Ruth Adewuya, MD (host):

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I am your host, Dr. Ruth Adewuya. In this episode, I will recap our season so far, highlighting the conversations I have had with our episode guests. At the beginning of the season, I said, "We would not shy away from difficult conversations," and we have done just that. We started off this season by discussing the public health implications of gun violence. With this topic feeling especially relevant now, Dr. Maya Rossin-Slater gave us insights on how even the presence of guns in schools can have lifelong consequences on children's trajectories and mental health.

Dr. Maya Rossin-Slater:

The health impacts of gun violence are extremely far reaching, and are not solely captured by the direct numbers of deaths and physical injuries. As research has shown, the ripples of gun violence, especially in school settings, really can last for many, many years after the actual gun violence event. And even in cases where there is no direct victim, thankfully, there are no deaths and maybe not even any injuries, we still see far-reaching health and wellbeing impacts on kids and on their communities.

We jointly looked at the impact of school shootings in the United States on youth antidepressant use. We were interested in understanding whether in the aftermath of a school shooting, the rate of antidepressant prescriptions in the local community is changing. The rate of antidepressant prescriptions for kids under age 20 increased by more than 20%, relative to what was going on before the school shooting.

The other kind of two main things from that study is that these effects were concentrated amongst shootings that had at least one fatality. So this large increase in antidepressant prescriptions was driven by shootings where there was at least one death. The main set of findings was focused on the two-year follow-up period, but when you extended the follow-up window to three, four, even five years after, we still saw this elevated rate of youth antidepressant prescription drugs. Indicating that these mental health issues that are arising in the local community, in the aftermath of school shootings, they likely last for many years to come.

It also echoes some of other research that have looked in this area who have, for example, found a heightened rate of suicides in local communities that have experienced very big mass shootings. Kids who were at schools that experience shootings, and follow them over time and look at both their short and longer term outcomes in terms of their educational trajectories, their attendance, whether they graduate high school, whether they go to college, and then even when they're young adults, are they working? And their earnings.

Ruth Adewuya, MD (host):

It seems that the school setting is a particularly big factor in amplifying this impacts on children. What are some reasons this might be?

Dr. Maya Rossin-Slater:

We view in our society schools as being kind of special places for kids, and there's something particularly traumatic when we disrupt that.

Ruth Adewuya, MD (host):

What is your key takeaway for clinicians who are taking care of patients that have been impacted by gun violence?

Dr. Maya Rossin-Slater:

First of all, the clinicians that are on the ground dealing with patients who have experienced trauma from gun violence, whether physical wounds or mental health consequences, this is really important work. And I just want to say thank you for doing that work to all of the listeners who are involved in that.

Second of all, there's still more to be learned about what people who have survived gun violence, especially in school settings need. The clinicians that are on the ground treating these patients and working with these patients know this. And working together on this as a public health issue, I think is really important and key to making progress on it in order to understand how to help.

Ruth Adewuya, MD (host):

Especially with the pandemic, many of the hardships and burnout the physicians silently battle have been coming to light. Episodes 46, 48, and 51 were a mini-series dedicated to explore this problem and the stigma behind it and also discuss resources and initiatives for help.

In my conversation with Dr. Christine Yu Moutier, president of the American Foundation for Suicide Prevention, she gave her insight into physicians suicide, and the heightened risk factors associated with their jobs. She also talked about potential warning signs to look out for.

Dr. Christine Yu Moutier:

We've known for a long time that the risk of physician suicide is very likely greater than that of the general population. One of the most potent risk structures for suicide are mental health conditions that are going unaddressed or undertreated. We know that they're as likely to have been suffering from a mental health condition, but less likely to have been engaged in treatment.

And for physicians, what we now know is that they are three times more likely to have had a job related stressor, a disciplinary problem, something job related, three times more likely than the general population. And they are far less likely to have experienced the usual sort of stressors, losses that are very common preceding suicide for the general population. The last thing is they are 20 to 40 times more likely to have had substances in their system, in their toxicology reports at the time of death, and those include prescribed medications like benzodiazepines, antipsychotics, and barbiturates.

