#### David Van Nuys, Ph.D., aka "Dr. Dave" interviews Dr. Shaili Jain M.D.

Shaili Jain, M.D. is a British born American Physician of Indian ancestry. She is a psychiatrist and PTSD specialist and currently serves as the Medical Director for Integrated Care at the VA Palo Alto Healthcare System. She is a trauma scientist affiliated with the National Center for Post-traumatic Stress Disorder, a consortium which is widely regarded as the world's leading center of excellence on PTSD, and a Clinical Associate Professor affiliated with the Department of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine. Dr. Jain's work is widely accredited for elucidating the role of paraprofessionals and peers in the treatment of American veterans with PTSD. Her work has been published in some of the most prestigious medical journals, such as the *Journal of the American Medical Association, Psychiatric Services* and the *Journal of Traumatic Stress*, in addition to being featured in national publications such as *The New York Times*. Her medical essays and commentary have appeared in the *New England Journal of Medicine, Psychology Today, Kevin MD, STAT*, public radio and elsewhere

(transcribed from www.ShrinkRapRadio.com by Heather McCartney)

### The Unspeakable Mind of PTSD with Shaili Jain

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Now here is the interview

Dr. Dave: Dr. Shaili Jain, welcome to Shrink Rap radio

Dr. Jain: Thanks so much for having me. It's my pleasure.

**Dr. Dave**: Well, I feel very honoured to meet you and to provide the opportunity for you to speak about your work and your remarkable book '*The Unspeakable Mind: Stories of Healing from the Frontline of PTSD*. So, to get us started here, I'm interested in the title. Why did you call the book '*The Unspeakable Mind*?" What about PTSD is unspeakable?

**Dr. Jain:** So often experiencing a trauma represents a violation of everything we hold to be dear and sacred, and a lot of times such events simply become too terrible to utter, and they take on this unspeakable quality, and, as you know, sometimes a survivor wants to speak up but if the wider community is unwilling or unable to bear witness to their story then a survivor is forced into silence, so then the trauma becomes unspeakable that way. The problem is we know that PTSD thrives under such conditions, when these traumatic thoughts and memories remain unspeakable or unthinkable for too long, they actually impede our brain's natural processes of recovery after trauma. It becomes these stuck points that inhibit the mental reintegration that is really needed for healing to occur, so in my mind, the unspeakability of the trauma was the crux of the PTSD.

**Dr. Dave**: Interesting, and what is implied in what you just said is that if a person can speak very soon after the trauma then perhaps it doesn't become PTSD - is that too strong a statement?

**Dr. Jain:** Well, I think you're on to something there. I definitely feel that giving people support in the immediate aftermath of the trauma, - part of that support is hearing them and providing that psychological safe space, - we know that that can actually prevent the onset of PTSD. So, yes, I do feel that if a survivor is ready to speak, being with them and allowing them to speak can be hugely beneficial.

# Dr. Dave: Yes.

As opposed to creating an environment where they might by hindered in some way in that regard.

**Dr. Jain:** Yes, yes. And often those of us who are not the traumatized person sometimes feel shy of pushing a person to talk about something that is so terrible, you can feel like, well, I don't want to retraumatize this person or make it worse by trying to interview them about what just happened.

**Dr. Jain:** Well, to be clear, we never want to coerce people into talking; we never want to make them feel like they must talk when they're not ready to – we know that does not work. They tried that with critical incident stress debriefing back in the 80s and that does not work, and it may actually harm.

### Dr. Dave: OK

**Dr. Jain:** But there is that fine line though between creating an environment where the person can talk and also, we, as the people who are bearing witness, being able to hear it, the story; sometimes we want to avoid it. Because we don't want to accept what happened. So, there's that fine line, right? We never want to force people before they're ready. But we should be ready to receive the story.

**Dr. Dave**: Ok. Yes – that's a good reminder. The subtitle of your book speaks of the frontline of PTSD science and that sounds exciting – the front-line. Perhaps you can expand on that a bit for us.

**Dr. Jain:** So, I'm a psychiatrist by training and I was in private practice up until 2007 and then I decided at that point for various kinds of personal revelations that I wanted (I'd been a clinician up till that point and all my training had been to be a clinician and that's still to this day the place where I feel most comfortable ) but I decided in 2007 that I wanted to learn how to be a researcher because I was growing dissatisfied with not having objectivity to know that what I was providing my patients was really happening ....]

