

Researching Manual Therapy With Danny Orchard, Duncan Webster and Simeon London

- SB For a change, I have three guests in the studio with me. I have Simeon London. Simeon is an osteopath with a practice in Scotland, but he is the Dean of Academic Development at what used to be the BSO, and is now University College of Osteopathy. He's been practicing Osteopathy since 1995. And I'm joined also by Duncan Webster. Duncan's got a particular interest in the relationship between chronic pain, stress and visceral conditions. And I have Danny Orchard. Danny is a lecturer in NMS and pain science, again, at the UCO, University, it's hard not to call it The BSO, isn't it? It really is, and most people will know it as such. But between him and Duncan, they are the directors of our location this evening, which is CORE Clapton. CORE stands for Center for Osteopathy and Research Excellence, and you got a little bit of a feel for this organization, a charitable organization in the introductory video. Danny, I mean, our viewers will hardly have gotten much of a feel for this fantastic and enterprise of yours. Can you tell us a bit more about CORE Clapton before we start talking about our main subject which is research?
- DO Sure. First of all, I just like to point out Center for Osteopathy Research and Excellence, the idea being excellence in mentoring, and excellence in achievements, and we want to do research on the side. We don't pretend to be osteopathic, the experts in research, and we've sort of reached out over the years to different groups who can help us with that, such as the London South Bank University, NCOR, The BSO, et cetera. But yeah, this is our building, we've taken this over.
- SB It's a work in progress, isn't it?
- DO Yeah, absolutely.
- SB When do you expect it to be finished? Up to the standards that you want?

DO I think probably six

SB Duncan's laughing.

DO Yeah just it's such a big task, but I think 6 to 12 months probably?

DW Yeah.

DO Until we're running smoothly. We've got a few mentors that started already, tutors in the BSO. We've got several students already, sorry, students, they're new graduates. Whole point is they're mentoring clinics, so the new grads come on board, and we're hoping to recruit more. So we are looking for new mentors and graduates to come on.

SB So from a practice point of view, I know you do other things here, you got that huge suite upstairs we people can have functions as well as use it for yoga and whatever else might be going on, how does the treatment system work? You got six treatment rooms and you're taking relatively new grads as the practitioners who are being supervised, mentored by yourself?

DO Yeah, myself and Duncan, but also we're having mentors come in and do at least half day a week to offer services. It's similar to the undergrad colleges, but obviously they are graduates now. So we're respecting their autonomy. One of the key things is we wanna make them effective. So rather than just being safe,

SB Yes.

DO We wanna make them effective in prognosis, in management, the things that we don't really have time to learn in the undergrad colleges 'cause it's

SB Yeah.

DO I mean four years is not enough to learn osteopathy as it is. But I think there's a lot of stuff that takes many years to learn and you have to almost fail on some patients to really learn the art of Osteopathy.

SB Yes.

DO So were hoping to fast-track that by having this postgraduate mentoring scheme and obviously mentoring is a big issue in the profession. The IR are doing a lot of good work to try and push this,

DW Yeah. I mean when we started four years ago, there wasn't that much actually happening in terms of mentoring and we've been really thrilled to see actually the profession taking that on because it's taken us a really long time to get to this point, so we're really excited that it's going now.

SB How long's the center here been open?

DW Two months?

DO Yeah.

SB So we really are at the start of this adventure, if I may call it that.

DW Absolutely, and we've been in the building for I think 10 months now and obviously there was a lot of renovations, a lot of extra work to be done, and now we're really just ramping up from there, so.

SB You set this up as a charity?

DW Yes.

SB So who are your patients? Who do you attract into the practice?

DW Well, at a fundamental level, anybody. We won't discriminate. We're not only looking at a single population. We're doing a pay-what-you-want scheme within recommended boundaries because one of our three core values is to try and make osteopathy available to people that wouldn't be accessing it otherwise.

SB Yeah.

DW But it's been really interesting. So it's operating on a recommended sliding-scale and we definitely have had people who say, Oh, is it okay if I pay the bottom end? And you say, It's not only okay, it's completely fantastic, thank you, but other people saying, I want to pay the maximum, I want to support you. So that's been really exciting.

SB How's it gone down with the local GP practices?

DW That is a work in progress.

DO Yeah. I mean there's a lot of operational stuff behind setting up a practice. The building's so the that we haven't really had time. But part of our marked in plans is just to get some of those local GPs. I mean, we did. We will talk about this more later. But three years ago when we started to look at setting this place up and also getting grant funding, we went for lottery funding. As part of that, we had to do a survey of the local GPs to see was there a need for manual therapy service, for osteopathy, And it kind of reflects a survey we did, say, five years ago, but it may be a lot more. When I used to work at Cambridge, where we surveyed the GPs in the area about their thoughts on osteopathy, whether they thought we were effective, whether they'd like to see us on the NHS, and it's very interesting reading. But basically a third said, great,

osteopathy saved lots of operations. A third said, There's no money in there and in the NHS, and a third literally said we're quacks. So people were writing down quacks, and nonsense, and stuff. So we didn't do such in depth one in Hackney, but I'd like to think. The majority were more Positive. Yeah.

DW Of the ones we surveyed, I think it was pretty heavily positive. We just haven't yet got to the point where we're following that up properly and presenting to them. So that's one of the things we're looking to do in the near future.

SB Do you think that's the belief that osteopathy is quack medicine, and I presume they think chiropractic is quack medicine as well?

DW I will assume so.

SB Do you think that they will come on board with a bit of education or are they just prejudiced against the professions?

DW So that was one of your main finding, right? There was quite a strong correlation between the amount of knowledge they had about or they self-declared to have about the profession and their opinion.

SB What do you mean? They pretended to have more than they actually know?

DW No, no. The ones that said they didn't know very much were also the ones that said that they thought we were charlatans. So it would be nice to say that, therefore, if we can increase education that would increase their opinion. It might be that those people are averse to it from the beginning, but we've certainly got to try.

SB It's interesting, as a bit of an aside here, I had an email from an osteopath yesterday who said that one of his patients had been to a wedding last weekend and had been seated at the table with a podiatrist. Not a doctor, not a GP. But the podiatrist had said that all osteopaths and chiropractors were quacks and they weren't properly registered by the government and they should be prevented from treating, in that person's opinion, which it's a curious perspective and of course it leads us into what I wanted to talk about, we want to talk about this evening, which is research, because presumably it's only by credible research that we are gonna change those perspectives where it's possible to change their perspectives.

DW Absolutely.

SB I suspect some of them won't change no matter what we do.

DW Yes. So I guess the problem with research in osteopathy, but in manual therapy in general, is that we struggle from doing things backwards. If we think of the way that evidence actually works, it's relatively easy for us to

have anecdotal evidence. We've all got patients that we've treated, and they felt better, and they told their friends, and that's great on a personal marketing level, but it doesn't really hold any water in general. The next level up is where we do case reports, where we actually write that down and tell people about it. Again, that's sort of okay for your website, but there's nothing to say that that patient was the indicative one to prove that the profession is true. So these things move up through the levels, and obviously the current gold standard that everybody is interested in is a randomized control trial, where you can literally change a single thing, and have nothing else different, and then compare the outcomes. But in manual therapy, that's very hard.

