Ruth Adewuya, MD (Host):

Hello. You are listening to Stanford Medcast, Stanford CME podcast where we bring you insights from the world's leading physicians and scientists. This podcast is available on Apple Podcast, Amazon Music, Spotify, Google Podcast, and Stitcher. If you're new here, consider subscribing to listen to more free episodes coming your way. I am your host, Dr. Ruth Adewuya. This episode is part of our Pediatric Pulse Mini-Series, and today I will be speaking with Dr. Megen Vo. Dr. Vo is a pediatrician that focuses on treating eating disorders in children, teens, and young adults, and on reproductive health and other adolescent health issues. She is a Clinical Associate Professor at Stanford in the Adolescent Medicine Department. She got her MD at the University of Rochester School of Medicine and did her residency in pediatrics and fellowship in adolescent medicine at UCSF. Dr. Vo, thank you so much for chatting with me today.

Megen Vo, MD (guest speaker):

Thanks so much for having me.

Ruth Adewuya, MD (Host):

We are talking about eating disorders. Fall of last year, you did an incredible webinar on eating disorders, the diagnosis and management of it, and so I wanted to follow up on that conversation. I'll start with, what are some of the most common types of eating disorders that you see in pediatric patients?

Megen Vo, MD (guest speaker):

The way that we've been thinking about how eating disorders typically look is morphing to be more inclusive and to be more acknowledging of the great diversity among our patients. I would still say the people who come to me for medical management or questions of, is this an eating disorder? they tend to be more folks who have restrictive eating disorders. So anorexia nervosa being the big one, because really when you lose weight, and I'm sure we'll talk about this later, when you lose weight, your body goes into this hibernation response and there are some really significant physiologic effects from that. So I'd say anorexia nervosa being a large proportion of the people I see. But with the new DSM-5, the Diagnostic and Statistical Manual that allows clinicians and mental health folks to categorize mental health diagnoses, there's a new diagnosis called avoidant/restrictive food intake disorder, or ARFID.

We've known these patients have been around for forever, but now we have a shared language to talk about them. These are kids who have basically pathologic picky eating. They don't have a body image component, but they have either a fear of an aversive consequence of eating. They're really afraid of having vomiting or belly pain or choking. Or they're the type of kids that have sensory issues. "I cannot do crunchy foods." or "I can't have sauces." And it's to an extreme where they can't meet their needs. Or they are kids who have just zero interest in eating, believe it or not. They could go all day without eating and not notice because it's just not interesting to them. We call those the low interest folks. We tend to see a lot of those young people as well because similarly to anorexia, when you don't meet your nutritional needs and you lose weight, you become more unstable.

If you look at the broader population, and this is born out in different population based in community studies in other countries as well, actually binge eating disorder tends to be most prevalent in communities, because when you binge eat, you tend to gain weight and not lose weight, people don't really become medically unstable very quickly from that, and so they tend not to present acute medical care like the other folks that I mentioned.

Ruth Adewuya, MD (Host):

Having a shared language really helps to put a name behind what's happening and then hopefully provide a path for treatment and for support, so that's really great. I want to take a detour and just ask you about your journey and how you came to this space and to this specific specialty of treating eating disorders. How did your interest in this topic emerge?

Megen Vo, MD (guest speaker):

My gosh, thank you for asking. It's really multifactorial. I don't know how deep you want to dive into this, but-

Ruth Adewuya, MD (Host):

We can go deep.

Megen Vo, MD (guest speaker):

Let's go deep. Before I went to medical school, I actually was trained as a professional opera singer.

Ruth Adewuya, MD (Host):

Wow.

Megen Vo, MD (guest speaker):

I know, right? It explains so much about why I am the way that I am. But you get in that kind of training, because your instrument is your body, you get a lot of feedback because you have to present your work to people. Some of it helpful, some of it not. It's very clear, this happens to all of us throughout our lives regardless of what our path is, that you get all this feedback on your body, some of it welcome, some of it not.

