

# Just Workforce Resiliency for Sexual Assault Nurse Examiners: Part 1

**Introduction** [00:00:05] Now this is recording, RTI International Center for Forensic Science presents Just Science.

**Voiceover** [00:00:19] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In episode two of our Workforce Resiliency mini season, Just Science sat down with Dr. Cara Berg Raunick, a women's health nurse practitioner and the Director of Clinical Quality and Advancement at Health Care, Education and Training, to discuss vicarious trauma experienced by sexual assault nurse examiners, also known as SANEs. Vicarious trauma - the cognitive changes someone experiences after witnessing traumatic events - affects SANEs profoundly, particularly those providing care in the aftermath of sexual violence. According to Dr. Berg Raunick, the ramifications of SANEs experiencing vicarious trauma could be devastating to the practice of medical forensic examination. Listen along as Dr. Berg Raunick discusses her journey through anti-sexual violence practice, the effects of vicarious trauma in her own life, and her research findings in this two-part episode of Just Science. This season is funded by the National Institute of Justice's Forensic Technology Center of Excellence. Some content in this podcast may be considered sensitive and may evoke emotional responses or may not be appropriate for younger audiences. Here's your host, Donia Slack, with co-host, Dr. Heidi Eldridge.

**Donia Slack** [00:01:34] Hello and welcome to Just Science. I'm your host, Donia Slack. I'm joined by my RTI colleague and co-host, Dr. Heidi Eldridge. We are with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. Welcome, Heidi.

**Heidi Eldridge** [00:01:47] Thank you, Donia. Today, our guest is Dr. Cara Berg Raunick, the Director of Clinical Quality and Advancement at Health Care, Education and Training. Welcome, Cara, and thank you so much for joining us.

**Cara Berg Raunick** [00:01:58] Thank you so much for having me. I'm so excited to be talking to you today.

**Heidi Eldridge** [00:02:02] We invited you because we really would like to talk to you about your paper Vicarious Trauma Among Sexual Assault Nurse Examiners, which we both read and enjoyed very much. And so with that in mind, we would love to hear a little bit about your background, what led you to write this paper and just any interesting anecdotes that get us into this conversation.

**Cara Berg Raunick** [00:02:21] I am a doctorally trained nurse practitioner. My focus has always been women's health and sexual medicine, but I really started my nursing career as a SANE nurse, as a sexual assault nurse examiner. My first job was on the postpartum floor at the Cleveland Clinic. So women's health, people sort of always talked about that that's happy nursing, right? Happy, healthy families. And I paired that with forensic nursing. So I guess my interest in sexual assault nursing came further back even before I was in nursing school, as many of us do, had, you know, a personal history with a really, really dear friend the summer before I went to college was sexually assaulted while she was on a date. And I was the friend who figured out getting her medical care or getting her emergency contraception and STD testing and sort of moving through that process with her and seeing how it affected her. And that was, again, right before I left for college. And

