



Pain2Brain

CHIROPRACTIC NEUROSCIENCE
— SUMMIT —



Dr. Bruce Steinberg

The Neuroscience of Stress

Marcus Chacos00:15

Welcome to the Neuroscience of Chiropractic. We have another one of our chiropractic legends with us today, Dr. Bruce Steinberg. He's the owner of Queensboro Family Chiropractic, Dr. Bruce has a passion for serving families and educating patients in the community on wellness, and particularly coming from a strong neuroscience basis. Look, he's got advanced training and certification in childhood and neurodevelopmental behavioral and learning difficulties, pediatric care, functional neurological rehabilitation, as well as addictive and compulsive disorders, published author, international speaker, and he's on the board of directors of the ASRF, and is the chair of the Science Committee for the International Federation of Chiropractic Organizations and his science background is going to provide so much insight and you're going to love this topic because we really need to know how mental health is influenced both by Chiropractic and its prevalence in society and the impact that we can have. Dr. Bruce loves chiropractic, you know, the impact he has with his service and unlocking human potential is by far, incredible, incredible insight, willingness to impact humanity through the work that he does. I love the fact that he links chiropractic neuroscience to the salutogenic model. This is going to be an incredible revelation with so many of you, the insights are going to have profound, the impact, invaluable. Dr. Bruce, I love hearing you speak. I love connecting with you. So I'd have to have you here in this event. Welcome.

Bruce Steinberg 01:45

Thank you, excited to be connecting with you as well. And as always, it's all about the same thing, chiropractic.

Marcus Chacos01:52

Absolutely. And I know you've got a great message and I love this one. So let's jump straight in, at the end we'll have a conversation again.



Bruce Steinberg 01:58

Perfect, I'm going to jump into the share screen and we'll begin. Alright, so today's presentation is Mental Health Matters: Exploring Physical Causes of Anxiety, PTSD, OCD, and Depression. Okay, now, this presentation is really near and dear to my heart. Because really, what we're trying to achieve here is show the world how chiropractic belongs at the table of mental health disorders. Now, this recording is in 2020. And I'm sure it's going to go on for many years and decades. But this year, there's been a lot of stress because of the COVID-19 crisis around the world. And if there's one thing that I know, for 100% certainty, is that mental health is taking a huge hit as a result of all this, this is a huge opportunity for us chiropractors to make a big impact not just in our communities, but across the globe, because they are ready for what we have. And I'm going to show you the science behind why I say that. So a little bit about myself, I'm Dr. Bruce Steinberg, and I'm a pediatric family chiropractor in upstate New York. So that's over in the States. My focus is I love working with children, okay, I really love that neurodevelopmental side of the equation, whether it's pediatric or adult, and the minute you start to get into neurodevelopmental that leads into problems with behaviors. So as a result, mental health disorders are a natural link right into that world. The other thing that those that get to know me is they know I love science. I'm a research junkie. That's why I call myself the chiro nerd and I have a company called Chiro Nerds. Okay, as Dr. Marcus said, we're going to be doing this presentation from a specific angle. So when we talk about mental health disorders, we're not going to be talking about them in terms of how to treat them from a pathological perspective, because there's already a profession that does that called medicine. But rather, we're going to look at it from a salutogenic perspective, because that is the playground, the camp that we belong in as chiropractors.

Bruce Steinberg 03:57

Now one of the things you'll know about this presentation is it's 100% fully referenced. Okay, so I will clearly state when I believe something is my opinion, but otherwise, all the information I'll be sharing with you, all comes from actual resources, actual research, okay. And there's a lot of it out there. Actually, it's coming out so fast and furious. It's really hard to keep up with at this point. So objective number one is we need to go back in time, we need to look at our sacred profession and what was special about it decades ago, because I truly believe that this is something that a lot of chiropractors across the globe really don't know much about which that's really unfortunate because I'm hoping to make the case for chiropractic because once you see the beautiful rich history we have of helping individuals with mental health disorders, you'll probably become pretty excited about the potential, what we have to offer the world. So let's talk about Chiropractic and mental health. So most chiropractors are very familiar with the Palmers over in Davenport, Iowa. But one of the things that I don't think a lot of folks are familiar with is the fact that there actually used to be chiropractic mental health hospitals or what they called sanitariums. All right. So in Davenport, there were a couple but there was one in Texas, one in

California, here was the biggest one ever over in Denver, Colorado, the Spears Sanitarium, a lot of people know about that one. And then Clear View. Clear View is fascinating because of the history, including BJ Palmer, because this was actually BJs favorite. Now, Dr. Heath Quigley, he was actually the director of Clear View and you know, there was an actual protocol that they followed for these places, and he stated this, each day each patient was examined with a neuro kilometer. If the clinician interpreted NCM, to indicate nerve impingement, the patient was adjusted. That's huge, because we know that this did not occur anywhere else in the world of healthcare, okay, it didn't occur then and it doesn't occur now. In other words, we have something very unique and distinct to offer the health care perspective, the healthcare world, and that's this thing called salutogenesis. Okay. Here's the other one. This is Forest Park. So Forest Park was open between 1922 through 1959, whereas Clear View was open through 1926 to 1961. So right there, there were four decades of chiropractic serving the masses, specifically in a mental health manner. Now when we say sanitariums, a lot of folks like to think of a sanitarium like a hospital, but what it was, it was like almost more like a nursing home. The folks lived there. They actually had gardens where they grew their own food, they drink clean water, they exercise, you know, so they live that healthy wellness lifestyle, but the one part that made it unique and distinct was the chiropractic aspect. Okay. So this is fascinating. And if this doesn't amaze you I don't know what will, so this is a judge Ponath. Ponath was a judge in North Dakota, but he had a special tie to the world of Minnesota. And this is why - back in 1934, Judge Ponath sent 10 patients that were deemed hopelessly incurable meaning there was nothing else that the medical world could offer them at that point. They were incurable, unhelpful. Okay? These 10 patients were sent from the Jamestown State Insane Asylum, which is an allopathic facility, to the Forest Park Chiropractic Sanitarium in Davenport, Iowa. Now, what is so fascinating about this is these 10 people, 80% of them, eight out of 10, they actually had a complete recovery. And these people were deemed incurable, okay. The reason it was such a big deal is because they actually started to send more people over. And between the years of 1922 to 1934, the Medical Insane Asylum had an 18 to 27% cure and discharge rate, yet the chiropractic asylum, the sanitarium, Forest Park had a 65% cure and discharge rate. That's huge. Judge Ponath said this chiropractic treatment for the insane should be given a trial and test in the institutions for the insane. At first, he recommended, hey, let's just let the chiropractors in. And then it got to a point where he didn't just want to let the chiropractors in. He wanted the chiropractors to actually run the show. And then after that, he said, That's not even enough. Let's just forget about the medical asylums and let's just have chiropractic ones.