**Dr. Dave**: Yes, really helping them, yes

**Dr. Jain:** Yes, so I left private practice and for two and half years I was I was a fellow at the national centre for PTSD in Menlo Park and I was also a doctoral scholar at the Stamford University School of Medicine and in those two and half years I really learned how to do health service research, specifically with regard to post traumatic stress disorder, and ever since then that's where I kind of live. I provide PTSD care to veterans as part of the VA hospital in Palo Alto. Clinically I feel the VA is at the cutting edge of what is going on in PTSD; part of their mission statement is to really take PTSD seriously. And then also I continue to do my research in affiliation with the National Center for PTSD so I'm really blessed that I'm part of this brains' trust of people who have committed their lives to understanding post-traumatic stress disorder and the science of PTSD and advancing the clinical practice of PTSD, and so that's where I speak from when I wrote the book - that sort of vantage point of having the benefit of. Being part of that brains' trust and having taken that time to become a researcher and a scientist myself.

**Dr. Dave**: Yes. What a special position you're able to occupy and how nice to be able to refer to oneself as part of a brains' trust. (Laughter) I don't think I can do that, but you know I interview a lot of people and one of the things I notice lately is that there are two topics that are very prominent right now and one is mindfulness and the other is PTSD, and in some cases I guess they go together. There is an enormous number of therapies springing up in which people are claiming to have good success with PTSD. Now one of the things you talk about - and this could be related to what I just saying- is that one of the dynamics you write about is over-diagnosis and under-recognition. I wonder if you could expand on those a little bit for us.

**Dr. Jain:** So I feel that since 9/11 and the wars in Iraq and Afghanistan, and hurricane Katrina, I do feel that PTSD has become part and parcel of our modern vernacular, but part of the reason I wrote the book is that I also feel like it's become sloppily invoked; I think it's been misunderstood; I think it's misconstrued. And part of what I wanted to do was to really

get precise about what we mean by PTSD because in my experience if we get flabby in the way we use it, it really diminishes the science and the practice.

**Dr. Dave**: Well, I've wondered about that because I've had guests who make the point, or attempt to make the point, that we all suffer from PTSD, and I've been concerned – well, isn't that overgeneralizing the term, just what you just said – losing some of its valuable specificity.

**Dr. Jain:** I would argue the opposite - trauma exposure is very common in our society and around the world, so the odds of you being exposed to a major traumatic event are very high – something like 60% of men in their lifetime, 60% of women in their lifetime, but you have to remember that the percentage of people who will develop PTSD as a result is a small percentage, a substantial percentage, but a small percentage – something like 8-10%. But because the amount of trauma exposure to begin with is so high, even that small percentage translates to a lot of people, so at any given time in America there are 6 million people who have PTSD with active symptoms that need treating. So, it's a considerable problem as it is. Sometimes I think people conflate trauma exposure with PTSD. They think trauma exposure equals PTSD and that is not the case.

**Dr. Dave**: I think that maybe I just committed that error in stating, - in quoting - what other people have told me and maybe they weren't telling me that we all suffer from PTSD but rather that we all have been exposed to trauma and, to different degrees, bear some effects from that.

**Dr. Jain:** Yes. That's I would agree with and in recent years we've come to know a subsyndrome which is called partial PTSD where people do not meet the criteria for full blown text book PTSD but nonetheless they're suffering – they have more subtle symptoms and would probably benefit from some type of professional attention so I think if you add the numbers of people who have partial PTSD to the six million who are active sufferers at any given moment in time – that's a lot of people, and the odds are you know someone in your life who has that – just the statistical odds from that many people, so if you're fortunate enough not to have it yourself, someone you know probably has it.

**Dr. Dave**: Yes, maybe the basis for something that you say in your book that PTSD is an inextricable part of all of our lives.

**Dr. Jain:** Yes. That's definitely a point that I wanted to make. We tend to think of PTSD – the obvious image that comes to mind is the soldier back from war, but really if you look at the statistics, PTSD can result from many traumas, from rape, family violence, being robbed at gun point, escaping a natural disaster like a fire, so many things can lead to PTSD and if you look at the stats well actually it's all of our business. So, speaking to your question that you asked me before about over-diagnosis and under-diagnosis - it's both. It's probably over-

diagnosed now because of the some of the reasons we just touched on – there's a conflation between trauma exposure and PTSD, but the sad thing is it's also under-diagnosed. The reality is PTSD hits hardest those who are socially and economically disadvantaged in our community and those people are hard to reach for many different reasons and they're not getting diagnosed. So, it's both at the same time – over-diagnosed in some under-diagnosed in others.

Dr. Dave: What is the impact of trauma and PTSD on the quality of life?