so when I arrived at IU, at Indiana University in Bloomington, I knew right away that I wanted to engage in sort of anti-sexual assault work and anti-sexual violence work. And so that's where I spent most of my volunteer time during college was doing sexual assault prevention education, and I love prevention, but also found that I wanted to be doing a little more direct service. So I started volunteering at the Rape Crisis Center in town and worked on the crisis line as well as an on-scene advocate, which means that we would volunteer to go in with survivors as they went to the hospital for medical care and for the rape kit examination, which ultimately it turns out is performed by SANE nurses, by sexual assault nurse examiners. And so that was really my first exposure to that. My undergraduate degree was not in nursing. So when I went back to school for nursing, I knew because of that work, that SANE work was something that I really wanted to be doing because SANE work requires some really good assessment skills and some broad base in nursing knowledge. You're generally not allowed to start that work as a new graduate. So again, started on the postpartum floor at Cleveland Clinic, but as soon as they allowed me to, I joined the Cleveland Clinic's forensic nursing team, and did that work the whole time that I was completing my master's degree to become a nurse practitioner and all of that so. So working as a SANE really informed my philosophy of care - the way that I bring trauma-informed care and a trauma-informed approach to all the work that I do and really just, again, shaped the trajectory of my career. And I will say, even though I'm no longer working as a SANE, it is among the most meaningful work that I've ever done in my life up to this point. So that's what brought me to forensic nursing. What brought me to this research - so I got a doctorate in nursing. I have a DNP, which is a Doctor of Nursing practice and as I was exploring topics for my research for that degree, I was exploring some things that I knew I was seeing in myself and my colleagues on the forensic team. And a few things really stood out that were happening both in my personal and professional life. I think the first thing to say is I came from a peaceful home, a really sheltered home. It's generous to give me an ACE score of one, right? But one of the things that I noticed was that as my husband and I were talking about moving from Cleveland to Indiana, which we're now back in Indianapolis, this was before we had kids, we were- we were barely married, and I found myself really overwhelmed by thoughts about what it would be like to eventually raise kids away from my parents who are in Michigan, and that as a two working parent household, the idea of what we would do with our children if we didn't have my parents as the only acceptable adults to watch them was profound and chilling fears that just seemed really different than the experience of my peers that were at similar life phases. And I just realized something different was going on in my brain with, I think everyone worries about who's going to watch their kids and what's safe and all the things, but something really different was happening for me. And then I also noticed, I remember once working on a school project with some other nursing students, and we had met out in a park in Little Italy in the area that I lived, and I remember watching these kids play while we were doing our work and that I really found myself thinking, like, who on this playground is going to end up as victims and as perpetrators and who will be my patients. And I realized that I was watching these kids play. It was fun. We were again at a playground - like nothing bad was happening. They were carefree and innocent, and this was what was going through my mind. And I realized very quickly that those are not thoughts that you share with people who don't do the work, with my non-SANE friends, right? And I'm sure there are other listeners here who can relate, right? Not just SANEs, but anyone who works in kind of the forensic field. Those were kind of strange and different thoughts. So those are my personal examples.

**Heidi Eldridge** [00:07:29] Because you opened the door, I would love to know what was your undergraduate degree in because it's funny the paths that we take to get to these different careers. And I think some people think, you know, and land in the scientific

career, you've got to know from day one - it sounds like you were very driven all along with this career goal. But how did you get there? Where did you start?

**Cara Berg Raunick [00:07:48]** So I actually started school as a theater major, so very different. And actually, because of this experience and motivating experience with my friend, I switched gears to my undergrad degree was in human development and family studies, and I minored in public health and human sexuality. So I thought that I was going to get a master's in public health, and it was actually through some volunteer experiences during college that I realized that nursing and specifically being a nurse practitioner was probably the best way to serve people in that kind of women's health and sexual health space.

**Donia Slack [00:08:23]** So one of the things that really interested me in your back story there and how you, eventually, it led you to the research that you presented in this paper, is that you were noticing differences in what sounds like your cognitive schema. Your actual world view was impacted, and the one variable that you probably attributed that to was the forensic nursing that you were involved in. And this is really interesting to me because on the topic of vicarious trauma, what I understand some of the gaps in the literature that exist right now or some of the literature had some discrepancies on the actual vernacular, right? The actual terminology that is surrounding trauma, especially as it pertains to people who have not experienced trauma firsthand, but instead things like secondary traumatic stress, vicarious trauma, compassion fatigue. So with that, if you could maybe expand a little bit about your thoughts on that and how that might have led to the research at hand?

**Cara Berg Raunick [00:09:26]** Yeah, absolutely. One of the things that was really challenging in starting this research is there are all of these associated concepts around secondary trauma, and I called them secondary trauma in my paper, kind of distinguishing from primary - something that had happened to you versus this whole group of secondary trauma factors. So these are frequently interchanged in writing and in discussion, and I think that that's really problematic because when we're talking about an academic investigation, it's so important to be precise so that we know what we're measuring and high quality research can then move forward giving us accurate information on these issues. So it was really, really important to me to distill down, and I think that was one of the biggest challenges in going through the literature review, which I'm sure you experienced as well. So secondary traumatic stress really focuses on the behavioral symptoms, so it is more in line with PTSD, things like avoidance and hyperarousal or hypervigilance. Another unique thing about secondary traumatic stress, which is different from vicarious trauma, is that it can occur with just interacting with one trauma narrative, so it can have a rapid onset, be based on one significant story that you hear and again, comes mostly about those behavioral symptoms that we see. There's another concept - which is less about secondary trauma, but often gets intermixed - and that's burnout. And we hear so much about burnout now, especially. But it also was really hot when I was doing the research several years ago. So burnout is different in a couple of ways. It can happen from sort of any challenging environment and work with any kind of challenging population. So not just trauma, that's one of the things that distinguishes it. It has three components that are central to it - emotional exhaustion, depersonalization or cynicism, and then a decreased sense of personal accomplishment. All of those resonate really strongly with me. I think this is a really important concept that is really linked to vicarious trauma. But again, it has some really important differences, and I think they're often kind of smooshed together, inappropriately - smoosh being a very technical term, of course, right? So and then the last term that gets kind of thrown in there a lot is compassion fatigue. And