SB Yes, and I've been very determined to promote this as an investigation into manual therapy rather than osteopathy because I don't think I'm seeing anything particularly insightful in this, but I don't think it's possible to have research that says osteopaths can treat anything. All that you can have research to prove is that a particular treatment, as a method, has an effect. Am I wrong in that? Because I mean our chiropractors will be a little bit interested too, as it obviously relates to them.

DW Yes, so it's really interesting that you say that because one of the ways that we want to try and address things is to look at it actually at the completely opposite way. I don't really want to say is it the HVT, the thrust.

SB Right.

DW Is it the vigorous articulation for 30 seconds in this plane? I almost want to go a step further back and say, the patient has had an intervention of six osteopathy sessions. And, I think one of the difficulties is that we become so very focused on a single interaction, but actually even the way that Danny would administer this 30 seconds of vigorous articulation would be very different to how I would. And that's coupled with the fact that every patient has their own set of reasons for being in that position in the first place. So it becomes incredibly complicated, probably impossible to say, these two patients are the same, these two treatments were the same. What was better? So I feel like it's almost worth if we can come back and say, no it's not a randomized controlled trial, but we administered osteopathy, or actually in the wider sense, manual therapy to these patients. Was there an improvement? How do they compare to patients that didn't receive it?

SB How how well do you think that's going to be received in a world where the randomized controlled trial is perceived to be the only trial worth doing?

DW Yeah it's an interesting question. I think what we need to focus on is how we look at the impact of the treatments. So if we can say we had this cohort of 100 patients who we treated six times over the course of a year, and look at these differences and treatment outcome that we would have expected from

a similar cohort, it's not proof of anything, but it's an indicator that maybe it's worth looking further. I don't think that any of that kind of high-level research is going to persuade anybody, but hopefully it can point people towards the idea that it's worth researching further.

SB So you're saying that really the randomized control trial doesn't have a place in manual therapy?

DW That is a very strong phrase.

DO I mean there was, it wasn't long ago, there was an article with the BMJ where 88 professors of health care departments, medical schools, wrote to the BMJs complaining that only 1% of it was qualitative research. It was all quantitative RCT-based stuff, and there was quite a flippant response from the editor saying tough because we're gonna continue to do that. Their argument was it fits in with the pharmaceutical model. It's easy to sort of just test a blue pill and a red pill, but very hard for the majority of medicine, which is a gray area, it's not the black and white we'd like to think it is. So I think there's a huge drive within medicine and health care as a whole to get away from the RCT and the randomly controlled trials towards the stuff that looks at the more subtle stuff, not just think about palpation and these things that we can or cannot explain, but just the interaction on the biopsychosocial level, which is what we're also move towards.

SB Yeah.

SL I was gonna say, medicine is always been dominated by biomechanical kind of model of thinking about the patient. That's why the pharmacological model has been dominant for so many years within general health care, and it has very effective outcomes. As Duncan and Danny have said, it's relatively very straightforward to measure. But what we're seeing now a lot in the documentation in the research in relationship to outcomes, there's a very strong move within medical practice, and there always has been a move, a direction in I think manual therapy towards the patient being most important in terms of judging outcome, and as Danny was talking about, measuring treatment outcomes. It's also important that patients have their values understood and that treatments and therapy is aimed at affecting a person's own desires, or function, their values within their community, their values as a person. And measuring those things is important and I think medicine is beginning to realize as we've moved through the last century into this century, and the demographic has changed in the population, acute illness is very easy to manage. The chronic illnesses are changing the face of the way in which health care is being directed. And yes, there are massive advances in technology that improve outcomes for diabetics and the chronically, people with chronic disease and chronic organ disease, but medicine is also waking up to the importance of addressing the needs of the person, which is fundamentally what manual therapist, chiropractors, osteopaths have always

traditionally done. Listening, having time to do that. And I think Dan's point about the letters to the BMJ is quite pertinent because I think a lot of health care practitioners, GPs, are seeing this as being important, and yet there is very little evidence that surrounds how we address values, how we engage at the psychosocial level to affect change, and what are the outcomes to that. And it's probably more effective and probably more important in our demographic now than it was 30 or 40 years ago to begin to measure these things and understand the language that's used, and understand the touch in a therapeutic engagement, and how their patient people are supported by their practitioners, and understand how those things influence their outcomes.

SB So where do we stand at the moment? You're obviously, you're heavily involved with the education of students at the moment. What are we telling students is the evidence for their careers effectively? What evidence exists at the moment which will be accepted by a conventional body of practitioners?

SL Well, I don't think it's unique to say that there is very little substantial, categorical evidence in manual therapy, to say that any one particular thing is effective over another. But you could also point the same accusation within medicine. And there was a very recent article published in the BBC website which critiqued the intervention from knee arthroscopy and saying that it was ineffective and shouldn't be done. And the following day or two, I was at a CPD Pathway event with orthopedic surgeons who were furious at this research and saying that's absolutely dreadful because we know that it's effective. They were quoting a different agenda in saying that there was a different

SB An osteopath would be shot down in flames for saying, well, we know that it's effective, if the evidence didn't support that, wouldn't they?

SL Exactly so there are always these tensions.

DW In fact there was a piece of research which actually was blinded, wasn't there?

SL Yes, there was.

DW And they did The knee arthroscopy.

SL Yes.

DW But they didn't actually do it.

SL Do anything, yeah.

- DW They did make a, did they make an incision? I think they made an incision and inflated the knee, talked through an operations that was visible on a camera, let it out, stuck a plaster over it because that's the aftercare, and I think it was a five-year follow-up. There was no difference. Something like that.
- SL Something like that.
- DW So in that cohort of patients, it really didn't seem to do anything, and that was quite awhile ago.
- SB Do you think osteopaths, and I'm presuming chiropractors, are justified in this belief that the system is rather prejudiced against what we do? For example, we've had Simon Lambert who's a professor at the Royal National Orthopedic Hospital, in one of our shows in the past saying that, not only is there no evidence for the effectiveness of manipulation and anesthetic for frozen shoulder, but actually it's dangerous. And yet, it's still widely practiced, and a consultant surgeon has the authority to go ahead and do that if he feels like it. But nobody's complaining that this is bad medicine, and yet we're shot down if we advertise that, I don't know, we can treat children for colic, maybe it's for colic.
- DW Well there's a lovely phrase, isn't there, extraordinary claims require extraordinary evidence.
- SB Yes.
- DW Which is widely used when talking about us because the implication is that anything we claim is an extraordinary claim. And that's really quite interesting set against orthopedics. Because if you look at the development of orthopedics, a lot of the things that was seen as extremely obvious about, I don't know, very heavy-duty casting, and setting, and keeping that splinting, and keeping it on for a long time, it made a lot of sense, but actually it seems like it wasn't the right thing to do. A lot of these things are still being uncovered like potentially arthroscopy is. But yet, can we treat something? Well, that's extraordinary. So we need a randomized controlled trial, and better yet, a set of them, in order to compare.
- SB I suppose in the mind of, not just the lay person, but also the GP or the orthopedic consultant, if you're talking about visceral osteopathy, that's difficult to understand. Whereas if you talk about cutting lumps out of bones, that's easy to understand.
- DW Absolutely.
- SB You can understand why that should work even if the evidence doesn't prove it.