**Dr. Jain:** I think it has a huge impact on quality of life. I think it interferes with the way we love, the way we create, the way we work, the way we play – it really hits every dimension, so let's take just your personal life, for example, trauma is infectious. Trauma begets trauma. The odds are that if you love someone who has PTSD, you are at higher risk of PTSD, depression or anxiety yourself. So, if you get a sense of that - how it infiltrates our society that's pretty alarming. So if you just look at the personal lives of people with PTSD – they're much more likely to be divorced, have a lot of problems with intimacy, emotional as well as sexual intimacy, in personal relationships, much more likely to have violence in a home where one of the sufferers has PTSD, so you can start to get a sense of a lot of lost productivity in terms of employment for people who have PTSD. Those are just some of the ways, and now of course in recent years we've got to have a sense of the toll having PTSD takes on the physical body - the relationship to things like obesity and heart disease and cancer. So it really seeps beyond the confines of mind and brain and it infiltrates into cells and organs and bodily systems - so these are just some of the ways it impacts the quality of life, not to mention the higher risk of death by suicide, not to mention issues with violence – I mean those are just some of the ways.

**Dr. Dave**: Yes, at first it sounds extreme to say that it's infectious but with the example that you're giving clearly there's a kind of social contagion, if you will, and, as you point out, it can impact the environment that one is in - whether it's family, or social group or whatever. You know, it raises the question -since we're going that far - about the impact on family and so on and as you just suggested the impact on one's health, can we say that it's genetically transmitted at all? Is there a predisposition towards PTSD that can be inherited?

**Dr. Jain:** So ,that is something that has become quite apparent in the last decade or so. When you think of PTSD, you think of this external traumatic event, and your first instinct is: what has that got to do with genetics? But research has shown that PTSD is highly heritable so as I was talking about earlier, trauma exposure is really common but only a small minority will develop PTSD. Now, genetic factors probably account for one third of the overall risk of developing PTSD.

Dr. Dave: Wow, that's a high percentage

**Dr. Jain:** Yes. So, when you look at the that group who develop PTSD after trauma exposure and the group who don't, genetics play a big role in determining who does, and so in that way, it is actually a very heritable condition. Now, there is this other form of science called epigenetics which is a little bit different but again is very fascinating. It's still early days; we still don't fully understand the epigenetics of PTSD but there's enough that we should be able to be aware of that you know when a man or a woman is exposed to a major psychological trauma, a damaging psychological trauma, it can impact the man's sperm, it can impact the woman's eggs and then these changes are transmitted to their future children via this process of intergenerational transmission and this leaves their subsequent children of these traumatized parents can be at risk even though the child him or herself may never have been exposed to a traumatic event.

## Dr. Dave: Wow.

**Dr. Jain:** But then if in their life, that child is exposed to a traumatic event, they're going to respond from that position of carrying sorrows in their genes so they're going to respond from that vantage point. So, in my mind when you think of mass traumatization, when you think of slavery and genocide and atrocities that affect masses of people, we start to get this sense of PTSD's deep footprint.

**Dr. Dave**: Yes, wow, it's paints a pretty bleak picture, a bleak sounding picture, I'm thinking of dominoes in a row and once one domino gets tripped, they all start falling down, and it sounds like there's that sort of effect going on here, with multiple factors that can be involved in the tripping of the dominoes. And what's the impact in the brain specifically?

**Dr. Jain:** So, we know the neurobiology of PTSD has been pretty well-developed in the last 20 years or so. As you know, neurobiology is constantly advancing. As the tools that we have to probe the brain and its circuitry improve, the landscape is going to shift too, so I hate to be very definitive when it comes to neurobiology because I know I'm going to have to eat my words.

Dr. Dave: Ok! I won't make you do that!

**Dr. Jain:** But here's what we know at this moment in time that in the PTSD brain there are probably three regions that are implicated: the hippocampus is one, and as you know the hippocampus is the part of the brain where long-term memories are stored, and we know that there's some reason the hippocampus is smaller in people who have PTSD. We don't know what direction that relationship is in though – we don't know if they were born with a smaller hippocampus and that made them vulnerable to developing PTSD or whether the PTSD somehow made the hippocampus shrink, so we don't know the directionality of it but we do know the hippocampus is probably implicated. The other parts of the brain that are probably implicated are the amygdala - that's the part of our brain that processes fear and anger – that

is overactive in people who have PTSD. They tend to sense danger even when danger is not there and when they react, that reaction is more pronounced too, so it takes a lot of time for them to calm back down to base-line.

#### Dr. Dave: Yes

**Dr. Jain:** And then along with this overactive amygdala, there is the frontal lobe which is involved in our planning and our execution and our impulse control and judgement that is inactive, or less active than it should be, so you combine the inactive frontal lobe with the over-active amygdala and the problems with memories, and then you start to get a sense of what's going on in the PTSD brain and then, obviously, coming from a neuro-chemical standpoint – adrenalin – that is present in high levels in people who have PTSD who probably have some serotonergic dysfunction as well that accounts for the anger and the irritability associated with PTSD, and the mood states and then the human stress hormone cortisol is also implicated in some way. We're starting to get an inkling of what that picture is like but those are some of the neurobiological aspects that we know to be true at this point in time.