I will say as far as like surface level resonance, I think compassion fatigue, we intuitively know what that means. We hear that so much right now living in the time of COVID, right - especially talking to health care providers and really our whole society in this moment. The problem is that when you look at how it's defined academically, it doesn't actually, in my mind, reflect what it feels like very well. So, so compassion fatigue actually originally was another name for secondary traumatic stress sort of put out there to be less stigmatizing than that concept. And now there's a definition of it as sort of a combination of secondary traumatic stress and burnout, and I just find that really confusing. Well, it really resonates and sits with me and I have- I have a physical reaction to compassion fatigue and how much sense that makes. On paper, it's much harder to deal with and just doesn't- doesn't line up for me. Whereas vicarious trauma was really, as I started reading, the concept that aligned with what I found myself experiencing and my colleagues experiencing. So I was really most interested in this concept of vicarious trauma that really does focus on those cognitive changes and that worldview change, like you said. So vicarious trauma has been around since 1990, originally conceptualized by McCann and Pearlman, and it is theoretically defined as changes in cognitions, beliefs, and assumptions about the world that come from empathic response and repeated exposure to narratives of trauma. To me, it is so clear by the nature of what we do as SANEs, and I would venture as forensic scientists, we clearly are going to be at high risk of vicarious trauma by the nature of the work that we do. So we obtain detailed histories of an assault in the acute aftermath of the assault, and we spend hours one-on-one with one patient. I don't think that's doable without empathic engagement. And Donia, I read in your review article, one that you referenced that talked about crime scene investigators and one of the ways that they cope was sort of separating from the victims, right? And really depersonalizing that, that they emotionally distanced was what you talked about, what they talked about, viewing victims more as carriers of evidence. And I just think that for forensic nurses, that's not possible. You're in there with them, and one of my soapboxes about forensic nursing is really that we are nurses first, right? We talk about this as a medical forensic examination, not a forensic medical examination. OK. I serve my patient best by collecting high quality evidence, by giving them the opportunity to move forward with the legal system if they choose to. I am well-positioned and well-trained to do excellent, excellent forensic evidence collection, right - that is what forensic nurses and SANEs are trained to do. However, my primary focus will always be the health and wellness of my patient and initiating that healing process. And we know that providing that patient centered, trauma informed, culturally sensitive care helps allow patients to further engage with the legal system, right? We know that when patients receive that high quality specialized care, they're more likely to choose to move forward and to do so in an effective way. But really, my primary goal is to care for my patient, again, and their health and wellness. So there's no way to avoid empathic engagement is what I'm saying in the work that we do. A few of the keys of vicarious trauma, it's repeated exposure, which is every patient we see is a new story, that engagement. And another thing that I was really interested in was that it's classified as having gradual onset that can increase over time, which is also different than that sort of secondary traumatic stress rapid onset one story. And then finally, that it, of course, is specific to trauma workers, not other challenging populations.

**Heidi Eldridge** [00:15:42] I think that's a really interesting point, Cara, about the interactions that you have with your patients because I come from a background where I did crime scenes for a number of years. And as you said, we have to have different coping mechanisms because our situation is quite different. And even though we're all doing forensic work and we're all working on cases and we're all hearing really bad stories and seeing the aftermath of those really bad stories, the interactions are fundamentally different. You know, when I came to a crime scene, my victim was either dead or not

present most of the time - I wasn't having a conversation with them. And so it was a coping mechanism that we used to, I know I personally would view it like a puzzle. It wasn't a person. It was a puzzle. It was something to figure out. And you know that that could help you to do that sort of distancing and disassociating from the horror of whatever the case was. But I think it's a really important point that the SANEs not only don't have that luxury, but it's possibly outside their own perception of their role because they're there to be helpers to the victim in a very personal way that a lot of the rest of the forensic disciplines aren't engaging in that way.