Ruth Adewuya, MD (Host):

Exactly.

Megen Vo, MD (guest speaker):

Is it anybody's place? I just became so acutely aware of that's not okay and how hurtful it can be. And so, when I detoured and went into medicine, my pediatrics rotation happened to be with adolescent medicine at the University of Rochester that has a wonderful adolescent medicine division and a very strong eating disorders program. I remember my attending taking me as a little third year medical student first week of third year, and he did a guided meditation with me and the patients. I was like, "Are we allowed to do this? Are we allowed to have feelings and acknowledge how our bodies are feeling and take the time?" I just thought it was so amazing. It really just spoke to me like this is the area of medicine where I was really meant to be.

Ruth Adewuya, MD (Host):

It's interesting how that one experience brought you to where you are right now. Thank you so much for sharing that journey. People show up into medicine and as clinicians, their paths are very different, and so I appreciate you sharing that story with us. Going back to our point of discussion, we know that some

eating disorders could be subtle, some more than others. Can you talk about what are some of the symptoms that help you identify them in patients?

Megen Vo, MD (guest speaker):

Such a good question. For all the clinicians out there listening, go with your gut. If you think something is wrong, something's probably wrong. The big one with young people, children, with eating disorders, is they should be growing. They should be gaining weight year over year. Depending on where they are in puberty and their growth phase, it should be five, 10, sometimes more pounds per year. So if somebody is not gaining weight year over year or is losing weight, there's something going on. And that behooves us to get a good history.

Sometimes I hear from clinicians that they don't know what to ask, they're worried about triggering something. But I think it's okay. Our patients really want to have that relationship with us where they can be open even if they're not quite ready to verbalize it. So even just asking like, "Hey, I noticed you lost some weight. What's going on there? What are you doing?" Asking about skipping meals, asking about restricting, asking about diets. There's some really horrifying evidence out there that children as young as elementary school, like fourth grade, will say that they are or have been on a diet.

Ruth Adewuya, MD (Host):

Wow.

Megen Vo, MD (guest speaker):

Isn't that awful?

Ruth Adewuya, MD (Host):

It's so awful. I don't even have the words for that right now. How much of that is gender specific?

Megen Vo, MD (guest speaker):

It's a really good question. It appears to be more gendered, like more birth assigned females, who identify as female, are saying these things, but I also think that's who we're looking for. We expect that. A whole other topic, and maybe we'll get there, but boys totally have eating disorders, they just say slightly different things. And so it is, you're right, there's a little bit of that socialization of these are the things you say if you're a female-bodied person, these are the things you say if you're a male-bodied person. As early as elementary school, kids are getting these messages that there's something wrong with their bodies that needs to be changed.

Ruth Adewuya, MD (Host):

So it sounds like for clinicians, creating a environment where your patients trust you so that you can initiate those conversations without triggering them is number one. And then number two is using your years of training and expertise and your gut to recognize that if you think something is wrong, investigate it further. The major symptom that I heard is the loss of weight as an initial trigger. Are there other physical symptoms that clinicians should be looking for?

Megen Vo, MD (guest speaker):

If it's somebody who has their menses, if they lose it or if it's delayed, that's a huge one. The other things that you might see but tend to show up later would be bradycardia. Lanugo takes a very long time

to develop, but that's that downy hair that they often get all over, particularly on places that you don't expect someone to be fuzzy. There's subtle mood changes. They tend to be a little less interested in stuff they normally would be because their bodies are just trying to do everything they can to keep moving forward and it cuts corners in all kinds of ways. School is remarkably preserved though. Usually people are like, "But I'm doing amazing in school." And you're like, "I'm sure you are, and these are the ways the rest of your life is falling apart."

Ruth Adewuya, MD (Host):

Yeah. I imagine that some of the challenge that clinicians might face when thinking about symptoms is what you said about mood issues, because we also know that children, teenagers are also going through increased anxiety, increased depression that could be comorbidities with eating disorders, but it's also all happening together. So if as a clinician trying to navigate, is this a mental health issue, but is it also this physical thing and eating disorders, that must be a challenge that you guys have to navigate day in, day out.

