

James Gordon: So, that in fact our health as a population is getting worse and I'm sure, as you know, the next generation is likely to live less long unless they pay attention perhaps to some of the things that you're saying and that I'm saying. But, in general, the next generation's prospect don't look so good. We're spending more and more on health care and health care professionals are burning out earlier and earlier. They're more and more dissatisfied both in the field of health and in mental health.

Announcer: Bulletproof Radio, a state of high performance.

Dave Asprey: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the is that lab-grown organoids are actually more stressed than your actual brain cells. Brain cells that grow into clumps in labs have ambiguous identities and make more stress molecules than cells taken directly from a human brain, according to new research. And, they make these little clumps of brain cells using stem cells from [inaudible 00:01:08] blood, which under the right conditions form three-dimensional clusters of brain cells, which are called organoids. They're useful because they recreate some aspects of very early human and other mammal brain development in a period that you would never be able to study in the womb. The new results are teaching us things about unappreciated differences between those organoids and our human brains.

This comes to the field called Developmental Neurobiology, which in my mind is one of the most cutting edge fields of study about what makes us who we are maybe before we even noticed. Some of the things that have come out in that field are in alignment with my very very first book called The Better Baby Book. Which is all about fertility and what you do even before getting pregnant in order to set your children up for success. In this case, there's new science about organoids shows more active genes in stress response and that these are not actually normal brain cells. They're stressed out cells that are neurological. The good news, when they implanted and grew those cells for several weeks in a more normal environment with a blood supply in a mouse brain, the cells were less stressed and not as confused about their identities. So, isn't it kind of creepy? Maybe all the cells in your body each have their own little identity and you're just a collection of all those cells and there's a whole bunch of these alien mitochondrial cells that are actually your puppet masters. Well, that's the world I think we live in. Time will tell. In the meantime, now you know what an organoid is. So, everybody wins.

Today's guest is a guy I'm really excited to interview. He's Dr. James Gordon. He's a Harvard-educated psychiatrist and a world-renown expert in using mind-body medicine. This is an emerging thing that, oh, wait, what happens in your mind is effected but happens in your body. But he's healing depression, anxiety, and even psychological trauma, which is behind a lot of the things you do that you don't like, is unacknowledged trauma. And he's a founder of and now executive director of the Center for Mind-Body Medicine, which is a group that focuses on life-changing therapeutic work for individuals, families, and groups. For more than 25 years he's led teams in relieving population-wide

psychological trauma. We're talking during and after war in the Balkans, the Middle-East, and Africa, climate-related disasters in Louisiana, Texas, California, Puerto Rico, Haiti, and even after school shootings. And with active-duty US Military and veterans.

He's got a new book that I really, if any of this resonates with you, you really want to read his new book. It's called *The Transformation: Discovering Wholeness and Healing After Trauma* that explains trauma's just a human experience. Nothing wrong with you. Having dealt with my own set of traumas throughout my life and just understanding how they've affected who I am, how I developed and what you can do about them, I think this is a core part of being Bulletproof, is just understanding I got some programming. We all did if we're alive and Dr. Gordon is one of the guys who's put decades into figuring this out with the hardest groups out there. So, Dr. James or Jim Gordon, welcome to the show.

James Gordon: Thank you, Dave. It's good to be here.

Dave Asprey: Now, I could have gone through a longer list of all the cool things you've done like Harvard Medical School, MD in psychiatry, and Georgetown Clinical Professor, you're a very accomplished guy. What I'd like to understand first, before we get into the details of what is trauma, why is it happening, and what is our response to it, it's not that common for a well-credentialed and Harvard trained doctor to go into mind-body medicine. At what point in your career did you decide that you were going to basically flip the bird to your white lab coat colleagues and talk about mind-body medicine?

James Gordon: Actually, I don't know that I flipped them the bird, but I felt a little bit different right from the first days of medical school.

Dave Asprey: Ah, okay.

James Gordon: That was because I'd had an education, went to Harvard College, and then Harvard Medical School. In college there was such a range of thought that was possible and use of the imagination, and students, in general, were treated pretty well, pretty respectfully. I went to medical school and it felt like an extremely extremely high class vocational high school. That was everything was very cut and dry. My classmates were brilliant, funny, interesting people. But the way we were taught felt rather narrow and there wasn't much room to question. Then especially I was troubled by the way patients were treated on the hospital wards. There seemed to be a kind of objectification, condescension, and other, you know, kind of very cool treatment to people instead of warmth and connection that I looked for. It wasn't universal, but it felt to me from the beginning like there was something wrong with the system as a whole, something a bit wrong with the way we were being taught, and definitely something wrong with the way patients were being treated.

So, I felt really for the first time in my life I felt kind of alienated and I identified, and some of my professors didn't hesitate to tell me this, that I identified too much with the patients. But I could see that they were feeling, and not always, there was some beautiful doctors, but too often, they were feeling neglected and misunderstood, that nobody was there really listening to them when they were going through hard times. So, it wasn't that I came at change specifically for mind-body medicine but I came at it from looking at the world from the point of view of my patients. And seeing how they experienced things was different from me. So, that opened me in a way to understanding and looking at other perspectives. Not just my patient's way of looking at the world but within a couple of years I became interested in how other healing systems understood us.

Dave Asprey:

I've often thought, from having studied with or just spent time with and benefited from Transformative Psychology, shamanic things, Chinese traditional medicine, acupuncture, even Tibetan medicine in the middle of nowhere in Tibet, it seems like the variables we're dealing with are what is the patient and the condition, what is the technique for healing, and who is the healer? If you try to remove the healer from the equation that you introduce this sort of robotic mindset to medicine that alienates people. And it seems like it was taught in the '60s, and I was born in the early '70s. And it's percolated throughout. Are we fixing it? Have we fixed it? Is it better today than it was 30 years ago?

James Gordon:

No. In some ways, it's better and in some ways, it's worse.

Dave Asprey:

How's it different?