**Cara Berg Raunick [00:16:52]** It's actually one of my biggest pet peeves when we hear that narrative of the forensic exam of that sexual assault kit, the medical forensic exam, as being revictimizing or as you hear people talk about the body as a crime scene. And again, well, there's an element of that because I am collecting evidence, that's not the point, and I really think we need to sort of dial that rhetoric back. I think it discourages people engaging with the process. And I think we actually could view the medical forensic exam instead as an opportunity to initiate healing instead of talking about it as retraumatizing.

**Donia Slack [00:17:28]** I think something you said there is really important in that if your nurse practitioner who's performing this exam is negatively impacted at this point - have gone down this path of their actual world view has been permanently disrupted now because of the work that they've done - you know, this could have negative ramifications to the job that needs to be performed with trauma-informed health care in mind, right. So this is something that I believe that as we awaken the community to the problem that they can see that there is a negative impact, not just to the actual person it's impacting, but it actually has ramifications downstream of your SANE provider not being able to provide empathetic care anymore because at that point they have been permanently impacted by the work that they have done. That has ramifications not just to the case, but actually to the patient. And so I think that research like this is critical to be put out into the world so that decision makers are able to see that this needs to be dealt with early, right. You have to have an awareness that this is a challenge and put measures into place to make sure that the forensic nurses are supported in a way that they have outlets, or they have coping strategies, or that there are areas to prevent that this becomes a bigger problem. So do you have any thoughts on what might be some strategies for decision makers to be able to ensure that this problem is paid attention to?

**Cara Berg Raunick [00:19:05]** Yeah. So I think one of the things that's really important is to look at sort of the sequelae of vicarious trauma. So what happens when someone's experiencing vicarious trauma and we know that VT is linked to burnout, and we talked about those key components of burnout - that depersonalization, emotional exhaustion, and decreased sense of accomplishment. And those are not things that you want your forensic nurse examiner experiencing, right? We also know that with burnout comes higher rates of attrition and turnover. It takes a lot of resources to train and orient a new nurse, period, and especially to train a SANE nurse. It is intensive training, and it is something that simply only gets better with time. Every case is so different that the more that you do, the better you are. That's true with I think most, most careers and most engagements, right, but especially here. So if we're losing nurses to vicarious trauma and burnout, that's high turnover, that's wasted resources, and it's diminished patient care. We see vicarious trauma linked to decreased empathy, to distancing from patients, and to separations from peers and colleagues as well. And I think that's really important. So when you think about the wealth of knowledge and skills that builds over time, if we're losing people, if we have that poor retention, that has huge implications. We also know that support from leaders is something that's been shown to help mitigate psychological distress even more than

support from family, friends, and peers - although I would argue that all of that support matters - but we know that support from leaders matters. And that means that we need strong leaders with empathy intact to support the whole team or else the cycle just continues to feed itself. But a couple of other sequelae include we know that vicarious trauma is linked to higher rates of mental health concerns. So not only depression and anxiety, but also substance abuse, and we see use of substances as coping. It's probably not our preferred coping mechanism. I think it can be more and less healthy. But one of the things I remember so clearly from when I was doing this work is having people rush home after finishing a shift to grab a drink. My program operated in an on-call setting, so if two patients came in at once, we would sort of have to call down our list of support people to bring in a second nurse. And one of the only acceptable reasons to not come in was I've had a couple of drinks, I can't- I can't make it in, right. And because we are caring for these patients on the worst day of their life - and it is a privilege and an honor to do the work and we're passionate about the work - and so to say no, because you're tired or to say no because you have something to do at home doesn't always feel like an excuse or a reason that you can give, and I think that's part of the culture that contributes to burnout, right? But also, is real when we do these real passion-based and important human work and specialized work where there isn't someone else who can fill in. Just mentioning the way that substances can play in there - forget just the numbing and self-medicating, right, but also that it actually becomes a functional break from doing the work.

**Donia Slack** [00:22:18] Self-protection. Even if it's one glass of wine, you're not doing it for the substance numbing-ness of it. You're doing it more for the protection of your own mental health of that you don't want to handle another case right now.

**Cara Berg Raunick** [00:22:29] They say coping mechanisms are our ways to get through life, right? Even when they're- even when they appear not very functional or helpful, really what they're doing is helping you survive, right?