Megen Vo, MD (guest speaker):

You're absolutely right. And it's this suspicious cycle. If your brain isn't nourished, it's not resilient. And so, of course, things that would've not happened to you then do, the loss of mood, increased anxiety around things. So I think there for clinicians it's teasing out whether the mood stuff or anxiety started before any kind of eating changes because there's where medication for anxiety or depression can be really helpful, which unfortunately hasn't borne out as much for just straight up eating disorders. If you have eating disorder first and you have poor mood or more anxiety as part of that, it doesn't seem like the medications are quite as helpful. You really want to address the eating stuff first, get them better nourished, and then see where you are.

Ruth Adewuya, MD (Host):

That's a great segue to my next question, talking about the management and treatment for each of the types of eating disorders. I know we can't talk about it all in this podcast, but at a very high level, how does the management and treatment vary between each type of eating disorder?

Megen Vo, MD (guest speaker):

I would say, from a really high level, it's actually pretty similar for the different subtypes. There might be different options among the therapies, for example, just because of the evidence. For anorexia, first up would be medical follow-up. The primary care provider could absolutely do this if they had the bandwidth. When I first identify somebody, I try to see them every one to two weeks because you're going to revamp everything that they're doing and you really want to see how it's going. Or if they're medically unstable, you're going to see them pretty often because they might need admission. So from an outpatient perspective, the medical provider's job is really giving them good dietary advice, having them pull back on activity that they're doing because you really want to hopefully only change one thing at a time, and then see them in a week or two weeks. And ideally they're gaining one to two pounds per week. Some young people who are growing need 4,000 calories a day, 5,000. If they're a tall person who's usually very active, sometimes more than that just to make up from the deficit and start to gain.

So it's hard for me to say calories are this is what they should do because you need that data to see how their body is responding. Usually I say three meals, two to three snacks a day using the plate model, half the plate should be carbohydrates, a quarter protein, and fats and fruits and vegetable. We could do the dairy as a drink. And then a snack like two to three items from different food groups. Ideally, the family

steps in and really takes charge of this because it's hard when somebody has an eating disorder. Most eating disorders are what we call ego-syntonic, so the person who has it doesn't really see it as a problem. It's like a personality disorder in which it's like, "This is the way that I am wired, and this is the way that I feel." It's not always like that. Once they're better nourished, then they can reflect back on and say, "Oh, like that wasn't so great." But in the moment, the eating disorder really hijacks the brain and says, "You obey me now. This is what we do."

So you need the parents or someone responsible to step in and do the plating and the choosing because the kid really can't be objective about it. There's also great evidence that the brain distorts perceptions, so it actually can't tell if it's eating enough or not. So that's the medical side. Super easy, totally.

Ruth Adewuya, MD (Host):

I don't know about that.

Megen Vo, MD (guest speaker):

Tell them to eat more, bring them back in a week or two. And then hopefully you're able to get them in with therapy because that's really important early on. It's important across the board, but getting them hooked in as quickly as possible. For anorexia, the best evidence is for what's called family-based treatment, which really is empowering the parents to trust their instincts. They know how to feed their kid. It's just that the eating disorder sows confusion and makes them doubt themselves. It's really nice because then the family and the kid are in the sessions together and they talk about, "Okay, what are the challenges?" They do weigh them in the sessions to have a safe space to be exposed to that number and figure out, does it mean anything at all? Probably not. And so, being able to know that and have it not be a mystery and be able to process it.

And then based on this and your progress, all right, here are the goals. And actually if you ever read their notes, they'll use Socratic questioning because it's like, "Really, I didn't say anything at all." We let the parents come to or the family come to an agreement about what they're going to do. So that's like my first choice for anorexia for type of therapy. We are very fortunate at Stanford to have incredible FBT therapists. So you can imagine, there's not enough for all the need.