- DW Yeah. Particularly with orthopedics, it is extremely logical. There's a big lump. We're going to change that lump. There's a broken bit, we're gonna jam it back together. And a lot of the time, it is really useful. We should say it.
- SL Yeah, and I think in the context of a biomedical, biomechanical model, it's completely applicable. If there's a torn cartilage, you remove it to improve its function. That's the basic premise
- DW Yeah.
- SL Of any surgical intervention when you're talking about something that's affecting people on very different level. I'm not saying that there aren't psychological outcomes for surgical intervention, that would be daft. But I think when you're working with patients who are in that gray area who perhaps don't have medically explained symptoms, but yet don't feel particularly well and back pain is complex, and the symptoms that people present with aren't easy to categorize as a structural problem, and Dan's the expert on pain here, and he'll explain that more than I can, but in that setting, it's about the complexity of how everything is brought together for that person that needs to be unwound and understood by the practitioner. The intervention might involve manual treatment as much as it might involve giving advice or reassurance, or allowing somebody to speak about their concerns. All of those things have a therapeutic value and I think that in a context of being a manual therapist and osteopath or chiropractor, there's opportunity to explore those and give patients the space and time to talk about their problems and concerns. And that, as much as anything, along with being touched and being cared for, and being given advice or whatever, is incredibly powerful as a tool if it's done effectively, if it's done well.
- DW And of course, it's nice that we have the luxury of taking the time to do this.
- SL Of course, yeah.
- DW None of this is to say negative things about doctors.
- SL No, no, not at all.
- DW That's really important, that we do have the luxury of time, which means we can actually take the time to make it a nice patient interaction.
- SB Yes. I think that it's probably important to point out that most of the negative things said about doctors are possibly about that third of the doctor population that will not even look at the evidence for what we do and people get a little frustrated with that. But I think we all accept that when you put an eight- or a nine-minute appointment, it's very difficult to go through the therapeutic process that we're going through.

DW Sorry, I was just gonna say there's one other thing which is important to talk about with randomized controlled trials, which is that there's a lot of things going on at the moment which say that actually maybe they're not the gold standard in the same way we thought they would be. This is coming from primarily the pharmacological industry where the way that we would normally do things is with a p value of 0.05, which means that it would only happen one in 20 times. But of course if you're a large company, you can run the trial multiple times, or indeed, sufficient times till you get a positive value. And so there's been a lot of problems recently with replication problems because maybe the trial that would pass was not the only good one and with the need to expose all the data. So this is the AllTrials movement. To try and increase access to data, to try and make it a bit more obvious.

SB Is this the the path that Ben Goldacre's been doing?

DW Yeah, absolutely.

SB Trying to make sure that all of the studies are published, not just the ones which help.

DW Precisely.

SB And all the studies which are never completed are also made

DW Yeah.

SB I'm so sorry, what is it? If you plan to carry out a study, then you have to publish it in advance or tell people what you're doing in advance.

DW Yeah, exactly.

SB So you have to start with the outcome measures in advance and not change them to suit what you found.

DW Yeah. How exactly that can work, I'm not sure. But certainly one of the things that I love the idea of doing, and I don't know to what extent it's practical, is once we have a large database of non-identifying patient data, I'd like to make that publicly available, or available on request, or something like that because I think it's important that we don't be accused of doing that. If we're able to say, This is what we wanted to achieve, this is what we think happened, I want the people to be able to critique the data. Exactly how we can manage that interaction ethically I think remains to be seen, but.

SB You said that the pharmaceutical companies are leading a charge on perhaps along with Ben Goldacre to say that the randomized controlled study is not the gold standard, so what do they want instead?

- DW Well,
- SB Just more publication of data or RCTs?
- DW Yeah I guess that's sort of misframing it. It is still the gold standard in that area, but you just can't have one and say that was it. There's nothing to show that that was the correct one. And then above that, of course, you have your top level of the hierarchy of evidence, which is where you review all of your different randomized controlled trials, and then compare them to see if any of them on average, actually any good. But that relies on you having all the data.
- DO Yeah, and the problem with that, even the timeframe they do that and classic cherry picking that evidence data when you do this sort of back pain analysis which is to leave off the, it's the back to the BEAM trial is that? I forget the names but I think it's the BEAM trial, really big important one. But literally it fell a few months outside of his date frame.
- SB Right. Do you think that was deliberate or,
- DO I wouldn't like to say, but it made it easier for him to come to conclusions about it. So I think we are unlucky in manual therapy world. We have to sort of go out there 10 times as, not forcefully, but we have to make sure everything is completely explicit.
- SB Maybe the reassuring thing is that actually no matter what comes out in the press or the research, there's still a huge body of patients out there who believe in what we do, and obviously would like to know for our own that benefit that what we do is useful. Somebody who identifies himself as Jay said partially, anonymous partially, not, says, I never tell patients that osteopathy would definitely help. I tend to say if I can treat somebody which may help, I also found through my own experience that some surgeons say similar things. There's no promises, and that patients do appreciate the honesty. I think that for individual patients, they appreciate what happens afterwards, don't they? It's rare for a patient to leave without feeling some benefit from treatment. It happens, but then it happens, I'd probably argue just as frequently in conventional medicine. How many people who've had lumbar spine surgery and felt worse or no better afterwards.
- SL Of course. I think it's important that patients are realistic about their outcomes. And again, I think it's misleading if patients expect all outcomes to be positive. Being honest and open is reassuring because I think everybody is realistic, then understands the things for some people may not necessarily work for them, and I think that's a very healthy approach.
- SB You talked about hierarchy of evidence in the notes you sent to me before, Danny. What did you mean by that?

- DO Well I assume it's what Duncan just sort of talked about in terms of the RCT already down to the single observational study, which interestingly, in sort of surgery, that's right. For a lot of the surgical cases, they are so unique. That is a form of evidence which is often used, and I think that's partly why you get interventions like you say in terms of the manipulation under anesthesia where it's used because it's been used on signal examples, how many times by people that also involved high up in the sort of administration of hospitals where they can choose.
- SB So where do you think it's reasonable for us to pitch ourselves in terms of the research we can achieve then? Obviously we're not gonna get away with single cases, case studies like that. It's surprising that MUA can 'cause there's so many MUAs now that you can hardly look at the single one and say this is evidence. So where can we expect to get evidence for osteopathy, chiropractic, manual therapy?
- DO I mean they're already what we did. If we start getting more database on just pain scores, et cetera, quality-of-life scores, simple things like a patient's perceived functional outcomes, so just on a scale of one to 10, I have back pain, I can't put the bin out anymore. So on a scale of one to 10, it's four, say. After three or four sessions, it's now 10. I can put the bin out. There are simple ways of making everyday data into an objective, quantifiable measure. Other pharmaceutical industries use numbers needed to treat, which is how many patients needed to get one person, 50% better, and things like Naproxen for fibromyalgia is an NNT, which is numbers needed to treat of about five. That means you have to treat five people to get one person 50% better or sometimes 30% better, which is, if you think as a manual therapist, if you had to see five people,
- SB You're saying 20% of your patients get 50% better. That's,
- DO Yeah.
- SB It's not particularly impressive.
- SO Manual therapy, if they used an NNT's more regularly, would actually come across extremely beneficially.
- DW But they're really hard to achieve without large scale data. By achieve, I mean to calculate.
- SB And of course the NHS wants to see comparable data. That's what I assume. What's more cost-effective? We're not measuring against a baseline of how bad are you now. It's how much better will you get under conventional treatment.

