

INTERVIEW TRANSCRIPT



DAVID HANSCOM, MD, ORTHOPEDIC SPINE SURGEON

The Mindful Approach To Dealing With Pain And Anxiety

David Hanscom is an orthopedic spine surgeon whose practice focused on patients with failed back surgeries. He quit his practice in Seattle, WA to present his insights into solving chronic pain, which evolved from with his own battle with it. The second edition of his book is, *Back in Control: A Surgeon's Roadmap Out of Chronic Pain*. His website presents an action plan.

His new book, *Do You Really Spine Surgery? – Take Control with a Surgeon's Advice* was released this Fall, 2019. It is intended for health care providers and patients alike to make a good decision about undergoing spinal surgery.

Visit his website at www.backincontrol.com

Maya Novak

[00:05] Welcome to the Mindful Injury Recovery World Summit. I'm your host, Maya Novak, and this is where I'm bringing you the world's top healing experts who are here to teach you how to recover in the best possible way. That means going beyond the conventional approach to physical injuries and really activating the healing potential we all have but very often forget about it.

In this interview, I'm joined by Dr. David Hanscom, who is an orthopedic spine surgeon whose practice focuses on patients with failed back surgeries. He's the author of two books, *Back in Control: A Surgeon's Roadmap Out of Chronic Pain* and *Do You Really Need Spine Surgery: Take Control with a Surgeon's Advice*. His approach to treating chronic pain is based on his personal experience with it, learning about medical practices you can apply yourself, and connected to your own capacity to heal.

David, thank you so much for being here.

David Hanscom

[01:01] Thank very much. I'm excited to be here.

Maya Novak

[01:03] Thank you. Yes, I'm very excited as well.

Now, before we go into today's topic, can you share a bit about yourself, and why did you decide to go into this profession?

David Hanscom

[01:13] I trained and finished my spine fellowship in 1985-86, and I spent 32 years practicing spine surgery, and it evolved to taking care of many patients with many, many back surgeries. I think my record was one gentleman who had 29 surgeries in 20 years. Another gentleman, 18 surgeries in 36 months.

And I just an endless stream of patients with surgery after surgery after surgery. And what happens is you get one operation, then the spine starts breaking down above and below prior fusions. And I think that probably 70 percent of spinal surgeries should not be done. Unfortunately, any time you do a fusion in the spine, you've actually physically damaged the spine, badly. Then there's a 30 to 40 percent chance of the spine breaking down, and then the longer the fusions, the higher the complication rate and the higher the breakdown.

What happened about seven years into practice, and I was one of those surgeons who was quite aggressive in actually doing surgery for back pain. I did not know that there is not one research paper that supported its use, nor is there still. And about eight years into practice, there was a paper that came out of the State of Washington that said that these – the success rate of a spine fusion for back pain in the State of Washington in the Worker Comp system was 22 percent. So, I just stopped, and then I looked backwards and realized that there was not one research paper that said it did work.

About the same time, I started developing severe chronic pain myself, and I went from this fearless spine surgeon to crippling anxiety. I also had migraine headaches, burning in feet, ringing in my ears, back pain, and neck pain. Extreme anxiety, I developed a full-blown obsessive-compulsive disorder along with major depression. And no matter where I went or what I did, nobody could explain these symptoms to me. And the last seven of this ordeal, it was

about a 15-year ordeal, were just absolutely intolerable. I feel very fortunate to have made it through. I was very suicidal there towards the end, but I had no diagnosis, no hope. These symptoms were just torturing me.

Basically, by a series of, in retrospect, very fortunate events, I'm fine. I've been pain-free now since about 2003, and I started passing these skills onto my patients around 2006. Then in 2011, things came together very quickly, and then the last 10 years of neuroscience research has been unbelievable in telling exactly what's going on with chronic pain.

Maya Novak

[03:41] This is an amazing story, and one of the reasons why you are also here as one of the speakers, is because you really understand – personally understand what is happening with a person.

You get overwhelmed with anxiety, and fear, hopelessness, and everything that you describe. So, when it comes to chronic pain since you have such an incredible knowledge, what are some of the things that are necessary to look into? Because many times what I see and hear also people doing is they are going around in circles, going from one doctor to another doctor, looking for the physical problems or what is wrong with the body.

David Hanscom

[04:26] Right.

Maya Novak

[04:26] Is the only way how to go? Or what are your thoughts about that?

David Hanscom

[04:31] So, that's the only one wrong way. It doesn't work. Here's the problem.

I understand that acute pain is necessary for survival. People that are born without pain fibers, which they do, it's called congenital indifference to pain, their lifespan is between 10 to 15 years, but they can't protect themselves. They're putting hands into hot fires, they're putting too much pressure on their skin, and they die of infections. So, pain is a very, very necessary part of staying alive. Acute pain keeps you out of trouble. So, I'm shifting in my chair unconsciously. My pupils constrict in bright light. My stomach changes its rate of digestion based on all these signals from the brain. So, if your stomach is distended, it hurts, right. Acute pain is absolutely necessary.