**Donia Slack** [00:22:39] Yeah, absolutely.

**Heidi Eldridge** [00:22:41] I hadn't realized that about senior nurses. Could you give us an idea of about how long the training program to become a SANE takes?

**Cara Berg Raunick** [00:22:49] Training for a forensic nurse, again, you want to make sure that it's a nurse with some level of experience because we're very independent. We really function very autonomously and often have specialized knowledge that the other people around us, say were embedded in an emergency department, the emergency room doctors don't necessarily have this experience - in fact, almost always don't have this experience and expertise. So working very autonomously. So you need to have some really good assessment skills and clinical judgment. So generally, there's an experience requirement, then it's a 40-hour didactic training plus clinical skills. So that's things like learning how to do really wonderful speculum exams, which isn't traditionally in an RN's scope of work - that normally would be, you know, a nurse practitioner or a physician assistant or physician. So speculum exams, we often are doing ride alongs with law enforcement, visiting a Rape Crisis Center or Advocacy Center in our communities, observing in court, learning forensic photography skills, learning about toluidine blue dye, right. There's on and on and on skills that we gain. And then typically there's some sort of a process of orienting to the actual program. And that, of course, can vary what those requirements look like. But it's not a small- it's not a small investment to get a SANE nurse up and running and functioning on their own.

**Donia Slack** [00:24:09] So I'd like to talk specifically about the paper.

**Heidi Eldridge** [00:24:12] We'd love to get an overview of sort of the number of participants you had, what your general design was, but I can tell you a couple of the things that we really loved about this paper were, first of all, the great use of your control group because we see a lot of sort of supposedly scientific studies out there that haven't actually compared the thing they're measuring to anything else, right? I'd love to hear about the control group you set up and why you chose it the way you did and how effective that was, and also the fact that you used a validated instrument to measure the effects you are trying to measure. I'd really like to hear about that instrument that you chose.

**Cara Berg Raunick** [00:24:47] So we took on a anonymous online survey, a quantitative design, looking to explore levels of vicarious trauma among SANEs compared to other women's health nurses. So a lot of the research around vicarious trauma shows that it intuitively makes sense to people, but we don't necessarily see real high levels coming out in the quantitative measures. And so it seemed that to really identify the phenomenon, we needed to compare this population that clearly, again, by the nature of our work, has a high risk of vicarious trauma to a group of nurses that that doesn't, right, that doesn't have that experience. And so I chose other women's health nurses because as I mentioned when I was talking about my career background, whenever I told someone that I am a postpartum and nursery nurse, they said, Oh, that's happy nursing, right? And so I recruited from two professional organizations of nurses - one, the IAFN, the International Association of Forensic Nurses, to get our SANEs, and then I looked at AWHONN, which is the Association of Women's Health, Obstetric, and Neonatal Nurses, to get a group of nurses who were unlikely to have experienced vicarious trauma. So we obviously weren't going to look at hospice nurses or ICU nurses or emergency nurses. And we did, to be clear, exclude neonatal nurses - so we didn't include folks who work in the NICU, in the neonatal ICU, because obviously that's seeing harder stories and more potential for exposure to trauma. So we ended up with a really robust number of participants - that was really exciting. We had a goal of getting 200 participants, 100 in each group, and that was based on a power analysis. And in our final sample, we ended up having 144 SANEs and 196 women's health nurses. So we totaled 340, which was really, really exciting. So the next piece of what we explored was not just levels of vicarious trauma among SANEs and among non-SANEs or women's health nurses, I also wanted to add a component around a history of personal trauma. And part of that is because one of the concerns around measuring this phenomenon is that it's very difficult to tease out what changes in cognition might be related to someone's own history of trauma versus vicarious trauma. How would you do that? I don't know. I don't know that there's any tool available that has figured out how to do that. So the tool that we used was the Trauma and Attachment Belief Scale, which is validated. It has been around for a long time - an earlier version was called the Trauma Stress Institute Belief Scale - and it is considered the standard by which to measure vicarious trauma. Although it also, again, it owns, and I own that it does measure cognitive changes related to trauma, period, right, that could be primary or secondary, but it is considered the standard by which to measure vicarious trauma. It's an 84-question Likert scale survey that measures changes in cognitive schemas across five different schemas that it looks at, and that is changes in belief about safety, trust, intimacy, control, and esteem. And it looks at each of those on a level of self and also other. And I can give you a couple of examples of questions, if that would be helpful.

