Conscious Life presents
TRAUMA
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The root cause of pain

Guest: Dr Abdul-Ghaaliq Lalkhen

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[00:00:09] Alex Howard

Welcome everyone to this interview where I'm super happy to be talking with Dr Abdul Lalkhen. Firstly, Abdul, welcome. Thank you for joining me.

Dr Abdul-Ghaaliq Lalkhen

Thank you, Alex. Thank you for having me.

Alex Howard

So in this interview we're going to be exploring pain and the many dimensions of pain. I've been dipping into Abdul's book, *The Anatomy of Pain*. There's also a UK version, *Pain: The Science of the Feeling Brain*, and a soft back version coming out, *Pain: What It Is, Why It Happens and How to Cope*.

I'd love to start a little bit, though, Abdul, with your journey to working with pain. And you start in the book sharing a little bit of that. I'd love to hear that.

Dr Abdul-Ghaaliq Lalkhen

I'm a medical doctor and I was born and brought up in South Africa, and then I ran away from home in 2001, there was a woman involved. We won't go into that. I'm sure you're listening. Probably the subject for another book. And I came to the UK wanting to specialize in intensive care medicine and critical care medicine. And in order to do that you have to become an anesthetist because critical care is a subspecialty of anesthesia, you can come at it from emergency medicine or general medicine, but I chose to come through anesthetics.

And then really, during my training I felt that critical care wasn't the sort of environment that I wanted to work in, for a lot of reasons. I found looking after people who were critically ill, challenging from a psychological point of view. But I think what I missed was the contact with people, talking to them and being part of somebody's journey. And actually, during my training, I got to, with the help of some really good clinicians, and they exposed me to what life would be like as a consultant in that specialty.

So as a trainee it's very different because you're observing from the outside. But then they said, well, you run the unit today and then suddenly you're confronted with the decision making and you're confronted with the politics and you're confronted with bed shortages. And I just thought I'm not entirely sure if this is the career for me. There was something that was missing.

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And I thought about general practice, and I contacted the Dean who run the training program, and I said, I'm a bit disillusioned with all of these sleeping patients and pushing buttons, I'd like to do something perhaps where I could be more part of somebody's journey. And they told me what I needed to do, but serendipitously I then did my module in pain medicine.

So pain medicine is a subspecialty of anesthetics, and it's a strange place for pain medicine, but it's historical. And anesthetists are very good at sticking needles into people and injecting various substances. And originally we did that for cancer pain, where we interrupted nervous system pathways in order to reduce pain and alleviate suffering. But as oncology got better, as pharmacological approaches improved, there was less need for those sorts of destructive procedures. And so we morphed into a specialty that looked at non-malignant pain, non-cancer pain, and chronic back pain, which is about the most common pain you can find. And we still had our needles, and we now had steroids and local anesthetic and then we had electrical burning therapies. And so the anesthetist morphed into treating non-cancer pain.

And I was sitting in a pain clinic and listening to the consultant talk to the patient and explain their pain. And it was the fact that, one, it's a fascinating subject, just from a physiological point of view, the mysteries of pain, how we study it at the moment, how we understand it historically in a very simple way. When Galen, the Roman physician, tied the nerves off of dogs and saw that the dogs couldn't move their body parts and then realized that the brain was the center of sensation rather than, as the Greeks had believed, the heart. And then looking at how our progress in understanding of pain and how that translated into the treatments. And the fact that actually, after thousands of years, we still only had opioids to try and dampen out, down this alarm system. And we still continue to use those. Because fundamentally, a true understanding of the neurophysiology of pain still alludes us.

So I sat in the clinic, but what I watched was somebody having pain explained to them and having it explained to them that their spine was not crumbling, that the pain was due to a broken malfunctioning alarm system. That the pain they were feeling was real, but that it wasn't something catastrophic or dangerous. And just watching that visible relaxation of somebody, just watching that tension leave their body purely through somebody engaging them in a conversation, that winding down of that primitive amygdala brain and getting them to just understand and reframe what they were feeling, I thought, was probably the most powerful thing I've ever seen in medicine.

And in my experience as an anesthetist, I remember sitting with somebody who was not for theater, had ruptured an aneurysm, and just providing some analgesia and conversation, how that was far more soothing than anything I'd ever done. And so the combination of an interest in relieving acute pain associated with operations, and also the privilege really of engaging with somebody with a long-term chronic pain condition where the pain itself is a disease, I felt that that was something that I could really, it could be a lifelong journey, a lifelong challenge.