But chronic pain is completely different, and one classic is back pain. It's a very common problem, even though this applies to many different types of chronic pain. In back pain, they did a research MRI scan called a functional MRI scan, and they noted that a certain part of the brain lit up every time in every patient for patients that have pain less than three months. Then they looked at the same people that had back pain for 10 years, the pain center was inactive completely. Only the emotional center was active. That's it. So, it turned out you have the same pain but a different driver. Then they took these patients that had pain less than three months, the acute group. They called them every month for a year. About half of those turned into chronic pain. The patients who had the pain result, everything went quiet. The patients who developed chronic pain, the pain center went dormant and the emotional center lit up. So, it turns out that the pain shifted from the pain center to the emotional center in about six to 12 months in every patient, every time.

The current definition of chronic pain is that it is an embedded memory that becomes connected to more and more life experiences and the memory can't be erased. These are permanent circuits. It's like riding a bicycle. Once you know how to ride a bicycle, you actually cannot unlearn how to ride a bicycle. Those are permanent pathways, right. So, the circuits are there. They're permanent.

It also turns out it doesn't matter where the pain starts. It could be a bone spur. It could be a vascular injury. It could be phantom limb pain. It could be migraine headaches. It doesn't really matter where the pain starts or why. Once it's memorized, it's memorized.

And what we've also seen, that if these are permanent circuits, they're programming your brain, and that sounds pretty dismal, right? I mean, doesn't that sound sort of bad?

Maya Novak

[07:12] Yes.

David Hanscom

[07:13] Okay. So, first of all, I'll say it's a disease of the brain, and what you have to do is you literally can actually change the structure of your brain called neuroplasticity. You can actually rewire around these preexisting circuits. If the brain shifts from these preexisting pain circuits to different circuits, the pain goes away. It turns out that chronic pain is solvable and curable. We're spending billions of dollars on research trying to look for the solution for chronic pain, and we already know the solution.

The solution consists of three steps. One of them, the first one, is education –becoming aware of the nature of chronic pain, becoming aware of your situation, and becoming aware of the principles to solve it.

The second step is addressing every variable simultaneously. In other words, many things affect chronic pain such as sleep, stress, medications, physical conditioning, nutrition, all of those things affect pain and everything counts. You have to address all of those at the same time. It turns out that everything works a little bit in chronic pain, but nothing works in isolation. The metaphor I like to use is like fighting a forest fire. It takes multiple strategies to successfully fight a forest fire, everything counts.

The third step, which is the most critical, is the patient takes control because your individual chronic pain is complicated, and it takes a lot of work. The only person that knows the solution is you. So, by definition, the only person actually that can solve the pain is you because you are an individual with your own specific perspective.

Anyway, so we've had hundreds of patients go to pain-free. It's very much of a self-directed process. I use the estimate that over 1,000 patients have gone pain-free, but I get emails from all over the country every week with people saying, look, I read your book. I went through the exercises, and I'm fine. There's minimal risk, almost no cost. It's a matter of literally rewiring your brain to a different set of circuits.

Maya Novak

[09:07] So, what you explained, and especially when you started explaining at

the beginning, does this translate into also that we can potentially avoid chronic pain if we take care of the emotional aspect of what is happening inside of us? Could that be also how we can prevent chronic pain from developing, one of the ways?

David Hanscom

[09:30] Well, again, the key issue is that there is – each person is an individual, and some people maybe it's more of a structural back problem, physical. Some people, maybe it's more emotional. Some people it's lack of sleep. For instance, lack of sleep has been shown in research to actually cause chronic pain.

Maya Novak

[09:47] Mhm.

David Hanscom

[09:47] They did a major study out of Israel. It's an important study in over 1,200 patients. They found out that people that had insomnia, actually it caused back pain. And I always thought that people with back pain couldn't sleep because of the pain. They actually didn't find that, it was actually the lack of sleep that caused the pain.

So, for instance, you could do lots of different treatments, but sleep is easy. It's easy to address. It's easy to solve. And so with many of my patients, just getting people to sleep actually solves the problem.

When you talk about the emotional pain that is a major factor, I think the mental pain is actually a bigger problem than the physical pain. But again, a lot of things affect that, including exercise, and different things we've talked about, life outlook, etc.

So, the main thing is understanding it's a multi-pronged approach. Each person does it totally differently. The key to the book and the website – the website, by the way, is backincontrol.com. The key is that you take control. So, the book is just a framework that takes documented medical treatments, organizes them in a structured manner, and then you can figure out your own solution because yours is going to be much different than mine was.

