the lifespan, with an emphasis on treatment-resistant disorders, longitudinal outcomes of depression, psychosocial and psychopharmacological treatments, and biological markers to improved identification, treatment, and prevention of mood disorders. This work has led to several major developments and improvements for patients living with mood disorders. These include better methods to deliver care (e.g., treatment algorithms, computer support systems, measurement-based care), new treatments (e.g., cognitive therapy for depressed adolescents, exercise for depression and bipolar disorder, ketamine/esketamine), and new treatment innovations (e.g., vagus nerve stimulation, magnetic seizure therapy, and deep brain stimulation) for treatment-resistant depression.

The CDRC has pursued a better understanding of the biological and physiological bases for these disorders with a range of laboratory tools (functional brain imaging, EEG, mHealth measures, etc.). Research into the basic foundations of these dysfunctions have produced important findings in the molecular and cellular basis of neural plasticity, neurotrophic growth factors, and mechanisms of antidepressant action.

Biography: Dr. Madhukar Trivedi

Madhukar Trivedi is Professor of Psychiatry, Chief of the Division of Mood Disorders, and Director of the Center for Depression Research and Clinical Care at UT Southwestern Medical Center. He earned his MBBS and MS in Baroda, India, completing his residencies in Psychiatry at University General Hospital, Baroda, India and Henry Ford Hospital, Detroit, Michigan. He completed

his fellowship at UT Southwestern, where he now serves as Betty Jo Hay Distinguished Chair in Mental Health and Julie K. Hersh Chair for Depression Research and Clinical Care. Certified by the American Board of Psychiatry and Neurology, Dr. Trivedi is an established clinical and translational researcher with extensive experience serving as PI and Co-PI on several single and multi-site clinical trials funded by NIH, foundations and industry sponsors. Dr. Trivedi has authored more than 600 peer-reviewed articles and chapters about the diagnosis and treatment of mood disorders.

Dr. Trivedi's research over the last 25 years has focused on understanding the neurobiology and psychology of depression and bipolar disorder, with a particular focus on developing an empirical basis for improving treatment of depression. Dr. Trivedi and his team have been involved in many of the pivotal studies involving the establishment of efficacy of antidepressant treatments (medications, psychotherapy, exercise, complimentary treatments, devices, etc.), examining next steps in treatment resistant depression to develop algorithms and guidelines, and developing and validating biomarkers in order to reach the goal of precision medicine for mood disorders. Among his most notable studies are the Establishing Moderators and Biosignatures of Antidepressant Response for Clinical Care (EMBARC) trial, Combining Medications to Enhance Depression Outcomes (COMED) trial, Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study, and the Texas Resilience Against Depression (T-RAD) study.

His numerous awards include the National Depressive and Manic-Depressive Association Scientific Advisory Board, the Psychiatric Excellence Award from the Texas Society of Psychiatric Physicians (TSPP), the Gerald Klerman Senior Investigator Award, the American Psychiatric Association (APA) Award for Research, and the American College of Psychiatrists (ACP) Award for Research in Mood Disorders. For six consecutive years, Dr. Trivedi has been named a Global Highly Cited Researcher by Clarivate Analytics. He is also a member of numerous other professional organizations, including the American College of Neuropsychopharmacology (ACNP), the American College of Psychiatrists (ACP), the American Medical Association (AMA), the American Psychiatric Association (APA), the Dallas County Medical Society, the Society of Biological Psychiatry (SBP), the Texas Medical Association (TMA), and the Texas Society of Psychiatric Physicians (TSPP). Dr. Trivedi currently serves as Deputy Editor of the *American Journal of Psychiatry* and as president of the American Society of Clinical Psychopharmacology (ASCP).

Biography: Catherine Huff

Catherine Huff is currently the Strategic Communications Coordinator at the Center for Depression Research and Clinical Care (CDRC) at UT Southwestern Medical Center. Catherine graduated from Southern Methodist University with a major in Psychology and minors in Anthropology and Business. Upon graduation, she joined the Mood Disorders Research Program in the Division of Psychiatry at UT Southwestern Medical Center in 2015. That year, Dr. Madhukar Trivedi received funding to launch the Center for Depression Research and Clinical Care. Catherine has worked in a series of diverse roles in this academic research environment: administrative, clinical, regulatory, patient-facing, and community-facing and has worked closely with Dr. Trivedi.

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