And so I abandoned my abandoning of anesthesia. And these are the sorts of things that happen to you in your life. It's sliding doors where your life takes a completely different direction. And I think at the time as well, I was going through a difficult trauma in my life from a psychological personal point of view. And the woman I'd run away with had gone back to South Africa, and I was a bit stranded. And I think in those moments of reflection and change, perhaps you stop being so active in terms of wanting to do things for people, and realize that people have their own agency. And really, you who deem yourself a giver, you're really but a witness. And I think within that space I found my calling.

[00:07:19] Alex Howard

One of the things that struck me in the opening section of the book was the fact that when you're dealing with, particularly that crisis pain management, you're meeting people in such an intense moment in their life where the animalistic side comes into us of just survival.

I remember on Christmas Eve, Christmas just gone, and I had this agonizing toothache on Christmas Eve, and I was desperately calling around all these emergency dentists. And the thought that I might not get to see someone to get this pain resolved for 3 days, whatever it was going to be, was just all consuming. It must be very interesting day after day when you're meeting people in that peak experience, not a positive experience for them, but that intense moment for them.

Dr Abdul-Ghaaliq Lalkhen

It is. And I always have to remind myself that I am a person and I'm a human being, and the expression of distress by another human being will have massive triggers within me. And I think a lot of doctors often are not aware that actually the way the individual is approaching them, the language they're using, the things that they're saying, will move that doctor to perhaps engage in an intervention, an operation, which is probably not the greatest chance of success. But actually the desperation of that patient is moving them to be a rescuer, the patient feels like a victim. And then when the intervention fails, the patient then persecutes the clinician, who then feels like a victim. And so the drama continues.

Alex Howard

I was struck in your book about your self care practices before you do your clinic. You get up early and go and have a sauna and how you prepare your own mind and body to be in that role.

Dr Abdul-Ghaaliq Lalkhen

Yeah, it's not something I've always done. I think I've fallen prey to overworking, not looking after yourself, not eating properly, not exercising on a regular basis, and really not understanding my own drivers. And that does affect patient care. I think you cannot be an agent for somebody, you cannot be a witness to their suffering if you yourself are suffering. It makes you end up with all sorts of biases in terms of treatment. It makes you not able to really explore the full biological, psychological and social impact of the condition, and therefore, the treatments you reach for are based on your own distress.

They say there are four ways of getting somebody out of your clinic: offer them an injection, offer them a procedure, offer them an intervention or refer them to somebody else. And you see that in the health service all the time, where somebody who sees somebody has not had the language to explain to them that this is the condition you have. These are the limitations of what we can achieve with our current technology. This is your prognosis, and we are going to do this, that or the other. You'll find there's a throwaway medication. And that's really how the opioid crisis has started and being perpetuated. It's this treating distress with drugs because we don't have the language to treat distress with words.

[00:10:50] Alex Howard

Yeah, I want to come back to that but you said something a little bit earlier, which I think is a really important foundation here, which is pain is produced in the brain, not in the body. Can you explain that? Because I think that's a really important foundation to this perspective.

Dr Abdul-Ghaaliq Lalkhen

That's essentially the essence of the book, Alex, that you've identified. That's the reason I wrote it, because most people believe that the pain they have will be proportional to the tissue damage.

So the way we understand pain is that if you have an injury, there are only really three ways you can injure the body, mechanically, chemically and thermally. So mechanically, be shot or stabbed or bump your toe. Chemically with acid or an alkali. And thermally either extremes of heat or cold. When the integrity of the body is damaged, so that outer aspect of us, or inner aspect which protects us is damaged, the brain needs to know about it.

And the way that process works is that when you're injured, the body releases inflammatory mediators. So prostaglandins, bradykinins, there's a sort of whole chemical soup that gets released by the damaged tissue. Those prostaglandins and inflammatory mediators then attach to what are called nociceptors, and Noci is the Greek God of mischief. So these are aptly named receptors. Which again, are massively complex and there are people who spent years in labs studying the different kinds of nociceptors.