Bruce Steinberg 08:53

He said, any treatment that gives promise of restoring the mentally afflicted is worthy of consideration and trial regardless of name or methods. In other words, it doesn't matter what you call it, the whole goal is human potential. And in my opinion, chiropractic is all about well-



being and human potential. How can you not be amazed when you look at those numbers, the 18 to 27% cure and discharge rate in the allopathic world versus the 65% cure and discharge rate in the chiropractic world. He also had this to say, and if this record 65% can be obtained on cases where the large percentage are classed as incurable and had already spent much time in insane asylums and other sanitariums. How much more could chiropractic do if given the opportunity to handle the patient's immediately after being brought to the insane asylum rather than months or years later, when their constitution has been run down by deterioration or prolonged mental disability or both? What he was saying in less words is maybe just maybe these individuals with mental health issues or even addiction should start with the chiropractor first, instead of being thrown into these institutions where eventually months or years down the road, we finally get access to them. Because we know that nerves that fire together wire together, and a lot of times, people get thrown into that world of neuroplasticity where they get hardwired in a negative manner, we notice with the current research. So between the 20s and 60s, those four decades, it was the heyday for chiropractic with mental health. And then in 1973, this book emerged by Dr. Herman Schwartz, okay, Mental Health and Chiropractic, it was a really big deal because it suddenly was a resurrection, if you will, of us looking at the world of mental health. Unfortunately, it didn't make a huge impact. And so here we are, you know, five decades later, literally half a century after this book was released. And you know, are we serving the masses? Do we have chiropractic mental health, hospitals, nursing homes, whatever you want to call them? Are they popping up all over the world? They're not. And that, to me, is our fault. You see, we're playing too small as a profession. We're fighting for little scraps at the world of medicine. And you know, the truth is, we don't belong at that table, we have our own table. And here we are half a century later and I'm going to show you the statistics, but the world needs us now more than ever. So, research, we know that case studies are extremely valuable. When a paper came out in Nature magazine, which has an extremely high ranking in terms of quality in the research world. They looked at N of one studies, when the study had one patient, and you know what they found that there's a lot of validity and there's a lot of value in N of one studies in the research world. And I know as chiropractors that we across the globe could be pumping out N of one studies left and right. And just imagine if we had an initiative where we focus on this for one, five, or even 10 years, we could actually show the world what we do as chiropractors, there's all sorts of techniques out there from upper cervical to full spine from tonal to global to segmental techniques. And yet, they somehow all get results. So here's one looking at depression, while person was receiving upper cervical care. And then here's another one. Now, this paper I'm very partial to, I must admit, and the reason is, well, this is what I had published. This is actually a case series of there were five people who all underwent care in my office for anxiety, and they all showed marked improvement with chiropractic care. So the question is, how is that possible?



Bruce Steinberg 12:49

Here's one of my favorite studies, this is one of the biggest if not the biggest study that's come out of our profession where there were over 2800 patients across 150 offices in four countries, where they had people on their care from one month to three years. And the reason that's one of my favorite studies is because at the end of the study, they noticed a couple of very interesting things. The first thing they noticed was, the results were immediate within the first four weeks of care. But what was super valuable and fascinating is that at the conclusion of the study, the results were still coming in, the improvement, the functional changes were still occurring. In other words, you can't tell a patient Hey, sorry, this is as good as it gets, and then discharge them. What healing potential means is, the longer a person's under care, the better ability for their body to adapt at a higher level. In other words, there's no ceiling, there's no indication of maximum clinical benefit. So this is important to realize, especially as we play some of us do at least in the insurance world, we talked about maximum medical improvement, because that is not a chiropractic term that is a allopathic term, just something to consider when you're trying to look at things from a congruent perspective. Okay. But to go back to the study, when you look at it, it wasn't just the physical changes that occurred, there were changes in mental state, emotional state, they could deal with stress better, and my personal favorite, they had better quality of life. And if there's something that we all could take advantage of, and need more of, is this thing called quality of life. So what about the rest of the world? What about outside of our little bubble called chiropractic? How is the rest of the world doing with all this? Well, this is looking at a paper back in 2016. These are 2013 numbers that they published. These are the top 10 medical conditions with the highest expenses. Okay. Now, what's interesting is this, we know that cardiovascular issues are the number one cause of death in this country in the states yet, what's fascinating is it's not the most expensive disorder, what takes that mantle, mental disorders. And this is back in 2016, that they published this, meaning the numbers are at least seven years old. And yet, when you look at that, it stated that it costs us over \$201 billion. That is fascinating. In other words, we can't afford our current system. And the number one thing that's drawing the funds is mental health, you know, when you take a look at the statistics, and this is in the States, because obviously, that's where I practice, you know, one in four adults have a mental illness, one in four, okay, at least 50% of adults will develop at least one mental illness during their lifetime. In other words, flip a coin, every person, you know, every other person is going to deal with some kind of mental health affliction. We see it more in females, okay, we're looking at about 15 million Americans, it's a leading cause of disability in the United States for people between the ages of 15 and 44, and the most current numbers I could find is 300 billion per year. In other words, this number is not going down anytime soon, it's only going to get worse this burden is going to grow. You know, if we take a look at some of the actual subdivisions of mental health, look at anxiety, it's the most common mental health illness in the United States, we're looking at 40 million adults or roughly 18% of the population. And yet you look at someone like me, a little fish in a big pond, you know, I had this little office.



Yeah, I was able to help people with anxiety, not because I treated their anxiety, but because I reduced inflammation, interference in the nervous system via chiropractic care. And yet we were able to make changes. In other words, imagine if chiropractors across the globe truly understood the science and truly understood the application of what we do. We could change these numbers, we could decrease the financial burden, we could decrease the quality of life burden, we can make a huge impact across the globe. Okay? Because when you look at anxiety, one of the things that's fascinating is that 50% of those diagnosed with anxiety also have depression. In other words, these two are comorbid with each other, they go hand in hand. And the question is, well, why is that? And the answer is because of the neurological underpinnings that I will show you here shortly.