James Gordon:

Well, back then I think there was, certainly in psychiatry, there was much more emphasis on talking with patients. There was the biopsychosocial model which George Engel put forward, that was really very fundamental to my training in psychiatry. You spend a lot of time listening to people. You did psychotherapy over a time. It was important to understand the way patients looked at the world. Now, psychiatry's become much more narrow, in general, and much more focused simply on prescribing drugs to treat diagnosed conditions. And the sense of the richness of the individual and the understanding of the individual in his or her social world is just kind of dropped by the side of the road. In medicine, yes, now because a number of us have sort of advanced the cause of mind-body medicine, and nutrition, and use of movement, and exercise, and meditation, and bringing that into medicine, there are those openings in medicine and in healthcare.

But at the same time, we really haven't made the major shift that we need to make, which is in the direction of focusing on self-care as central to all healthcare, self-awareness, self-care, and group support. So, that in fact, our health as a population is getting worse. I'm sure, as you know, the next generation is likely to live less long, unless they pay attention perhaps to some of the things that you're saying and that I'm saying. But, in general, the next

generation's prospect don't look so good. We're spending more and more on health care and health care professionals are burning out earlier and earlier. They're more and more dissatisfied both in the field of health and in mental health.

So, I think there are kind of contradictory forces at work. There is a progressive emphasis on a wider, more holistic, or integrative perspective. There is the interest in functional medicine, looking at basic biological processes rather than diagnose the categories. But so far, this is not changed the sort of mainstream of medical care in this country, which is still very much a kind of narrow biomedical view. We're going to find the diagnosis and we're going to focus on that. We're going to treat the symptoms. We're primarily going to use drugs and surgery. And that's still, although drugs and surgery clearly can be brilliant and lifesaving, in certain instances they are not the primary way that we're going to deal with most of the problems that most of us have most of the time.

Dave Asprey: Should we really be going to the doctor for trauma in the first place?

James Gordon: Well, that's a very good question. The premise of The Transformation of my book and the premise of the work we do at the Center for Mind-Body Medicine, we've now trained close to 7,000 people who in turn have worked with many hundreds of thousands here in the US and around the world. The premise is that what we're teaching about self-awareness and self-care and also encouraging people to get support from other humans is fundamental to the understanding and treatment of all trauma and that other therapeutic approaches, whether provided by physicians or mental health professionals who are necessary for therapeutic approaches, those are often important but they're secondary. We're missing the boat. And the boat is that trauma is going to come to all of us. It's not such an exceptional thing. You were saying that in your introduction. You've been through a number of traumatic episodes in your life. I've been through them in mine. All of us humans will go through traumatic events.

The problem with focusing on sending people to the doctor is the trauma then becomes a medical condition and it becomes something exceptional that just to begin with as opposed to being understood as something that is a part of human life. That if it doesn't come early because of poverty or discrimination or because we have an abusive or neglectful home, it's going to come as become young adults and in mid-life as we deal with the real crises of loss of relationships, and disappointments, and perhaps in our job, or our career, and loss of parents. And if not then, as all the wisdom traditions tell us it will come as we grow older. And we have to deal with physical frailty and the loss of loved ones and our impending death. This is a much bigger way of understanding trauma than the medical way of understanding it.

So, I think in answer to your question, there are times for medical interventions but we really have to take a step back and all of us need to learn the basic skills for understanding where our trauma comes from, for being able to balance

ourselves out physically, physiologically, psychologically, socially, and spiritually, and then understanding that the trauma comes to us, that comes inevitably to all of us, can open the door to greater wisdom and compassion and a clearer sense of meaning and purpose in our lives. That's not a conventional medical way of looking at human beings. And I believe it should be informing. And this larger perspective that the medical way should be just one piece of this larger perspective.

Dave Asprey: If there was a trauma vaccine out there would you recommend it?

James Gordon: I have questions about what would I do? I vaccinate myself against life?

Dave Asprey: Exactly.

James Gordon: I think that's a pretty dangerous vaccine to take. I think people do that. They call it addiction.

Dave Asprey: Oh, wow. That's a strong statement right there.

James Gordon: But that's what it is.

Dave Asprey: Yeah.

James Gordon: I mean if you talk with people who are addicts that's what they'll tell you. "It's too much for me. I can't take it. This is the way I'm self-medicating. I don't want to feel." We sacrifice so much of life if we do that.

Dave Asprey: Wow. So, after 40 years of working with patients, and you've seen your fair share of addicts among them I imagine, this is very strong words. It reminds me, there's an episode of Black Mirror, which is kind of like the modern-day Twilight Zone. Where there's a parent who puts little virtual reality contact lenses in her daughter, so her daughter never sees anything scary. And it completely, of course, wrecks the daughter's life, as you would expect. But it was, of course, done out of love but it was one of those things you're going the kid can't see his scary barking dogs and like nothing.

James Gordon: But Dave, but that's exactly the story of the Buddha. That's exactly what his parents tried to do.

Dave Asprey: Yes.

James Gordon: They eliminated any plants that were dying. They made sure he didn't see any sick people or old people. He never saw corpses. And that wasn't the way. That's not the way. And so, he went out-

Dave Asprey: It worked out all right for him. He didn't see any of that and he said, "Well this is really a problem. I got to do something about it. I guess I'll just get enlightened."

By the way, I just pissed off all of my Buddhist friends. But I'm summarizing his path.

James Gordon: He said, "Suffering is a part of life."

Dave Asprey: There you go.

James Gordon: And I need to know what to do with about it. I need to know how to deal with my suffering. And that's what I'm about also. And that's what so many of us are becoming about. That is we understand that suffering is part of life. There's a question of how to relieve the suffering and how to grow through and beyond that suffering. And that's what my work is about. That's what The Transformation is about. And it's possible as far as I can tell.

Dave Asprey: At what point does it go from that was a scary challenging difficult problematic experience that I either succeeded at or failed at, when does it switch from that to becoming a trauma? How do we know how far to push our kids or ourselves to not traumatize ourselves but to continue growing?

James Gordon: Well, I think that those scary experiences, those experiences are traumatic.

Dave Asprey: So, any time you feel fear, it's traumatic at some level?

James Gordon: Well, pretty much. I mean it depends. Obviously, if you're just afraid of a, you know if you're startled by a noise in the house, no. But, the events, the ordinary challenges of our life, divorce for example-

Dave Asprey: That's years of traumatic, yeah.

James Gordon: Well, over 50% of Americans are divorced. I've never seen divorce not be a trauma. Have you?