And they then convert that mechanical, chemical or thermal signal into an electrical signal and that's transmitted, first to the spinal cord, and then a bit like fireworks, to the brain via various pathways. And the spinal cord is not passive and the brain is not passive in receiving that information. So the brain receives the information and there are motivational networks, salience networks. It goes to your amygdala, which is a primitive emotional aspect of your brain, it goes to the bit of your brain that deals with location. There's a bit that checks in with have I experienced this before? What do I know about it? And ultimately you experience pain.

And so you can step on a drawing pin on a Sunday afternoon in your garden and you don't have anything to do so it's a minor inconvenience. And if you're a stoic person who has high self efficacy and resilience, you'll be fine. But if you step on same drawing pin whilst walking up to run the 100 meters in the Tokyo Olympics that you've been training for five years now, then that's a much bigger deal. If you're a footballer and somebody touches you gently in the back of your leg, there's a lot of rolling around. But if you're a rugby player who gets tackled by somebody who weighs twice as much, you might just get up and shrug it off.

So pain is not proportional to tissue injury. It has context. It's influenced by our preexisting, who we are. And in the context of trauma that's really important. So we know that minor whiplash injuries in certain vulnerable individuals can produce long-term persistent pain and disability. Whereas the same whiplash injury in an individual who is not vulnerable, it resolves after a few weeks.

So really, the general public needs to understand that the pain they experience is an alarm. It's a useful alarm. It's not a brilliant alarm. For example, if you have appendicitis you get this sort of nonspecific pain. Pain from cancers can sometimes be quite late. The pain when you stub your toe is pretty immediate. Or if you walk over your child's Lego, that's a fairly, and depending on your disposition to your child at any one time, it's either going to be, 'aw, he left his Lego' or other words that I probably shouldn't repeat. But we've all been there.

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So it's this primitive driver. Pain is like sleep or hunger. It grabs you. You described your Christmas, you're thinking in the back you're not probably thinking I won't get my turkey, I won't be able to eat all the deliciousness, but that is probably part of your distress.

Alex Howard

Well, it's also in that instance particularly, it's the thought that I might have to live with this for 3 days because I can't get a dentist till Monday. It's a funny thing, as someone that is quite good at putting off going to the dentist, I would have paid large amounts of money for a dentist in that moment. So it also shifts your whole perspective on things.

Dr Abdul-Ghaaliq Lalkhen

And we're complicated creatures. And each of us is so different. I mean, it's the one thing that always strikes me when I'm in clinic is you meet somebody and you really see a segment of their world, and you only really see a tiny bit. I have elderly parents and my sister is a psychologist, my brother is a GP, my father is a GP, so the whole family is medical. But whenever any of us are ill, we consult my mother, who is a radiographer, because my mother is the keeper of all wisdom and comfort.

I think behind every individual you see with a problem, there's a lot they're not telling you, and there's a whole family and cultural context behind it. And sometimes that can be a bit overwhelming. And so a lot of doctors shut that down I think, because actually, to start thinking about that and about the impact that you might have on a person and a family, I think that can be really quite overwhelming.

Alex Howard

One of the things that also struck me in the book is the impact, and you've been touching on it here, that one's mood and one's mental and emotional state has on pain. For example, I was struck by, you said that those that are depressed tend to experience increased pain. That preoperative anxiety is a strong predictor of postoperative pain. I think people might be quite struck to hear that their mind and emotions are actually impacting their felt sense of physical pain.

Dr Abdul-Ghaaliq Lalkhen

So we know from neuroscience that in the presence of anxiety and depression, there are pathways that go from your brain to your spinal cord that can inhibit or facilitate those signals that are being generated. And when you're depressed, you have lower chemicals that normally activate those pathways.

So actually, you see the danger is always that people think, oh, it's psychological. And psychological always gets dismissed, and it's pejorative, and there's a certain amount of judgment, I think of weakness that comes with that. So I really try when I'm in clinic to very much boil everything down to chemicals and neurotransmitters. And I like to explain psychological challenges and behaviors in terms of neurochemical imbalances, because that's what they are. We don't have a Star Trek tricorder to scan for neurochemical imbalances yet, but there will probably come a time when you can have a brain scan, at point of care, which can state you're depressed because there is a serotonin and or general imbalance, and we can reset you.

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I think, unfortunately, where our technology lags behind, we tend to always, and we have done historically, invoke spirits, voodoo, mythology and mental health. But it's all chemistry. And I think we know now that pain pathways are complex and that in the future we may be able to understand these pathways so expertly that psychological therapies would be able to target exactly those pathways. So instead of just having a general CBT approach, if you can really understand the neurochemical imbalance, you might be able to offer somebody a talking therapy that specifically addresses their neurochemical disturbance.

