Academy of PHYSICAL MEDICINE

Treatment, Research, Context and Innate Healing - Ref 99DN - Draft Transcript

with Dr Dave Newell

14th September 2020

TRANSCRIPT

Please note, this is not a verbatim transcript:

- *Some elements (repetition or time-sensitive material for example) may have been removed*
- *In some cases, related material may have been grouped out of chronological sequence.*
- *The text may have been altered slightly for clarity.*
- *Capitalisation and punctuation may be erratic…*
- *There may be errors in transcription. If something appears odd, please refer to the recording itself (and let us know, so that we can correct the text!)*

Steven Bruce
Today we're going to be looking at evidence we're going to be looking at the placebo. We're going to be looking at the new CBOE, we're going to be going to be looking at the specific and the nonspecific effects of treatment. And to do that, until that end, I am joined by Dr. Dave Newell from the Anglo European College of Chiropractic, chiropractic. My words right one of these days where he is the head of research director of research, Dave, great to have you with us again second time for you, isn't it?

Dr Dave Newell
It is yes. Thank you so much for inviting me on Steve. Just one slight correction there. Actually, I'm head of research we're now the ACC University College and the carpeted school is one of our schools we have we have three scores one in radiology and also in sports and psychology and physical exercise, so and so slightly different to the old ACC college we've moved on to become a fully fledged University.

Steven Bruce
Yep. But you're still director of research.

Dr Dave Newell
I am. Much to my surprise these years and clearly must be doing something right but yes, so Last time

Steven Bruce
we had you on the show we were able to do in the studio instead of zoom and we were talking about patient reported outcome measures. If I remember correctly. This broadcast this discussion has been prompted by a paper that you've written about contextually aided recovery. And that was published in which journals.

Dr Dave Newell
I was published in Chiropractic and manual therapy, I think back in 2017. Now, so there have it that obviously this is the the end point, if you like, have an awful lot of research done outside of the chiropractic field on placebo, and it was something that I was noticing was increasingly important to articulating excuse the pun, around some of what the manual therapeutic professions were doing, and had the luck to sort of be relative We knew in the chiropractic literature anyway, to sort of highlight this as an issue in the field, but it obviously has a far greater reach if you like, across you know, not only manual health care and therapeutic options that go with treating ms K, but uh, but also generally in healthcare these these these phenomena are very important. And increasingly we have the research behind it to explain why.

Steven Bruce

And that's really useful and important to all of us, osteopaths, chiropractors, and others, isn't it? Because we do worry that the conventional world doesn't accept that what we do has the effect that we say that it does. But I was going to say that there's probably an assumption on the part of a lot of the people that the placebo effect happens whether you like it or not, and there's no way that we can affect it in any way ourselves. Is that true? And

Dr Dave Newell

so some Actually, so much to uncover here. I mean, one of the things we might want to do first is just look at the word placebo. So, placebo is a word that has been associated with in a rather negative way for hundreds of years actually with particular phenomena that people have noticed for hundreds of years and that is that people will often get better and improve from the particular conditions that they suffer from, with all sorts of different way to wonderful treatments and and you know, I suppose things like these the sort of snake oil salesman, some of the historical ideas that are associated with what might be called medical charlatans. placebo itself is a word that means to please and, and so, really the word itself and the concept has become caught up with this very Negative historical viewpoint, which portrays the placebo, any, any attempt to modulate the placebo, or the effects that might be labelled as placebo, to be somehow are non legitimate in some sort of way, made up purely in the mind of the person, just really pleasing the patient so that the patient then says that they got better because they just want to please you. And so, placebo itself, the idea of placebo comes with a lot of historical laid in this, you know, it's laden with these negative historical viewpoints. And in fact, you know, one of the things that exemplifies this is that it was often associated, the word was often associated with the practice back in mediaeval times, where you would pay for mourners to come and cry for you. Which we should I guess, you know, if if didn't have too many friends. I guess that was a reasonable thing to do. But, you know, it got associated with this falseness, you know this charlatan SNS and and actually we now know that, that it's that it's not really true at all and that the effects that are sort of generated are bogus Ebo or the facts that are generated by the placebo mechanisms if you like, are bonafide neurological mechanisms that modify particularly things like pain but modify things from performance to the immune system to a bunch of different things. And and so, yes, coming back to your question, the the placebo effect or the placebo, the action of placebo, doesn't need people to work hard to do it. So there are some unconscious and subconscious elements to generate Writing effects that can be elicited by what we might call placebo.