Bruce Steinberg 17:31

Now, look at this statistic, if this doesn't bother you, I don't know what does, especially those that take care of children, one in eight children have an anxiety disorder, I bet the farmhouse that that number is going to be bigger after this year, I wouldn't be surprised if it's as high as one in six, or one in five, especially as children have to go to school remotely, instead of attending in person because of this, quote, unquote, pandemic, PTSD, you know, over 7.7 million adults. And we can go on and on with all these sub brackets, right? OCD, I mean, the numbers, they're just high across the board with mental health issues. So you know, what's happening from a statistical perspective, well, over here in the States the CDC stated that 6.8% of adults had moderate to severe depression. Now, when we talk about depression, there's various types. But when we get into the major depressive disorder, the kind where you literally can't get out of your couch for an entire week straight the people that are one step away from suicide, we're talking about close to 7%. Okay, this is unacceptable, in my opinion. Teenagers. What about teenagers, 6.7% of adolescent females aged 12 to 19 are on a psychotropic medication. That's unacceptable. So in other words, it's one thing to have a diagnosis, it's another thing to have the issue where you have to take pharmaceuticals just to deal with life. That's a quality of life problem. Okay. According to the World Health Organization, and obviously, this is dated because we don't have the 2020 data from COVID-19. Right. But the World Health Organization said that it's the number two cause of disability in the Western world, that mental health disorders account for 13% of the global disease burden. Now, here's what's fascinating. This was a few years ago, because it takes a few years to get the data and to compile it and to release it. But they stated that by 2020, which is this year, depression will be the second leading cause of world disability. By 2030, which is 10 years from now. Depression is expected to be the largest contributor to disease burden. So as chiropractors we don't have a choice to play small on this matter. We can't be uncomfortable, we can't say well let someone else do it. The world needs us. When you take a look at these numbers, one thing is apparent, mental health disorders are going to be the number one thing that's going to cripple our people, meaning it's going to be the number one reason they need us to play bigger. Okay? At this



moment, there are more people now being treated than ever before. So if the drugs work, those numbers should not be increasing. But we know as chiropractors that that model is broken, it doesn't really work, because it doesn't really heal people. So why doesn't it heal people? Well, part of the challenge is that chiropractors are the ones that think we need more research. I'm one of them. I think we need specific kinds of new research. And obviously, in my opinion, I stated the case studies are valuable. But there are many in our profession that illogically state things such as well, we need more randomized controlled research trials, we need to RCTs and I disagree with that, because it's not a part of our world. Those are created by the pharmaceutical world. And then let's explain why. If we take an individual and this individual has anxiety, we can create an RCT model that says, Well, here's our theory, we create the RCT that you give the patient alcohol for anxiety, and we should get a positive outcome. And we do and why is it positive, because once they drink the alcohol, they feel great, life is good. And they can say alcohol, corrects the deficiency. But the problem is this.

Bruce Steinberg 21:35

They have to continue to drink the alcohol to keep getting the same result. And we know especially for the world of addiction, that it actually becomes more of a burden because they need more and more. In other words, the alcohol actually never fixes the problem. That's why that whole model is broken when you put it through the chiropractic perspective, we don't belong in that world. Because especially from the world of mental health, if you ask the general public where does depression come from, you're going to hear the majority tell you it's a chemical imbalance. It's due to the body not producing enough serotonin. This is the most popular theory when you look at depression, and it actually comes from the 1960s. It comes from something that happened over 60 years ago. And what they were looking at was a tuberculosis drug study. And what happened was, they were giving people all monoamine oxidase and they noticed that hey, things started to change, and they started to feel better. This is where the world of antidepressants came in. Okay, because what the antidepressants did they increase serotonin at the synaptic level? Okay, so this is where it started to become the SSRIs selective serotonin reuptake inhibitors, okay. And they block that serotonin and serotonin floods the synapse, okay? And they're saying, Hey, this is great. As long as people take the SSRIs, depression's gone. The problem is this, there's limitations in that theory. Number one, as we know, from the world of neuroscience, receptors lose signaling over time, which is why they need more and more and more just to get the same effect. Okay? Another limitation, you give these folks SSRIs, okay. And what they should notice is that, boom, it's immediate. So if I sit here, and I have huge glass of moonshine, and I slam that moonshine down, I'm probably going to feel different within a few minutes. Okay. But the challenge is, when people take the medication, they don't feel different in a few minutes, even though it floods their nervous system. So that doesn't make sense. Another one is not all drugs, that enhance serotonin transmission help depression, well, how's that if it helps improve serotonin levels. One of my



favorite papers looked at serotonin from the cortical perspective at the brain. And what they did was they took mice, and they lesion their dorsal raphe nuclei. And what happened was, they should not have been able to produce serotonin, because that's the part of the brain that produces serotonin. And what they found was the opposite, that the mice did not develop depression. So that's a problem. So it's not as simple as serotonin. Okay. The truth is, the pathophysiology of depression remains unknown, for the most part.

Bruce Steinberg 24:22

So they like to use mice, because obviously, focusing on human beings isn't exactly a thing that we should be doing in the research world. But what they were looking at was mice not being able to produce serotonin in this study. So this is what I was just mentioning a few minutes ago. But what was fascinating is that even though the mice couldn't make the serotonin, they found the opposite. They actually behaved normally. So it's like, well, that doesn't make sense. And this is a study that came out six years ago. This is from the New England Journal of Medicine. And this author had to say this, numerous studies of norepinephrine and serotonin metabolites in plasma urine and CSF as well as post mortem studies of the brains of patients with depression have yet to identify the purported deficiency reliably. In other words, over the last decade, there's been a lot of research coming out saying, hey, guess what depression really isn't about a serotonin deficiency. Okay, here's one from the University of Oxford and this researcher stated, simple biochemical theories that link low levels of serotonin with depression are no longer tenable. This book this author had to say, although it's often been stated, with great confidence, that depressed people have a serotonin or norepinephrine deficiency, the evidence actually contradicts these claims. Wow. Another one, medical journal, Serotonin and Depression: A Disconnect Between the Advertisements and the Scientific Literature. This author said this, contemporary neuroscience research has failed to confirm any serotonergic lesion in any mental disorder and has in fact proved significant counter evidence to the explanation of a simple neurotransmitter deficiency. Wow, I love this one right here. I spent the first several years of my career doing full time research on brain serotonin metabolism. But I never saw any convincing evidence that any psychiatric disorder, including depression, results from a deficiency of brain serotonin. So the problem is this, you know, if these researchers are finding that serotonin and other neurotransmitters are actually not the reason why people are developing depression or other mental health disorders, why are we still taking all these drugs. And as researchers states, of course, the drug companies encourage this type of message because it stimulates normal sales for the popular and costly SSRIs. So obviously, the company still wants you to take these medications. But the problem is this, the chemical imbalance theory is wrong. And we've actually known this since the 1990s. So three decades later, the research is flooding the marketplace saying, hey, that's all wrong. And yet these companies are still laughing to the bank. You know, in JAMA between the years of 1999 and 2012, they stated a number of people taking these antidepressants rose from 6.8% to 13%. That is huge. In other



words, there's not a decrease in the number of people taking these drugs. And yet, the theory is incorrect. If you look at this chart here, look at that top there. Look at Cymbalta. Cymbalta is just one of the medications used to treat depression and look how much money and that's in one year \$4.1 billion. Could you imagine the chiropractic profession if we receive just what Cymbalta made in one year, we could literally change the world. So what's going on here? You know, why are these drugs, so called, working when the research says that there's no way that they should be working? You know, it is a placebo effect. So here's a Cochrane Review and it looked at 29 studies. And they said, when these drugs work, it was because 25% of the time, it was from the drugs themselves, but three quarters of the time, the reason the patient got better was nothing to do with the drugs. It had to do with something else. They said it was a placebo, there was something else, okay. Even the people who did not receive the drugs in the studies, they got better. How's it possible people can get better when they don't even receive the chemical intervention? And it's simple, because they thought they received it they believe they did. Now for those of us there are big into the world of the salutogenic. Most of us are pretty familiar to work at Dr. Joe Dispenza. Okay, he wrote the book, Breaking the Habit of Being Yourself and then this one which I liked a lot, Now You Are the Placebo, okay. And in that book, he talked about the nocebo effect, not the placebo, but the nocebo and a nocebo is that when there's potential for them to get the placebo. I mean, this is just mind boggling. Okay. So we know at this point, the drug side effect is only one contributor to change.