- DW Yes. So that's something that we think we can probably stand up quite well with impact analysis.
- SB Yes.
- DW Where you say, for example, what if we are able to treat the person every month and articulate their hip and it can delay the time that they need to have a hip operation. That hip operation costs the NHS, gosh, I did have these written down, but it's been about six months since I looked at them, something like 15,000 pounds. If weekend delay that by a year, that's 15,000 pounds saved for that year. What's the cost of those 12 appointments for us? Potentially 50 pounds in appointments, 600 pounds. So there's an immediate saving of 14,000 pounds a month.
- SB But would the NHS accept evidence on the basis of we articulated someone's hip or we applied osteopathic or chiropractic treatment? They would have to know specifically, exactly what you had done in order to get that--
- DW Well so this is the question, this is what I want to try and approach, and I still don't know the answer. I think the reason that it's important is, assuming that you get an outcome, that you get an intervention which isn't incredibly specific, that you can say they received chiropractic or osteopathy, then that's far more reflective in the real world. Because when you go and see an osteopath, the truth is we're not remotely homogenous. You could go and see one person who would be incredibly gentle and do things that you barely felt and somebody else that would do some firm manipulations in a number of different places.
- SB Yes.
- DW It would still be an osteopathic treatment, which is difficult by the mainstream medical model because it's not a single intervention, but it definitely reflects real practice. So that's why I have this idea.
- SB A couple of interesting examples that spring to my mind about this because sometime ago we were running a course with Lori Hartman and we broadcast half an hour's live treatment from Lori because he had learned from a physiotherapist an HVT technique to the hip. And he had some criteria is to determine whether it was suitable for treatment. Basically if it was restricted an anterior glide, then basically he walloped it.
- DW Yeah.
- SB Walloped the head of the femur from behind. He did he did it three times and one of the examples which he cited, it's not the only one, is somebody who had been scheduled for hip surgery as a hip replacement who didn't go

for hip replacement, and two years later, still hadn't gone for hip replacement.

DW Yep.

SB The other example is slightly different. We ran a course last weekend with Simeon Neil Asher. One of the students, a chiropractor, actually had arthritic hip pain. Simeon applied his shoulder technique to her, which wasn't treating the hip, it was treating the surrounding musculature and we won't go into that, but I think she was almost in tears at the end of it at how much better her hip felt. But it would be really hard to quantify that in terms the conventional world would understand. If you can hit something and say, Well, I've got a hip, it doesn't do this. I've hit it and now it does,

DW It moves.

SB And the patient feels better, that's easy to measure. Not so easy if you're saying, Well, I did a technique with involves the adductors and it involves the quads and maybe a bit of articulation, and that's achieved the difference, so.

SL But it may not be the act of doing that creates the change, and that's the thing. There's an awful lot about belief, and we go back to this concept of values and what people believe is happening. Many people's health models may very well align to, if that's moved in a particular way, freed up, or put back in place, then that triggers a placebo effect perhaps or a psychological alteration in my belief, how I believe and think about my pain, how I think about my abilities to move or not move, and that can then facilitate recovery by normalizing things, by helping them feel that something has changed. In the same way that placebo intervention with medication et cetera can trigger a response, so it can, I'm not saying that manual therapy is just about placebo, but engaging a whole range of things including placebo, physical change, feeling different, being reassured, all of those things combined to create the outcome. It's not the act of doing the one thing as Duncan was saying earlier. I think treatment can be incredibly powerful, but it's not simply the act of doing.

SB No, and Ben Goldacre in I think Bad Pharma or one of his books, I can't remember which, pointed out the dilemma we're in here because Ben Goldacre has a particular extra grind with homeopathy. And he doesn't dispute that on occasions that the treatment works, but he believes it's placebo effect, but of course you can't in the conventional world administer sugar pills to a patient and tell them it's something different. If you tell them it's a placebo, does that then stop the placebo effect from having any impact?

DW Well, there's been research.

- DO Yeah, yeah. There's been good studies they use in placebo now. Obviously you can't give someone something 'cause that would be tricking them. But you can say how the placebo works and you can discuss it and define the response you may get and alterations and symptoms. And then by just knowing that, it helps reduce the actual symptom level. So they are using it, especially in the pain world. They're using explanation of a placebo as an intervention, and it seems to be working quite well.
- DW There's even been at least one study where they told the patient that it was a sugar pill and that the sugar pill was a placebo, and they did administer it to them. But they said this is a pill, it does nothing. Here is how it does nothing, and this is why we're doing it, and that worked as well.
- SB And it's been shown that if you administer twice the dose of sugar pill, that it was nothing, that it'll have more beneficial effect, wasn't it?
- DW Yeah. A red octagonal pill is the strongest of the placebos, which I think, I'm sure that's right. It's definitely a red one.
- DO 10 sizes too much.
- DW Yeah, it's perfect.
- DO I mean seems what Simeon was saying about the hip, arthroscopy is in sort of these replacements. I mean there's very little evidence to show that it's the x-ray findings that dictates who has operations it's about pain, and pain is about understanding and what you think is going on. So if you think it's an arthritic node hip joint, every bit of pain is something crumbling and deteriorating. So a lot of the times when you see someone who does a big intervention, it's like a pop or a click of a hip, and then they're pain-free for a little bit. That could be enough for them to think that it's safe to walk on it. We can tap into that with, not necessarily doing the technique, which is giving them an understanding of these facts, that actually they don't have to change the hip to be in less pain. We can then use our normal manual therapy techniques to ease them into that.
- SB I've got quite a few questions that are coming. I'm gonna deal with them slightly out of sequence, and some of them are getting in slightly ahead of us 'cause we've got some of these things we're gonna cover later on. But this one actually is for Sarah who is in London 'cause she has a gin and tonics, so Sarah, good evening. You think this is water. It is water, sadly. She wants to know how we can attribute data to your collection. Is that something we can talk about now, or should be wait until we've covered a little bit more of that?
- DW Wow.

DO Wow, I love that to happen.

DW Firstly, thanks. Thank you very much, wherever you are. That would be amazing. We're not yet in a stage to advertise that, and that is our intention. So that's definitely gonna be more at the six-month stage. As soon as that is something that we can do, we will be happy to make that available. In the meantime, if Sarah's an osteopath, there is a move within NCOR, the National Council for Osteopathy Research.

SB Interestingly NCOR's website is completely down today, I don't know if that's, has that been for some time? I couldn't find a single page on the website that works.

DO It was fine yesterday, it seemed.