Alex Howard

Something also implicit in what you're saying is that there's a lot more hope for those suffering, particularly with chronic pain, than they may realize. And maybe that's worth exploring briefly, the difference between acute pain and chronic pain. Because I think sometimes people think I have this pain, this pain is intense, this pain is not going away, therefore there must be damage, and it's always going to be this way. And I think what's key in what you're saying is that the story is much more complicated than that. And actually, therefore, there's hope that shifting one's perspective, shifting one's response, shifting one's wider life, which we can also come to, can have a real impact.

Dr Abdul-Ghaaliq Lalkhen

Absolutely. So acute pain, we have this fairly, I mean, it's a useful but somewhat artificial separation between acute and chronic. Acute pain is pain associated with tissue injury and usually resolves when the injury resolves. And that takes maybe three months with most injuries. And then chronic pain is pain which persists beyond a period of around three months, which is an artificial period of time.

But the crucial bit of the definition is that chronic pain is pain in the absence of ongoing tissue damage. And in the latest International Classification of Diseases version 11, The International Association for the Study of Pain, which is a good resource for people who want to know a bit more about pain, apart from my book, of course, they have decided to divide chronic pain into primary or secondary.

So if I just go back again, acute pain. There's damage, you break your bone, you have an operation, you have those inflammatory mediators. Over time, the wounds heal, the inflammatory mediators go away and the system goes back to its default quiet setting. That's acute pain. It's what most of us know. But occasionally, despite all that healing, the alarm becomes dysfunctional.

I always tell people it's a bit like a car alarm. Acute pain is somebody bashes into your car, the alarm goes off, you go out, you chase them away, you get the car fixed and the alarm switches off. But sometime after that, or after that incident, now the alarm seems to go off whenever it wants to. You go outside, you keep checking the car, which is like having the repeated MRI scan and the repeated investigation and going to your doctor. Your doctor doesn't have the language to say, look, the car is okay. He might say the tires are a bit frayed and the causal relationship is made between the tire and the pain.

But actually, the problem is in the alarm, the wiring is now being permanently affected and so the alarm goes off and it hasn't got anything to do with your spark plugs or the fray ties. But if you go to a spark plug specialist doctor, then they will replace the spark plugs because in their worldview, those spark plugs, you're complaining of pain, they don't understand faulty wiring pain. And so they'll replace your spark plugs.

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And so there are loads of medical interventions which have that as their model. So acute pain. Chronic pain is either primary or secondary. Secondary chronic pain is if there was an inciting event. So you had cancer, you got chemotherapy, the chemotherapy damaged your nerves, and now you've got nerve pain following chemotherapy. You have a car accident, you get whiplash injury and you develop, sensitization is the word we use for the broken alarm system, you develop central sensitization where the brain and spinal cord changes. And now, even though your neck is structurally stable, you have persistent pain.

The primary chronic pain conditions are conditions like fibromyalgia, widespread pain. We're not sure what the cause is, it seems to happen in certain people, there's clearly a genetic component. Lower back pain is a brain disease. Lower back pain is not a back pain, it's not a back disease. Lower back pain is a widespread multi system condition, but because the pain is complained of in the lower back and we have MRI scans and rods and screws, we've tried to treat this complex psychosocial brain condition with interventions that are costly and which make people more disabled.

Alex Howard

And I think, you spoke to it very well a bit earlier when you said that one of the things that tends to happen is people go and see a pain specialist and they're suffering and the practitioner wants to help and they have a limited set of choices that they can use. So people can then, one of the things that has obviously been a major issue in recent decades, is people then become addicted to pain medication and they then can't function without it. Maybe speak a bit to some of the problems that can come from that.

Dr Abdul-Ghaaliq Lalkhen

The difficulty is really the way medicine is set up. We treat complex conditions that we don't really know that much about with medications we know even less about, with people we know nothing about. I think it was Voltaire who said something like that.

But there's what's called the biomedical approach, and the biomedical approach seeks to find a diagnosis and then treat it. The biomedical diagnosis is a deviation from the norm according to that doctor. The biopsychosocial approach aims to look at the whole individual, understanding that psychological and social factors will impact on disease.