Bruce Steinberg 29:08

What about the research itself? You know, can we even trust the research? So this came out of the New England Journal of Medicine, and this was back in 2008 12 years ago, and they looked at 74 studies, okay. The studies were looking at antidepressants. And what they found were these studies, they were extremely skewed. In other words, they published the 74. But out of the 74, only 38% of them had positive outcomes. So wait a minute, if nearly half of the studies published show that the drugs work, why did the other ones show negative? And the problem is, number one, people aren't reading the research and number two, it's all skewed. So the question is key, can we even trust the researcher at this point, and the answer is not likely. Okay, so some questions we need to be asking ourselves number one, you know, why do mental health and mental health issues occur in the first place. Okay, why do we see them as comorbidities like this is very common. And there's a reason behind that which I'll share shortly. You know, this one's huge. Number two, why are they strongly predicted by early life stress? Why those challenges early in life typically result in mental health changes as adults? What if mental health issues are not a disease, but rather more of a symptom? And what if mental health issues were not so much a disease or more of a holistic whole body systemic problem? So where are we now? You know, how are we doing with everything? This is where the research is. It's all about the gut brain connection. It's all about the world of salutogenic, you know, we know that as we look at this slide here, that gut brain connection, that there's an



actual physical conduit between that which we know is the vagus nerve. And yet, they're looking at it from an outside in perspective, they're looking at it from all the different systems, right. And that's that whole model, that reductive reductionistic model that we could figure out the whole, if we just study the parts, and we know at this point, that's illogical. It doesn't make sense, okay. And that's why we as chiropractors who belong to a holistic profession, we know that it's not an outside in solution that's needed. It's an inside out solution that's needed. You know, here is what the current research is showing, they're looking at it more from an inflammatory angle, they're looking at mental health as more of a problem with inflammation, okay, the pro-inflammatory cytokines. Now, this should be one of those things that makes us as chiropractors, that makes us want to jump out of our skin with excitement. Because one of the things I'm currently working on is a talk on Chiropractic and COVID-19. Now, what's important is this, we do not treat infections as chiropractors, yet we can help people become healthier. That's a salutogenic model. And that's a veer off, but I will share this, a lot of the research coming out looking at COVID-19 states that the people who don't do well, when they get the infection, they all have one thing in common. And the one thing they all have in common is they're all producing a cytokine storm. They're all producing too much cytokines, too many cytokines in the body. And that's the exact same thing they're finding in the world of mental health. Is that a coincidence? I don't believe so. So if we go back in time, where did this link to inflammation come from? Drug trials, okay. In one trial, they gave people medication to shut down their immune system, right? Because if the body's attacking itself, makes sense, it's to make it stop attacking itself. The problem is that leaves it in a weakened state. But in this one study, back in 2010, they took people with psoriasis, and they put them on drugs to weaken their immune system. What they found as kind of a coincidence is that people with psoriasis said, hey, my depression, my anxiety, it's not as bad as it used to be. And the researchers were kind of fascinated by that. And another study, they gave people with depression anti-inflammatories, and what they found was when they give them the anti-inflammatory medications, they experienced less depression. So what's fascinating is this. In the research world, they couldn't figure out why certain SSRIs, certain antidepressants helped and others didn't. But what's interesting in the world of SSRIs, some actually reduce inflammation, others don't. So the drug companies basically said was, hey, if they work, just take them. So they were wrong about the serotonin deficiency, but they don't care. They just want to make the money. So they said, just take the drugs. Okay. So here's a study looking at stress-induced depression, they took a bunch of mice and what they did is they stressed out the mice so that it can mimic chronic stress in humans, which is the leading cause of depression right now, especially in the year 2020. This is a big deal, because there's many people across the world that are stressed out of their minds. But what they found was that when they stressed the mice out, the mice develop behavioral and neurological symptoms that we see in depression, they had a reduced ability to experience pleasure, they had a reduction in social interaction. You know, we call that depression. From a neuro physiological perspective, what they found was that the mice actually



had a reduced capacity to generate new microglia. In other words, it actually impacted the human at the brain level of

Bruce Steinberg 34:52

stress, stress, inflammation, mental health. I love this paper here because what it shows us is we are actually put together, you see our fight flight mechanism and our immune system, it's there for survival reasons, the challenge is that human species has never been under this much stress, we've never had the burden that we have now, especially with what's going on in the world. And one of the things that we're finding is that when we have that burden that's chronic and increasing, it's constantly activating the immune system, it was never intended to be activated like the way it is. But once it's chronically activated, the number one thing that they see occur is increased levels of pro-inflammatory cytokines. Now, what's important to state is this, these threats can actually be perceived. In other words, the people that are constantly stressing about not knowing what tomorrow's going to bring, that is chronically throwing them into a pro-inflammatory cytokines state. In other words, this year, we are going to have more and more people experience mental health disorders, which is why we need to play big as a profession. So I share this with you to empower you, not to bring you down. But it's kind of hard not to be kind of depressed about this, right. So let's look towards the future. What's the goal, the goal is same, at least it should be, and it should be adaptation. Now, when I say the same, this is what I tell people in my practice, I tell my practice members, whether they're coming in for migraines, or they're coming in because they have anxiety, it doesn't matter the label or diagnosis, I tell them that my ultimate goal for you, is for you to be able to adapt at maximum possible efficiency. adaptation is the final frontier for us chiropractors, and to think that adaptation resides in something called the nervous system, and that this nervous system is entirely protected by the spine. And there happens to be a profession that simply focuses on this very phenomenon. You know, when we take a look at the nervous system, we can look at it from that whole sensory motor loop the whole input output, right? I think that what we should be focusing on is that autonomic nervous system, I believe that this is the conduit between us and the world, people find the autonomic nervous system fascinating, you know, when we can look at it from a sympathetic parasympathetic perspective, right, to break down that ANS and to think that there's actually tools out there that we can use as chiropractors to measure the function in the autonomic nervous system, to measure activity, and coherency. And, I mean, who wouldn't want that? So this picture right here, this is part of the unit I use in my office, my good friend, Dr. David Fletcher and CLA, I use his unit, okay. And, you know, we use tools like this in our office, and there's many other chiropractors that do more, that should to measure this change in physiology and adaptation, okay. Because outside of our profession, they are looking at the autonomic nervous system. Here's one study back in 2009. And they looked at the autonomic nervous system, when it dysfunctions with depression. And what they found was people with major depressive disorder, the bad kind of, kind of you can't even get off your couch for a week