Steven Bruce

I suppose one of the inferences is in the minds of the people I was describing earlier that you don't need to do seven or eight years of training to become a doctor or five years to become a chiropractor or an osteopath in order to exploit the placebo effect. So I guess we've got to be able to show that we offer more than simply the placebo effect and our ability to influence that effect as well, haven't we?

Dr Dave Newell

Well, I would just disagree with that, actually, um, I can see why that's a conclusion that people might make. And I think the reason they made that conclusion is because of this historical labour this that we see that you know, it's, it's just placebo. And it's like, well, it's just a fever. That doesn't really mean anything at all.

It's not skillful, whatever. But well, actually, we know that the therapeutic encounter is a very complex thing and it brings with it many elements that I need that considerable skill to get right. And so, actually, what we might call these effects, which are therapeutic effects which are elicited by guessing, right, if you like multiple elements of the therapeutic encounter, many of those actually take a lot of skill. So for example, therapy to touch beyond that, Pat, you know, the manipulation with confidence without hurting people. If you move back from back into the psychosocial round things like understanding the patient's story, understanding where there might be psychological barriers, understanding the psychology that might go behind expectation, understanding language, being empathic. All of these things are To do well, are actually very highly skillful things to do. And in fact, you know, we might talk about this later on. But the good thing around this is that a lot of good clinicians will do those implicitly. Because they're, they've learned that they are good things to do. And they've sort of taught themselves perhaps, to be to listen very well or better than they would have been would have done before, and, and perhaps natural things like being empathic. But we now know that those things could be and sometimes can be done better if you can do them more skillfully. And, you know, we may not perhaps do as much of that or have as much emphasis on that in our education as we might have done. So. It does. You know, I would say that no, I think if you're going to elicit recovery, that includes these therapeutic elements, which might be called contextual and you're going to do that regularly and well, you actually need To be very skillful at this stuff, it's not an easy thing to do and it doesn't just happen just naturally. So

Steven Bruce
is it now being incorporated into mainstream training at the ACC? Can I use ACC as a short term shorthand for university? Well,

Dr Dave Newell
yeah, ACC UCS is an hour opinion but but um so that's an interesting question. I think I had a lovely opportunity to talk to all of a Thompson on his podcast words matter, which I would recommend people to listen to who's an osteopath at UCL. And we did have a chat around there about whether this you know what the menu therapeutic educational curricula do where they are at this particular moment in time. And I would say that that probably an This is why this area is so fascinating because every time you talk about it unpacks more and more of a Pandora's box around all sorts of issues. But in terms of where the manual therapeutic professions come from physiotherapy to some extent, but certainly oski, osteopathy and chiropractic which are very least historically wedded to the idea of this manual input, then, perhaps we don't do as much around this area as we might do. And I think historically, both professions have been dominated with the idea that it's a very, very mechanical type of thing that both professions deliver. And we can talk about whether those mechanisms, those historical makeups have any evidence around them. So I think that the curriculum really has has sort of emerged from that historical viewpoint. And I think it probably still needs a certain amount of catching up. So I think all curricula need to be reviewed and and and modernised. And I think that is probably the case for, as it should be for for our curriculum in the ACC UC, which is constantly being looked at in terms of more ization. And I suspect that's probably true of many therapeutic curricula across the piece, particularly in osteopathy as well. And but I think it's a very interesting issue

about where we are at the moment the curriculum and where our focus is and actually where the evidence might be going.

Steven Bruce
Yeah, we also had a question from Aiden even says, Do you think that placebo is more powerful in manual therapy as opposed to allopathic? And if so, do you think this might have anything to do with our evolutionary origin as mutual grooming primates?