Dave Asprey: Never.

James Gordon: Maybe it happens but ... So, many of us experience loss of a significant relationship, a parent's death. Also, there are people who from very early life, very large numbers of people, even well-to-do people who are living in peaceful neighborhoods, or at least ostensibly peaceful neighborhoods here in the United States, have many of those adverse childhood experiences. They're neglected. They're abused. They're hit. They're bullied. These experiences are a part of life, early on for so many people. I don't know what's the line you're looking for between what and what?

Dave Asprey: Well, let's take bullying for example. I had lots of bullying in my life. When you're the tallest and the fattest kid, the smallest kids will always want to prove something. So, I had way more than my fair share of bullying and fights. I look back on that and you know what? There's some value to being able to stand

there when there's someone who you know they're going to hit you and you're going to hit them and to feel like you're going die. Right? Which is what it feels like when you're in a fight in 5th grade. It really does feel that way. Then to walk away from that with a black eye or having given the other guy a black eye, and say, "You know what? I survived and I can handle myself."

Years later, you'll be able to walk through a dark park and you'll have that energy that says, "This is a person who can handle himself. I better not mug him." Right? So, it's not like it isn't without value. But I'd rather, you know, my kids not have experienced the little bits of bullying they've had because I can tell. My daughter once said, "In 1st grade, I didn't feel safe because there was a bully in class." And I'm like, "Oh, man that breaks my heart as a dad," and I know that wasn't good for her because it's not. But how do you know, like okay let your kids feel some pain because pain is a teacher? For myself and for my family like how do I know?

James Gordon: Well, first of all, you can't protect them completely from the pain.

Dave Asprey: And it doesn't work if you do.

James Gordon: And second of all, we don't really know. My son, for example, who's now 17, when he was about 14 or 15 his football coach committed coaching malpractice and had them run drills full speed, first day, without helmets and pads. And a running back crashed his head into the side of my son's face. He had five facial fractures and a concussion.

Dave Asprey: Oh my god.

James Gordon: Devastating injury. And yet, that injury helped him to mobilize himself to discover who he was, what was important to him, gave him a sense of his own strength and gave him a sense of the direction he wanted to take. Among other things he didn't want to play football, not because he was so much afraid of being hurt, but because he could see that the football coach was irresponsible and that there was something about football that wasn't quite right for him. So, he focused his energy in a different direction. As it happens, he's become a very good basketball player. And that's how he's organized and mobilized himself. But he dealt with the pain beautifully. He dealt with the difficulty beautifully and he really kind of grew up. Now, would I have wanted him to have this injury? Of course not. But it came to him and with support from his mom, especially, and from me as well, he was able to come through it and develop a real sense of self-reliance that he had never had before.

So, I think the idea is what do we do when trauma comes to us? How do we get the support we need and then how do we use a variety of different techniques that I write about and teach people to come through the trauma, to rebalance ourselves, to look at things with a different bigger perspective and to understand that this something that's happened to us but it doesn't define

altogether who we are. That we can be bigger and grow beyond the trauma we've experienced.

Dave Asprey: Your son had an unfair advantage, his dad's a world-leading expert in trauma. What did you say to him first when he broke his face on the field, if you were there, what your first words to him?

James Gordon: Something like holy shit.

Dave Asprey: That must have hurt.

James Gordon: No, probably less professional. "Oh my god." I wasn't there. I just heard on the phone. His mom told me.

Dave Asprey: All right.

James Gordon: Oh my god, I was just shocked and worried. And I wanted to make sure exactly what are the injuries. That he had the best surgeon. So, he needed a medical intervention. There was no question.

Dave Asprey: Was that traumatic for you then? So, you experienced a trauma through your son?

James Gordon: Of course. I think we all do. That's another source of trauma is when people we love are hurt. That we go through another source of trauma, not in his case, the medical care actually was exemplary in his case. But for many instances, I've seen medical care itself be traumatic. So, the injury or the illness is traumatic but the pain and suffering in the hospital, in the indifference that's too often there in hospital settings causes more trauma, both for the patient and for the patient's family. So, yeah.

Dave Asprey: So, you experienced your own little "Oh, my god, you know, my child is injured." So, you had your own traumatic experience. But then when you got to put your head together and then you went and you held his hand in the hospital, what'd you say to him? What are the first things, other than are you okay? Like how did you frame it for him?

James Gordon: Well, we're going to be there for you. We're going to do what's necessary for you. We're here for you. And here are some things that we can teach you to help you go through this situation.

Dave Asprey: So, it was you're supported, you're safe, and here's tools for you?

James Gordon: Here's tools for you and you will recover. Hope is absolutely a critical element. One of the things that I do when I work with people and you know I did this some with my son, as well, but everywhere I go I teach people techniques that give them an immediate experience that they can make a change in how they

feel. Simple one being slow deep soft belly breathing. Breathing in through the nose and out through the mouth with your belly soft and relaxed. And what happens is, if you do this for five or 10 minutes, just about everybody, 70%, 80%, or 90% of people notice their "Ah." They feel a little more relaxed, shoulders relax, maybe heart rate goes down, muscles are less tense.

So, right from the beginning, it's not just me saying, "You're going to come through this," you're having a felt experience. I can feel better and I can do something for myself. So, right from the beginning, whether it's my son or a nine-year-old kid I'm working with within a war zone, whom I'm teaching the same soft belly breathing or a 60-year-old person who's lost half a dozen family members, what they're feeling is yes, this unbelievably bad, unbelievably difficult, and maybe there's a chance that things can change because I've experienced the change and I've experienced the fact that I can make it change for myself. So, right from the beginning, it's not just that I'm saying that there is hope. In *The Transformation* I'm also telling stories of people who will give hope to my readers. But I'm also right away giving people an experience that they can make a difference. So, it's not just a matter of theory, or science, or other people's experience, it's my own experience. I think that's crucial.

Dave Asprey:

That's really profound. So, we can take that ... Actually even before we go there, you're listening to the show right now and you're going to be spending the next, oh, probably 30, 40 minutes. So, for the next 10 minutes or so of the show, you can actually breathe in through your nose and out through your mouth and make your belly soft while you do that. Let some more air goes through your belly. So, you can actually do this while you're doing other things. So, there you go.