straight. They all show profound autonomic dysfunction. They know that mental health issues directly tied to the world of the autonomic nervous system. Here's another one looking at heart rate variability in the world of psychiatry, and they found that studies indicate that patients with depression and anxiety exhibit abnormally low HRV compared to people who don't have those issues. Do you know a profession that can improve the HRV in their population, which is a result of an improved autonomic nervous system? I do. Here's another paper 2012 depression comorbid anxiety in HRV. What do they find, unmedicated physically healthy major depressive disorder patients with and without comorbid anxiety had reduced HRV. I kind of chuckle when I see a physically healthy depression. How can you be physically healthy, right? Here's another one looking at depression and HRV patients has significantly lower HRV measures relative to healthy people. So there's many studies that are looking at this and they're all coming to the same conclusion. People with mental health disorders have poor HRV.

Bruce Steinberg 39:25

So where does this come from? If we look at early life, and failure to adapt, this is what we call the altered trajectory that's failed. Okay. Early life stress can prime people for later depression by altering nerve circuits that control emotion, exaggerated, later responses to stress and creating the neurochemical and behavioral changes of depression, anxiety and addiction. This is why I tell people, especially the adults that come into my office, I'm so excited for you to be here, but just allow me one thing, give me permission For one thing, and the patient says, well, what's that, and I say, give me permission, when the time comes when you are ready for me to bother you, until all of your family members are in my office to get your nervous system checked, especially the children. Because we know, when a child has a nervous system that's not free of interference, it alters their ability to adapt, and thus alters their trajectory, which is why one of my first career goals was to become pediatric certified, I wanted to know more about how to help these little ones. Here's the 2014 paper looking at stress, inflammation, and depression. You see this to me, you see over and over and over. Because there's things you can't control, like genetics, you can't pick your parents, right. And sometimes you can't even change your environment. And when that occurs, we see that loop of mental health and inflammation over and over, mental health, inflammation, mental health, inflammation, this is the research, this is the 2020 research, these are the variables and that's why we have to look at things from a neuro plastic perspective, we have to look at it from a brain based perspective. And for those that are not familiar with this book, I highly recommend Norman Doidge, The Brain That Changes Itself, okay? Because we have a huge role in the world of neuroplasticity, okay. But the thing that I want to make sure people understand that are watching this presentation, is it's not all about chiropractic, it's not all about chiropractors are going to save the world. You see, I believe it takes a village, meaning we're all sitting there at that table. So I don't believe that chiropractic is the only thing that's needed. I just believe that we are the main thing that's needed. And it should all begin with us. And so that's where, it takes a recipe, right?



So where's the disconnect? You know, where's this whole chiropractic perspective come in? And the answer is simple. Keep it simple, right? The vertebral subluxation. You know, it alters neuro physiological function. It's that beautiful and simple. And I think that's why some people, they're kind of thrown off when they enter our offices because when they come in for a specific issue, say mental health challenges, like anxiety, to think that something like mental health can change, by simply focusing on correcting a vertebral subluxation in the spine, it seems too simple to people. And that's what's so beautiful about it, you know, we know that structure affects function, we say it all the time, right? You know, the research from our profession shows that when you are subluxated, a subluxated individual has negative autonomic changes that we see, that there's decreased blood flow to the brain, that there's decreased CSF flow in the body, we know that there's increased inflammation, systemic linked, we know that subluxation can cause or be result of altered spinal cord tension, you know, these are not new things. And yet, I believe the world doesn't really know about these things. So we need to change that. Here's a, you know, a book looking at structural changes in the upper neck area and how it leads to an obstruction of the cerebral spinal fluid. And that's a big deal because when that occurs, you know, we're not just talking about nerve stress in the upper neck as a result of subluxation. It can alter venous drainage, right, you can alter the artery, the vein, it can alter the nerves, it can alter basically everything that's liquid, that's flowing through that area. You know, this paper is looking at things a little bit higher up in the cerebellum. And looking at it, you know, in terms of, you know, when you change this signaling into the cerebellum, what do we find? It alters not just motor function, but it alters immune function. And the current research says, hey, guess what, that thing called your cerebellum, it doesn't just control all those muscles in the body, it actually ties into the world of mental health and the immune system. This is big. This means two things. Number one, what people were taught for decades is 100% incorrect because we are still making new discoveries. And number two, we as a profession still don't know the level of impact, positive impact we can have on the whole world. This paper was looking at the whole fight flight mechanism. And what they discovered is when the neck was adjusted, it had a parasympathetic effect. In other words, the system down shifted from a fight flight state into more of a parasympathetic, rest and digest state.

Bruce Steinberg 44:26

This is a paper looking at subluxation and the autonomic nervous system and what they found was the decreased heart rate and increased total power from the HRV analysis indicated, healthy autonomic nervous system balance was achieved after the correction of the vertebral subluxation. How cool is that? Like we actually have some research even though I believe we need more, showing that yes, we can help HRV, we can help autonomic balance. This one from one of my favorite people, Dr. Christopher Kemp, states that autonomic dystonia may be evaluated by measuring skin temperature differentials, how cool is that, we can use actual tools in our office to measure autonomic changes. And yet we can see improvements via the