Dr. Dave: Yes, that's a beautiful picture you just sketched out for us. Let me just break in here to tell you about today's sponsor - betterhelp.com an online counseling and therapy site. Is there something interfering with your happiness or preventing you from achieving your goals? You know I'm reluctant to promote anything I haven't had some experience with. They've given me a free three-month subscription so that can kick the tyres so to speak and tell you how it's going. I recently had my third video therapy session with my betterhelp.com therapist, Marjery Fagin, and she's such a good listener that I feel treasured; my mood has been lifted after each of our sessions so I feel confident in asserting that betterhelp.com will assess your needs and match you with your own licensed professional therapist . You can start communicating in under 24 hours. It's not a crisis line; it's not self-help. It's professional counseling done securely online. There's a broad range of expertise in betterhelp's counselor network which may not be locally available in many areas. The service is available for clients worldwide. You can log in to your account any time and send a message to your counselor just as I've done. You'll get timely and thoughtful responses plus you can schedule weekly video or phone session, so you won't ever have to sit in an uncomfortable waiting room. My own experience underscores that betterhelp is committed to securing great therapeutic matches so that they make it easy and free to change counselors if needed. It's more affordable than traditional offline counseling and financial aid is available. Visit betterhelp.com/shrink and join the over 500000 people taking charge of their mental health with the help of an experienced professional. For Shrinkrap radio listeners get 10% off your first month at *Betterhelp.com/shrink*.

Now back to the interview.

As a clinician when you're diagnosing people, you're not going to be testing their brain and so on... What are the symptoms that are displayed that tell you that this is PTSD?

Dr. Jain: So, that's a really good question because it can sometimes be hard to tease out PTSD from, say, a mood disorder or anxiety, so in my mind, eight times out ten there's a trauma history, there's a clear something that happened, there's a before and after, and after that it wasn't quite the same. So, sometimes there's not a trauma history that a patient's consciously aware of, so it just takes time for that to come out, but eight times out of ten they're pretty clear: "I was fine before this and then I was not fine." So that's one thing you want to be listening out for and then I think the hallmark features of PTSD that really help us differentiate it from other diagnoses are the intrusive symptoms, so the nightmares, the flashbacks, the intrusive memories which are very trauma-specific, so it's not just general nightmares it's very specific nightmares related to the trauma; it's flashbacks, a reliving of the trauma in the present, so it's intrusive memories of the trauma and again this sense of reliving it in the present. Those are some of the hallmark features of PTSD and then along with that the hypervigilance and the startle reactions - the over-reacting, the flying off the handle or going from zero to ten in terms of anger with no control, that kind of hypervigilant, hyper-startle reaction – those in my mind are the very typical features of PTSD. And then of course there are other symptoms too - the avoidance cluster - those mood states - shame, guilt are very predominant in PTSD, more so than in other conditions - so there are all the other symptom clusters too but some of the ones I've mentioned are kind of hallmark features that can help you tease it out from other mental health conditions which is hard because PTSD rarely lives alone. It often goes hand in hand with depression or addiction or anxiety so teasing it out can be tricky.

**Dr. Dave**: Thank you. You know as a result of the wars that we've been engaged in some of the recent years where there are traumas and so on, what's changed in the science of PTSD in the last, say, twenty years?

**Dr. Jain:** A lot has changed, and I think there are many reasons for us to be hopeful. I don't mean to paint a dismal picture in terms of the statistics and what not. I feel like this is a really exciting time in terms of PTSD science. The events that you mentioned fuelled a massive body of research. People really started to get behind PTSD and accept that it was a condition and that has really helped advance our understanding of the condition because we've had so much research, and this is a body of research that continues to grow exponentially so that's really good news. The exciting news is that PTSD was once considered incurable and disabling but today it's very treatable and manageable. So, we have a lot of well-tried and tested treatments that we know work for PTSD.

**Dr. Dave**: I was just going to remark that it's really accelerated our understanding of the brain and other systems from a scientific point of view.

**Dr. Jain:** Yes absolutely. I think this so much, and different types of science - not just neuro-biological science, but health service research, epidemiological research, pharmalogical research - I think the whole mental health community benefits when there's this much high quality research done, so yes, I feel like there's a lot of exciting advancements in the science, in the treatment. We've done a lot of work in understanding how to prevent PTSD which in my mind is the really exciting piece, and that's where I feel we need a paradigm shift – we need to start thinking about prevention as opposed to treatment.

**Dr. Dave**: I want to come back to that but before we go there, I wanted to ask you what's at the cutting of treatment today?