SB Right, so maybe it's just a temporary glitch. Everybody else says. It wasn't my Internet. Everybody else's site was working.

DW How funny. So they're running a data collection program where osteopaths can contribute. That's a very formal and very specific, but it is slowly gathering data.

SB How closely do you work with NCOR?

DW So we are in discussion with them, but we haven't yet got a dual project or anything. But we've talked to all of them, and we know how they work.

SB I was gonna say earlier on actually that in my limited investigations across the world of research, I see a lot more papers about chiropractic techniques than I do about osteopathic techniques. Is that fair or am I just missing the osteopathic ones?

DW No.

SB I see in these papers about how manipulation of such and such will affect headaches or back pain. Our current practice is better at this than we are or--

DO I think chiropractic colleges historically been better at producing lots of research. There's a big sort of paradigm difference between what the colleges promotes and what a lot of chiropractors do in private practice, similar to osteopathy. With the subluxation theory being sort of discussed as potentially outmoded. I think osteo is catching up. I mean sorry, I'm assuming we'll talk about this later. But definitely with the research team at BSO, they've been pushing out a lot of data over the last few years. But I think there's just been a bit more money in chiropractic. And with American chiropractic colleges,

SB Yes.

DO You're adding,

SB And I think all the papers or most of the papers I've seen have been American.

DO They're adding thousands and thousands of people and so yeah we have a long way to go there in osteopathy for sure.

SB But then I come back to what I said originally that actually those chiropractic papers, although the title might just be does chiropractic treatment affect such and such, when you look at it, the treatment is a manipulation of the joint, and it's generally that specific.

DW Yeah.

SB So it's just as applicable to what we do,

SL Yeah.

SB And you just have to look past the word chiropractic just as I hope our members are looking past the word osteopathy in the title of CORE Clapton because what you're doing is relevant to the whole profession of manual therapy professions. I got to go through some of these 'cause they're coming in quite quick. Someone says, Could we treat and give a red octagonal pill. Would that make patients even better? Would it?

DW Probably.

SB You wouldn't know which was effective though, would we?

DW I think what would

SB be really.

SL Does it matter?

SB Really effective would be if you gave them a couple of opiates a couple of times so they can learn it is a instinctive reaction alongside the treatment, and then they could use endogenous opiates when you treat them again, but we probably can't do that ethically.

SB Possibly not. Now I've got a long question. It's been sitting here for a while. I'm gonna have to read through it. Related to today's talk, but not necessarily the current timeline, so feel free to interject this whenever you like or not at all. One of my big bugbears in research is the popularity of researching

nonspecific XXX pain and trying to find the one-size-fits-all treatment sorted. The pain is generally not nonspecific, but not idiopathic or benign. These same journals within dream of publishing any research that lumped all nonspecific lung or liver tumor conditions together to assess a single treatment modality. In our sphere, a joint sprain is not the same as a muscle sprain. It's not the same as a spasm. It's not the same as tendinitis, et cetera, et cetera. Does that ring some bells with you?

DO That's a lot of bells and we have that debates on a regular basis in the BSO. Nonspecific back pain, the idea being that it's very very difficult, almost impossible, to determine, and if it is several fibers of the annulus fibrosis with a few attachment muscles, some ligament inflamed them. You know, there's always gonna be a multitude of different tissues that are gonna be sensitive and their thresholds reduced causing them to feel painful, and trying to isolate one is almost impossible. There's a large van of rheumatologists, orthopedic surgeons who fully feel this as well. So I think the idea of the term nonspecific has been sort of poorly misunderstood as being we don't know, we don't care. It's saying it's mechanical, it's safe to treat. There's no active nerve or irritation or inflammation. Whether we can say it's discal or facetal it's very difficult. So we sort of take care, take it easy. But in terms of lumping them for research, again, because the objective investigations are so poor at determining these things, because you can tell within less than 24 hours whether this product is fresh. It could be there for a month or a year. So having an x-ray of the prolapsed disc, having someone with a particular back pain hurts on flexion doesn't necessarily mean the two are joined.

SB Now when I interviewed Nick Birch, a spinal consultant from Midlands, he doesn't operate anymore, he's purely consult, he said eventually I guess prolapse will self resolve in about two years I think he says. So it's unlikely to be a year or surely it will have started to be.

DO We do get, what's it called, sequestration, which is when it gets eaten away, and sort of dissolved in, or it just stays there. I think about 80% of the population on the street will have a bulge of some sort that hasn't gone.

SB Asymptomatic.

DO Yeah, exactly.

DW It's what he means by resolved, I guess.

DO Yeah, result is--

SB But he was talking about sequestration. He was talking about the bulge having disappeared completely.

DO Early, right.

SB He said it's a perfectly reasonable treatment option, the option of doing nothing, because actually if you can put up with the pain now, it will go away in time of its own volition. So it depends what you do with that disc while you're waiting for it to resolve, isn't it? Because movement is likely to aggravate the problem.

DO I think the problem with the discal diagnosis, and this is obviously going off--

SB It is, isn't it? It's a bit of a tangent, isn't it?

DO The word discal tends to give you horrendous images of discs, that are wiggly, gonna pop. They're gonna pop in and out.

DW They're gonna slip.

DO Yeah, exactly. You go online, you see American surgical websites saying this is what we are gonna do. You need to do this. So every time you get that twinge, and it could be from small fiber of multifidus. It could be from a little bit of ligament flavum. So it's impossible to say. But if I'm thinking disc, then I'm gonna be scared to move. Then you get sort of altered movement behaviors. You get catastrophizing, all these factors which are known to prolong pain rather than actually the tissue which should heal quite quickly. So I just think there's a lot of dangers to saying it's the disc problem if it may resolve in two, three weeks time, then to say, if that's in the physiotherapy world, they talk about flexion strains, and extension strains. They're trying to move away completely from even going down the route of explaining tissue 'cause most patients don't really know or care what it is. They wanna know, am I gonna be in pain in two months time. Can you help me?

SB Yes.

DO So there's definitely a move away from most,

SB But as you say, the minute you mention disc, you can expect a bit of catastrophization, can't you?

DO Yeah.

SB 'Cause everyone knows it's bad.

DO Yeah, exactly. And I work in a free clinic in and most of my patients are gonna get scanned, so I have to diagnose them, and then answer to the consultant afterwards, or see the scan, and it's difficult. You're always thinking, oh what if it is disc? But the fact is, you can't really tell, and every time their diagnosis is discal, or sorry, sometimes, they're pain-free in a week, which could not be

the physical healing of that tissue, so they're getting it as much wrong as I would be if that makes sense. It's almost what's the point of--

SB So what correlation are you seeing between clinical tests and observations, and scan results?

DO In our clinic?

SB Yes. Because we're led to believe that a significant proportion have got asymptomatic disc bulges, so

DO Exactly. So sometimes you scan them and you see these things and it's impossible to know if that was just coincidental. But in that way if you bump your car, and you look, and suddenly you see lots of bumps but you haven't looked at your car for three years in that much detail. So, I think generally if you've got nerve pain and you can tell it's straight away it's more advanced and there's more likely to be discal herniation, et cetera, but most disc pain will be from internal disruption where it's getting towards the outer third, which is sensitive, and then you'll get a vague grumbling, you won't get flexion pain, you won't get extension, it'll just be uncomfortable. And quite often then it's two or three weeks later, where they had a pain-free period and they bend and they get a little twinge, which is probably just the muscle it's guarding.