correction of the vertebral subluxation. Here's another one that, this one's big because this one actually looks at that pro-inflammatory cytokine expression I was alluding to minutes ago and it found that the SMT, even though it's what I like to call it, the adjustment and a profession slowly trying to figure out that we don't have to call it SMT, we can call it adjustments, that's what we actually do, resulted in a reduction of pro-inflammatory cytokines was observed in the patient population. That's a big deal. And I think, this is my opinion, if we can spend more of our time and resources looking at things like immune markers and inflammatory markers that reduce in terms of clinical care as chiropractors, that is going to be the thing that puts us on the map as chiropractors, you know, not shying away and pretending we're a bunch of other paths and saying silly things such as there's no such thing as nervous system and chiropractic. That's, that's asinine, it makes no sense to me. Sowe need to stop thinking like that and think bigger. This is looking at brain changes with chiropractic. What did they find? The results of this study suggests that chiropractic spinal manipulation affects regional cerebral glucose metabolism related to sympathetic relaxation. So in better words, when a person gets adjusted their system down shifts out of fight flight status and goes into a state of ease and higher coherence. That's a big deal. When you change the spine, you change the brain. Okay. Here's another one. This was done by Heidi Hawick. And it showed chiropractic adjustment change brain activity by 20%. Or so what should we be focusing a bit more on? Well, before we even talk about that, I think something that should be stated is make sure you're staying in your lane. You know, every state, every country, every locale has a different scope of practice, where chiropractors are allowed to do different things. So here's the scope of practice here in New York, were I practice. They say that the practice of the profession of chiropractic is defined as detecting and correcting by manual or mechanical means structural imbalance, distortion, or subluxations in the human body for the purpose of removing nerve interference, and the effects thereof, where such interference is the result of or related to distortion, misalignment, or subluxation. of or in the vertebral column. In other words, if we're going to talk to the general public about mental health issues, I think it's very important that we explain to them, I though you are coming for help with anxiety or depression, as your new potential chiropractor, I'm not going to treat your anxiety, I'm not going to treat your depression. But what I am going to do is allow your body to work at a more optimal level. So you can achieve a higher state of adaptation, well-being human potential. In other words, stay in your lane, and really guide them when it comes to expectations. Because what it boils down to is this, are we attempting to treat disease or do we help revive and enhance the ability to self-heal and reorganize the higher levels of functionality? We need to look at it from a salutogenic perspective, and not a pathogenic. See, the world wants what we have but we need to make sure that we're not acting as barriers for these individuals. In other words, they don't know what salutogenic means. Heck, most of them don't know what a vertebral subluxation is, but they want what we have to offer, we just need to share it with them. And it's okay to be different. It's okay not to be an allopathic because that world already exists. So if you are going to be taking care of these individuals, and you're going to set



proper expectations, then you should probably have some proper objective indicators and outcome assessments. So here is a list of various outcome assessments and tools, things such as the HRV, things such as, you know, the functional neurological testing, even lab work, lab work is great, doesn't mean we need to be treating their conditions, but it'd be good for pre/post.

Bruce Steinberg 49:25

Okay. So, when we look at it from a daily perspective, we should be keeping track of these changes. We need to communicate the value of what we do with our communities. We need to clearly state what exactly we are doing as chiropractors. In other words, we need to share with them who exactly we like to focus on and how we can serve them. Okay. In other words, what's the vision for your office for your community? I'm going to share with you the vision of my office. Our vision is that Glens Falls Queensberry community that is free from drugs and disease. without pain, suffering and scarcity, free of the interference that causes chemical imbalances, free from labels applied to our children that limit their potential and damage their image itself. We actively choose to see our community filled with families thriving in peace and with joyous vitality. We see happy, healthy, carefree children playing, expressing life and energy. We see parents and young adults who are fully alive, connected and contributing to our society, to the beautiful gifts inside of them. We see active mature adults enjoying their golden years, mentoring with love, fully engaged and fully relevant, their hard earned wisdom an invaluable and priceless gift appreciated by our community. We choose to live in a community where all things are possible, where miracles are commonplace, where everyone is empowered to express life abundantly on Earth, as it is Heaven, to the glory of our wondrous creator. This is life. This is love. This is our chiropractic community. You see, people want to know what's in it for them. But don't be afraid to show them what they could potentially have. Okay, because they commit with their time and money. And in response, we put our reputation on the line, we deliver the goods, in order to do that, we need certainty, we need to be able to deliver clinically. And that's why, in my opinion, chiropractors should never rest, we should constantly be striving to achieve higher and higher just levels of adaptation and become the ultimate masters of our own craft. We need to become the community's most trusted healthcare adviser. And one of the keys with that is don't try to be everything to everybody, you know, just try to be that relay center. You know, I like to stay this one. And this was something I learned for Dr. Shawn Bill from the Black Diamond Club. My job is to find you a solution. Even if it's not with me. You know, that's why I believe everybody needs to get their spine checked. Okay, but just not in my office. In other words, it's okay not to take care of everybody. And the truth is, if the whole world suddenly became turned out to chiropractic, there's not enough chiropractors to take care of everyone. So I'm going to wrap things up with this story. I gave a talk in my office on this mental health. And in the presentation, I shared with people, what if there was a test out there that actually looked at this neural spinal functional analysis? What if we had the ability to measure the ability for the body to adapt, we can measure the heart rate variability, we can actually

measure how well the autonomic nervous system is working with thermography? What if we could actually use something called spinography, we looked at structural changes in the spinal column, thus altering the nervous system, and the ability to test these expressions of nervous system interference through functional neurology? And I said, How much do you think these tests would cost if they were offered at the local hospital, and people started to yell out numbers 2000 10,000, 1 person yelled out \$50,000. And I said to myself, Oh, my gosh, they don't know what we have to offer. And number two, I need to raise my new patient fee, because it's not enough. What we need to do is reach out to this world, recommend, schedule, talk, you know, talk to your community about what we could potentially offer them. Use tools like social media, connect with people. After this presentation, an individual came up to me and she showed me her cell phone, and she said this is me.

Bruce Steinberg 54:09

And she asked me, can you help me? This is an individual that had a lot of mental health challenges. And she had a history of trauma. And in the medical world, they decided to fuse her spine. They fused her mid to lower cervical. And after that didn't work, they fused her occiput, the C two and C three. The only thing that didn't fuse in her whole cervical region was her Atlas. After seeing the X ray, and although that's the only thing I saw, I looked this individual straight in the eyes and I said yes, I can help you. Because the truth is this, it doesn't matter what the person is coming in with and they can be fused from C two down to L five, as long as there's a part of their nervous system that we can improve via very specific chiropractic care. That means we can help that person express their healing potential at a much higher level. And what's really neat is this person came in for care and they're still a part of my practice four years later now. And she has had such a huge improvement in her not just quality of life, but her ability to function at a higher level from day to day. Here's another individual who wanted to share her story. "My chiropractic care with Dr. Bruce has totally changed my life. I no longer suffer from chronic migraines and no longer use a cane daily, I now experience less stress, less fatigue, and less physical pain and more joy. For 10 years I took medication daily for anxiety and depression. Last month," and this is actually two years ago, this testimonial, "I celebrated one year of being off that medication, it took a while for it to leave my system but I am now enjoying my life free from a lot of the side effects associated with the drug I was prescribed. Last November, I was able to stop taking the prescribed medication for medical for migraines. Thank you. Thank you, Dr. Bruce, for reconnecting me to life." So I end with this. How big can we play? You know, to think Dr. Spears had the biggest mental health chiropractic facility in Denver, Colorado, an actual mental health hospital. You know, what does the future hold for us as a profession? Chiropractic is not for us, it's for the world. The global pandemic has changed everything. So my cry to you is to play big, to dig deeper, to look to figure out how to better enhance your ability to produce the clinical goods, to be able to communicate with certainty, and to just how to deliver to the world at a much bigger level. This presentation was developed

and is now part of something called Wait List Workshops. If you would like to know more about it and get your hands on it, contact my friend Dr. Steve Tullias is at waitlistworkshops.com okay. That's it. You know, I think we need to really play at a bigger level as a profession. Because what it boils down to is this, the world needs us now more than ever, and they're ready for us. Thank you.