Ruth Adewuya, MD (Host):

Yeah, there's not enough mental health providers for everybody. I want to go back to one thing you said about nutrition and it being one of the key management options for eating disorders. At least when I was in medical school, we didn't really spend a lot of time on nutrition and get training on nutrition. And so, I'm curious, for clinicians who are navigating this, how did you get to this place where you are aware of this, or do you partner with nutritionist? How does that work out to be able to give your patients evidence-based, nutritionally-sound advice?

Megen Vo, MD (guest speaker):

It's such a good question. I'm fortunate that I work with incredible dieticians. And so whenever a new patient comes to me, they always see the therapist first, get the diagnosis, they see me for the medical evaluation, and then they spend at least an hour with the dietician to get them started. I will say that the dietician plays an incredibly important role in care, but if you're in a place where you can't access a dietician, and honestly, sometimes if you're relying on the community, people can call themselves anything. I've come across folks who say, "Oh, I'm an expert in nutrition," and it turns out they're not quite as helpful as you want them to be. I think if you can't access that, it is following up, following the

weight and the vitals, and if they're not getting weight, they're just not eating enough for whatever it is they're doing activity wise.

I think if somebody is looking for more education, like if you can shadow or meet with a dietician in your practice or mine to learn a little bit, it's really helpful. There are some really wonderful eating disorder dieticians in private practice who have active websites in social media. I learn a lot from them. What I like to give families, and I think would be good for clinicians, is called the Plate-by-Plate method. It's very FBT based as well.

Ruth Adewuya, MD (Host):

Speaking of social media, there's an ongoing conversation about the benefits and the harms with social media. From your professional experience, have you seen fluctuations in the amount or the type of eating disorders in the past couple years with the growing use of social media?

Megen Vo, MD (guest speaker):

We could take a whole other hour.

Ruth Adewuya, MD (Host):

I'm sure.

Megen Vo, MD (guest speaker):

It's really interesting. There's clear studies that show a link between increased social media use and increased body dissatisfaction. And the chicken and the egg part, right, but it is associated. I would say COVID was a really important example for me as a clinician to see, okay, kids were taken out of their normal lives, they were put online, and the only outlets they had to have interaction with other people their own age was through social media. Concurrently, we had an explosion of new referrals of patients needing to be admitted to the hospital, but I don't know that you can tell me that's not associated. I will say that also a lot of our young people that we take care of will mention there are these communities online, some which are actively marketing themselves as an eating disorder, like, "Here are the ways that you manipulate your weight at the doctor's office. Here are the tricks to not feel hungry," that kind of stuff. There are some that are more like recovery based, but again, anybody can join any group online.

Ruth Adewuya, MD (Host):

You used a term earlier, did you say ego-syntonic, is that correct?

Megen Vo, MD (guest speaker):

Yes.

Ruth Adewuya, MD (Host):

I'm wondering if social media plays into that a little bit, because I think just generally in our society, we're very egocentric now. "This is me. This is my belief system. This is who I am, and you do you, but this is me." And so I'm wondering if part of that mentality plays into eating disorder where it's like, "This is just how my body is wired." But when it comes to this, it doesn't work out so well because it's just we think this is how our body is wired and we just have to deal with it. What are your thoughts on that?

Megen Vo, MD (guest speaker):

I think you're exactly right. You're heating right on the types of things people who are actively in their eating disorder will say is, "I know you're saying to me Dr. Vo that the eating disorder is separate for me, but I don't feel that way." I have patients who say, "I feel that it gives me a sense of control, it gives me a sense of direction and centering. I don't want to give it up," which is really sad. So I think it's also our job to when you hear that, acknowledge someone. "This is how you are feeling, and I am not here to invalidate it." And also, both things can be true. You can feel like this is a part of you and you're not ready to give it up and your body can be suffering from it. And so we do have to address that. We can disagree while we're addressing it and we can be open about it.

Ruth Adewuya, MD (Host):

And then I suppose it goes into this investigation mode for the clinician to investigate what are the causes of the eating disorder for that specific patient. We know that it's multifactorial. Can you elaborate on what some of those factors are?