So even if you look at something like diabetes. Sure, diabetes from a biological point of view is a relative or absolute lack of insulin. Fair enough, we can treat that with medication. The difficulty is if you don't address the person's understanding of their diabetes, their social context, societal values around sugar, fast food, etc, then it doesn't matter how great your insulin is or your metformin, you're not really going to ensure a good outcome for that patient. And pain medicine is no different. If you treat it only biomedically, then you will try injections or interventions or medication.

The difficulty is that we don't fully understand the neurophysiology or the pathophysiology of chronic pain. I mean, we've got a fairly good idea about diabetes. It's a relatively straightforward condition in comparison. So you're then doomed to failure because you're treating a condition where we don't have treatments that are 100% effective. If the pain then doesn't go away, the person is left to think whatever they can, whatever they want in terms of, well, it's not going away, it must be serious. So their distress escalates. As their distress escalates your intervention escalates or your opioid prescribing escalates. Then in a vulnerable population you might develop addiction. People are

biologically vulnerable to addiction, which is continued use of the opioids despite it causing psychological distress.

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But even if you don't become addicted, you become dependent. And there are opponent processes. There's the opponent process theory of opioids, where the A processors are the euphoria, but the B opponent processors are the dysphoria. Opioids change your brain. I think what people don't realize is that opioids actually change the neurochemistry of your brain and therefore coming off them can be very difficult. It's the effective component of pain that opioids address.

So there's a reason why people use opioids as drugs of abuse, because if you are very anxious about the world, what opioids do is they kind of throw a big blanket over you. Now you might feel a little less distressed but nobody can operate under a blanket. And if you take highly distressed chronic pain patients who have already got a deranged cognitive framework, you throw that blanket over them, they then can't access those psychological and social changes within their lives that would enable them to manage their pain better. So you're almost handicapping them in terms of their ability to manage their condition.

We know a lot. There's a lot of basic science. There's a lot of people, I recently attended the IASP World Congress, and there are loads of people doing really interesting work on MRI scanning of people with tabasco sauce in their mouth and seeing which bits of the brain light up. There are people who are looking at animal models of pain and how pain changes your genetics. But I sat there thinking this is really quite interesting, but it doesn't really help me as a clinician at the coalface.

So I think we need to have an honest conversation with our patients about the nature of their condition. Unfortunately, when you have a hammer everything will eventually look like a nail, especially if the hammer is sponsored by a particular company.

Alex Howard

It also strikes me as you're speaking, that there's something around people's expectations of physicians and practitioners and their responsibility in their own healing path. I think it can be very easy to go and see a practitioner and think, I need you to give me a drug. Your job is to know which drug to give me, and that's going to fix me. As opposed to becoming proactive in one's own healing process.

Dr Abdul-Ghaaliq Lalkhen

Absolutely. And I think the medical profession does sell that model because obviously it's in our interest to do so. But active participation in prevention, I mean, as I get older, I spend more time in the gym now because I look at my parents and I think genetically they are pretty robust. What they're struggling with is the musculoskeletal problems associated with not having had an active lifestyle.

And I always say to the patients, when you're a young car, you can take the car out all hours of the day. You can do donuts in the parking lot. But when you're a vintage car, really, you don't do less maintenance on the car. You have to do more. Vintage cars require more maintenance. You need to take them out. You need to run them through. You need to do all of those things. But we have this weird thing where we get to a certain age and we retire from exercise. We go, well, we've done enough in our lives. And we don't look after our mental health.

[00:30:39]

The last part of the book is very much my reflection really on what I see. And I'm probably straying on the expertise of many of the experts that I've looked at on your website for the trauma conference, looking at maintenance of mental health, looking at nutrition, we know the things that aren't good for us. There's so much information out there now.

I was saying to my wife, Nicola, this morning, I listen to all sorts of podcasts about all sorts of things and I read fairly widely on, I'm reading Daniel Kahneman's book *Noise* at the moment, and you get this wow moment where you think, I thought I knew what I was thinking. Then you read the perspective of somebody else and you go, I don't really know anything about that. Socrates said, "The only thing I know is that I don't know".

Alex Howard

That happens to me in my job. You realize how little you know when you go in thinking you know a lot about something.