There was an informal taking of self-prescribing, or informal curbside, getting meds from a colleague, because, "I'm not sleeping, or because of my new onset panic attacks." But we're not affording us ourselves the benefit of a full medical psychiatric evaluation to really get at the underlying roots and have the follow-up necessary for comprehensive care. And perfectionism, shame, rejection, humiliation, those are common contributors before a person's attempt or death. And amongst physicians, we can just think about the culture that we live in, the way that we are wired as human beings, we tend to be a little more tightly wired, that's how we succeed in medicine.

And not that it's all bad, but when it comes to life life-threatening distress that we only know to apply a certain set of responses, which is, try harder, get more disciplined, maybe sleep less, so that I can just ramp up my effort, that really reaches a point of diminishing return. Our behavior patterns are actually pretty darn stable, and when your gut gives you that red flag feeling like, "Whoa, something my colleague just did was like out of character," I think we've written off our own gut instinct around colleagues' distress, for a whole lot of reasons.

But I think things like just showing up late when they're usually on time, and I don't mean just one time thing, but again, when your gut tells you, "Whoa, something seems off," it might be their tone of voice, it might be the way that they talk about either their patients or things in their personal life seem like they are overwhelmed and struggling. Certainly, they can sometimes use actual language that tips you off to the fact that their mental health is deteriorating, and those could be words like, "I'm feeling overwhelmed," "I feel trapped."

If they talk about feeling like a burden to others, that is really big suicide warning signal. What I'm also proposing is that we can be much more caring and attentive to one another. Like that sense of community that we actually are in this together and we need to be watching out for one another, and we can take actions on that.

Ruth Adewuya, MD (host):

I really like what you said that we're in this together. It's a community and I think the more that we are vulnerable with each other, it will lower that bar. It takes psychological safety within groups to be able to be vulnerable and have those conversations. That's definitely a way that we can move forward.

Episode 48, featured Corey Feist, co-founder of the Dr. Lorna Breen Heroes' Foundation. He emphasized the importance of checking up on colleagues, normalizing mental health discussions, and diving into barriers preventing help seeking, and the policy steps the foundation is taking to combat these issues.

Corey Feist:

Supporting yourself and colleagues when they seem to be suffering or even when they look like they're having a fine day, creating a supportive culture, where we're just checking in on each other. And we're saying, "Hey, Ruth, how was your weekend? No, how was your weekend really?" Or, "How are you doing to you doing today?"

There are barriers to seeking mental health treatment that are real for doctors and nurses across this country, and other healthcare professionals. Clue that appear on different kinds of applications that doctors and nurses have to fill out to get a job in a hospital. There are questions that exist in those applications which go far beyond the bounds of the American with Disabilities Act, and ask questions beyond what is acceptable, frankly.

In many states, a doctor's own mental health medical record can be subpoenaed when that doctor is being sued for malpractice, which to me is unbelievable, mind-boggling, and perverse. And there are programs like in Virginia that are called Safe Haven programs, where that record is maintained confidentially.

The barrier was brought to our attention by the widow of a physician who died by suicide in the last year and a half, and this physician, named Dr. Scott Jolly, was limited by his own health plan that he had on his insurance card. He could only use the services of the hospital he... When you talk to the widow of Scott Jolly, she would say that, "Limiting Scott's ability to only go to get mental health care at his own hospital was really what contributed to his decision to take his own life. Because he was literally wheeled by his colleagues when he was discharged, and it was just too much to bear."

So health plan design and changing the health plan design is that sixth barrier. What we've done on our website at drlornabreen.org is we've created a free toolkit. First audit questions that appear and any of these applications. The second, change them, and we've given some criteria for a what's acceptable. And then the third, and importantly, we need to communicate to the workforce.