What happens when people take control of the care and understand while this works or it doesn't work, this applies to me and this doesn't apply to me. I mean, some people with chronic pain sleep just fine. So, we're not going to spend time there. But once somebody decides to get involved, it's really just learned chronic pain, and actually start picking their way through it, it just a matter of time. Probably 90 percent of the people are better within three to six months. Some people are much faster. I've had three or four people in this last month, they've been looking at their chronic for about three or four years, and all a sudden bam, they've hopped to pain-free.

So, it's a process that your brain changes. We used the term neuroplasticity earlier. Your brain changes every second. New neurons, new connections, new myelin, all different – all sorts of things different happens. It turns out that the brain is very dynamic.

When I was in medical school, we thought the brain was static, that you would only lose neurons as you get older. That's absolutely untrue. The good news is,

okay, there are permanent pathways, permanent circuits, and you can stimulate the neuroplasticity to form different circuits around the old circuits or detours, and it doesn't matter where the pain starts, you can rewire around it.

Maya Novak

[12:04] What does that mean – rewire around it?

David Hanscom

[12:07] So, any threat, whether it's a physical threat in the form of physical pain or bright lights or too loud of a sound, etc. yields a neurochemical reflex to survive. And humans have a problem that I call a curse of consciousness, it's that thoughts do the same thing as a physical threat. And so what happens, you have an unpleasant thought, your brain processes it as a threat, you have a neurochemical survival response, it's the same as a physical threat. But with my cat, if she escapes the threat that's got her fired up, the chemicals drop down and she's fine. Humans have a problem called the curse of consciousness, in that you cannot escape your thoughts, right.

Maya Novak

[12:50] Mhm.

David Hanscom

[12:50] You can suppress them, which was my problem. You can experience them by complaining, etc. which actually reinforces the circuits. What does work is masking, for a while. In other words, you can overeat, too much alcohol, too many drugs, whatever you want, work addiction, etc. So, the masking actually works while you're engaged in the behavior but, of course, long-term these masking behaviors are very destructive. So, you can either suffer, suppress or mask.

What happened to me, I used to think that anxiety was a psychological issue. Don't you think that's what most people think?

Maya Novak

[13:22] Yes, absolutely.

David Hanscom

[13:24] Okay. So, this is the problem. So, how could you go from being absolutely a fearless spine surgeon who honestly didn't know what anxiety was, to panic attacks in one day, right?

Maya Novak

[13:36] Yes.

David Hanscom

[13:36] And I was open to ideas. I was open to change. I actually went to psychotherapy once or twice a week for 13 solid years. Now, I'm a supporter of psychology and psychiatry. But what I thought, if I just really, really understood the problem, that somehow I would be better.

It turns out when you discuss a problem over and over and over again, from a neuroplasticity standpoint you actually reinforce it. So, again, you have some type of threat. You have a physiological response and then you have stress chemicals. The sensation generated by these elevated stress chemicals, that's the anxiety. That is not psychological. That is physiological.

The reason why it's so critical is because the unconscious brain processes about 20 million bits of information per second. The conscious brain processes 40 – four zero. You're looking at 20 million compared to 40, and it's no wonder that people can't control their anxiety, plus you don't want to. I mean, if you

didn't have anxiety, you would live about maybe three minutes. You wouldn't breathe. Your heart rate wouldn't work right.

And so remember, anxiety says danger. The way every living creature survives is by avoiding danger and gravitating towards rewards, with a first response to avoid danger. So, what both our bodies are doing is we're automatically avoiding things that are dangerous. I'm not staring into the sun. I'm not sitting in one spot on my chair. I'm not walking into the street because my brain automatically puts me on autopilot. It keeps me in a safe zone. When I see the safe zone, that's when my brain experiences anxiety.

So, anxiety is just that signal that says danger is intended to be very unpleasant. You don't want to get rid of it. You can't rid of it. It's actually a gift, right.

Maya Novak

[15:28] Hmm.

David Hanscom

[15:28] Okay. So, remember every creature that's alive now, the species before has paid attention to their environmental cues. It's always survival of the most anxious more than the most fit. I mean, obviously being fit makes a difference also. But remember, it's by paying attention to your environmental cues that you survive. The creatures that did not pay attention to their environmental cues didn't survive. So, you have this massive survival response.

I wrote a website post called 'Anxiety: Your Prison Guard or a Bodyguard'. Anxiety is your bodyguard. It's what happens, it's not who you are. When the anxiety becomes part of your identity, then you're imprisoned by your anxiety because your identity is now mixed up with this massive unconscious response. One hundred percent of living creatures have it, especially humans.

None of us can escape our thoughts. Every human being is subjected to a certain level of negative thoughts. The more chaotic and abusive your background, the more intense those negative thoughts because that's the way your brain was programmed. Any time you're anxious or upset, you're in a reactive survival pattern, that's it. Not psychological – physiological.

