Operator: Welcome to the VA HSR&D Investigator Insights Podcast Series.

Maria Hecht: Welcome to Investigator Insights. I’m Maria Hecht, I’m a Research Editor with the Center for Information, Dissemination, and Education Resources, which is an HSR&D funded resource center. And I’m here today with Bryann DeBeer, who is a Research Psychologist with the Eastern Colorado Healthcare System. And we’re going to be talking about Bryann’s work on Mental Health Suicide Prevention and the ramifications of the COVID 19 guidelines for lockdowns, social isolation, and their impact on Veterans.

Bryann DeBeer: Thank you so much Maria, it is wonderful to be with you. I’m speaking about this really important topic and really excited to share my research. I am a Clinical Research Psychologist at the VA Rocky Mountain MIRECC out of Eastern Colorado VA Healthcare System. I also direct the VA Patient Safety Center Inquiry Suicide Prevention Cooperative. And I am a visiting Associate Professor at University of Colorado. And my research focuses on suicide prevention and I also examine risk factors such as adverse social connectedness. And then my other work also focuses on leveraging implementation science to improve suicide prevention services.

Maria Hecht: Bryann, how did you come to HSR&D and you know, kind of what is it about the work that you enjoy, and you know, what keeps you here?

Bryann DeBeer: You know, I’m very fortunate to receive funding from HSR&D and a lot of my work, it’s with the permission of HSR&D and so, you know, it seemed like a good fit between my work and HSR&D. So that’s how I came to be here. And how I came to the VA was that I have many friends and family members who are Veterans. And so it’s really important to me that they receive high standards of care. Unfortunately, one of my friends was killed while he was in Iraq, serving in Operation Iraqi Freedom. And I’m warning you that my skills of being a researcher and being a psychologist could be of use to the VA. And so I very intentionally came to the VA to study topics like suicide prevention and post-traumatic stress disorder in order to be able to make my own contribution. And you know, I think I stay in the VA because there are a lot of great things. You know I love doing this work. I think this work is very important and it’s very exciting to me. Sometimes people say to me you know, suicide prevention must be depressing, and it’s not depressing to me at all, it’s actually very exciting because we have a huge opportunity to save lives. You know I don’t have to be a surgeon to save someone’s life. I can do it through my work, and that excites me a lot.

I also really enjoy working with my team and I really enjoy my coworkers at MIRECC, it’s a really great place to be. And so I really enjoy working there. And I also of course, love working with the Veterans. I really enjoy my clinical work and you know, getting to know Veterans and getting their opinions on various topics related to mental health and suicide prevention.

Maria Hecht: Based on your own personal background really do have a very deep-seated sense of mission and I think that that is one thing that is a commonality among so many folks who are investigators in the field. This is that they are there for a personal reason. So my first question regarding your work is you know when the Corona Virus pandemic occurred, you know what was your first main concern about the population that you work with in that overall that VA serves?

Bryann DeBeer: Yeah being focused on suicide prevention. I think a lot about how we’re losing people to suicide. And when the pandemic occurred you know, I became concerned that we would lose more Veterans both to COVID and to suicide death because the pandemic creates this really challenging environment where we have an increase in stressors, increases in things like unemployment, financial difficulties, living security, transportation issues, and we know that their stressors can increase suicide deaths. And that’s coupled with these public health pressures. So we know that public health mitigation strategies are important to reduce this part of COVID 19. However, social distancing also can potentially reduce people engaging in open mechanisms, like you know going out and engaging in group activities like going to a concert or group exercise. A lot of people do those things in order to cope. So we have this combination of increasing risk factors while decreasing coping strategies. So if you talk to me as a psychologist I’m going to tell you that’s not our optimal situation.

The other thing is that when you look back at prior opinion on epidemics, most of the research that’s been done, although not all of the research, indicates that suicide deaths follow the infectious disease mortality. So we would expect that going into recovery period we actually see increases in suicide deaths versus during the pandemic. And that is what we’re seeing in little bits of data that are coming out. Unfortunately, our national data takes a while to be processed, and so we don’t have access to all that yet. But in the data that I’ve seen, suicide deaths did go down during the pandemic. And so there isn’t – to me, the possibility that they could rise as we move into the recovery phrase. And when you look at other countries like Japan, Japan did have as – were not as bad off in terms of COVID 19 deaths. But now it had more suicide deaths than COVID 19 deaths, because they moved into a recovery phase earlier on. And we still don’t really understand precisely what the mechanisms for that are. What one of the mechanisms in the prior research that was positive was adverse social connectedness.

Maria Hecht: Wow, that’s really interesting to see that there is a historical precedent for suicide deaths in a recovery phase from a pandemic. Is it a post-traumatic result, is it a post-traumatic effect in place. We’ve hunkered down and gotten through this very traumatic period, and now that “Normalcy” returns, is this the response. So my next question is, when you looked at the impact over time of the COVID 19 safety measures in mental health, use a social network analysis. If you can talk a little bit about what is social network analysis?