Ruth Adewuya, MD (host):

What are some of the policy initiatives that your foundation is involved in that addresses this topic?

Corey Feist:

March 18th, 2022, President Biden signed into law the first ever law that's focused on supporting the wellbeing of the healthcare workforce. And what it's doing is it's building the first few steps of an entire staircase of health policy that I think needs to come into play to support the wellbeing of the healthcare workforce.

And it's doing that by creating programs at training institutions and at non-training institutions to support the workforce. It's doing that by creating a national awareness campaign focused on employers and on individuals on what they need to do to be supported. At a state level, what we're really focusing on are removing these barriers to mental health access.

Ruth Adewuya, MD (host):

In the third episode of the Physician Distress Mini-Series, I talked to Dr. Ariel Brown, founder of The Emotional PPE Project. In that conversation, she expounded on barriers preventing help seeking and more resources that are available.

Dr. Ariel Brown:

I do believe that stigma's really at the root of all the other barriers. The first one is the concern that receiving mental healthcare could have an impact on their career. So sometimes this is just a perception, it's a fear, but very much in reality there are very real, actual consequences to career that can happen when a physician seeks mental healthcare.

The second barrier is time, cost, access to care. A physician may work 50 to 70 hours a week, and in addition to this, contributing to exhaustion and contributing to burnout, the lack of time itself is a barrier to health seeking. Any of us who are looking at popular media at all. And this challenge is compounded for physicians because of these concerns for confidentiality, and it leads many physicians to prefer providers outside their home institution, and that decreases access to care, it increases the time associated with finding a provider, and it can also increase cost.

To me, I think the umbrella idea that defines this stigma is that having and admitting that one needs emotional support is equal to being impaired as a doctor. And we know this is not true. There are really great toolkits out there for physicians who are peers, who are leaders, program directors that can help guide conversations, and help guide looking for these warning signs.

And specifically, AMA published a toolkit on preparation for NPSA for the National Physician Suicide Awareness Day. Also, the Lorna Breen Foundation has a great toolkit that can be used to help guide these conversations for helping support physicians who are having these triggering events.

Ruth Adewuya, MD (host):

Over the past three years of the Pandemic, we've had many people having a tough time sleeping because of current events, but one group of people that's been having a hard time even outside of the pandemic have been teens. So Dr. Caroline Okorie and I discussed the link between sleep and mental health in children. She also gave tips for helping children adjust to school routines, which can be especially helpful now as kids return back to their routines fresh off of the winter break.

Dr. Caroline Okorie:

There is this co-dependent relationship between mental health and sleep that we know about. So we know that poor sleep can worsen mental health issues that already exist or bring about ones that weren't there before. We also know that mental health issues can also then relate to poor sleep, so unfortunately, they can actually really be interconnected.

I've got a lot of people who come to my clinic who say, 'Hey, my child is having depression or anxiety or some issues in school. If you could fix their sleep, it'll make everything better." And unfortunately, I say, "It's not that simple." It's really addressing both in parallel, which is really important, especially if those who have serious mental health issues, anxiety, depression. We actually know that sleep disruption can be associated with suicidality in some kids, so it can be really serious. I always tell parents, "Address both talk about sleep, try to work on sleep. At the same time, seek a mental health professional to help you as well."

Ruth Adewuya, MD (host):

You talked about sleep and anxiety and depression, does it tend to vary by person and by age?

Dr. Caroline Okorie:

We have great evidence to show that sleep issues and anxiety are very well tied together. Depression and sleep issues are also tied together. Also, attention deficit disorder, kids struggling in general having lower mood, they see those things commonly tied. Oftentimes though, it is also important where sometimes just having sleep issues can seem like it's a primary mental health issue, where really the kid's just tired. And so sometimes it's actually helping the sleep can actually improve how a kid shows up at school and they seem less tired.

Ruth Adewuya, MD (host):

How can parents help their children make the adjustment? If they are talking to their clinicians, how can clinicians help their parents, help their children make the adjustment?