Dr Abdul-Ghaaliq Lalkhen

The other day my mother said to me, I was saying I had this patient and we talked about their diet. And she said, 'so are you a dietitian or are you a pain specialist?'. And I said, look, I've got a person in front of me, and I can't just say to them that narrowly I will treat your pain problem but actually, all of those other things in your life, all those other activities are negatively affecting you as a whole person. And I think that's where the medical profession is falling down, is that we're at the tip of the spear, but for chronic long-term conditions we shouldn't be. And it shouldn't be a spear because the spear implies that there's a cure.

We need to be educating people that looking after your physical body and looking after your mental health is a lifelong journey. And more of that should be taught in schools. And if we did that, we would be able to prevent some of these diseases of lifestyle rather than trying to patch people up when they're already broken.

Alex Howard

And I think it's great that there is growing evidence around what you mentioned as the biopsychosocial model of health, but I think it still needs to move into actually the practical day-to-day recommendations. It strikes me that increasingly, physicians and practitioners are aware of the importance of these different ingredients, but actually when it comes down to when the rubber meets the road, what does that actually mean in terms of practical changes?

And I'm curious as to, as that's unfolding and evolving in your own clinical work, someone comes to you and you recognize, you're able to have this dialogue and they're engaging, what would be some of the really practical things that you would have them start to focus on?

[00:33:31] Dr Abdul-Ghaaliq Lalkhen

So I'm fortunate. I've self-selected to work in a pain management unit that has five psychologists and half a dozen physiotherapists. And we try to be evidence based in terms of the treatments we offer. And it depends on the type of chronic pain condition. But say, for example, with lower back pain, the first is pain neuroscience education. Like the conversation we've had today, to try and demystify chronic pain, to make them understand or to try and help the individual understand that pain is not due to ongoing tissue damage, to try and dial down that heightened and stressed amygdala.

Now that's met with variable success, because some patients don't want to hear that they have to manage this problem. They want a cure. So often that's a challenge. But that's where you start. Explaining pain is the place to start. And there are loads of online resources and we produced our own leaflets and I've written that book really trying to explain pain.

Once you've done that, and they now understand, and the patient starts to understand and accept that the pain that they're experiencing, the abnormal sensations, that that's not catastrophic, then begins the process of learning better ways to manage.

So, for example, people have good days and bad days with their pain. And so on a good day, they'll try and catch up with all the things that they've not done. So we teach pacing. Pacing your activities. We teach problem solving. So how to reframe a task if it's something that is affected by pain. We teach people how to re-engage with their families, to try and explain to their families what the condition is. And it's our psychologists and physiotherapists are really the rock stars of behavioral change. But behavioral change is very difficult.

If you've ever tried to change the habits, then you can imagine, no, it's difficult. And if you're beset with pain, which is trying to grab your attention, I always say to the patients, it must be, when you have chronic pain, like living with a particularly annoying child who's always hugging you while you're trying to accomplish your day-to-day tasks. And patients go, yeah, that is pretty much what it's like. Sometimes you can ignore the child and sometimes you can't. But what you're really trying to do is to put boundaries around that child to try and get that child to behave better. It's not going away. But you can change how you respond, and you can change the choices you make.

And it's not easy. And people will continue to fluctuate throughout their lives. But from a doctor point of view, I don't have a lot to offer. There are a few interventions that have good evidence, spinal cord stimulation for nerve pain. There's limited utility with medications, and increasingly we're realizing the harms we cause of drugs like gabapentin. Certainly the opioids, in my view I struggle to see a place. And the latest is cannabis, and we seem to be going down the same route with cannabis. Where really, if you're going to offer somebody a treatment, it really needs to have been evaluated in a very robust way. So you can have an honest conversation about what are the risks? What are the benefits? What are the long term consequences? This is the population we studied in. You match or do not match that population. And I think that's the way to proceed.

But as you said, with your toothache at the beginning, when somebody is desperate, it is very easy to end up offering them something which you almost convince yourself is going to help just so you can quell your own distress that you feel when encountering something like that.

[00:37:50] Alex Howard

I think it will be very helpful, though, for people to hear you speak of it in that way. Because I think sometimes when people go and see a practitioner in a lot of pain and not feeling like they're given the magic bullet, they can sometimes feel that that practitioner is not caring or doesn't understand because they're not fixing it. And I think it's helpful for people to hear, that actually, that interaction is a relationship between two people, and it's also hard for the practitioner, unless they are sociopath, actually wants to end the suffering of the person in front of them. They just haven't got perfect choices available.