Bryann DeBeer: So I’ve been fortunate to partner with a group called Visible Network Labs, which is headed by Dr. Danelle Varda, and they specialize in social network analysis. And they’ve typically applied this method to other populations, not to Veterans who are at risk for suicide or Veterans who experience mental health issues. And so we took their methods that they’ve used in the past and applied them to this project. So in a social network analysis, what we are looking at is we’re trying to understand who is in the Veteran social network, so how many people do they have in their network. And then we want to understand how all of those people work together to coordinate the Veterans care. Are those people working in tandem or not. And then also want to know how much the Veteran depends on those people to help them with their needs. And want to know if a Veteran trusts the people in their network. So if a Veteran is experiencing high dependency and low trust, that’s conceptualized as what we call adverse social connectedness.

Maria Hecht: Okay.

Bryann DeBeer: And then another factor is where they perceive that they have a social support network around them. You know we asked them if they feel that others are supporting them, do they say yes, or do they say no. So the social network analysis accounts for all of those factors. And so for me, as a researcher you know, in the past I’ve used perceived social supports in some of my work to try to understand that factor. The social network analysis in comparison to that, does a much more in-depth analysis regarding what the Veterans experiencing within their social network. And how that’s helpful to us, is that in comparison to perceive social support, we can look at these underlying factors and try to understand what exactly is it – are the reasons why a Veteran is having challenges with their support, and if there are ways that we can remedy that. So the social network analysis goes much more in depth. It provides us with a lot more information, and then we can use that information to try to intervene with the Veteran.

Maria Hecht: That’s really helpful. I had not come across that term before, so I thought if I haven’t come across it, I’m probably not alone. Another concept that I’d love to have you elaborate on is hostile attributional bias. What is it, and why is it important to – with regard to assessing somebody’s state of mind?

Bryann DeBeer: So hostile attributional bias is a social cognitive concept. So social cognition refers to the skills that underlie social interaction.

Maria Hecht: Okay.

Bryann DeBeer: Theres a lot of work done on this, particularly on schizophrenia. Demonstrating that when people have trouble with social cognition that really affects their functioning and their ability to interact with other people. However, I also think that those concepts also have a capability to depression, PTSD, also possibly beyond mental health disorders. So if somebody has problems with the skills that underlie social interaction, they’re going to have problems interacting with other people. And that actually has much more of an impact on their life then we tend to think about. So if you have trouble interacting with others, it’s when you meet trouble, you’re going to have trouble finding employment.

Maria Hecht: Uhm-hmm.

Bryann DeBeer: And social relationships. There’s a lot of things that it affects. Hostile attributional bias is a specific form of social cognition. And then this project we specifically looked at lame related to hostile attributional bias. And what this means is that when you present someone with an ambiguous social situation where they could be at fault or another person could be at fault, you know, who do they say is at fault for that situation. So what we saw in this research, is that for some people who tended to blame others in these ambiguous social situations, they had more problems with their social network. They had higher adverse social connectedness. And another reason why it’s important to look at something like social cognition is we refer to that as something that’s called a modifiable treatment factor. So this means that we can change through treatment.

Maria Hecht: Okay.

Bryann DeBeer: So we’re not necessarily going to be able to maybe change someone’s – certain aspects of someone’s social network. You know there’s some things in there that we could change and some things in there that we can’t change. But if we look at these modifiable treatment factors, we can change those in order to change the social network and the other things that that impacts.

Maria Hecht: In other words, there sort of a core personality, but within that core there are certain immutable factors. If the ones that are mutable that you can change, you can work on that through something like a cognitive behavioral therapy. It’s those modifiable factors that in treatment you can address. Is there the sense that those modifiable factors may help widen or deepen a social network? In other words if you’re more approachable you may be considered more friendly and therefore able to build a better or different or richer network?

Bryann DeBeer: There has been work development in social cognitive interventions. Again, primarily within individuals with schizophrenia. And so these are very specific types of interventions that are specific cognitive behavioral therapy. So, presenting people with different social situations and having them roleplay the social situations. And that the treatments are much more focused on social interactions than cognitive behavioral therapy tends to be.

Maria Hecht: Got it.

Bryann DeBeer: And so I would love to be able to have people do this type of intervention and see if it improves their social network. But I don’t think that anyone’s ever done that. Work is primarily looked at improvements in functioning and there have been improvements in functioning with a lot of these types of interventions.

Maria Hecht: Really, what struck you the most about this work. You know your findings, you’ve finished the study, and you know you’re working on your papers and publications, so was that any result from this work, and this was a rapid project. I mean often times projects are funded with HSR&D had two to five years of funding and you turned this one around quite quickly. So was there anything that really struck you in the results of the work?

Bryann DeBeer: Yes, absolutely yes, we were trying to do this as quickly as possible because we think this information is going to be very important as we move into the recovery phase of the pandemic. And as we talked about before, I am really concerned about our Veterans, and I want us to get this information out as quickly as possible. Some of the things that struck me were you know, this finding hostile attributional bias. So hostile attributional bias increases or is associated with adverse social connectedness. And it’s also associated with PTSD and depressive symptoms as well. And then adverse social connectedness is also increasing PTSD and depressive symptoms. And then PTSD and depressive symptoms are increasing thoughts of suicide.