Dr. Caroline Okorie:

My recommendation for those who maybe aren't still quite have started school yet is to actually try to do it gradually. The younger the child, I say, the more gradual the transition, so sometimes it might be just shifting your wake up time by half an hour every day, every other day, just until you get closer to where you want to be. Starting to actually develop a more structure in your day. Have a regular lunchtime, have regular dinnertime, have breakfast in the morning as a family. Just start to reestablish structure. If you have the time, and if you anticipate in that time, gradual transitions, the more gradual the younger the child. And then really trying to have a positive anticipation for the change.

Ruth Adewuya, MD (host):

Monkeypox became a trending topic in the United States in the summer of 2022. Then in the fall, a public health emergency was declared. At the forefront of this work at Stanford, we had Dr. Benjamin Pinsky and Dr. Jorge Salinas, whom I chatted with on this trending topic. Could you update us on this status of the Monkeypox outbreaks?

Dr. Jorge Salinas:

Yes, there has been, especially in America, but also in Europe, a steep decline in cases. How low it goes, it's still to be seen. People at risk of acquiring Monkeypox have definitely modified their behaviors. CDC

has done analysis and people have been more careful, and have reduced the number of sexual partners that they have. There has been also more knowledge about how this disease is transmitted and how it is not. Initially, there was some fear that this would be more easily transmissible, but nowadays, it is believed to require a great amount of physical contact such as during sex.

Ruth Adewuya, MD (host):

Am I correct that there is a Monkeypox rapid test in development? And if so, where are we with that and how effective are we finding it to be?

Dr. Benjamin Pinsky:

As far as I can tell, there are no rapid antigen tests for Monkeypox available in the United States at the moment. There's only two tests that are available through the FDA. One is FDA approved. This is the non-variola orthopoxvirus q-PCR test that was developed by the CDC and distributed to what's called the Laboratory Response Network. And this has been FDA cleared for several years, and it detects Monkeypox but also cross-reacts with some other pox viruses like Cowpox, for example, or vaccinia virus.The other FDA authorized test...

We've learned that and seen that from SARS-CoV-2, that the variants were named after the countries from which they were first identified and that practice is now in the past. So that's what's occurred with Monkeypox. The two clades now are just named Clade I and Clade II. We don't need to put the stigma on the place of origin. It's not even known if it's the place of origin. Folks shouldn't be penalized for doing important surveillance work, they should actually be applauded.

Ruth Adewuya, MD (host):

Dr. Salinas with the Monkeypox vaccine. Should people get it preventatively or once they are experiencing symptoms?

Dr. Jorge Salinas:

Vaccines work primarily as prevention. That being said, not every American is eligible for vaccination. Vaccines are currently recommended for people at the highest risk, and that involves people that have multiple sexual partners, preferentially men.

Dr. Benjamin Pinsky:

It's difficult to predict these things with infectious diseases. They're by nature, unpredictable, and we'll have to see. And we always say that we'll have to closely monitor, which at times seems self-serving. But it's true, we'll have to monitor the high-risk at-risk populations and determine whether this is going to continue to be a problem, or if it's something that through the behavior modifications and vaccination, and availability of testing, that's something that we've been able to get completely under control.

Ruth Adewuya, MD (host):

Next, in episode 50, I had a great conversation with Dr. Kimford Meador on pregnancy and epilepsy. Where he gave important insight into how treatments have historically impacted and caused developmental issues, as well as where treatments are now and the future pipeline of treatments.

Dr. Kimford Meador:

There's a lot of women with epilepsy where there's no risk of infertility. There may be other subsets of women with epilepsy that have risk of infertility. In the 1950s, people thought maybe drugs can harm the baby, and then they checked in the epilepsy population, they found there was increased risk to malformations. But it was not to the 2000s that we really started to see differential effects in those malformations, with the highest risk being from valproic acid or Depakote is American brand name.