You can do twice the ROI for today's show just by doing that. Just consciously as much as you remember while you're listening to the rest of this. Like that's zero cost. But just try it. At the end of that, you're probably going want to order *Transformation* because I think that was just a synopsis of the book, at least a good portion of it, that we just talked about right there. So, there's something interesting going on here and if you believe the supposition from a very believable guy with very strong credentials that everyone has experienced a trauma, hey maybe that breathing's going to do something and maybe it will change your day. And if not, you didn't really lose anything, maybe you just got more oxygen. The risk is pretty low.

James Gordon:

As you well know, the science is there. When you breathe slowly and deeply you stimulate the vagus nerve, it quiets the fight or flight response, decreases fear and anger, mobilizes self-awareness and capacity for judgment and compassion. It's an antidote right there to fight or flight and to some of the more disturbing effects of trauma.

Dave Asprey:

What is the definition of trauma? The one that you used to convince someone ... I've had people go through the Neuroscience EEG and Feedback Program that I started, and they're like, "I don't have any trauma." I'm like, "Ah, I'm pretty

sure we could see something in your EEG there because you respond differently when you talk about certain things." But there's a denial that "Oh, traumas not something that's for me." So, what is our actual definition when we talk about it, even in the context of that sentence?

James Gordon:

It's very simple. Trauma just means injury. It's the Greek word for injury. I'm happy to stay with that. You can call it a significant disturbing life challenge. But I just call it injury. Injury to the body, mind, or spirit. Something that happens to us that throws us off balance. Throws us into a state of confusion and/or forces us to shut down emotionally and withdraw and distance ourselves. So, that's defining it by its effects. But it's simply an injury. Whatever you see as a trauma and one of the things you mentioned at the beginning of our discussion is that sometimes we don't understand why we behave in certain ways. Why we're afraid of certain things. Why we get angry so easily at certain things. If we take the time to reflect and we have an opportunity to go inside and be a little introspective and maybe ask a few questions of our family members we can find out what the source of the trauma is.

So, for example, when I was a kid, when I was about 21 or 22, my girlfriend and I broke up. I was totally devastated. I thought it was almost like the world was coming to an end. That was a trauma for me and I wondered "Well, why is it quite so severe?" Why is this so devastating to me and seemed to shatter all my notions of who I am? And one of the things, as I reflected, at that point I did go into psychotherapy, is that when I was a kid my mother was kind of distant from me and she wasn't really there and I'd experienced early loss, which made me vulnerable to later loss. That understanding helped me to become aware of what was going on with me in the present moment with my girlfriend. It didn't make it all go away. I had to find other ways of helping myself to move through that particular trauma.

But I think that if you have an experience ... I don't try to convince people that trauma is there in their lives, it's really a question of opening the door and saying, "Well, you know, nothing has happened to you in your life that's been really upsetting, that's thrown you off?" Or if not interested, that's fine. But you might consider the fact that it's highly likely that someday if you don't die soon, you're going to die later and that you're going to go through the difficult situation of becoming frail and dealing with the loss of loved ones. That's there. That's part of human life. I think people increasingly are recognizing their own vulnerability. We need to create a situation that makes it safe to do that.

One of the things we're seeing is that people who think they have to be so strong and so tough and that nothing is going to touch them, are really really suffering. For example, more and more first responders, policemen, police officers, and firefighters are killing themselves. They're becoming depressed. They're becoming suicidal. They're killing themselves. They're coming down with chronic illnesses. So, they're beginning as they see what's happening to understand that somethings going on here that's affecting me. Something I need to deal with in my life. Same with health professionals. The numbers of

health professionals who are burning out, which is another word for the kind of trauma that comes to caregivers, they don't feel committed to doing the work in the same way. They feel overwhelmed by it. They feel anxious about it. They feel bored by it. The work has become traumatic for them and they've begun to distance themselves from it. They've hardened themselves and they're suffering. So, what we find, what I find is that more and more people are beginning to wake up to this suffering that they have. That's really there. It's a part of being human. And it's simply a matter of giving them the opportunity to have some time for reflection.

I've done a lot of work with US Military, active duty military, and veterans. I was just doing a group with veterans. I think it was yesterday. It was amazing. These men and women began to talk about what had happened to them and they began to share the effects of being in the service and being deployed and how they were connecting the things that had happened which they had been told they just had to suck it up and go on and pretend it hadn't happened. Just taking a little bit of time they were beginning to reflect on what had happened and becoming very interested in how to deal with it in a better way.

So, I think it's a process of growth and what we need to do simply is to give all humans, especially little humans, our children, children in schools, an opportunity not to focus on their trauma, but just an opportunity to talk about what's going on and to learn basic skills for becoming more self-aware, for expressing themselves and for dealing with the stress and the trauma that they inevitably have. It needs to become a part of life as opposed to the idea that "I'm tough. I can tough it out. I can deal with anything." Well, I have to tell you, ain't nobody alive who can deal with anything. And I've worked with some of the toughest people in the US Military who will say to me, "I was the toughest SOB and I had this rank, and I did this and I had 8 tours and deployed and I came back and I thought I was fine. Until my wife told me I was yelling and screaming in my sleep."

Dave Asprey:

One of the things that I do, when you talk about these traumas, I keep a list of things or I notice I have an unreasonable stress response. In my mind, these are unresolved traumas. I have a little list in my app on my phone that says, "Traumas." One that I noticed the other day, I have zero sense of direction. I have no idea which way north is and frankly, I don't actually care which way north is and I never really have. Now, we all know that makes you less of a man if you're in the Boy Scouts or something or whatever.

I haven't figured out where that one comes from. But the next time I sit down with electrodes on my head and do the form of introspection that I do at 40 Years of Zen or the next time I'm working with a therapist or any of the kinds of unusual people that I'm lucky to have in my life, I'll take out the list and say, "Oh, I never figured out where this one came from." And then we'll go back and it will probably be some time I felt lost when I was three, God knows. Like it's not even that rationale. Whatever it is I'll go in and I'll erase it so that the next

time I'm walking around and I have no idea where I am instead of it being an anxiety-inducing experience it will just be like, "Maybe I'll ask for directions."

James Gordon: Yes, exactly. Exactly. Take a few deep breaths and ask for directions.