So during the pandemic, adverse social connectedness got worse. So people became more dependent upon others in their network. And so we see that impacting their mental health symptoms and their suicide risk. So, I think that it is really important that we continue talking about this issue of connectedness as a risk factor. If people don’t have a strong social support network around them and is driving up their mental health symptoms and it is increasing their suicide risk. And we can see how that changed during the pandemic. You know dependency within the network was increased. And so people became more dependent on others. So, and then if you think about hostile attributional bias in that association, people who have you know, who tend to blame others in social situations, it’s worse for them, they’re having worse social connectedness and increases mental health symptoms, and are at higher risk for suicide. And so then, coming back to what we were talking about before, social cognitive interventions may assist them and may improve their social connectedness and then have down street effects on PTSD and depressed symptoms and suicide risk. So that was one of the main findings from our study, and I think that’s really important to think about as we move into the pandemic recovery.

Another important finding from this work is that most Veterans did not have people in their network to help them with their needs. Most Veterans who have people in their network to help them with needs like healthcare needs, getting access to healthcare, getting access to behavioral healthcare, getting access to food or transportation. And so that was surprising to us because we also saw that needs increased during the pandemic.

Maria Hecht: Was your cohort a primarily world cohort, and did that have any kind of effect on given that most world Veterans have access issues to begin with. And one would think of your world dwelling that transportation might already be a challenge. I’m just curious about the nature of the cohort or if you had any sense of that or if that was not something you were accounting for in the results of the work.

Bryann DeBeer: That’s a great question. So how we recruited was we over sampled for Veterans who had a diagnoses of PTSD or depression or other common mental health diagnoses among Veterans. We also were fortunate that VA Office of Research and Development created a database of Veterans who’ve been diagnosed with COVID 19. So we also over sampled for Veterans who had COVID 19, and we had about I believe about 66% of our population had had a diagnoses of COVID 19. And we did a nationwide sample, so we sent mailings to Veterans asking them to participate in the survey. And so it was nationwide, and we haven’t looked at rurality yet, but that is actually a very good question. But we could look at that by looking at people’s zip codes and trying to see where they are located. We could do that and see if that was a – if it was worse for Veterans in rural areas certainly.

So another finding that we had was that when we looked at the social network, people who had adverse social connectedness who also did not have people coordinating care for them, they had increased suicide risk. It seems that in Veterans who aren’t getting their needs met, that’s also increasing their risk. And something that was important on that level too, is that VA was actually named as an organization that many Veterans relied on. You know maybe for Veterans who don’t have people in their network to help them, maybe their VA can step in and be a source of support.

Maria Hecht: If you in ideal world could say I want X policy or Y clinical service to change as a result of my work, what in an ideal world would you have happen with these results. How would you have these results leveraged to improve Veterans lives and/or policy in VA?

Bryann DeBeer: Absolutely, so this were confused to build the evidence base around social connectedness. We know that social connectedness is important. But this work really drills down on what aspects of social connectedness are driving suicide risk and increasing them to halt symptoms in Veterans. And so connectedness continues to be an important strategy, and we need to continue to work on novel ways of promoting connectedness or Veterans suicide prevention because we don’t have that many strategies that work along connectedness. You know, I think this finding that Veterans don’t have individuals in their network who can assist on what needs is very important as we discussed. And it did seem like for many Veterans, he was really important in filling that role. And so I think that if we talk about a specific policy, we’re thinking about methods of intensive case management.

Maria Hecht: Uhm-hmm.

Bryann DeBeer: Who in my center, we developed of method of intensive case management courses I mentioned. And in early results, that method seems to be effective. And in that work, we actively work with the community. This seems to be effective in the work that we’re doing now. We’ve seen significant improvements in functioning in drop offs in mental health symptoms and suicide ligation in that other project. But those methods could also be used for other Veterans who experience social connectedness and don’t have people in their network to coordinate their needs. We’re just very grateful for the support for people to do this work. And I think that there are a lot of interesting findings that will be coming out of this project, and we’re continuing to analyze the data as well.

Maria Hecht: So we’ll keep our eyes peeled and we’re looking forward to seeing more of what comes out of this study. And while I hope we can use it for general purposes and suicide prevention going forward, I certainly hope you don’t ever have to repeat it for the extraordinary circumstances of a pandemic.

Bryann DeBeer: Oh I know you know.

Maria Hecht: Thank you so much for your time Bryann, it’s been great. And thanks again for joining us for an investigator insights.

Bryann DeBeer: Thank you so much Maria.

Operator: The views and opinions expressed in the preceding podcast are concerned with the scope of recently concluded or ongoing VA HSR&D funded research, and do not necessarily reflect current or to be implemented VA policy. To learn more about this research, visit the VA HSR&D website at www.hsrd.research.va.gov. concerned