Around the same time, we had started investigations into this area in 1999 looking at neurodevelopmental effects. In recent years, a lot of population based studies out of Scandinavia and France and other places have confirmed this signal for Valproate over and over again. It's very strong signal. It can cause a drop in IQ. It can cause a dose dependent effect on a variety of cognitive measures, and it can also increase the risk for autism.

It's risk for malformation is about 10%. It's risk for cognitive decline is about a seven to 10 point drop in IQ compared to other any seizure medications. And I think a doubling of its risk of autism, so it has serious problems. And is a drug we don't really like giving to women at childbearing age, because of that. The medicine is effective for a particular type of epilepsy, a primary generalized epilepsy. Most of those women can be controlled by other medications, so we're starting to define some of the drugs that have high risks that we try to avoid. Some of the drugs that have low risk.

Ruth Adewuya, MD (host):

To wrap-up our 2022 calendar, I had a great conversation with Dr. Michael Gisondi, where we explored the use of social media for learning and for medical knowledge dissemination. He also gave us great tips for utilizing online tools, and his story on how he got started on social media.

Dr.ichael Gisondi:

Each of the sites has their own reason for existing and can be used in different professional ways. There's a lot of different reasons then that physicians choose to engage on these sites for professional reasons, just to name a few, public health initiatives, combating health misinformation, advocacy for social justice or health equity.

I do think we should talk about professional branding a bit, because that's a reason that physicians are going to, particularly, Twitter amongst the social media sites. It also can lead to opportunities that they may not have gotten if they weren't visible online. And I can give examples. I've been invited to lecture at several international conference, by colleagues in other countries, who I first interacted with on social media.

But I think of all the reasons that physicians should be online knowledge translation in the digital era is especially important. Take, for instance, March 2020, when New York City physicians took to Twitter to post images of chest radiographs of patients with COVID pneumonia. So instantly every one of us on Twitter knew what COVID pneumonia looked like, and we were also able to learn about low oxygen saturations that were tolerable, proning patients, things like that.

And then consider how long it would've taken to disseminate that same scientific information without social media. Maybe it would've gone to the next national conference of some relevant professional society, but that wouldn't be teaching physicians to national scale. Or it may take many months to publish a manuscript. And we learn from Twitter instantly. Digital and social media are transforming medical education.

Textbooks are being supplanted by medical blogs and medical podcasts that are more reliable, trustworthy, and I'd say comprehensive by the day. Might have a social platform. But all that said, I

spend very little total time on Twitter. I want everyone to know that I'm not on it for hours a day, and a Novi should not be intimidated or concerned that they're going to waste hours and hours on the site.

So I get on there, I post something, I maybe scroll through other posts for like a minute, very briefly. I'll retweet posts that I do think should be amplified, generally of my colleagues. To get started, I recommend that physician users curate medical or scientific content and post that.

So what do I mean by that? So you're reading a journal article online and you think it's interesting and you want to share it with people, click on the share article button, click on the Twitter icon, assuming you have an account, and then it's automatically going to make a post for you. You could go beyond that when you're curating content and add context, and this is what creates your professional brand.

So at the top of the post, just put a single sentence reason why you posted it. Why did you find it interesting? So I found this article interesting because... Or I learned X from this article, and describe what it is. Single sentence and then tweet it out.

Ruth Adewuya, MD (host):

It has been a rich season so far. If you are interested in the full version of any of the topics mentioned so far, you can listen to them wherever you listen to podcasts and on medcast.stanford.edu.

So what's coming up for the rest of the season? Great question. I will continue to cover hot topics in medicine, healthcare, and education. In February, we will have a cardiology episode and bring awareness to eating disorders. In honor of Women's History Month, I will highlight two notable clinicians and their journeys. I will also discuss topics such as the connection between climate change and mental health, incorporating sex, gender, and race into biomedical research, and clinical topics on gut health and esophageal updates with national experts.

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