Dave Asprey: The valuable thing, okay, if you're listening to this and you're saying, "What was going on here?" Look, we've got Jim here who has 40 years of deep experience saying, yeah, he's got stuff like that, that he works on. I'm a successful entrepreneur and a lot of people know my work, but I still have this crap and it's just part of the human condition. If you just notice and write it down and work on it someday, eventually you become non-reactive to it and that's the gift.

James Gordon: Also, the techniques that I teach, part of it is balancing out the physiology. So, whether you're doing soft belly breathing or you get up and you shake your body for five or 10 minutes, which is a great way to shake loose from feeling shut down and traumatized and frozen, which we feel when we're feeling helpless and overwhelmed, which is the way you may feel when you don't know which direction you're supposed to go in. So, those two things will bring you back into balance and then you can begin to ask questions. And the techniques that I teach are really sort of how to consult your intuition, your imagination, your unconscious if you will? And ask, "What's going on here? Why is this upsetting me so much?"

There are many ways to do that. You can do it with guided imagery. You can do it with drawings. You can do it with written dialogues. So, you could have a dialogue with your confusion that comes up when you're dealing with not knowing what direction to go in. The fascinating thing, and I teach this in The Transformation, the fascinating thing is that your symptom, in this case, the confusion, if you have a dialogue and I bet this would work with you because you're a very good interviewer so you'd sense your interview in your own unconscious-

Dave Asprey: Yes.

James Gordon: You would start getting answers back. Your confusion would start telling you, "Hey, Dave, this is what's happening and this is what you need to do."

Dave Asprey: I did an exercise, this is got to be like 15 years ago, and it actually scared me. It was in the context of a personal development retreat thing. But they had you write a question with your right hand and answer it with your left hand and just kind of relax and see where it goes. It was creepy. But I learned some stuff that I did not know my subconscious was doing and I don't know that that's going to work for people sitting alone at a desk some night but there's all kinds of stuff buried in there.

James Gordon: But it's exactly the same principle that I'm describing, is that you're consulting with your ... the left hand being your non-dominant hand is your unconscious,

it's your intuition, it's your imagination. And you're consulting it and there's so many answers that lie there and the techniques to access that wise guy, that wisdom, there are numerous techniques. And anyone can learn them. We've taught these techniques to eight, nine, ten-year-old kids. People of any age, any educational level can use them.

Dave Asprey: Okay. I teach this stuff to my kids. I remember my daughter must have been five or something and she was just melting down. She didn't know why and you could tell it was like a new strong emotion. In fact, it was around the time that there was bullying going on in her school. Finally, I said, "Well, let's talk about what this is and can you draw a picture of the feeling?" And she draws a picture of this big red ball and all this stuff. But it was one of those, "Oh, what's my body doing right now?" But it kind of took her out of it and she had the picture hanging up for a little while. Like until she pondered her emotional response in the way that a five or a seven-year-old, however old she was, would do.

It was interesting because I kind of do the same thing myself. I don't really draw a picture of it usually. But some of the therapist-types I've worked with will tell you "Draw a picture of that." You're like, "What do you mean? It's a feeling." But you do it anyway and then there's knowledge in there. Is that art perspective something that you've used in your-

James Gordon: Yeah. Beautiful. Right at the beginning of The Transformation and right at the beginning of work we're doing whether it's in a war zone or after a school shooting or in an office with an individual person, I have them draw three pictures. It's very close to what you intuitively did with your kid. Draw yourself. Draw yourself with your biggest problem. Then the third picture is draw yourself with your problem solved. Sometimes people say at first, "Well if I knew, I would solve the problem." No, let it come from your imagination, your intuition. It's amazing what people come up with. That there is that capacity that we have even when we feel we're totally up against it. That third picture will often show us a way out and that's right at the beginning of the work. And you can keep on using drawings as a way of accessing not only expressing what's going on inside, which is a crucial part of healing, but then finding the answer. What do I do? What's the next step?

And, it's amazing. So, for example, there's a woman I remember, always remember this drawing. It's a woman with ovarian cancer. She drew her biggest problem was a big red blotch in the middle of her belly.

Dave Asprey: Wow.

James Gordon: I'm looking at it and I'm thinking, "Well, that's the ovarian cancer." But I'm smart enough to say, "I don't know," and to ask her, "What's that?" She said, "That's my anger at my husband, right there in my ..." And the third picture, the solution, she's sitting across from her husband and sounds are coming out of her mouth. She's talking to her husband and she's telling him why she's so angry at him. That's the solution. It's not what I might have thought. The cancer that's

obvious. But it's not. She came up with the problem and she came up with the solution. All of us have that kind of wisdom inside us.

Dave Asprey: That's some profound stuff and it's pretty far away from a bucket of Prozac.

James Gordon: Yes, it is.

Dave Asprey: Now, we've zoomed in on children and individuals but some of your work is in some war-torn regions where it's not just an individual who's experienced the trauma of war. You identified trauma earlier as being an injury. It can be a spiritual injury, an emotional injury, a physical injury. But the whole community is highly damaged. What is the role of your book *The Transformation* or the techniques in it, and dealing with a whole school, a whole city, a whole country that's full of trauma?

James Gordon: What you're saying is really important in terms of framing the issue. You have to deal with the whole school, the whole city, the whole community, and if you can, with the whole country. So, what we do is we have that understanding and any time my Center for Mind-Body Medicine colleagues and I go somewhere we're not there to treat everybody who's traumatized. We work in Gaza for example. There are two million people and there are two million traumatized people in Gaza. Literally. I'm not saying they all have a diagnosable post-traumatic stress disorder, but everybody's on edge. Everybody's anxious. Everybody's hypervigilant. There's a lot of irritability. A lot of fear. A lot of emotional withdrawal. Because they're shut off from the rest of the world. They've had three major wars in the last eight years.

So, we go. We teach local people the whole program of self-awareness, self-care that's in *The Transformation*. We teach it to them in trainings. They learn these techniques in a small group. They share their experience with each other in the first part of our training. In the second part of our training, we teach them how to use what they've learned with people in the population, in schools, hospitals, clinics, women's groups, all kinds of community-based organizations. Then we provide ongoing supervision to them as they use the work with others in their community.