Okay, I'm going to ask you a rhetorical question that you won't get the answer to – or maybe you will because you've read my stuff. So, anxiety represents elevated stress chemicals. Just like when you're lying on the beach in the sun, you have oxytocin, dopamine, and serotonin and you feel relaxed, you wouldn't call relaxed a diagnosis, right.

Maya Novak

[16:56] Yes.

David Hanscom

[16:56] 'Relaxed' is a description of your body's neurochemical state.

Maya Novak

[16:59] Yes.

David Hanscom

[16:59] Just like with all adrenalin, cortisol, and histamines, you're hypervigilant and you are anxious. 'Anxious' describes that experience of being under threat. When it's sustained – so, it represents elevated stress chemicals. If anxiety is not solvable by rational means, remember it's 20 million compare 40, how do you decrease anxiety?

- Maya Novak [17:24] That's a really good question, and I'm absolutely positive that you're going to answer it.
- David Hanscom [17:29] I am, and that's a very good answer. I like that. You should be in politics!
No, I ask that question because people say well, mindfulness, meditation, relaxation, those are ways to do it, but the answer you're looking for is simply decrease the stress chemicals.
- Maya Novak [17:42] Mhm.
- David Hanscom [17:43] Okay. The first thing you have to do is separate anxiety from your identity.
- Maya Novak [17:47] Yes.
- David Hanscom [17:48] And so, I say look, get rid of the word anxiety out of your vocabulary completely, okay. And when you feel upset, agitated, whatever you want to call it, just visualize the words 'elevated stress chemicals'.
The way to decrease anxiety is to decrease the stress chemicals. But the first thing you have to do is separate from that reaction. I have people visualizing a large thermometer on the opposite wall and just visualize how high your stress chemicals might be. We'll talk about ways to lower the stress chemicals, both directly and indirectly, in a second. The bottom line is to decrease anxiety and simply decrease the stress chemicals. What doesn't work is talk therapy. Again, it's 20 million to 40.
There's two categories of ways to decrease the stress chemicals. One of them is called – I call them direct means. For instance, a meditation course drops your stress chemicals down. Yoga, Tai Chi, all those types of things also work. But there's an exercise all the time, and I'm going to do it right now, called active meditation.
- Maya Novak [18:52] Mhm.
- David Hanscom [18:52] If your mind's racing or a little bit upset or something's frustrating to you or somebody cuts you off in traffic, just drop your shoulders for a second and put your sensation on just where your sitting, or just feel your shoulders. Let your jaw muscles relax. That's it. It can be sight, touch, sound, feel, whatever you want, for three to five seconds.
The reason I call why I call it active meditation is because it's something that you can do all day long. It doesn't take a meditation practice. I've done a lot of this work, but I honestly don't have the time and patience to meditate. It sounds ironic, right.
- Maya Novak [19:28] Yes.
- David Hanscom [19:28] But you don't have to. If you want to, it's fantastic. I think it's a really wonderful thing to do. But this active meditation you can do in real-time. It takes no extra time. It's a learned skill. And just all day long, just drop your

shoulders and let your jaw muscles relax. You might have noticed that my voice dropped down just a little bit.

What that does is a few things. It relaxes your muscles. It shifts the receptors to your brain to a different sensation. But what you've done, you've gone from racing thoughts to a different sensation. You've changed the sensory input. The response will be less stress chemicals.

We actually do this during surgery if we're a little bit frustrated. We'll just drop down our shoulders and go to light, touch, and feel, and by going to light, touch, and feel, we're actually connected to the mood, and we're not trying to suppress our negative thoughts.

But I want to go back to the original part of the story back in 1990. I was trying to cross the 520 Bridge in Seattle. It was 10:00 o'clock at night. All of a sudden I went and had a panic attack – which is a racing heart, sweating, light-headed. I thought I was going to die. I was only 37 years old. I honestly went from a fearless surgeon with the attitude of 'bring it on'. I went through a very high-level spine fellowship to panic attacks in one day. For a decade, I could not figure out what happened. How did I go from that to that? It got worse and worse and worse, and nobody could tell me what was going on. Again, I told you I went to psychotherapy for 13 years. It's not psychological. What I was a master of doing, was suppressing anxiety. We all know when you try not to think about it more.

Maya Novak

[21:05] Yes.

David Hanscom

[21:05] To become a spine surgeon takes a tremendous amount of fortitude, and I was just an incredible master of suppressing stress. In fact, my nickname in high school and college was 'the brick' and I thought – I wore that with pride. In retrospect, it's not a great title. But I think not just physicians, but most high-level professionals and I – you're a veterinarian, right?

Maya Novak

[21:31] Yes.

David Hanscom

[21:32] So, the two top people in my class went to medical school because they couldn't get into veterinary school. It's very competitive. You know the intensity of the training, right.