**Dr. Jain:** So, in terms of talk therapies now, it's just become clear there's such a robust evidence base to support many treatments as being the kind of first line treatments. Many times the first line treatments are talk therapies which are trauma focussed so they involve the reworking of the trauma and really helping the patient understand their trauma cues and working through the trauma so that it does not have the power any more to hijack their brain and their bodies: so treatments like EMDR which has been around for a really long time but I feel like the evidence to support it as a cognitive behavioural treatment for PTSD is sufficiently robust, and then things like prolonged exposure or cognitive processing therapy those are the treatments that we know - we have great evidence for their effectiveness. Just because a treatment is effective doesn't mean it works for everybody and there are additional treatments that are not suitable. For many people understandably the idea of working through their trauma is really daunting and what we've needed and we now have available are treatments that don't really go back to the heart of the trauma bur focus instead on the here and now: so what is going on in your life because of the trauma that is disrupting your life today and what can we do about it? There's a treatment called STAIR; there's a treatment called ACT - acceptance and commitment therapy - theese help people with PTSD but, like I say, by focussing more on the here and now. So someone says to me: "my interpersonal relationships are a mess, I can't hold down a relationship because I just get very agitated and I can't trust people" then they focus on that and they focus on arming the patient with the skills to help them get through the day to day, so that's been a really exciting development as well. There's a lot of cutting edge innovation going on - maybe treatments that aren't quite ready for prime-time because we don't quite have robust data to support their effectiveness but there's no doubt they hold a lot of appeal - such as art therapy programmes and you can think of mind/body approaches like meditation, yoga, acupuncture, neuro feedback – really popular approaches that I believe are being more extensively investigated and are used widely by patients with PTSD.

**Dr. Dave**: Yes, I've got some of these I wanted to run through a little bit with you. You've mentioned some already such as EMDR and there all these sorts of spin-offs from EMDR that involve tapping. I don't know if we as yet fully understand the underlying neural mechanism of why this works: why does it work to tap on acupuncture points on your body? Some people have talked about bilateral stimulation of the brain and I suppose distraction is

another thing people have talked about. Do you have any personal sense of why they do work?

**Dr. Jain:** That's a million-dollar question – like you said, in terms of the neural mechanisms, I think we're still far off. I think there are some studies done with the talk therapies that have looked at changes that occur in the brain after going through some of these talk therapies and there have been some preliminary studies that suggest changes in the neurobiology that explain how the therapies are working but I don't understand why. With a lot of the mind/body approaches I don't think we have a clear understanding of exactly what it's doing so this is where I come back to being a clinician and I'm a very practical person and if, in a controlled trial, you can show me that someone feels better and if scores go down and they have a better sense of wellbeing and their quality of life has improved, I'll take it!

# Dr. Dave: You're all for it, right?

**Dr. Jain:** Because the brain is an exquisitely complicated and intricate organ, I think it's going to take us decades to understand what's going on, this is my feeling. And we have people who need our help right now so whatever we can do is helpful. What I like to look for are those nice randomized control trials, multi-site trials, data from different sources, that help me to be confident in recommending something for a patient, but at the same time I know that what is tried and tested doesn't necessarily work for everyone so I have to have this open mind. If someone tells me that a dog therapy program changed their life, well, then getting an emotional support animal – that's fine with me. But really my job is to make sure that they've tried the tried and tested and if that has failed then we will be open minded, but really, I like to see that people have tried what is tried and tested first.

**Dr. Dave**: I was at the gym this morning and a guy that I'm friendly with at the gym said that he had just seen something on TV. He asked me what I'm doing and whether I have any good guests coming up and so on and I mentioned that I was going to be talking to you about PTSD and he said he had seen something on *60 Minutes* that sounded really interesting - so just before this interview (because I initially showed up an hour too early) I put that hour to good use - I went down and was able to find it on the television. I don't know if you saw it: something called stellate ganglion block (SGB) and they mentioned that it's in trial right now; it's only very preliminary - being offered in 12 VAs – is it offered in yours by any chance?

**Dr. Jain:** Not that I know of, but it's interesting you mentioned that because a couple of people have told me about that. I haven't had a chance to look up that segment yet.

**Dr. Dave**: It's last week's episode of 60 Minutes.

**Dr. Jain:** OK. I look forward to watching that. But I mention SGB in the book and there was a big, big fuss made about SGB a few years ago - everybody was swearing that this was going to save everybody with PTSD - this kind of rapid cure. I had a flurry of patients come to me asking for that treatment and at that time it was attracting a lot of media attention, as I believe because of this promise that it literally cures people - a painless kind of magic bullet, and so I think it attracted a lot of media attention and people were coming seeking it. But I think if you actually look at the data at that time, it was experimental and, as you say, it was preliminary; it was pilot; it was anecdotal. There were a couple of studies done with this cervical block (CSB) which is a kind of related premise of treatment, and then were subsequent studies which were done but it didn't pan out, it didn't look as good, and then things died down again, but the hubris was still on the internet so I still have patients coming asking me about it. Now I know that trials are underway, as you said I've got to watch the *60 Minute* segment - so the trial's underway. I don't know if we have it at our local VA or not. I Of course I'm excited to see the data when it comes out, but it hasn't come out yet.