SB Yeah.

DO Being pulled slightly, and that's moment it's gone and then they start to get the leg pain, but it's probably the two weeks beforehand that they started to get the fissure that was actually, so the time-frames and the tests don't seem to match up with physiology.

SB Again, I've got quite a few questions, I really ought to ask some of these, I'm trying to put them in an order that suits the way we've structured our discussion this evening. Jason, Jason obviously contribute our discussions and made some very valid points, like always. He says that whilst he appreciates the points made about justifying the cost to the NHS, has the NHS given the problem he says experienced for many years, has the NHS given the problems experienced for many years is it looking to implement more finance towards manual therapy of any kind? Okay, so the NHS has had problems and financial difficulties, is it likely to make more use of manual therapy?

SL There is a move Suzanne Rastrick, who is currently involved in trying to look at innovative ways to improve the way the NHS is able to support patients. It has introduced this idea of intricate of allied healthcare practitioners, which is a movement towards engaging a lot of private healthcare practitioners, osteopaths, chiropractors, podiatrists, occupational therapists, to be involved in helping support and provide care. And although the model has yet to be

clearly delineated, essentially what she appears to be suggesting is that the skills and abilities of these healthcare practitioners are useful to NHS patients. And if the NHS can interact effectively with that group, they can diminish waiting times, they can improve patient outcomes through immediacy of care, and that that would be a benefit. So although the NHS in terms of from a bunch group perspective may not necessarily have resources to buy in services extensively, this initiative would appear to suggest that the government recognizes the value of musculoskeletal therapists, osteopaths, chiropractors in providing care, and are keen to make some use of that.

SB I'd hate to criticize the NHS, 'cause it's a fantastic institution. Although practice efforts could be better directed. But our experience in my own clinic with an NHS contract was to first of all, it was hugely difficult to get the contract, and we were then constrained to a fixed number of treatments for a fixed fee, which that was fine. But of course, patients, if they're made aware that they've got a number of treatments, they will want to take all those treatments. So we tried very hard not to tell them how many if they wanted to know. But the other thing was I can remember going to a discussion early on in the contract with the NHS team. And they were discussing very keenly what you do with acute patients and what you do with chronic patients. I think the differentiation was something like six weeks between the two. It was slightly arbitrary. And I had to ask at some point, when you put the waiting list as 20 weeks, why are bothering to talk about acute patients? And so the NHS then ended the contract for all manual therapists across our county, and despite the fact that we had provided outcome measure for all our patients. They have never analyzed any of the data. So dare I say, it's a fucked up system, isn't it? I'm allowed to say this 'cause this is nearly after nine o'clock. But this is in Northamptonshire, Northampton CCG, Northampton Corby.

DO Is this the acorn thing? Or was it North Essex?

SB No it wasn't, I'm aware of the Essex one, this was a standardized NHS standard contract for manual therapy. There was a big physiotherapy organization. I can't remember the name, but it was one that subcontracted to physios. There was one chiropractic clinic, and then there was my clinic that got the contract, and then we were able to subcontract to other osteopaths around the county. Which worked very well for the two or three years that the contract was running. But it just seems to me that we talk about research like this and we provided them with, we went to extraordinary, we don't have to employ an extra staff member to do the paper work for this. They didn't even look at the research, in the end they said this contract is costing us this much money, but they haven't analyzed whether it was making much difference to the patients.

DW And is that data available to be looked at?

- SB Yeah, it is, and we ought to talk about, somebody has asked us about outcome measures and what we should do about that. And there are clearly lots of people who want to know how to provide useful feedback from the clinics. So what are the outcome measures that people should be using? Then we'll talk about how we might be able to provide some.
- DW So, and the reason that we think they're important, there's a concept in the NHS of a quality of life adjusted year, a QALY, which is valued at 30,000 pounds, I can't remember exactly. It's valued at some tens of thousands of pounds. And what that means is if you can provide somebody with an additional perfect year of life, it is worth that much money. What's really happening is you say via this treatment, say a pharmacological treatment, they get 50% improved quality of life over the course of a year, so that treatment is then valued at half of one QALY. So operating at those levels is quite difficult. But actually improving 1/10 of a QALY is comparatively easy. So what we need to look at for those things is quality of life, how can we show that we're impacting a patient's quality of life? And so that's the first of the outcome measures that I quite like is the EuroQoL.
- SB The EuroQoL.
- DW Which is the--
- SB Will we be allowed to use this in three years or something?
- DW Well it's okay because they charge you for it anyway. So we were able to use it in a trial, because they very kindly gave us permission, because it was a small trial. But I think in general one of the problems with PREMs and PROMs is that you have to buy them. And that can be quite expensive. But the EuroQoL. anyway is five questions, ranging from I have no to I have extreme difficulty in doing the things I normally want to do. Or anxiety and depression. And the idea of it is you come in and on that day, you tick between extreme and none at all on these five questions. And then the sixth question is a true visual analog scale from naught to 100, and you put a cross on that line. And that is your score for that day. There's another EuroQoL which is the 70, way you can, it's a different like a scale where there's seven points you can tick between.
- SB You know, let's just take it back for a moment, because if it's a true visual analog scale, there's no numbers on it, it's a line.
- DW Ah, you're right, it's a line with numbers.
- SB Right. I wasn't trying to poke holes in what you said, is there a useful difference in one over the other in getting a result from a patient?

- DW So I guess there's really three different visual analog scales that we talk about, 'cause the one that we often use in practice where we say, visualize a number from naught to 10, where do you stand on this? And I think that's not that valuable probably in truth. But it does enable them to think about things.
- DO One of the problems with that is when you hear, talk to who's being interviewed, they quite often say 110% or 12 out of--
- SB How much pain out of 10, 12.
- DO Numbers are far more let's say, it's bigger than this, whereas when they see a visual they more like to put it in a lower category.
- DW And then there's the final option, which is your 10 little bases ranging from really sad and crying to extremely happy, and that's clearly not a linear scale, so I'm not a fan of it for research.
- DO But when you get children or Alzheimer's patients, these things are really important. So the faces ones are being used in certain areas.
- SB So I interrupted you there when you were talking about how we should, what are the questions we should ask in order to get meaningful results.
- DW Yeah, so even the administration of these things is slightly complicated, because as soon as it's me, if your patient says to you, what does this one mean? You tell them what it means, and you're immediately putting an interpretation on it. So at that point it becomes a bit invalid.
- SB Now, I'm gonna come back to what you asked me about our data from the clinic. We used a modified version of the Bournemouth Questionnaire. Now we used a modified version, it was my decision, they NHS wouldn't tell us what to use, so I decided what we would use. And I simplified the Bournemouth Questionnaire, I thought it was too long. But even so, very often patients couldn't understand the questions. And I recognized that we shouldn't change the wording, but actually, Mrs. Bloggs from Rushton doesn't want to sit down and have to understand some technical question designed by a research expert, she probably wants smiley faces. And a simple question, are you in pain, how much?
- DW And the Bournemouth Questionnaire does have quite long questions, because it's trying to really indicate into the nitty gritty.
- SB It's not up there with the gold standard of questionnaires, do you think?