Maya Novak

[21:40] Yes.

David Hanscom

[21:41] Okay, so we're just taught to put our heads down and don't complain. We're lucky to be there. We become masters at suppressing stress.

The research shows when you try not to think about something you think about it more, but you think about it a lot more. And so, sort of the craziest negative thoughts that we suppress, that you're not giving neurological attention to – I wrote a website post called 'Your Demons are Really Robots' because all these sorts of demons and really unpleasant thoughts that you have in your brain, is actually who you're not. And what happens in neurological triggers, they suppress these crazy bizarre thoughts, but you've paid neurological attention

to them. It's a neurological trick, right.

Maya Novak [22:22] Mhm.

David Hanscom [22:23] I was a master at suppressing, and what happened is I started having migraine headaches, my feet were burning, my ears were ringing. I was getting skin rashes all over my body. But I didn't connect these two together.

What happens is that – again, anxiety represents elevated stress chemicals. If you suppress the sensation of anxiety, then your body chemistry is still way and it affects every organ in your body.

Maya Novak [22:48] I'm nodding here the whole time when you were talking. I was nodding because I can also very much connect to what you were explaining.

And one of these is definitely talking about something over and over and over again, and what kind of affect this has because I suffered with chronic pain a couple of years ago. And then at the end, I came to the solution, sort of, that I have to stop talking about it because otherwise, I'm just in pain, in constant – and constantly talking. People are constantly asking me. I'm constantly thinking about it.

David Hanscom [23:24] Right.

Maya Novak [23:23] So, when I was searching your website and read your book, I was like oh my goodness, if I knew about you a few years ago, I might be free of chronic pain much faster because I needed to come to that solution on my own.

David Hanscom [23:42] Right. And I take it that you're doing fine now? Are you doing fine?

Maya Novak [23:45] Yes.

David Hanscom [23:46] Right. Now, only 20 percent of physicians are – the research shows that only 20 percent of physicians are comfortable managing chronic pain. Less than one percent enjoy it. But the problem is, we keep treating it as a structural problem, which is a disease of the brain. And again, these are permanently embedded circuits. Just like an athlete learning a skill.

Let's just take phantom limb pain, for instance.

Maya Novak [24:10] Mhm.

David Hanscom [24:10] The leg is amputated. Ninety percent of people have phantom sensations. Fifty-five percent of patients not only feel the arm or leg that's been amputated, but they still have the same pain that they had before the amputation, and it drives them crazy because they can't touch it and massage it.

You can't do more surgery on it, and that's something that was never – I remember in medical school going what are you talking about? I mean we're all taught that the structures cause the problem. We have no concept about this being a disease of the brain. And phantom limb pain is a very classic example

to really consider. I just reviewed a research paper of 28 people who had arm pain. They talked a given surgeon into amputating completely normal arms – 28. Only two of them got better. Twenty-six had the same pain they had before the amputation but, of course, it's worse.

And we now know – I did not think that these processes were going to work on phantom limb pain, but I've heard this now several times where – the most recent one was a gentleman who – a middle-aged gentleman who really had a tough time, and was a very rigid thinker, very – basically, a part of a gang. He lost his leg in a car accident and developed phantom limb pain, high dose narcotics, and he was a pretty angry guy. And when the world started cutting back on narcotics, he got very, very reactive and very aggressive with his physicians. He got sent to a friend of mine who is a pain psychologist, who calmed him down, started going through my book, going through the website. Within three months he went to pain-free – no phantom limb pain, no narcotics. He's going back to school to become a drug and rehab counselor.

So, again, the essence of solving chronic pain is optimizing your body's chemistry. In other words, you connect your own body's capacity to heal. What happens is about the body's chemistry because the essence of solving a problem is feeling safe. Remember, that's how we survive, is by feeling safe. When you feel safe, you're giving off all these great chemicals – the oxytocin, the love drug, and dopamine, the reward drug. When we feel threatened your body's full of stress chemicals because you're on high alert.

So, what happens, it's not just the book, it's not a formula like approach. You're taking well-established medical treatments. You're talking with the patient, and listening to him. And I honestly didn't think that phantom limb pain could disappear to that degree.

But going back to your original question about where does pain exist? All pain exists in the brain. The only reason this table exists as a table is because my brain has sorted that sensory input and said this is a table. If I put my hand on this table, it's a little bit cool. Well, it's because my brain says that this is cool. In other words, it's interpreting sensory input.

The only way you can interpret your environment is through your brain unscrambling the signals. And so for certain people, the pain threshold is lower versus higher.

But looking at a boxer, a cage fighter, or an NFL football player, I mean, take one-tenth of one of those hits, and I would out for the count, right. So their brain has been programmed to take a tremendous amount of stress. Or take a major league baseball player who can take a 90 mile an hour fastball plus. I can't do that. I can't even see that. But again, their brain's programed to see even the rotation of the baseball as it comes into the plate.