**Dr. Dave**: They're very careful to say in that segment: that it's not a cure - that it is a symptomatic treatment and often it can free people up so that they can engage in talk therapy because previously it was just too much for that to even make sense to them

**Dr. Jain:** Interesting yes, it's more like an adjunctive treatment as opposed to a stand-alone cure. That's interesting.

**Dr. Dave**: I just want to be clear about that.

A couple of other items I have on my little list here: virtual reality. I interviewed somebody years ago - Skip Rizzo at USE - and I think he's still doing this work where he puts combat veterans using virtual reality into a kind of exposure therapy, and I'm very interested in psychedelic therapy which is starting to come around again after having been discredited back in the 60s – there's a whole renaissance of interest in psychedelics and I believe that some people have had the experience of being freed up from PTSD. I'm not absolutely certain of whether I'm stretching that or not.

**Dr. Jain:** Again, I think a lot of what I get concerned about as someone who's a clinician who also does research is that differentiation of what is tried and tested, what has been through the hoops, and is out there being used by many, many practitioners versus what's experimental and still at an early stage.

### Dr. Dave: Sure

**Dr. Jain:** Some time last year, I believe there was a trial for ecstasy for PTSD, i.e., MDMA. It was a pilot - but as you know proving any type of pharmaceutical for treatment of a condition you have to jump through many hoops, and it's not just a matter of if it helps – we need to look at side-effect profiles, we need to look at risk-benefit analyses and in my mind it's still early days for all of that. It's happening - it's still early days. My biggest fear is that

even if something goes through all the hoops that the FDA requires, sometimes a medication has to be on the market for a few years before you get a real sense of what the side effects are because it's only once it's been rolled out to millions of people and the data starts coming in and we've been though many cycles of that in psychiatry. In the 20 years that I've been a doctor I've been through many cycles of that - where a thing has been touted with much fanfare only for a few years later for us to realize that this medicine has got horrific side effects. So again, as you can gather, I'm a little on the cautious and the conservative side and I feel like when I meet people, they're feeling desperate, right? When you are suffering mentally, you feel desperate and you want to hang on to anything that's going to relieve you of your anxiety and I feel like then that things that have this kind of 'magic bullet' quality to them hold a lot of allure when people are feeling desperate and I do feel part of my job as the clinician has to kind of be a guide and to remind people that this is what we know works; this is what's tried and tested; this is what's been on the market for years and years and years and we have very little to lose by trying this, and then if these don't work, then let's put our thinking caps on and think about something different. Sometimes people just want to skip right to what sounds most promising.

**Dr. Dave**: Yes and in the book you warn about the allure of 'magic bullets' and I underline that phrase. I think it's such a powerful way to state it: the allure of magic bullets, which is a very human tendency. I sort of want to wince when I read that because I sort of recognise that I can be very susceptible to that kind of hope, you know: oh here's the thing!

**Dr. Jain:** Well, good for you for being aware of it. And like I say, it's natural, for those of us in this work - we want to alleviate suffering, that's why we're here, we want to help people who are in agony but too many times over my career a lot of these treatments over-promise and under-deliver, and then you're kind of left with someone who's so disappointed.

**Dr. Dave**: Yes. You have a section in your book called the Americanization of human suffering. Of course, that caught my eye. What are you getting at there?

**Dr. Jain:** Well, there is this big raging debate in the world's mental health literature that came up when... there was a bunch of mental health surveys done - I think it was around 2010 - where they in essence tried to replicate a lot of the epidemiological studies that were done in the 1990s in America and in Europe where they designed these hefty studies with many, many people enrolled where they really wanted to get a sense of the prevalence of depression, anxiety, substance abuse disorders, PTSD. What is the actual prevalence in lower middle income countries? So, they designed these surveys, they rolled them out and, lo and behold, what happened? The data on PTSD was coming back as really low. So some countries were reporting rates of PTSD as zero, some countries were reporting rates of PTSD as half a percent, or 1 percent and this is compared to a prevalence of 6-8% in European countries and America so then there was this kind of revolt in the scientific community. What's the point of a diagnosis that does not have a worldwide applicability? Is PTSD somehow a culture-bound phenomenon that's very American? And then some even went as

far as to push the argument to say that rates of trauma exposure in low middle income countries are the same as in America if not higher - maybe people in low middle income countries have this kind of higher paradoxical resiliency, maybe they are more accepting of traumas and that's why they don't develop PTSD.