DW I honestly couldn't assess it. I think it's a validated questionnaire, which is better than ones that we just make up. So at least it's been shown to have some replicability.

SB This question on the top of my list is, can we have a standardized patient outcome measure that we can then use to give to you or to NCOR?

DW Gosh, that would be lovely, wouldn't it?

DO Yeah I think the BSO are using the MSKHQ, which is a well-validated measure of, it's designed by the Arthritis Research.

SB Counsel.

DO And it's, you know, it's great. It's got some talk about the pain, area of pain, your activities of day living. You know, I can't bend, et cetera. But it also has some of the psychosocial stuff about sleep, anxiety. And you just did a pilot actually.

SL Yeah, we did. It was my colleague Francesca Wiggins at UCA who ran a pilot in the clinic, and we've got a very big clinic there as I'm sure you're aware--

SB The subtitle that UCO, BSO, et cetera, some of us haven't quite got used to that.

SL University College of Osteopathy. And we did a small pilot to look at the feasibility of applying the questionnaire and the gathering of data and how we were going to do that effectively.

SB Is it freely available? MSKHQ.

SL It is?

SB HQ stands for?

SL Health questionnaire.

SB Health questionnaire, I'm a military man, and HQ generally stands for something--

SL Headquarters.

DO Freely and that you have to apply for usage of it. They don't charge you, whereas a EuroQoL they charge you to use, so it's.

SB Right.

- DO Yeah.
- SB There's gonna be some people perplexed by that. 'Cause if you've seen the EuroQoL Questionnaire, sure, you can just use questions.
- DW You certainly could, but could you publish it, I think is the question.
- SB Well we'd send it to you and then you print it out.
- SL The challenge of any of these outcome questionnaires is gathering a data and presenting a patient with however many questions, and Duncan's point about the simplification of the questionnaire but keeping it valid and reliable is very important, because patients, if they're anxious or in pain or in a hurry, might not necessarily want to fill in a Bournemouth Questionnaire or 60 other questions. So it needs to be flexible, quick, and easy and convenient to do for patients. But what's also very important is being able to gather the followup. And at the BSO we experimented with a six week followup, electronically trying to send out links to our survey system and to get the patients to fill them in online at their own time, and avoid posting things. And that's an approach that many people use. We're talking about NCOR having their data collection, they have an app.
- SB Are they using the Bournemouth?
- SL They're using the Bournemouth, but they have an app-based survey system so they can get customers to give feedback their data, that kind of use of technology is clearly the most effective way to begin to gather data more effectively and conveniently.
- DW And call have it going immediately one week and six weeks. But it's interesting, I think they said that they have 50% actually filling out the first one.
- SL Yes.
- DW And their initial principle was that every osteopath would get feedback once they had 25 completed questionnaires at the end. And I'm in one of the cohorts using it. And I don't think anybody in the little group they're talking about has yet got to 25. Because you only get amalgamated data back.
- SL And that's the challenge for the individual practitioner, is you need to get a body of data that's big enough to be valuable, and then to be able to gather the followup data. For it then to be transferrable or understood in the real context of outcomes. And these are complex issues, and mostly Danny and Duncan have dedicated a huge amount of time and effort to try and create an environment where that's possible. And even in that case it's still a significant challenge. So for the sole practitioner or small group practices who

perhaps want to gather data, they need to be alternative approaches and simplified approaches that can help support them, at least in the initial stages of gathering basic data.

SB Well you've possibly answered one of the questions here, which is how do we contribute to NCOR? And the questions, whoever it is, this is anonymous, so he or she realizes you are not NCOR. But you see more alongside them than many of us. What would you advise as who would like to contribute, or should we wait for you to be up and running? I mean sorry, Aaron has announced, it is Aaron who is apparently with tea and biscuits, not with the gin and tonics. But yeah, so there is an app that NCOR provide that's if I remember rightly, as you say, that anyone can use that app and then the data will be analyzed and you get fed back anonymous.

DW It's slightly, slightly more complicated than that in that you need to apply, because they want it linked by practitioner. So every practitioner ends up with a stack of numbers which are linked to their osteopathic practitioner number. And the stack of patient information forms.

SB Do you think that deters people from doing it?

DW I think it slows the process, but I don't know what the solution is. And this something that I'm trying to work on for us at the moment, I was speaking to the health research authority today, or trying to. Because one of the problems you have with these kind of research areas is, can you actually collect a lot of data and then go back and look at it or not, ethically? So ethically, in terms of a moral issue, of course you can. But in terms of actually publishing, do you actually need prior ethical approval which has been individually accepted by every patient to use their data for every trial that data will be used for? I hope that the answer is no, because if it is, I think all of this stuff would be extremely difficult forever. But we don't.

SB Is it your experience that patients are reluctant to give that permission, so it could just be a standard question at the beginning of every--

DW I think as soon as it becomes, so that's what we've tried to do here. Because we haven't yet allied that formally with the investee or gone through an NHS ethics committee. I'm very aware that that disclaimer that we used which is are you happy for us to do this, please confirm if you will, if you're not interested in doing that, that's completely fine and won't affect the standing of the clinic, is not valid, so that we cannot use the data that we've gathered so far for formal research. And the problem with it becoming a standardized thing is, much like a problem that we all face about consent in treatment, as soon as it becomes something that you gloss over, that just happens, it's no longer valid. Has to be informed consent, and that's the difficult thing.

- SB Yes, in fact I was at a seminar yesterday, last evening, about informed consent, and of course it's a very very woolly and thorny subject, isn't it?
- SL Yeah.
- SB What would be acceptable in a court of law or at a disciplinary hearing? Though we won't go down that route.
- DW Yeah.
- SB Couple other questions, and there's a long one here. I don't know who this question is. Researchers used to prove arguments and examining research will show that approximately 50% of research, the use of ice baths, massage, and compression garments in recovery and support and exercise is beneficial to recovery, and the other 50% will show no statistical effect at all, if you're paying attention to this. General science uses mostly quantitative methods, randomized trials, data organized into numerical form, social science uses a broader spectrum of methods including qualitative methods, such as structured and semi-structured interviews, focus groups, life or case histories, documentary analysis, participant observation, all of which can show causal relationships. Maybe osteopathy could be brave enough to recognize that we need to use different research models. And you were suggesting just that, weren't you?
- DW Absolutely, and I think Simeon in particular was--
- SL I think it's a very good point. I think there are lots of different ways of looking at individual questions, and some are more sort of qualitative in terms of exploring concepts and ideas and beliefs and understanding those and allowing that to then create further research questions that you can be a little bit more specific or targeted with. And some are very open towards the more structured quantitative approaches. But it's being flexible and adaptable with those approaches that's helpful whilst also being confident that the research will be subsequently meaningful. And that's the value of undergraduate education, and as much as the curriculum that we run at the UCO and elsewhere at the Anglo-European Chiropractic, very much embeds the whole model of enabling undergraduates to apply in an undergraduate way, research methods, but understand them and be able to read research effectively and also they need to be able to think about doing their own surveys. And as Duncan has very eloquently described, think about the ethical issues and understand how data should be gathered and how it can be used. And that's the future in many ways of assuring or at least encouraging high quality research to come from within the profession. 'Cause you know, whilst you can look to these to choose the larger educational bodies like the UCO and ACC to undertake research, they are only a small voice. And the more the general profession are able to add to that, like NCOR

are doing and Dan and Duncan here, the stronger the voice of the profession can become.