I'm mentioning Gaza partly because it's our largest program. We've trained 900 people. They're not all health or mental health professionals. A lot of them are teachers, leaders of women's groups, clergy, community organizers, former combatants, first responders. They, in turn, have shared this model with 170,000 people in Gaza.

Dave Asprey: Wow.

James Gordon: The work that they're doing is quite stunning. We've published studies. Groups that they've run where they taught the same techniques that are in *The Transformation*, two people, 10 people in a small group, these people come

with diagnosable post-traumatic stress disorder. At the end of 10 or 11 sessions, 10 or 11 weeks, 80% or 90% of them no longer have diagnosable PTSD and the gains hold.

Dave Asprey: You can do this in groups of people, not individuals?

James Gordon: Yes. I think it's really important when you're working with a whole population you can't possibly see everybody individually. Also, people need support when they're dealing with psychological trauma and one of the things that's really important is that people have that support. Now, if they're reading a book and they're learning the techniques from *The Transformation* they can learn all the techniques but it makes it even more valuable and more effective if they can share what they're learning with other people.

In a place like a war zone, where everybody feels, when we're really traumatized, parts of our brain that make it easy to connect with and identify with other people are kind of shut down. So, it feels like we're alone with our trauma even though we can see that the whole neighborhood has been destroyed, even though we know other people have had family members killed, it often feels like we're alone. So, it's really helpful to have people come together in groups to share with each other their experience.

For readers in *The Transformation* part of the sharing is with people who stories I tell in the book so you feel like you're connected with them. But I also encourage everyone to get connected with other people, to share what they're learning with others, to share their vulnerability with other people. It makes a huge difference.

Dave Asprey: One thing you didn't mention about that 80% is that you did a double-blind placebo-controlled trial, which is the benefit of being a Georgetown professor, on what you did here in order to help these kids let go of their PTSD. So, this is a clinically proven effective thing using the highest standard. Let's see placebo is 30%. Drugs that suppress your trauma response have what, a 45% depending on the drug? Plus drugging kids is usually a bad strategy to start with. So, this is more effective than anything else we've seen, right?

James Gordon: I think first of all for post-traumatic stress disorder there is no drug that has been shown to be clinically effective. Even in the most optimistic psychopharmacologist, they might say, "Well, some of the anti-depressants relieve some of the symptoms of depression. Some of the anti-anxiety medications relieve some of the symptoms of anxiety." But there's been no good evidence that drugs relieve post-traumatic stress disorder. Cognitive therapy can be very helpful. Other therapies can be very helpful.

What we're doing and we did do this randomized controlled trial, this was in Kosovo and this was kids who had been in an area of Kosovo called Suhareka, where 80% of the homes were destroyed and 20% of the kids in the high school

lost one or both parents. It's a very significant psychological trauma. These high school kids participated in 11 week-long groups where they learned the mind-body skills that are in The Transformation. And they had these results, more than 80% no longer had PTSD after the groups were over. Those gains held at three months follow-up. Very striking findings. Good scientific methodology. Studies we'd in Gaza were not randomized controlled trials but the results were the same. The important thing also is the people leading the groups were not psychiatrists and psychologists, they were rural high school teachers. So that means that-

Dave Asprey: That's a big deal.

James Gordon: Yeah. These were people who cared about the kids. They were good teachers, good people. They got supervision from us. But they were leading the groups. Subsequently, they led groups for all 1,000 kids in their high school and they worked with everyone in their community who'd had a family member killed. This is very hopeful. This is one of the sort of signs that it is possible to work with population-wide psychological trauma and to use community members who are not trained health or mental health professionals to do the work.

It's also a very good finding for people who are learning the techniques, that you can learn these techniques yourself and you can use them yourself. This is really all about giving people the power to understand and help themselves. If we go back to the beginning of our conversation this is part of what was missing and still, to a significant degree, is missing from medicine. We don't really value people's capacity to understand and help themselves. So, this is an answer to that. Showing in this really significant area of psychological trauma that we can do so much to help ourselves.

Dave Asprey: How hard was it to screen the people who lead those groups? Is in one in ten people can do that? Is it one in a hundred? How do you know you're not getting like a little monster in there who's going to further traumatize the kids?

James Gordon: I'm happy to have the monsters in there. Except when we're doing a research study, we don't screen.

Dave Asprey: No kidding.

James Gordon: What we say no matter where we're going is, "This is a group where you're going to learn skills to understand and help yourself."

Dave Asprey: Right.

James Gordon: We call them mind-body skills groups. So, what we say to people is, "This is an opportunity for you to learn skills that will help you to help yourself. Are you interested?"

Dave Asprey: Oh, for attendees that makes sense. I'm talking about the person who's, you know, these high school teachers. We all know that people who are traumatized tend to traumatize others, like the more traumatized you are. So, how do you know that the person who's standing in front of this group teaching them things isn't going to cause more harm?

James Gordon: We train these people. They come through our training and, every once in a while, some of the people who come through our training are not able, they're so caught in their own difficulties, they're so troubled themselves that they can't do it, and so we don't encourage them to continue. We say "It's not the right time." So, we screen the people who we've trained.

Dave Asprey: What percentage of people can take the training and use it beneficially?

James Gordon: I've never done it by percentage. But what we see is the vast ... I would say 90% of the people who take the training can do the work effectively.

Dave Asprey: And could lead another training? So, this can go viral? The reason I'm asking this is like do you need to have a special human being with a halo over their head in order to lead to group of people or can you take anyone from the group who's been through it to go, "Oh, yeah, I'm going to teach you how to teach it?" In other words, how viral can we make this?

James Gordon: So, the criteria to begin with for people who come through our training are you're willing to learn on yourself, you're committed to taking this work out to work with other people, and you're willing to be supervised as you do that work with others. Now, we leave it to our local partners wherever we're going, whether it's Gaza, or Israel, or Kosovo, or Haiti, or South Sudan, to choose the people. So, they pick people who they think will be appropriate. We ask people to apply and they write a little note about who they are and why they would like to do this work. What's amazing to me is how well people can do it who never believed that they could do it. Sure, every once in a while there's somebody who's so totally caught up in their own ego that they just can't do the work. But the vast majority of the people who make this commitment, who are chosen by members of their community who are their leadership in the community, they do quite a good job.