So, your brain adapts really well, including pain impulses. And again, once they're memorized they are permanent. So, when you have these racing thoughts coming into your brain, your body's full of stress chemicals. When they are sustained, there's over 30 different physical symptoms that happen

with sustained levels of stress chemicals.

I had 17 of these at the same time. I mentioned a couple, and again, one of them is anxiety, which led to a severe depression, which led to a severe obsessive-compulsive disorder. Every one of those symptoms has gone.

The reason why there's so many symptoms is that when your body chemistry is full of these stress chemicals, then each organ is going to respond in its own unique manner.

And that's why it sounds like snake oil to say, well, okay, how can 17 different symptoms disappear? But my ears don't ring anymore. Tinnitus is a very, very annoying symptom. One of the worst symptoms I've experienced in my life. I actually experienced that for 25 years.

Maya Novak

[28:34] Wow.

David Hanscom

[28:34] That's a long time. That was way before I knew about chronic pain. It was way before my anxiety developed. I started to develop burning in my feet when I was training in Hawaii as an orthopedic surgeon, and I thought it was just the hot pavement. That burning progressed to the point where at the worst point, I thought that my feet literally were in a toaster oven. I had testing, everything was normal. What do you do? That's gone. My ears don't ring. I don't have migraine headaches anymore.

But it's about regulating the body's chemistry. That is not psychological. I think if you take any migraine headache sufferer and imply to them that the pain is imaginary, they'll try to punch you. I mean, migraine headaches are horrible.

Maya Novak

[29:17] Yes.

David Hanscom

[29:18] So, again, the essence of the solution is feeling safe, which optimizes your body's chemistry from a stress profile to a play/relaxation profile – everything works better. That's the key issue. Are you learning the tools and learning to regulate your own body's chemistry?

Maya Novak

[29:36] Yes. So, when we are talking about feeling safe, is that also – do we talk here also about perception? Because feeling safe is not necessarily, I'm at home, I have a roof over my head, everything is taken care of. But also, how we are perceiving certain situations. For example, going to the doctor's office or thinking about our jobs. So, does this feeling safe include that as well?

David Hanscom

[30:08] I think the essence of chronic pain are the thoughts. What people don't feel safe from are their thoughts, right.

Maya Novak

[30:16] Mhm.

David Hanscom

[30:16] We're raised, by most of our parents, about what not to do rather than what to do. We're never quite good enough. And society keeps telling us that we're lacking this, this, and this, and then can sell us something to fix yourselves.

Maya Novak

[30:30] Yes.

David Hanscom

[30:30] There's this endless noise that we're not good enough, we need to do this and this to be happy, etc.

Remember, you can't escape your thoughts. I'm now convinced that the inability to escape your thoughts is the essence of chronic pain. Because, again, the reaction's the same. It's a physical threat or a mental threat, it's the same thing.

The research also now shows that thoughts become embedded in your brain the same way this chair does. So, the only reason I can look at you as a woman because my brain says you're a woman, the same thing with a belief system, or Republican or Democrat, or whatever you want to talk about. My brain has a greater construct of what that is like. That becomes embedded in my brain as real as this table. That's why there's so much concrete really bad behavior taken based on thoughts, concepts, and ideals.

When I wrote my first two books, I said look thoughts are real. They create chemical reactions in your body, but they're not reality, they're just thoughts. It turns out I was wrong.

The neuroscience research shows that thoughts are your version of reality. In other words, if you look at a movie you have a completely different experience by me looking at the same movie because you're programmed by your past...

Maya Novak

[31:41] Yes.

David Hanscom

[31:42] ... and that's your filter. That's why it's really critical for humans to get along someday and to truly understand that your view is as valid as mine. We can discuss ideas and you may change your views, but you can't argue about somebody's perspective.

It's the same thing with food. If you're programmed to eat a certain food in a certain country, you're going to like certain foods that I will never like and vice versa. But it's how your brain is programmed that this food for nurturing as a child, I love it as an adult, whereas to me it could be absolutely disgusting. But that's my brain perceiving the environment.

So, it's really critical to understand that thoughts are relentless. You can't escape them. That's why I want to jump back into the tools of actually how to solve the problem.

Since you can't escape your thoughts, my number one message I'm trying to give to the world is that chronic pain is solvable. It's a brain disease. It's about the body's chemistry, but anxiety is the pain. That's it. It is not psychological.

So, we're talking about the direct ways of calming down the stress chemicals with relaxation type tools, but the other way is neuroplasticity.

Maya Novak

[32:53] Mm.

David Hanscom

[32:53] We actually, instead of being stressed and on automatic survival response, it's stress, a little bit of a space, and then you substitute the response, but you have to create a space.