Marcus Chacos^{57:32}

Thank you, Dr. Bruce. That is why I wanted you on this event. That is why the world and what chiropractic can do within it is going to be enhanced because of speakers like you, messages that you have delivered. Not only necessary, not only profound, they're going to be life changing. I wish I could just literally drop this mic, boom. Because that was epic. Now, before I go to questions, I just want to highlight something that was so impactful for me in the history of chiropractic. And I, you know, I was fully aware of the chiropractic sanitariums and the impact they were having and, and the statistic, but just a reminder, you know, three to four times more effective than psychiatric interventions for the chiropractic was 18 to 27% and 65% with chiropractic. I want to highlight something right now, because I have a little interest in this area myself and I've read, for those who are not aware, there's so many there's a number of incredible documentaries out there in chiropractic. We've also had backbone and so we are getting into the media of some of the incredible effects of chiropractic. And yet, I think there is more to be done on this area of stress because in Australia there's this one he you know, the Psychiatry: a friend or foe, The Untold Story of Australian Psychiatry, making a killing have watched a number of these and this is The Untold Story of psychotropic drugs. And then this one he, the documentary on the dates and vague. And when Dr. Bruce is going through some of that background about what's happening in the psychiatric world, it is really clear for those who are not aware that psychiatry is not only prescribing medications when they may not be yes, they may oftentimes isn't need if, if there's a place where but there is multiple occasions in situations where there are other interventions that are more effective. We've seen the research on that. And these documentaries highlight that it is almost a criminal process that is taking place where we are drugging children unnecessarily putting them on medications for their entire life. And yet, there is a solution to chiropractic. So when I watch documentaries like that, and I hear Dr. Bruce and I listen to the history of chiropractic. Immediately I go to that state. And the doctor said, How big can we play? What can we do as a profession, we hide behind the principles of chiropractic, or limit our potential to adjusting vertebral misalignments for lower back pain. And it frustrates me and I hear Dr. Bruce talking and it moves me from that place of frustration near to recognition of the power, the impact of chiropractic, the inspiration that Dr. Bruce provides with the literature that is there to allow us collectively, as chiropractors and individually within their communities and practices to share that message in a more powerful and compelling way. So hearing this should cause you to be a little uncomfortable. And then to move from that air of being uncomfortable, first one with the truth and second with your role in

moving forward in what chiropractic can offer. So I wanted to acknowledge you Bruce, is incredibly motivating, inspiring, challenging, all simultaneously in the message you have is so powerful. And that is only because chiropractic is so powerful. So I want to acknowledge you for that. And just give you a moment just having heard again my response to that. How do you now seeing what it's doing, how it's impacting people, share your own personal conviction. Where did that conviction come from?

Bruce Steinberg 1:01:19

Honestly, it's innate, you know, I feel, you know, I look at my personal story. My mother came from another country, Costa Rica, and came during her teenage years, and she had a lot of stress, met my dad, she end up getting pregnant, you know, I'm a woopsie baby. And as I look at my whole story, and all the traumatic birth I had, and all the illness I had as an infant in my first few years of life, I now know that I was born in stress soup, like I know nothing other than sympathetic fight or flight, I'm actually I seek it. And the reason that's important is because, you know, I feel like I was called into this line of not just work as a chiropractor, but to tackle the things that aren't exactly comfortable, challenging, as you say, you know, the world of mental health, currently spending a lot of time in the world of addiction, which to me is a natural spin off, you know, even looking at a world of sex, you know, chiropractors give talks about, you know, sexual function in their office. So that's why a few years ago, I said, you know, what, you know, I'm going to tackle the taboo things in our profession and things that deserve more of a voice, because it's not about me, and you know, and number two, you know, I feel like I was, you know, I like challenges like I was born to really try to connect the dots, because that's what I believe I have to offer the profession is how to take these things that are complex, and make them more usable. For us using our office, it is easier to teach our patients, you know, so that's where, you know, I came up with the Chiro Nerds, which we hopefully will be launching in 2021. And it's true, it's important to do research, but the truth is, research is kind of worthless if it's not being shared. So in other words, we need to be able to prove what we can offer the world as a profession. And then even more importantly, get it out there. You know, one of the things like you mentioned, some of the challenges are, you know, all these movies come out on the internet and Netflix, you know, documentaries, I think one of the coolest things would be to have a mainstream movie looking at chiropractic. You know, I just got done watching one the other day, the Queen's Gambit about this chess player, and, you know, millions of people are watching this movie around the world, I'm thinking, wouldn't it be cool to have one like on BJ Palmer, because he was such a controversial character, but to show how he brought chiropractic to the masses from his dad, you know, things like that. So I guess to answer your question, like, I don't know anything else, like this is, this is just who I am. And I was called into it.



Marcus Chacos 1:04:00

Yeah, I love that. Thank you. I want to come back to this point, because we, you know, the adverse childhood experiences. I love that that equation, your early life, adverse events plus failure to adapt, because often life trajectories, so there's a person or age which has all the childhood experiences and that we know sets up in late life and address depression, anxiety, or not just those mental health moments, a whole host of, a range of a wide variety of health challenges, and therefore the life trajectory, which other chiropractors have spoken on the ability to adjust children and alter the trajectory of people's life because of that, but we're seeing anxiety depression at an epidemic level now, and increasing, the statistics nearly billion dollars on meds, on costs and moving to \$3 billion and I did a quick calculation a billion dollars add on sales from pharmaceuticals, either you highlight that, and we'll do one of them will cease doing the others, we're adding up well over that. So it's incredible. And yet current earnings offers a solution in these prices. So talk a little bit more about that science about how when if we can adjust children, have this pediatric preference and to when we're adjusting people within the context of not treating the mental health of that salutogenic approach process? How are we influencing the neurology component while they reclaimed their health, and how do chiropractors wanting to do this competently and constantly if they haven't got that neuroscience background?