There are obviously variations. But you have to be willing when you come through the training, you have to work on yourself, and if you don't want to look at yourself, okay. Then you're not right for doing this. If you're willing to be in a small group and learn these techniques and explore what's going on with you that's a big step. Then we supervise you as you learn to use it with other people in our advanced training and we see how they do. Not everybody can do it. Sometimes we say, "Well, you got to back before you start working with other people. You need to get some more training and some more supervision." But I would say, if people who are listening to us are interested in our training and they are committed to taking this work out to other people they should get in touch with us at The Center for Mind-Body Medicine and learn more about

what they're doing and if they'd like to be part of training we're always open to training people.

Dave Asprey:

You read my mind there. Bulletproof Radio gets about two million downloads a month. This is one of the top .1% of all podcasts listened to. And there's a community of people who actually just very deeply give a shit about the world who are attracted to the show. So, I know that, that probably pushed buttons for a few people saying, "Hey, maybe I should do more?" We have no commercial thing. I don't even know if The Center for Mind-Body Medicine's a nonprofit or not. I'm just saying, if you're thinking "I want to make a difference," this is a drug-free zero cost, you can do it in a traumatized community. In fact the lower the economic status of a community the more likely there is trauma because not knowing where you're next food comes from is traumatic.

So, there's lots of good work you could do in the world that's very accessible. So, I think this is worthy stuff, in part, because you go into the biology in your book and it's one thing to sort of say, "Well, there's magic fairies and we know that people get better." But you go, in the second chapter, like "Look, gut disruption happens and we know your digestion gets off when you go through trauma and that causes further damage to the brain and then that causes further to the gut." And you actually describe this negative treadmill that we get on. So, it's worth understanding, it's biology. It's not just beating a drum and hugging each other and letting go of trauma. It's hacking your biology by letting go of that.

James Gordon:

Exactly. The point about food is really important. I'm glad you brought it up because there's a long chapter on The Trauma-Healing Diet. In a way, it's so obvious. Of course, trauma's going to affect every cell and every organ in our body. And yet, I've never seen any other book that's talked about both the effect of trauma on the gut and how you can use, how you can rebuild your gut, you can help to restore the microbiome, you can close the leaks in the gut that come from stress and therefore repair your brain. Just as you were saying. So, I lay out a program for doing that very clearly and it's important. The biology's really important and it's important for people to know it so that they can act on it. It's also important to know that there's science, as you're pointing out, so that you were willing to take some of these steps to make a difference. Every step of the way the proof is in the results. Does it make a difference or doesn't it?

What I've seen over the last 40 years, as well as what I've seen in the research literature, is that all of these techniques and these approaches make a difference and that when you put them together in a comprehensive program the difference is really quite striking and sometimes quite magnificent to see people who've been totally devastated, including people who've been very devastated early in life, who have somehow using this approach and using it wisely and putting together the different techniques, who have really not only restored their life but have become magnificent human beings.

One of the things I want to mention that's really important here is as we deal with our trauma there is a process not only of rebalancing and of healing but a process of growth that encourages us naturally to want to reach out and be more generous and compassionate to other people. In the psychological literature, we now talk about it as post-traumatic growth. But this an ancient, the kind of age-old understanding of all traditional societies, that trauma is actually the soil in which wisdom and compassion can grow. So, as painful as it is, it's also an opportunity, and we need to address the biology, the psychology, the interpersonal aspects, and the possibility, the spiritual aspects as well.

Dave Asprey: You go into gratitude in the book, which is a core part of the Bulletproof lifestyle, and people who listen to the show for a long time have heard me say, "Every night with my kids three things you're grateful for." I think it's every one of the books I've had and I would say gratitude is pretty much that vaccine for trauma that we talked about before. And you actually cite research in your book about how gratefulness reduces symptoms of PTSD and improves the mood of people who have been traumatized. You talk about the Israeli study where gratitude prevents trauma-exposed children from developing PTSD.

James Gordon: Yes.

Dave Asprey: Can you talk more about how to do gratitude as a preventative for PTSD?

James Gordon: Well, I think what you're doing with your kids is right on. There's so much research on these gratitude journals, is what they're technically called. But really all it is, is being thankful for. It's good to write them down if you're able to, if you're old enough to write, three or five things for which you're grateful. There are a whole bunch of studies. Sometimes people have done it for a couple of weeks. Sometimes they've done it for a couple months. Just that reminder that we're grateful for something gives us a reinvestment in life.

One of the difficulties with trauma, of course, is that it overwhelms us and we feel like it's not just the particular event but nothing, nothing seems to matter anymore. Yet, when we keep a gratitude journal we're reminding ourselves, "Oh, yes, something matters. There is something that we care about." We're reinvesting in life and we're looking at the possibility that not everything is so negative. So, it's very very powerful.

I think that meditation opens the door to gratitude. Meditation, relaxed moment to moment awareness, brings us to acceptance and acceptance is like next door to gratitude. Once you start accepting that is a welcoming of life and that's pretty close to gratitude. Now, some people are very grateful, seem to be grateful constitutionally. They came into the world being grateful. The rest of us it's not so easy. So, the gratitude journal's a very very useful tool.

Dave Asprey: You go in your book from talking about gratitude towards forgiveness. In the path that I tell people is like you're not going to forgive anything until you're

[inaudible 00:59:17] on who you're grateful for. So, you have to start with gratitude. But you have a deeper take on forgiveness in Transformation. So, I would like you to define what forgiveness is and then tell listeners how they can access forgiveness?

James Gordon: Well, forgiveness is really a kind of letting go. It's a very deep getting over it.

Dave Asprey: That's a great, no one's ever said it that way. Okay, I really like that. Keep going.

James Gordon: It has a ring to it. Huh?

Dave Asprey: Yeah.

James Gordon: And it's like, "Okay." I would say the road goes from acceptance to gratitude to forgiveness. I think the thing about forgiveness, I don't ever try to force it on people. I talk about it, as I said after gratitude toward the later part of The Transformation because it's not so easy in the beginning. I think as we think about forgiveness it's partly about forgiving other people for hurting us. It's partly also about asking others to forgive us. There's a kind of humility in it. Finally, it's about forgiving ourselves, which for many of us is the hardest part of it to do.