So, neuroplasticity is based on awareness. You become aware of the trigger. In other words, any time you're anxious or frustrated, you've been triggered. Your automatic response is always going to be survival, right. Any threat is going to be perceived as a problem, so you have an automatic survival response.

What you have to do is awareness separation reprogramming. What you do, you can be aware, okay, I'm triggered. I'm anxious or frustrated. You may or may not know the reason. Then you create a little bit of a space. Take a deep breath, drop your shoulders, then you substitute a response. We talked about active meditation. Again, just drop your shoulders for a second. Feel the chair, done.

But the first step of the healing process, which happens with every patient, is a process called expressive writing. There's a book I think I've told you about called *Opening Up By Writing it Down* by Dr. James Pennebaker, and there's over a thousand research papers and documents that this works.

Which is you simply write down your thoughts. Pause over negative. Ration over your rational or bizarre, despicable thoughts, whatever they are. You write them down and you tear them up. You're tearing them up not to get rid of these things because there's trillions of thoughts, but you're just separating, and so you caring enough to write with freedom, but also not to analyze them. Because if you analyze them, then you're giving them neurological attention.

It turns out when I was in psychotherapy – again, I'm an advocate of psychotherapy in general, but it has to be put in the right spot. But my thing was if I just knew enough about my past and what the triggers were, that somehow that was going to solve the problem. It turns out it was actually reinforcing it and it didn't realize it.

So, expressive writing is the number one step. The active meditations combined with the expressive writing because what the expressive writing does, it does awareness separation of one mood, and the active meditation is a reprogramming tool.

The other tool we ask people to do is called not discussing your pain, ever. I'm going to pretend you're in my office for a second. Let's say you've had back pain for five years, and obviously, you've been talking about it, searching for a cure, asking people different questions about their experience, etc.

I didn't realize how much people talked about their pain until I started doing workshops. And then I reflected back on my own experience and realized I was on an endless quest to solve my pain. So, again, I talked about my pain all the time.

As powerful as the expressive writing is, what is equally as powerful is not discussing your pain with anyone, ever. So, I say to you, look, when you walk out the door of my office, you will never discuss your pain ever again, except with your doctor, that's it. People are stunned. They honestly don't know what to do because people don't realize how much time they spend on the pain.

From a neuroplasticity standpoint, where's your attention? It's on the pain.

You're reinforcing these pain circuits and in a really terrible way. And it turns out that not discussing your pain turns out to be one of the most powerful tools by far, as far as people getting better.

But also since the mental pain is a bigger problem than physical pain, that also means no complaining, no gossiping, no unasked for advice, and not criticism, right.

Maya Novak

[36:21] Yes.

David Hanscom

[36:22] And think about it. If you look at your daily conversation, think what percent of your time is spent on complaining, discussing, gossiping, whatever it is. I mean, I do the same thing. I'm not being judgmental here because we all do, it's part of the human nature.

But I've actually made my New Year's resolution this year in two words, and that's just 'be nice'. It's not going to be – so positive thinking doesn't work as a way of suppressing negative thinking. But positive substitution heading towards envisioning – positive vision is absolutely critical.

The metaphor I like to use is that of a new language. When you're learning French, you've got to practice it with repetition. But in five years and you now can speak fluent French, something happened to your brain – new connections, new neurons, new myelin. But you didn't learn French by trying not to speak English, right.

Maya Novak

[37:13] Mhm, yes.

David Hanscom

[37:14] Okay. The default language is pain, it's a defense survival mechanism, and the new language we want to you learn is called an enjoyable life. You're not going to achieve this enjoyable life unless you create a vision of what you want in your life. What do you want it to look like, and how are you going to get there, and start actually creating the plan with thoughts of your pain. As you move forward with your pain, inadvertently and consistently you leave the pain behind.

If you try to fix your pain – this is the hardest part about the whole process. We're all trying to fix ourselves, but your attention's on the problem and not the solution.

Maya Novak

[37:50] Yes.

David Hanscom

[37:51] It's like me trying to fix my terrible golf swing, which I've never had a good golf swing because I was always trying to fix my bad one, right.

So, again, you're not going to learn French by trying to fix your English. You're not going to create this new life pain-free by trying to fix your pain. The hardest part is letting go so you can move forward.

Maya Novak

[38:09] David, this is incredible advice, and I'm so grateful for you to be here and talk about this.

Now, I would love to ask you something else. At the beginning you were talking about your experience, and also that you were feeling hopeless, and that it was a really hard experience for you. So, I know that there are people out there who are listening to this and they are feeling hopeless in regards to their healing. What would you say to a person that is losing hope about their recovery?

David Hanscom

[38:41] On my website there's a section called 'Stories of Hope'. It's got 30 stories there. I have hundreds and hundreds of patients who have gone to pain-free.