Dr Dave Newell
Ah, I think I I hear elements of my own paper which Aiden may have bred and that's very kind of him if he has the manual therapeutic approaches to care certainly do have these elements of touching them. And I think that therapeutic touch and and, and the evolution of therapeutic touch that may have been attached to grooming. So I'll go through that in a moment. But these are powerful primate signals. And my thesis and and it's not only mine, but I think it's emerging from the literature is that that safety has a big effects on on our perception of pain in particular. There are lots of other things physiological mechanisms that can be affected by context and this takedown mechanisms, but I think pain in particular, and I think The elements of safety or, or threat, can can perhaps be used as a sort of very high level theory, if you like, around what might be important to modulating pain and other situations where you're, you're threatened. It makes sense to be highly vigilant, both internally of your own internal signals and external signals. And that under situations of safety, that you might turn down that vigilance. And, you know, I posted in the paper that one of the very strong levels of safety that a primate may get is to be within the group, safe within the group not on their own in the jungle, and, and perhaps being groomed by the top guy. And so, so I did, perhaps misters mischievously. suggests that, you know, grooming might be prototypical medicine. And the top guy might be the prototypical medic, the top groomer, as it were, you know, the silverback of about social media. In clinician terms might might be maybe this top groomer. And so I think that probably touch is very important. And I think that may be in the manual therapy professions, given the fact that there's a lot of therapeutic touch going on. They might very much signal strong safety signals. And, and so yeah, I think therapeutic touch is very important. I mean, we know this not just in the money professions, but a hand on the shoulder. If you go to see your doctor often if you're upset, you know, that that signalling of empathy is probably very important. And so it may not be just many therapy professions but, but Carpathian osteopathy and physiotherapy do have a lot have been able to to touch patients and perhaps deliver that very powerful contextual signal.

Steven Bruce
So, is some contextually aided recovery is it all about placebo and manipulating the placebo effect?

Dr Dave Newell
Well, so, one of the things I think is important is to try to rehabilitate these powerful therapeutic effects outside of the historical language of placebo. Now, the problem is is that placebo has been, as we said, before being associated with a whole bunch of cultural expectations if you like and cultural labelling, that is that is left it with a very negative context if again, excuse the pun. And and so if you are in a situation where

something very useful and very real, it's happening. But unfortunately, the label for that is has is a label that suggests that it's culturally unacceptable. And then it becomes very difficult for people to accept that it's something that they should do well, and that is bona fide a and legitimate in terms of carp in terms of health care, um, with that label, so you're sort of fighting appeal against that label. So one of the so language is a problem here. So one of the attempts of of doing that is, and there's been multiple attempts from various individuals who have published in the literature is to try to think about words that are different words that still describe the same phenomena. And so, Dan mom, and who is one of the guys I read very early on his his book called Meaning effect, try to do this by by positing this idea of the meaning effect. So a different set of words. But what is emerged is is the context. So contextual factors, which are these therapeutic elements that are really important in generating good outcomes. And, and so the context and the contextual factors in the manipulation of these to get contextual effects is a sort of new language that is emerging over and above placebo. And so the reason that I somewhat again mischievously brought to bear contextually recoveries because because the the acronym spell care and for me, for me, a lot of the contextual elements are really about powerful care. They're about Good care, and good carries. Because we know that you know that the empathy, listening and compassion and all of those sorts of things are elements that literally modify people's pain that they feel. And so, so yeah, I was quite I was I was quite chuffed with with coming up with care. But But yeah, that's where it sort of came from.

Steven Bruce
Yeah, I often wonder how long people spend thinking of the acronyms before they actually put way too long, I think. But in that, in that sense, though, I mean, you can talk about empathy and you can talk about languages or other less obvious aspects of context that we're also able to manipulate. I guess for anyone I mean, does the colour of my wall in my treatment room does that have an effect?

Dr Dave Newell
Well, we don't know about colours yet. But but a colleague of mine Christi Bishop and a bunch of other authors have tried to get a handle on the sorts of areas that that were important. And some of them that are self evident, I guess patient practitioner interaction is is very powerful. We know that through things like the therapeutic alliance and so on. And there's a whole bunch of research around therapy lines, that we can sort of unpack to some extent. Um, there are things such as the patient beliefs and what the patient comes with. And we know that has an effect. That's an area there are the the practitioner beliefs For example, we know that if practitioners and interesting study was done, where practitioners were asked to give patients a treatment that they didn't really feel comfortable with, compared to a treatment they did feel comfortable with it, despite the fact that their patients didn't know that they were doing that. Patients got better in the treatment that the pet the practitioners felt comfortable with and not so much in the ones they didn't feel comfortable with. So what practitioners bring to the therapeutic encounter, even unconsciously, can have effect. So that's the third area. So we've got practitioners beliefs, patients beliefs and the patient practitioner interaction. We've also got environment is also important as well. And so the, the setting within which the therapeutic the therapy is given, we can talk about that as well, a little bit. And we also have the characteristics of the treatment. So some treatments are might be more contextually powerful than other ones. And so, for example, the manipulation itself in the on the sort of therapeutic ritual that goes behind

that might be more powerful than Simply massage for example, and then needles might be more powerful than manipulation and so on. So those five things so the the setting the characteristics of the treatment, the patient practitioner interaction, patient beliefs and practitioner beliefs, those five areas seem to be the ones that are they're important. Couple so yes, environments important.