I teach a very simple Buddhist meditation on forgiveness, which includes just sitting and relaxing and imagining the person who has hurt me across from me and forgiving that person and letting that person go. Imaging someone I've hurt asking for forgiveness. Then imagining myself sitting across from myself and forgiving myself and then letting that forgiveness expand to the whole world, to all those who need forgiveness, which is all of us. Every major religious and spiritual tradition understands that forgiveness is essential for us to become peaceful and to become sort of in harmony with who we're meant to be. But we have to start it step by step.

I remember in Kosovo a guy who came to our training, I think he was a journalist, we did this forgiveness meditation toward the end of the training and he said, "Well, I don't know if it was success or not." He said, "I couldn't forgive the man who killed my brother. But I sure as hell don't want to spend the rest of my life trying to take revenge." And I said, "That's success." That's a huge step. That he's gotten out of that spiral that's destroying his life.

When we're unforgiving, when we hold resentment, all we're doing is damaging ourselves, psychically, psychologically, spiritually, socially. We're just cramped figures and we can't be fully ourselves. So, forgiveness is for us. It's nothing really to do with the other person to begin with. It may eventually produce that. But I know for myself, it's really about how to free myself from any kind of resentment that I'm still holding on to. How to let go. How to get over that sort of nasty connection that's still there. Either seeing myself as a victim or hurting

other people. And how to come out of that spiral, out of that destructive connection.

Dave Asprey: Are you done with that yourself? Are you still holding on to any of those things?

James Gordon: Not much anymore. A little bit here and there. But less and less. In my case, the person I have to forgive is the same person whom I'm asking for forgiveness from. That's often the case. Somebody in an intimate relationship. I'm really doing much better. What happens is there's more of a kind of relaxation and an acceptance and a kind of perspective and an almost a sense of gentle humor about the situation. I don't feel so wound up in it anymore. I'm not saying I couldn't be. But it's certainly getting better over the years. Thank God for that, I'd say.

Dave Asprey: Do you work with a forgiveness coach? A spiritual person, a priest, a rabbi, therapist, shaman? Is there someone you go to when you need to work on your own forgiveness or gratitude?

James Gordon: No. I just work with a forgiveness meditation.

Dave Asprey: Just a straight-up meditation because you've done enough of it?

James Gordon: Just the same meditation that I teach. I just do it over and over. I think the first things is obviously after all, or perhaps not obviously, but after all these years, hopefully, I'm more self-aware so when I do something that I feel bad about I'm less inclined to try to defend myself and say, "No, but this or that or the other thing."

There's a wonderful quote, the story about Buddha, that he had a heckler in the audience who keeps coming back and saying, "Oh, this guy's an idiot. He's a phony. What are you trying to do? You're a prince. You're a privileged jerk. What you're trying to tell me how to live?" One of Buddha's disciples, so the story goes, says, "Why do you tolerate this guy? He keeps following you around and he keeps shouting all the stuff at you?" And what Buddha says to him is so beautiful. He says, "Well, first of all maybe he's right about something and I have something to learn. And if he's not right he's talking to somebody else. So, why should I pay attention."

That story is my teaching story. So, when I'm getting wound up and I'm feeling resentful and I'm feeling anger about something, I do my best, I do the soft belly breathing, and I think "Okay, where's the element of truth in what somebody is saying that's gotten me angry and wanting to do something or just getting upset with that person or trying to defend myself? What grain of truth is there in it? What can I learn? And if it's not true, why am I getting worried about it? What does it have to do with me?"

The other thing is that I want to say, I don't have any formal spiritual teachers now and I haven't for a number of years. But I do my best to learn from other people and this is part of what I'm teaching in The Transformation is when people appear and I'm thinking of somebody who felt like I'd done something to her and I thought, "Well, she's my teacher. Maybe I did, maybe it's something I said?" And I said this to her, I said, "You know, I wasn't as kind as I might have been. Thank you for telling me that. I'm sorry." And as for the rest of it, okay, I didn't really, you know it's not my responsibility. But she's my teacher. No matter who she is and everybody I encounter, it's great to have spiritual teachers all over the planet, everybody I encounter is potentially my teacher. Just so this conversation is teaching me. Always. And that's the idea is to be open to learning wherever you are.

Dave Asprey: It's a profound mindset to look at everyone as a teacher, especially the ones who are most irritating.

James Gordon: Right. And kids have a knack for teaching us too, as I'm sure you've observed.

Dave Asprey: Of course, they do. That's one of the reasons they're here. So, you look at everyone out there being a teacher. You can certainly have the 10-year-old who pushes your buttons and causes you to blow up and you go, "I wonder why I blew up at that and maybe I should go read The Transformation or go do some trauma-release work because what, you know, no 10-year-old should be able to do that to me, but they still can. At the same time, you might want to find someone twice your age and ask their opinion because they probably know just because they had to do it.

James Gordon: That's interesting that you said that, Dave, because the other thing is that older people really want more meaning and want more purpose. So, when you're asking somebody who's older they're also finding their meaning and purpose if they can share their experience with you. So, don't feel, I think often we feel we're imposing on other people if we start sharing what's on with us with them. Especially if we're troubled. My experience is that if we're connected to those people and if they're older people who some investment in who we are they're often going to be very grateful to be helpful to us.

Dave Asprey: On that note, we're up on the end of the show. I want to thank you for your wisdom and for spending decades working on this and taking it from a child or an adult all the way to a war-torn community. You've really made a big difference in the change of our national and even global conversation around trauma. You've been on 60 Minutes. You've written for The New York Times and there's all kinds of really big things where people have changes from trauma being something wrong with you to something that's a biological thing that's eminently changeable. Your book The Transformation is absolutely worth reading and The Center for Mind-Body Medicine is cbm-

James Gordon: No, cbmb.org. Charlie, Mary, Betty, Mary dot org.

Dave Asprey: There we go. It's the initials for Center for Mind-Body Medicine even I didn't figure those out. I'm going to have to go. I'll forgive myself for that later. But, Jim, thanks for being on the show and thanks for your work in the world.

James Gordon: Thank you so much, Dave. It's great to be with you.