I just ran across a gentleman who contacted me on Facebook, I have never met him. I'm going to meet him here in a few weeks. He had 20 years of chronic pain. He had 27 surgeries. He had hydro-psychoics. He had a suicide attempt, alcohol issues. And I honestly thought that was not a solvable problem because usually after three to five surgeries, you're sort of done, right.

Maya Novak

[39:14] Yeah.

David Hanscom

[39:14] He had 27 surgeries. Six of those were spine surgeries. He's pain-free and doing just fine – no drugs, no medications, no pain. I've talked to him three or four times now just to make sure I'm actually hearing this correctly, and reinforced that yes, that he did have that many surgeries. We're going to get him on video here shortly to tell his stories.

But I just have to tell people that chronic pain is solvable. It doesn't matter how long you've been in the pain, how bad the pain is, or what you've been through. You literally can rewire your brain around everything. So, I think the first thing is to understand that there is a solution. And we also know that hope and optimism is actually a healing modality in and of itself because that changes your body's chemistry also.

So then, as far as the journey, it's about 90 percent self-directed. Essentially, none of my patients have seen pain psychologists. Not because I didn't want them to, we just didn't have those available. But by doing the expressive writing, relaxation, and not discussing your pain, those are very, very powerful tools. We also briefly mentioned sleep.

Once you understand the concepts, they're just not very hard. That's what's sort of disturbing to me in a way. I actually quit spine surgery in December 2018 because I was seeing three to five patients every week having their spines badly damaged by spine surgery that they didn't need. And I'm watching hundreds of patients go pain-free with some of the worst looking spines you can imagine with no risk. The divergence in the outcomes was so intolerable to me, I actually quit my practice to do this full-time.

Maya Novak

[40:46] This is amazing. We covered a lot in this last 40-45 minutes. Now, if you had to choose only one advice, what is your number advice that you would give someone who is right now injured and recovering?

David Hanscom

[41:03] What I do – one of my most successful patients made just a very simple comment, it's that you don't have to believe a word I said, not one word. Now,

why would I say that? The reason is that you're connecting to what is. In other words, this is not about positive thinking or well, Dr. Hanscom says this is great, if I believe enough I'm going to say I'll be cured – not true.

What you're doing is engaging in practices that actually rewire your brain. So, the first thing we do is to say suspend disbelief. You don't have to believe, but please suspend disbelief. And if you don't like what I'm saying or don't believe it, write it down. Just connect with what actually is in there because positive thinking does not work.

Second of all, just understand that you have to learn the tools to actually learn how to regulate your body's chemistry. So the books a book and the website's just a website, but if you actually engage in using the tools that we discussed, it's just game on.

So, there's a lot of hope and I would just encourage you to go through the process. You don't need me. You don't need a pain clinic. You can do it on your own, and it's right there.

Maya Novak

[42:06] Fabulous. This is so good.

Now, I do have one last question for you that is an out of the box question, and a bit of a fun question. That is if you imagine that you are being injured right now and you know that the recovery is going to take you a while, and it's not going to be easy all the time. But now in this moment, you can choose one of two options, or one of two gifts.

Number one is that you go through this recovery process and do everything that you can to recover in the best possible way, and then at the end, you are gifted with not being injured ever again in your life. Or option number two, that you go back in time, prevent the accident, prevent the injury, but then you also take your chances.

So, my question here is what would you choose, David, and why?

David Hanscom

[43:00] First of all, I would choose never to be injured. I mean, I would not choose to go through my journey again. It was horrible.

People in chronic pain get trapped, and they get very frustrated because nobody believes them. So, what happens with this process is learning how to fail. Pain keeps coming at us. And the exciting part is once you learn to choose a process – a stress process pain, people thrive at a level that they never thrived at before in their entire life, and so it's like breaking loose. It's really a very freeing experience. So, by learning the tools you don't have to stay in this hole very long. And then in some ways, you go in the hole every day, at least for a few minutes. So, as you move forward, it gives you a lot of power to know that you can control your own destiny.

So, my attitude is, again, bring it on, I can take it, but not because I'm tough. I'm more resilient and flexible.

Maya Novak

[43:51] Yes. Fabulous. David, where can people find more about you and your

work, and potentially get in contact with you?

David Hanscom

[44:01] Yeah, the website is backincontrol.com.

Starting tomorrow, 12:00 o'clock Pacific Time, I am doing a half-hour question and answer period for anybody who's listening, maybe up to an hour if people are interested. So, we have thousands of patients all over the world, and you can just hop on the website, and you can feel free to ask me questions. You can find that on my website backincontrol.com

Maya Novak

[44:21] Fabulous. David, thank you so much for your time and for sharing this incredible knowledge and helping people become free of pain. Thank you for being here.

David Hanscom

[44:32] Thank you very much.