Megen Vo, MD (guest speaker):

We definitely know there's a genetic component. There's a high concordance among monozygotic twins. There are groups that are doing genetic mapping and have found loci related to other mental health diagnoses in the same regions as depression, anxiety, OCD. We know that if you have a first degree relative who has a diagnosis of an eating disorder or had one, you're more likely to be diagnosed. So definitely there's something about genetics that makes you vulnerable. But we also know that not every person with those gene's destined to have an eating disorder. So there's also the other things that we've talked about, the ways that your environment plays on a genetically vulnerable person. Not every person who gets called fat by their swim coach will develop an eating disorder, but it certainly doesn't help. There's media, there's messaging from important people in your lives or even not important people in your lives.

There's also some really interesting phenomena that weight loss itself can start this off, who have an illness where they lose a little bit of weight because you're not hungry when you feel sick, and then you like the way that looks and you like the way that feels and it starts snowballing. That's certainly something that we've seen as well. So it's really just the perfect storm. There's also an interesting thread that has been raised in recent years that there's just something about the developing brain that makes you vulnerable to an eating disorder that is incredibly rare to have an adult person with nothing just develop an eating disorder out of the blue in middle age. If they do when they come to care is probably something that's been there that wasn't caught. It seems there's some studies that show that just by aging some people do just get better even without therapy. So maybe there's an element of as the brain is developing and the hormonal milieu or as the architecture is forming makes you more vulnerable to these messages that wouldn't otherwise bother you.

Ruth Adewuya, MD (Host):

I'm listening to you and I'm thinking, "Wow, there are a lot of factors." But also, it lends to the challenge of managing a patient because it's this intentionality to unpack each of the potential factors that are causing it. I imagine that for each patient it's an infinite number of combinations that you can see. And so really thankful for the work that clinicians like yourself are doing to support our patients. I know that this work, we talked about it before, is in conjunction with a lot of different specialties. We talked about dieticians before, but we also know that there's a lot of overlap with psychiatry and social services. I'm

curious, how does this collaboration, other than you mentioned FBT already, but how does this collaboration play out for the patient?

Megen Vo, MD (guest speaker):

It's such a good question. In an ideal world, it's pretty seamless, that you see your medical provider for feedback on the vital signs and check-ins about any medical problems that are happening once a week or once every two weeks. And you also see your therapist, hopefully FBT, once a week, and that we are communicating in between the visits. If you set a goal with a medical provider, you set a goal with a therapist that they can pick up that thread that same week and ask how it went.

The decisions about advancing physical activity are so complicated because, sure, there's what's medically safe that I can say, "Okay, your heart rate is X, so you're good to do this." But there's also the triggers that, "Okay, so I said you could run," but the track coach is one of these people who says, "If you're getting a period, you're not running hard enough." So talking about it with a therapist about the pros and cons of doing the activity of your choice. I think that if you're still in recovery and there's an activity that's potentially triggering, trying something new. Activity is so important, but trying something that might not have those associations, but unpacking that with the therapist and coming together as a team to decide, "Okay, this is what would be safe to do, and we're going to see how it went."

Ruth Adewuya, MD (Host):

What I'm hearing from you is that it takes a team, it takes a collaboration between the patient, their support system, whether it's parent, and then the larger healthcare team between the medical side, the psychological side, maybe social service at some point, which is just incredible. I know that not everyone listening to this podcast has access to that, so we recognize privilege of coming from a place like Stanford where clinicians are able to offer that. But it sounds like what you're saying is that there might be some readily available resources online that could help the clinician who doesn't have that resource to navigate some of these conversations.

Megen Vo, MD (guest speaker):

I'll say that I and my group are always happy to talk things over with people who have questions or need help. We're thrilled to not diagnose people with eating disorders, so even if you're like, "I don't think this person has one, but I'm worried about them. I don't really know." Please, I love to see a person without an eating disorder also.