Dr. Dave: Yes – one has to wonder...

So, this argument was put out there. I have to say that I am not in favour of that Dr. Jain: argument in any shape or form. I feel like it's a dangerous argument. I feel like there are many explanations for why the data came back the way it did, and paradoxical resilience is probably last on my list of explanations. I feel a couple of things: first of all they're probably culture-bound syndromes, right? Trauma is probably expressed in different ways in different countries - that I accept. Maybe the way we describe PTSD in America and in Europe doesn't map that well on to other cultures and communities but that doesn't mean we should throw the baby out with the bathwater, it just means we need to evolve our sense of what PTSD is. So, I think that probably explains the discrepancy. The problem is that as soon as you start this rhetoric: that PTSD does not exist in our society, doctors will stop looking for it, research will stop funding it; it will just slip into the shadows as it's always done. The problem is that often times the people who are most impacted by PTSD are women, children, minority groups, marginalised groups, and the reality is that in some parts of the world these groups do not have a voice, they do not have a platform; they may not feel safe to say "Oh I was traumatized" because the minute you say you're traumatized you have to allege that there was a perpetrator - certainly in human-made disasters, so if you don't feel safe doing that for whatever reason because there are no laws to protect you, or because you don't have any socio-economic clout, well, guess what, it's going to look like there's no PTSD.

Dr. Dave: Yes, right.

**Dr. Jain:** So, I think the situation is way more complicated and I'm very perturbed by this argument that low middle income countries do not have a PTSD problem. I think that's very misleading.

**Dr. Dave**: Yes, excellent cautions, I think. Well, earlier you were going to wax poetic on prevention of PTSD. So, this is your opportunity!

**Dr. Jain:** Yes so, I love thinking about prevention because as a frontline client clinician we've come to feel the limits of treatment - we don't think about prevention enough. Only 5% of US healthcare spending is on prevention. But I feel like in PTSD there's been a lot that we've learnt about prevention - so for example first and foremost obviously if we can prevent violence, obviously you prevent a lot of PTSD, so any kind of programs, policies, interventions that aim to prevent things like family violence or sexual violence or mass shootings – they're all really vital but I think what's changed now in the 21<sup>st</sup> century compared with previous violence prevention efforts is that now we have scientific rigour, and

we are much better able because of advances in statistical tools and the availability of big data, we're much better at finding out what really works and what are the secret sauce ingredients in violence prevention programs and the advantage of that is then you can scale those programs and you can implement them in all communities and that's really what we need: things that are replicable and scalable, so what's intriguing nowadays about violence prevention programs is that rigour. There's also this period of time known as the golden hours - that window between trauma exposure and the onset of PTSD - (like we were saying earlier, trauma exposure does not equal PTSD but some people will develop PTSD) so many people - many scientists and clinicians have thought, well, you know, the golden hours... This might be a chance for medical intervention to set a pathway towards recovery.

### Dr. Dave: Yes, a critical period

**Dr. Jain:** And intervening in those golden hours whether it be with some type of pharmaceutical manipulation, some type of psychological therapy, could reset the brain toward health. So, a lot of interesting work is being done, again nothing ready for prime time but I do feel that in the next 10 years we'll have a much better idea of what to do there. But the third form of prevention which I think is what we're using the most is this kind of tertiary prevention where you accept that people have got PTSD and what you do instead is that you reengineer mental health care so that PTSD healthcare is more available, more accessible to sufferers so that it doesn't become a chronic problem - the same way as with cancer prevention, the same way as with heart disease, early intervention is key with people with PTSD as well.

**Dr. Dave**: Yes, stigma is a big issue as well, isn't it? That people don't seek services, don't self-present because they feel ashamed, that their experience is shameful, and they don't want to be tagged that they're suffering from post-traumatic stress syndrome. Particularly males but not just males - I'm thinking of women who've been raped and so on.

**Dr. Jain:** Yes absolutely. I'm constantly fighting these internal and external barriers to people seeking help and I think the internal barrier stigma is a big one. Also just the very nature of PTSD. As I was saying earlier, avoidance is one of the symptom clusters: people have literally reworked their lives so that they don't have to think about the trauma; that's their way of coping and obviously the idea of coming to see someone like me doesn't make any sense to them. So the avoidance and the mistrustfulness: I think a lot of people with PTSD because of human-made disasters, they mistrust – they don't trust organisations, they don't trust doctors because where there's a power differential that's not in the person's favor trust becomes an issue, and so stigma, mistrust, avoidance, are constant barriers to people seeking help so where do these people show up in the healthcare system? They might not show up in mental health but they show up in primary care and so that's one of the intervention strategies that I talk about in the book, that as mental health professionals we need to literally move our practices which is what I've done in the last ten years . My practice is now in primary care, so I literally want to go and meet people where they're at rather than

waiting for them to come to see a mental health professional which 50% of the time is not going to happen.