**Heidi Eldridge** [00:28:04] Yeah, that would be great. Thank you.

**Cara Berg Raunick** [00:28:05] All right. So a few of the items would be things like - and again, this is a six-point Likert scale from strongly disagree to strongly agree - things like: I generally feel safe from danger. I don't trust my own instincts. I often think the worst of others. If I really need them, people will come through for me. Trusting other people is generally not very smart. To feel at ease, I need to be in charge. And I fear my capacity to harm others. So that's just a smattering, but sort of shows you what type of things they're looking at.

**Heidi Eldridge** [00:28:38] It's kind of a measure of how jaded you are.

**Cara Berg Raunick** [00:28:40] Yeah, right. Absolutely. Really, the ways that your- that your brain and worldview have changed. So I think I didn't finish saying that second group of people that we brought in. So because we also wanted to see how a primary history of trauma impacted these scores, we then asked another question. So in addition to demographic data and then including things about experience as a SANE and in women's health and all these things, and in addition to asking the TABS questions - that's Trauma Attachment Belief Scales, TABS - we also assessed for a personal history of trauma. So we did that by asking if participants had personally experienced rape, attempted rape, incest or child sexual abuse, or otherwise been made to engage in a sexual act to which they did not willingly consent. That was the question that people answered - it was just yes or no.

**Heidi Eldridge** [00:29:33] And so that definition that you chose, which seems pretty comprehensive for personal sexual assault experiences, does not include things like personal traumas that are not of a sexual nature or traumas of a sexual nature committed to those very close to you, such as the friend that you mentioned at the beginning of the podcast or, you know, heaven forbid, somebody's young children, which also would clearly have a mental impact on them for having seen that, even if they didn't personally experience it. Do you have any sense of how including that broader definition would have impacted your data? Or was there a particular reason you chose to limit that?

**Cara Berg Raunick** [00:30:14] That's such a good question. So it was original language, so that question is not validated. It was very intentional, including that we know that people often will say no if asked "Have you ever been raped?" But if you say, have you ever been made to engage in sexual activity that you didn't consent to, people are more likely to say yes to that, even if they don't consider themselves a rape survivor. So it was very intentionally constructed, but it is original language, which is a limitation of the research. I think at that point in my career, I was so focused on sexual violence. And as I've grown in my understanding of trauma and the effects of trauma, it's definitely possible that an expanded definition would have been more appropriate, maybe including the ACE categories, for example. But even acknowledging that, I do think that the interest in understanding what a personal history of sexual violence does in the setting of hearing about sexual violence is a worthy exploration - that very linked connection of personal history and then hearing about the same type of trauma is a reasonable place to start. But certainly, experiencing other trauma would certainly be a confounding factor.

**Donia Slack** [00:31:26] In the literature, too, there has even been some, I guess, debate that even secondary traumatic stress and post-traumatic stress disorder are very similar, almost. So even your story in the beginning of our discussion, where you were not the person to experience the trauma, but your friend was. But some of the traumatic stress that you might have experienced from helping her through that experience could have even impacted you with similar behavioral manifestations as a direct PTSD event would

have. So I do find the question interesting and the fact that you did focus on the direct impact for your population study of possible sexual assault, but it almost doesn't preclude the idea that perhaps people in your same situation who might have a very close association with some type of sexual violence, whether it's a friend or a family member, that they might have answered the question the same, almost. It's an interesting theory.

**Cara Berg Raunick** [00:32:28] Yeah, I think that's absolutely right. And just anecdotally, I do think people are drawn to this work for a reason, right? So whether that is a personal history or like me because it happened to a loved one and knowing that they deserve high quality care that they may or may not have received. So I think that's really, really common. There is no good way for us to know if we are measuring people's own trauma or if people who have their own histories or close histories are more susceptible to damage through exposure to other people's stories. I don't- I don't know that we have a way to really tease that out at this point.

**Voiceover** [00:33:05] Next week, Just Science continues our conversation with Dr. Berg Raunick about workforce resiliency from a SANE perspective. Opinions or points of views expressed in this podcast represent the consensus of the authors and do not necessarily represent the official position or policies of its funding.