Bruce Steinberg 1:05:46

Okay. Well, I think the first thing is, if we are not allowed to be checking children, that should be considered a sin, that should be literally considered evil, you know, that goes against everything that I believe in. I know that is happening across the globe in certain countries. And that's just, it's nonsensical, and it's based on nothing more than politics. One of the things that is pretty obvious is that a lot of children are born via intervention. whether it's things such as epidural usage, things such as forceps delivery, C section delivery, you name it. And there's been many studies over the years that looks at how it actually alters things such as the microbiome, that it can lead to compromised immune function immediately or years later. And it should be common sense to say, Hey, you know, it's very possible that if a child has had stress in utero, whether chemically whether structurally, that we should be checking their neuro spinal systems for subluxation, you know, there's no other profession doing it. So if you think that human beings are being brought into a world, into an environment where they're stressed in utero, before they even get out, and to think that there's certain areas of the world where chiropractors are not allowed to check these individuals, that's inhumane. And if you look at it from the scientific perspective, you know, it's like, okay, let's say these individuals had, you know, they were born in a stressful pregnancy, or there was a lot of stress used during the birth process, or let's say, Mom was stressed during the first year of life with the baby, because we know stressed moms create stressed babies. Well, we know, because research is it's just, it's mind boggling how much is coming out right now that a lot of these individuals end up with an altered autonomic



nervous system where it skews towards being stuck in fight or flight where they actually become sympathetic dominant. And what's interesting is, we know that the vagus nerve plays a huge role in that autonomic balance, you know, when the Vagus nerve can't fire properly, that person will end up in a sympathetic dominant state. And the reason why that's so big, is because when we talk about this world of mental health issues, you know, they're doing things such as implanting microchips on the vagus nerve, and then via the outside via a computer, they're altering the iPad to stimulate the vagus nerve, and they say, hey, guess what, the person with depression, they're showing less depressive episodes. And that's from the outside in, they're starting to realize that the immune system, when the body has an infection somewhere below the brainstem, basically anywhere in the body, that the afferent sided, the vagus nerve, the input loop, will shoot up to the brainstem, send a signal through the nucleus tractus solitarius, relay it over to the DMN and then fire it down the efferent arm of the vagus to say, Hey, shut it down. In other words, when there's an infection, the inflammatory loop starts to occur. And if that anti-inflammatory loop can't kick on, they get stuck in fight flight soup, and also an inflammatory soup. In other words, it's the vagus nerve that relays that communication. That's huge. Because if there's a structural issue in that person, whether it's a child, an adult or baby, it doesn't matter. Their ability to perceive and monitor what's happening in the body becomes altered. You see, we were lied to growing up, we were taught that there's five senses. That's wrong. There's not five, there's anywhere from seven to possibly eight. Number six, that's proprioception. In other words, where's my body in space? I can close my eyes and I know my hand's in front of me even though I can't see it because of course perception, right? And then you have number seven interoception, what is happening inside my body, the ability to go in and sense organs. And then number eight, depending who you ask, or it could be number seven is the immune system. So that's why this is a big deal, because that whole presentation I just shared showed that there's a link between the immune system and inflammation, the human body, and the conduit to the inflammation immune system loop is the vagus nerve. So the question should be, can we make it change and impact on vagal tone in the human body via chiropractic care? And the answer is 100% Yes. There's science for you.

Marcus Chacos1:10:42

Absolutely. And so when we come back to the equation, you know, failure to adapt being the ability to put the trajectory that we would leave your life for in line, we can increase it from one that's measured by HRV, to be known as a vagal response. And so we can alter water level response, alter HRV, and therefore, chiropractic becomes one of the tools that has that adaptive ability to alter the trajectory. I don't have children, but as you say, anyone's life, how they manage their stress and how they adapt to the stressful circumstances or situations or other immune system response. And the threat, all of these elements are there for the people within chiropractic practices. So it's an incredible role that we have. So how does the chiropractor become more courageous to speak his truth?



Bruce Steinberg 1:11:29

Well, number one, speak from a place of truth. You know, I guess I don't understand why fear even comes into the equation. You know, when you stand in truth, you should be immovable, you know, you should be that tree that weathered the storm. Because I'll tell you right now, you know, if you don't have a bunch of haters, and people leaving negative reviews and that stuff, you ain't working hard enough as a chiropractor, that's the God's honest truth. Because we know that throughout history, when a new truth emerged, it was always vilified. It was always, there was rocks thrown against it. Yeah, what happens? People we are afraid of what we don't understand in chiropractic is still not understood, which is sad, because here we are over a century later and yet, a lot of folks don't know what we do. There's a lot of chiropractors that don't know what we do. I think there's a lot of chiropractors that don't even get their spine check. I mean, I don't know what the problem is. But we shouldn't come from a place of fear. And I think fear occurs when we make this about ourselves. And so if you can shift the perspective, from us to them, chiropractic is for them. chiropractic was designed to unlock human potential. And so when you start there, it's easy.

Marcus Chacos 1:12:48

Absolutely, I think if, if the chiropractor is like, I get the chiropractic principle, I love chiropractic. And you know, you gave reference to waitlistworkshops.com. So you have the most people that don't have the certainty in the principle, but not the science to communicate that how and maybe not reading the literature because, you know, let's be honest, not every chiropractor gets the journals, reads those journals or even understands those journals. So how do they bridge the gap between what they know in their heart, what they know they need to do and the science that gives them the confidence, assuming the belief and the tools to communicate with the community?

Bruce Steinberg 1:13:31

Well, at this point, you just have to seek out the resources, and there's a bunch of them, you know, Chiro Nerds is going to be one of them. But there's a number of them out there. You know, the challenge is this, you know, in the age of information, ignorance is a choice. You know, because I see all the time on Facebook, where people ask, you know, how do I do this? Or, you know, is there a connection here? It's like, have you not heard of a search engine? It's like, even, you know, I guess it's hard because I have, there should be no reason to not know it at this point. And if you don't want to seek it out, then whip out your credit card and pay people or businesses that do it for a living, you know, I like to spend a lot of my hard earned income on accelerating the curve. In other words, I don't think twice about sending someone a bunch of money to say, hey, that thing that took you 15 years or 20 years to figure out, I want to learn it in six months. Here, here's \$2,000, here's \$10,000, whatever the fee, I don't care. So it depends on your perspective. The truth is simple. If you want to be one of those chiropractors that does



not want to talk about mental health, that rather just be an achy back clinic and wait for that insurance check that comes in, then this presentation is not for you. And I'm okay with that. And you should be okay with that too. But for everybody else, number one, you're not alone. There's a number of us that are looking to really take our A game to the next level. And I think people that pay for access to the summit that's you like those of you are the people that want this kind of stuff. So I would say email me, so it's Dr. Bruce@Queensburychiropractic.com. You know, like our current Facebook page, friend me whatever you know I'm here to help you, to extend my hand to a fellow brother and sister in the profession.

Marcus Chacos1:15:23

That's beautiful. And that's why I love you brother. Appreciate you, appreciate your message, always an honor and an enlightening experience working with you, you again continue to share, not just your knowledge and your experience but wisdom. And I'm so grateful for that, continue doing the great work you do. Thank you.