Steven Bruce
Thank you a couple more questions from the audience for you. We've got someone on the Vimeo team who's called double o 5.6. I think he's part of the the ami 16. He's asked, Do you agree with Paul Depp's work? He's the author of a rheumatology reference work, his hypothesis about the importance of ritual in the therapeutic encounter for maximising the placebo effect and the overlap of that with shamanistic ritual?

Dr Dave Newell
Yeah, well, I know Paul, and I had the privilege of going down to see him in Exeter. he's a he's a professor down there in the medical school and we went out for lunch and had a chat around this when it was at constructing this paper, and I know he's published quite a bit and some of his students as well, one of his PhD students to my head and I apologise and was bit has been very influential in publishing some stuff around Nazi both of which is a powerful way of making people feel worse. Ah yes, Paul is a really interesting character he is, is that he's a he's a medic, but also a prophet, a very interesting and interested academic, in all sorts of things, got involved with the theatre, so he got me some collaboration with the best bionic elements within the university, in the arts, and in acting, and I think that's that's where he probably stumble across this thing about therapy ritual, which is a sort of performance. And, and I would say that's really important. I think, for example, if I took the manipulation for for the osteopathic and the chiropractic professions, and if I've often said in some of the talks that I've given that if out, the founders of these two professions, in fact, stumbled across what they thought was was a was a sort of paradigm which was big toe pulling, and then pulling the big toe, even though that might have been something that they felt then would they would build a professional as a therapeutic ritual wouldn't really be very congruent with people coming in with low back pain, because it just doesn't really make sense to a patient that a big toe being pulled should necessarily, you know, stop from you know, being intelligent and in huge amounts of pain and not being able to sit properly. Whereas putting a bone back in place, even though that is almost certainly not the mechanism by which these therapies encounters work, and does make sense, and the ritual around this, you know, it feels like my, you know, even the language that we have within our societies such as put my back out, you know, slipped disc, all of those sorts of languages imply this, this this this mechanical idea that you could just put it back. And so the idea of a sort of clunk, that comes with a manipulation is a powerful story, if you like that makes sense to the patient. And so in terms of that therapeutic ritual, I think that particular performance is is is might likely be more powerful than a bunch of other performances that that could take place. So yes, I do think the ritual is very important.

Steven Bruce
Christina has come back on the colour therapy business and Christina says that yes, it's been shown in prisons in America. COVID if you paint the walls pink, you get less trouble from the inmates. Not sure she's advocating print printing on our clinic walls pink, but she says colour has an effect. Clive says, Wait,

Dr Dave Newell
before we go on on that on sorry. Yeah, before you go on that point, we are more important point around around the environment is We know, for example that people who are putting wards hospital wards to recover from operations. There's some there's some studies, some old studies that have been done around this have shown that people who have a window to look out recover, recover better and more often than people that don't. So, you know, I think it is likely that ambient sounds may have an effect. I although we don't quite know we certainly know that. It was a wonderful podcast and somebody put me on to just recently And which was about smell and the neurological mechanisms around smell. And we know that for example, what you smell is entirely very strongly based on the context. So the meaning of the situation that you're in. So if you're given the same molecule, for example, that is it precisely the same molecule that is found both in Parmesan cheese and also in vomit. And you label the two vials, which is just got this chemical in, there's no bomb at all Parmesan cheese, it's just a chemical label it vomits and bombs and cheese then people will smell precisely those two things. One will be you know, will elicit, you know, desires to have a pizza and the other one will elicit disgust and, and, and so the context around what you smell is very important in the meaning of what you actually see. So I think even things like smell might be important and one particular study Just as it's really interesting, there's a somebody I know called Billy sandal over in Denmark and she did amazing RCT around looking at exercise for I think it was knee pain. And they divided it into two groups, randomised, randomised controlled trial one that was in a lovely gym with the view over a sort of Olympic style running track with lots of young and very thick people out there and they had this group of older people that were doing the exercises in this environment. And in the other group, they had them do do these exercises in a sort of dungeon. Down at the bottom of the university, we had to go down some concrete stairs and follow some ducting to this windowless room that had some buttons on it, and they do their exercises down there. counter intuitively the results came out that the dungeon was much better for patients than doing it in the gym. And when they did the qualitative analysis so they asked the patients what was going on. The patients felt that the that sort of dungeon, if you like was they were closer together. So they chatted more. And some of them said that it reminded them of their school where they had the gym bars on the wall where they always felt that they they will have they went there for a purpose. They were going there to do some work, some exercise. And so and so it was this older group and their age that seemed to recognise a particular environment that sent signals to them about some of the positive things around that. That actually helped them get better more than the one perhaps in the gym, the bottom gym, but they felt a little out of place. So environment probably does have that but it's a fascinating area. Sorry. Sorry.