Dr Abdul-Ghaaliq Lalkhen

And communication, as we know between people, is brought with difficulty. You know what I'm saying to you and what people are listening to. I increasingly realize when patients come back to my clinic and I say to them, okay, well, we spoke the last time. What do you remember? And it amazes me sometimes about the miscommunication.

I think in my own life what I've increasingly tried to do is to go and understand things myself. If there's something I don't understand, there is a podcast or a YouTube video these days which will give you the beginnings of information. I think one of the reasons I wrote the book is really, and it's an extended reflection on my own attitude to life is, if you don't understand something, you can't always rely on another imperfect human to understand it. But there is the wisdom of crowds. So if you listen to ten imperfect humans somewhere you might find truths that are repeating themselves. And I think you also have to, as a person, take responsibility for the choices that you make.

So I think at the end of the day, if you don't understand then you need to go and find out. And also you need to understand that, and I think everybody has become, during the pandemic, a mini statistician and the probability theorist but that is what we need to be teaching in schools. We need to be teaching, not calculus, which I have this recurring nightmare where I wake up and I think I have to sit my calculus exam. I know as much calculus as I do now. And then I wake up and go, no, you're not 18 anymore. But I've never used that, but actually odds, ratios, probability, risk, benefit, those are how to assess evidence. Those are the skills which I think people lack.

And so we tend to believe, there also seems to be a short attention span we have these days. Nobody seems to read anymore. We rely on rapidly scrolling through various social media sites as a source of information. And what I would say to people who have chronic pain, who are listening to this is that there's a commitment required if you have any chronic long-term condition to becoming the expert.

I always say to people who attend our pain management programs, which are CBT or cognitive behavior therapy based programs, and I do the doctor session and I talk about doctors and I talk about how doctors are trained and how they interact with patients. But I say to them, look, your doctor is not necessarily the knower of all information, and really you need to become the expert. And you can. There is so much, as I said before, information available that you can educate yourself to a really high degree nowadays, just with a Wi-Fi connection.

Alex Howard

And of course, pain used in the right way can also be a powerful motivator. I think people move out of that initial shock and panic that, I've just got to find a way to end this. If one can start to learn to live with it and find a softer relationship, it can also be, sometimes the motivation for people to make big

changes in their lives as it is simply too painful not to. So there's also the potential for the pain to be used in the right way.

[00:42:04] Dr Abdul-Ghaaliq Lalkhen

Pain can be your baptism, I think somebody once said. If you look, I try to get patients to reflect on, rugby players, for example, bashing into each other for 80 minutes and never stop. And I say to them, each of those interactions has been recorded as being the equivalent of a car crash.

Alex Howard

Is that right?

Dr Abdul-Ghaaliq Lalkhen

Yeah. Those are the forces. Those guys are big. But they endure, they get up and they continue. I said, if you and I did that it wouldn't be within the context of what we normally experience. But you can become habituated pain. It's not to dismiss or minimize what people feel, but it's really to empower them to become active participants in the management of their own lives and their conditions.

Alex Howard

What I take from this, Abdul, is it's a message of hope ultimately, but it may not be what people first here because they want to hear the miracle solution.

Dr Abdul-Ghaaliq Lalkhen

It requires work. I always say to the patient, this requires work. I often say if you want to lose weight, you can go to Weight Watches, that's like coming to see me today, and I can give you a plan, I can educate you about food, but I cannot be in control of what you do when you go home. So there is hope. But it does require work, like everything unfortunately, that is worth achieving in life.

Alex Howard

Yeah, I think this has been fascinating. I really want to encourage people to get your book. I think it's a great starting point for people. And also it's readable. So often books on subjects like this can be a little intimidating. And I found myself ripping through the chapters and really enjoying it.

Just for people to help them find it, they can go to Amazon or wherever sells books. And in the US, it's *The Anatomy of Pain*. In the UK, the hardback version is *Pain: The Science of the Feeling Brain*. And Abdul, was telling me before we started recording, there's a paperback version coming out in the UK, *Pain: What It Is, Why It Happens and How to Cope.*

But I think the simplest thing is to put Abdul's name into any of the book websites and you'll find the book. I really recommend it. I think it's a great way to go deeper in this interview but also to get empowered, which I think is ultimately the message.

So, Abdul, thank you so much for your time today. I really appreciate it.