Dr. Dave: So, when you say you go to primary care, can you expand on that a little bit?

**Dr. Jain:** Sure absolutely, so you know you think of your regular doctor's office where you go and see your internist or your general practitioner? You know in the VA over the last ten years we've shifted towards having a mental health practitioner embedded in that clinic too so oftentimes there's a full time psychologist or a social worker in that clinic and then the way I do it is once a week I go sit in primary care and I have a psychiatric clinic there so sometimes my colleagues in primary care will be seeing a patient who's come in for an annual physical and it will become very apparent that they have untreated PTSD or depression or anxiety and they'll literally say to the patient: "you know what, we have a colleague here we work with closely who's a mental health professional. How do you feel about checking in with her today?"

Dr. Dave: Aha and you're right there on the spot. Excellent.

Something that we haven't discussed but it's a little bit of the flip side of responding to trauma is resilience and post-traumatic growth which I think are sort of new in the conversation in my thinking.

**Dr. Jain:** Well, post traumatic growth, when we go back to those two populations who are exposed to trauma and where some develop PTSD and where many will heal naturally with the passage of time and they will be fine, some people in that latter group will report that they will be beyond fine: they will experience what is known as post-traumatic growth where that traumatic experience was a major learning experience for them and they re-evaluate their life's priorities and they really re-evaluate what they wanted from life and they lead this enhanced life so there's actually a lot of research been done on post-traumatic growth and there's actually books written about it – I think I just live in a different world obviously as a psychiatrist and a PTSD specialist. I don't get to meet a lot of people who are lucky enough to have post-traumatic growth: I get to meet that other group of people, so resilience has become very important because and is being studied closely because a lot people have felt well, if the vast majority of people do OK in the aftermath of trauma, what can we learn from them and apply to the people who don't do so well? So we know some things about resiliency and the aftermath of trauma I feel that what does not get emphasised enough though is how much of your resilience and your ability to be resilient after trauma is actually related to your zip code - where you live and the resilience of your wider community. I think that gets lost. I think we tend to glorify human beings as being these amazing examples of people who have thrived after adversity but we don't really pay attention to how much of their ability to thrive is linked to the kind of luck of where they were born - geography really is kind of destiny. If you live in a resilient community you are very fortunate. You're probably tapping into a lot of resources in that community – just the home you were raised in, your access to education, your access to money, just the fact that you have a platform, you have a voice and I think if

you change the zip code, that resilience may never have a chance to manifest itself so I feel like, moving forward, we've got to focus on a way of levelling the playing field: how do we make all communities resilient so that everybody can be resilient after trauma exposure as opposed to ...

So that's my two cents on resilience!

**Dr. Dave**: I know you've got some thoughts on the Me-Too movement and what's going on there and its relationship to helping survivors of trauma - what can you tell us about that?

**Dr. Jain:** So, as you mentioned earlier, rape is the trauma most likely to lead to PTSD, closely followed by combat exposure and physical assault, but there's something about rape that is potentially traumatizing and in the United States alone nearly 1 in 5 woman has been raped at some point in her life. Obviously men are victims of rape too but women are just much more commonly victims of rape. There's something about the crime of rape which historically has carried the stigma and often times those raped have either risked being shamed or forced into silence but there's something about that silence that just bolsters rape's power to wreak havoc on the life of a survivor. Sometimes when a survivor speaks up they face what we call secondary injuries from those who suddenly or not so suddenly blame her and we know that, post trauma, social support is really powerful in helping survivors heal, especially for women. There's something about the way women are either wired or the way they're socialized that social support is really important for them and if they're denied that support the consequences are devastating. So, this Me Too movement that has been going on for at least two years now if not longer, if that means less stigma surrounding rape, if that means fewer secondary injuries for survivors who speak up and if it means more social support for survivors, then I think that can only mean reduced rates of PTSD in the future.

**Dr. Dave**: That will be interesting to research at some point when it's been around long enough.

Dr. Jain: Right.

**Dr. Dave**: Well, we've covered a lot of ground here. is there anything that we haven't touched on that you'd like to have our listeners be aware of?

**Dr. Jain:** Yes, I feel like we covered so much more - it's kind of never-ending, but I feel like we hit a lot of the highpoints in our conversation.

**Dr. Dave**: Well, good. Dr. Shaili Jain, I want to thank you for being my guest today on ShrinkRap radio.

Dr. Jain: Thank you so much for having me the pleasure was absolutely mine.