Steven Bruce
I was smiling while you were saying that because there's been an anonymous comments and in asking if there's any connection between my pink shirts, and the behaviour or outcomes or trouble with inmates, I assumed We're going to walk away from, I always assumed that when asked about the trouble I'm having at the moment with the general osteopathic Council, well, that's a different different matter. Who is Liz? Hello, Liz. Liz says does does the five principles apply to both acute and chronic pain outcomes?

Dr Dave Newell

So it is really important to say that there's still a lot of clinically based research that needs to be done. In fact, one of the areas around consumer research, which I don't like calling perceiver, but contextual factor research, is a call for more of this sort of clinical stuff to be going on, you know, what, what's the actual effect of these things in clinical encounters and it's a rather difficult thing to do experimentally, but there's more that needs to be done so and so acute and chronic is important, I think, obviously, because we will know that chronic pain is is considerably more resistant to change than than than acute pain, although I'm sure that you You will experience patients where that is not been the case in some miracles that happened, I'm sure with chronic pain patients who have had the pain for many years and do get better rapidly. One of the things to, to to think about is that contextual effects are not the only reasons why and why it's an important question. potential effects are not the only reason why people may improve. We know for example, that natural history is is, you know, particularly with things like low back pain, natural history accounts for you know, considerable amount of improvement over time. And there's other things such as, you know, concomitant other treatments, for example, patients may be taking pills or going somewhere else as well and you may inadvertently assume that you and, and, and there's something also called regression to the mean, which is a weird statistical phenomena which means that if you if you have to high school, you tend to have a lower score next time you ask the patient. So all of these things can impact outcomes. But in terms of in terms of natural history, clearly acute patients are likely to, you know, be affected by that particular variable than chronic patients. And so, you know, if you're going to look at the contextual elements, the specific elements, I don't like calling it that, but the specific elements, the nonspecific data elements, which is the connection stuff, plus natural history, then you might expect natural history to have more of an impact in acute patients than you might in patients. And so that changes certainly would be different across those two things. But, but we don't know and so at the moment in terms of context, you know whether the the contextual elements and how powerful they are with both acute and chronic patients, that research is really only just emerging or it's not being done so. But I agree it's an important important differentiation and, and clearly, of course, chronic patients are more important in many ways to the, to the economic and health load in society, because they're the ones that cost the most. And they're the ones that are suffering the most and the ones that can't go to the work to work the most, and so on. So, chronic patients in particular are an important cohort to really be focusing on but yeah, yet to be yet to be known, but an important question.

Steven Bruce

Okay. Clive was asked, Where do you see the balance between contextual effects being internally generated by the patient, as opposed to externally imposed by the therapist, and where do we have the greatest potential to manipulate the sensitive dependence on initial conditions which is put in inverted commas? So I guess that's an expression which will resonate with you.

Dr Dave Newell

Oh, yes. He might be he might be alluding to complexity theory which, which is a whole nother webinar. But so how what, how might we sorry, Jeff, first part of the question again?