Ruth Adewuya, MD (Host):

That's excellent. Thank you so much for that openness to collaborate with our community partners. How do you approach the discussion of food and weight, already being sensitive topics? Your patients are already coming with that sensitivity in part of their families. How do you approach it, and how should clinicians approach this discussion?

Megen Vo, MD (guest speaker):

It's such a good question, especially in the era with the new obesity guidelines and me working on the other end of that and really recognizing how hard it is to take care of people who are in larger bodies and how to message sensitively. Because I definitely see people who started at a higher weight and lost weight through restriction or abnormal behaviors and then became unstable and are low weight. So whenever I meet somebody, I kind of preface with, "I don't care what your weight is, and this is the last

time we're ever going to talk about it." Because I don't care. Truly, if you asked me what it was, I would have to look it up because it's not in my brain. But if you ask me what your heart rate was or when your last period was, I would know that because that's what's important to me.

So what I care about is what your body's saying and not what the number on the scale is. I think we have great evidence to show that BMI and weights, while they have their places from a public health perspective of knowing if you are at certain percentiles, you are at higher risk of certain things, but that doesn't mean that's your destiny for you as an individual. And so, I think just because something is measurable does not mean that it is a good measure.

Ruth Adewuya, MD (Host):

If I was in church, I would be like, "Say that again."

Megen Vo, MD (guest speaker):

Buy me a billboard because-

Ruth Adewuya, MD (Host):

I know.

Megen Vo, MD (guest speaker):

... it absolutely makes sense to know. And of course, I led this off with, "If somebody's losing weight, you should be worried," but once you've identified them, spending a lot of time obsessing over the weight number and modeling for the patient that we can know, we cannot know, it's all going to be okay because what matters is the other stuff, the heart rate, the period, how are you functioning. I say it's your health information, you are of course entitled to know it, but I always want to know, how does this information help you? What do you do with it? And is there a number that is scary or stressful? Not because that's right or wrong, but because I really want to know.

Sometimes what happens is whether they gain or whether they lose or whether they stay the same, the eating disorder is just as upset. It's okay to feel upset, and at the same time it distracts from what really needs to happen, so I don't spend a lot of time talking about it.

So that's weight. And then food, I'm very much of the camp of all foods fit because when you deprive yourself of something, that's what sets you up for overdoing it later because your body feels the sense of this is not allowed, and it can set up cycles of restricting and then binge eating. And so, we say everything is allowed. Of course it's a problem if you only eat ice cream. Of course it's a problem if you only eat kale. But there's room in a day for both. And so really incorporating that and encouraging people not to count calories because it'll just drive them insane.

Ruth Adewuya, MD (Host):

Yeah, that's excellent. Final question as we wrap up our conversation, the key takeaway that you have for clinicians who are navigating these discussions with patients and parents or just something for them to consider on this topic?

Megen Vo, MD (guest speaker):

I would say what I said initially, like, if your instinct says something is wrong, there's probably something wrong. So spending your time getting a history and then following them. If they're not in a place yet

where they can even verbalize what's happening, but you give them good counseling, like, "I need you to turn this around. I need you to gain some weight," and if it's not happening, then definitely please refer a call because they might be in this place where the brain has just hijacked them and they can't control it.

The other thing... You asked for one, but heres too... the other thing I often hear is, "Oh, but they're eating. So I don't think it's that bad because they're still eating." And actually that's really what's most common, is they eat, but their needs are so high because they're adolescents and they're growing that it's just not enough for them to keep up. And some people just need tens of thousands of calories a day to gain a pound. So if they're not gaining that, they're just not eating enough.

Ruth Adewuya, MD (Host):

This has been such a great conversation. I've learned a lot. Thank you for sharing your insights with us. I'm so appreciative of the work that you and colleagues like yourself around the nation are doing to support our pediatric patients, their families, and their communities on this topic. So thanks for taking the time to talk to me today.

Megen Vo, MD (guest speaker):

It's my pleasure. Thanks for having me.

Ruth Adewuya, MD (Host):

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