Steven Bruce
Where do you see the balance between contextual effects being internal from the point of view and imposed by the therapist? Yeah,

Dr Dave Newell
yeah, yeah. Okay, so. So all of the effects that you're like to see our all internally generated, because only the patient can can report to you less pain. So I maybe he's getting at this idea that is there an effect that is somehow independent of the consciousness of the patient, as we might call it, a special effect that historically has been called specific and and and that there are nonspecific effects which are sort of done by the patient. If you're alluding to those two things, then that is a very important question. very controversial question. I would say so because what you're saying is that and I think perhaps it comes down to some some misunderstanding, again of, you know, what is causing the outcomes that we're interested in? I think you might say that if a patient reports less pain, then you know, what has done that. And the, there are a whole bunch of things that could do that. As we said before, there are lots of elements including things like, like, natural history, um, but uh, the difference between external internal interest Let's go off on one so, so it's about specificity and non specificity or specific effects and nonspecific effects. And I know this is a very interesting and controversial issue because if you look at sort of pharmaceutical medicine, the specific effect of a drug is something that should happen regardless of whether the patient thinks they should be getting better or not. And, and it's often underpinned with an idea that the reason it's specific is because it biologically binds to some physiological receptor. And therefore, it's properly biological. It's sort of properly therapeutic. It's it's almost mechanistic in a way. Um, and therefore, you know, almost regardless of what you did, you know, the patient can't affect for example, glomerular filtration rates. By trying to make their kidneys filter more, you know, as a matter of how much you sit there and try to think your way into increasing the efficacy of your kidneys, it's unlikely that you're going to be able to do that however, if you give somebody frusemide, then it will change the glomerular filtration rate and you will have, you know, more or less urine production. And so, so clearly there are some areas where there are types of physiology there are a long way from the patient's conscious impact, if you like. However, there are types of physiology that are nearer and nearer to what the patient thinks. So things like pain, for example, are probably phenomena that are quite close to, and the ability of the patient to, to consciously or, or psychologically that you can you can alter what you're feeling in terms of pain by what you're thinking much more than you can alter your kit. infiltration rate by what you're thinking. So there are going to be some things that are closer. So. So when you are being specific, and the problem is, is that medicine and lots of historical thoughts about what is legitimate treatment and illegitimate treatment have been based on the idea that somehow, if it's specific, it's legitimate, and if it's non specific, it's illegitimate. So the question around how much a treatment, what proportion of a treatment is either specific or nonspecific? Has the history historical problem of saying, Well, what you're saying is how much of this treatment is legitimate and legitimate. And therefore that becomes a real problem. Because if a treatment or a therapeutic encounter entirely eliminated somebody's pain, but you have done that through contextual effects, which are basically top down mechanisms from how the patient is thinking about the encounter. If you've done that entirely through that particular mechanism, then you are 100%, contextual. And in the old lateness if you like around how we consider these things, you are 100% illegitimate, which goes all the way back to when it's just placebo.

Whereas if you give somebody a drug, and they start paying more, then somehow that specific effect of frusemide on bind to receptors in the in the kidney is somehow legitimate treatment and some proportion and outside of that, is this a legitimate thing if you're thinking about it like that, and it becomes a very pejorative discussion around how much proportion of that is in any particular therapeutic encounter. I don't believe that being specific or nonspecific is particularly in potent, or really a very helpful dichotomy. And there are some reasons behind that. And I apologise if it goes on, but it's a very deep question. I'm the one you might say, if a patient gets better because of this complex therapeutic encounter, including all of those elements, which are around belief and around empathy and around safety, and so on and so forth, all those cues that you're giving as a condition, you're doing that really well if they get better, and one might say they got better and that is legitimate by definition. The other thing is, the problem around that is that you could then say, well, you might then get you might elicit that improvement by lying to people. That is a whole Pandora's box that around the ethics of the use of context and whatever which you Which is an interesting one and we could cover in another webinar, but we could touch on at some point. But to go back the other about legitimate and illegitimate or specific and nonspecific is that if you look at pain modulation, we know that part of the neurology around pain modulation, is a descending pathway that is modified by the patient's perception of what is going on. So the prefrontal lobes, which is where you make models of the world, complex models of the world and cultural interaction, social interaction and so on what things mean. We know that that part of the brain is connected to descending pathways that impact on on nuclei above the spine, that have cells in them that can turn down pain, alternate pain, so how you're thinking about what the therapeutic encounter means can literally turn your pain down and up through a bonafide neurological mechanism that new or novel mechanism uses amongst other Trump neurotransmitters, opioids. And those opioids bind to receptors in a very specific way. And, and yet, you're eliciting the release of those opioids, which bind to those receptors by the contextual stuff that which is altering the way that somebody thinks. Now, that is essentially the contextual stuff in the placebo, which, if you're looking at the original arguments about legitimacy is, you know, might be considered illegitimate. And yet, if you give somebody an opioid, which turns down their pain, it binds to precisely the same pathway. So and yet that is medically legitimate because it's a drug. So this idea about specificity or non specificity, and it's linked to legitimacy and non legitimacy is actually a really interesting question. And I would say is actually gets in Way of us thinking about, well, what do we need to do to help people get better?

Steven Bruce
Do I feel we really we were just getting going in this discussion right now. And we've come to two o'clock already. But if I can take just a couple of seconds, a couple of minutes to just run through a few things that have come in, one of our viewers has asked what you meant by natural history now. I think it's a slightly confusing expression, but I'm assuming what you mean by that is the natural course of events which cause a problem to get better.

Dr Dave Newell
People get better anyway. Yeah,

Steven Bruce

yeah. salami. Olivia. Hello to sodomy. She asks, Does the White Coat help with the effects of a treatment? Why better does it affect rather than help?

Dr Dave Newell
I do believe that there is some preliminary research older research that suggests that the white coat may have impact but that's a study yet to be done well, and it's a really interesting one, but I suspect that it will have some effect. Okay.

Steven Bruce
Could you give us a quick recap what are the five things Suppose that you're talking about.

Dr Dave Newell
Yeah, so the areas where you might be thinking about concentrating, or thinking about noticing in a therapeutic encounter, and trying to mitigate or do well, would be the patient practitioner, communication interaction. So including therapeutic alliance and empathy. Picking up on patient beliefs, bad beliefs will will get in the way of them getting better, such as I can't move or it's never going to go away. And good beliefs such as self efficacy, I can deal with this are the sorts of things you could be concentrating on because they will help your own beliefs about the treatment. You know, whether whether you are thinking that this is something that you shouldn't be doing or you don't feel comfortable with it, you know, then then, you know, that's an important area and perhaps Something that you could think about and perhaps widen your viewpoint of what you're doing. The environment which we don't know much about, but but probably does, and I think a lot of clinicians already are onto this and probably try to try to modulate their in their therapy environment in such a way as to make it comfortable and safe and so on. And also the the, the, the treatment characteristics itself, such as touch perhaps been more powerful than non touch.

Steven Bruce
They've just been brilliant. Thank you. I apologise to those people whose questions I haven't had time to ask. Robin moody says we need more lunch. I think he says in a week. We need we need more than a lunchtime to cover this particular problem. But maybe I was distracted because I know Robin. It will be great to talk more about this and some of the other things that you've mentioned in that. Can I just ask one, one final and hopefully quick question. You've talked about a lot of characteristics of treatment, a lot of the context of treatment is it sufficient for us to know These things are important just from this discussion, or is there somewhere people can go to be specifically trained on how to enhance those aspects of training?

Dr Dave Newell
And well, there's Yes, it is very important to be aware, I think that's the first step. I think it's important to realise that what you bring to bear as a clinician is much more than what you think you're doing. And therefore, as soon as a patient walks in through the room, then things like, you know, active listening, you're listening to the whole story, not interrupting, and being able to recognise key elements of the story that appear to be quite important to the patient. Just as one of the areas that we've talked about is very important for you to realise. So remember that you are much more powerful when you think you are and you're much

more powerful outside the elements that you think you're delivering, you're actually delivering a lot more in terms of where you might go. There. There's a bunch of training Around pain science, I think, you know, for the pain science areas, a very interesting area. And there's things like the cognitive functional therapy, there's a bunch of stuff that's coming out of Australia with Sullivan. I don't know whether there's training there but the might be there are areas if you look off the top of my head, I can't give you the websites. But there are at the Royal College of practice, I think in their their pain faculty have put on some seminars around this. And I'm sure and of course, some Oliver Thompson, who is one of you, your your guy's got a brilliant podcast on on words matter, which is predominantly talking around these areas in stuff outside of the manual therapeutic elements. And so so plenty of CPD around there, I suspect as well.

Steven Bruce
They've been really informative. great pleasure talking to you again, thank you for coming on the show. But that's all we got time for today. Am I right?

Dr Dave Newell
Thank you so much. I really appreciate you inviting me on. I'm happy to come on again at any other point. Thank you.