SB What research is currently going on at UCO or at the Anglo-European College?

SL I'm not sure what currently. There was a recent completion of the CROaM Project, which was funded by General Spire Council, and Steve Vogel, he's the head of research, head of research department, vice principal of research at the UCO led on, and that was a very big piece of work nationally. I'm not sure whether there are any individual research projects going on within the doctorate team at the UCO, but obviously we have a doctorate program, a professional doctorate program. And one of the students who's now, Dr. Hillary Abby, who recently qualified, has been doing some groundbreaking research, I think you would call it, into persistent pain, chronic pain, and the integration of mindfulness and ACT therapy alongside manual intervention to change and affect chronic pain. And that's been funded by--

SB ACT therapy?

SL ACT therapy, I can't remember what it stands for.

DW Acceptance and commitment therapy.

DO That's that wave of CBT, cognitive behavioral therapy.

SB Okay, the third wave.

Yeah.

- Third wave.

- CBT was the second, first was basic psychology.

SB Okay.

SL And you know, that sort of integrative approach to patient care is the kind of thing that osteopaths do a lot. And what Hillary and Loraine Mankey, who's her, who's been working with Dr. Loraine Mankey have been working on is this novel approach to working with paying patients. And although the research has yet to be published, the outcomes are looking very positive. So we are looking at those sorts of collaborative approaches to evaluate the effectiveness of intervention. I'm not saying osteopathy, I'm not saying chiropractic. But this combined intervention, looking at these complex models in and around a complex subject like chronic pain. And so that's one of the things that the UC have been trying to push on.

SB Do you think NCOR will accept a chiropractor providing them with feedback, with data?

SL I'm sure they would. Okay, it's the National Council of Osteopathic Research. But data is data is data, and I think this is one of those, in light it's have a bit to, well what is osteopathy? Well what is osteopathy? Well good osteopathy is good care, care is care is care. So patients get better if patients are doing well, and that's the ultimate outcome, whether it's osteopathic or chiropractic or--

SB I don't know if there's a chiropractic equivalent of NCOR, is it?

SL I don't know.

SB Perhaps one of our chiropractor viewers will know, but--

DW I guess we'd still want to record an ORC against the data though. Because everyone would want to know the answer.

DO I mean they can still live in northeast Essex. I assume that's the one you guys did. That was coalesced in the three, it did show clear, it had the data to separate them. But it seemed to be off, quite similar to physiotherapy, chiropractic, and osteopathy. And I think the biggest factor is patient choice. If they like chiropractic, they believe in that, then as a GP it's better to refer them to that than to say, no try this instead. So as long as they're all improving at the same rate, it doesn't really matter.

SB No it doesn't, I'm just thinking in terms of, you know, if chiropractors had no other body to which they could report their data, then perhaps that call would benefit if they chose that, let's face it, chiropractic will benefit if the results are favorable.

DW I was thinking about this today actually, in terms of is the yellow label scheme from that occasion? I don't think it is, is it a yellow label?

SB If you've, drug's adverse effect, yes.

DW Do we have an adverse effect reporting program within our profession?

DO That's part of what the current study was.

DW Yeah, it studied them, but we don't have a formal, I had an adverse effect, do we?

SL No, I think there was call for one. I'm not sure whether it was ever established, I'm not--

DW Yeah, I was thinking that too today. I had a patient who was a bit sore afterwards, after the treatment, and they'd come back a second time and said they felt better, and I suddenly thought, we should probably be recording this stuff formally as a profession, and I don't think we are.

SB Do you think we shy away from that for fear that we might find people hurt?

DW Gosh, that's a big question, I hope not.

SB But you know, but it--

DW But we talk a lot I guess about not having many negative outcomes.

SB Yes, we talk about the most common adverse reaction to treatment being a day or maybe slightly longer of soreness. But we always call it a good pain, maybe that's our wishful thinking, I don't know.

DO I think one of the outcomes of the current study was that there was equal negative adverse reactions from things like cranial than there were with extra Ts, so it's not just these solid treatments that can have a patient feeling sore afterwards.

DW And I definitely noticed in my private practice other than completely non-statistical survey, if I told people that there was a fair chance they would feel discomfort the evening after I'd manipulated their back, and they did, and if I didn't then almost no one ever reported it. Which is not dreadfully saying anything except about me. But it was interesting.

DO There's also perceives, 'cause if you tell them they're gonna be in pain, or be careful of it, then when it happens they're not so scared of it, not such a big deal. So even with this you can sort of mitigate it. You know, in a good way.

SB But if we were to get on the roof of measuring adverse reactions to treatment, we'd have to be carefully schooled in how to do it, wouldn't we? We had a discussion over a year ago now with GP Doctor Martin Kendrick, who's got a particular issue with statins and has spent a lot of time researching cardiovascular issues. And he said that adverse reactions to statins were generally underreported, because a GP will say to a patient, how are you feeling with the statins? And patients will generally say okay. But if you ask them, are you suffering from muscle pain, or any of the other myriad symptoms associated with statins, then actually they or their spouse is likely to say, yeah, actually we are feeling some of those. So we would have to actually, you know, have you had muscle soreness, has there been any, have you been able to do your daily activities?

DW It would have to have been anything since the treatment, not from the treatment.

- SB Yes.
- DW Although hasn't there recently been further research into statins that maybe alters that slightly?
- SB I followed these up with Malcolm Kendrick on a few occasions, but last time I followed their part was after Professor Raleigh Cox, is it, from the Oxford Center for Research, oh I forget the title of those. It was widely publicized that statins are now definitely good for you, and I spoke to Malcolm Kendrick, I said right there hasn't been any new data, it's the same old data being rehashed. This isn't the latest information about statins. And again, this is a bit of a rabbit hole to go down through here. And we are, we have a, what does he call himself? We have a GP coming on this program in a few months' time to talk about pharmacology and overmedication and his particular, the bee in his bonnet is that he tries not to give people, tries to fix them without medication. So perhaps we can learn a bit more about that then. But even within conventional medicine, you know, the fact that there is a large body of people who say statins don't work and a large body of probably quite well-funded people who say that they do work, it makes you call into question the whole quality of the research, doesn't it? There's a big cynic out there somewhere, 'cause he says, yesterday's placebo is today's biopsychosocial treatment. What do you think? I mean I think biopsychosocial treatment has got quite good press, hasn't it?
- DO Yeah, I think the term has become used in medicine so much that we forget that osteopathy and chiropractic and physiotherapy, you know, we've naturally used as manual therapists dealing with a person that they're not sedated, they're talking to them, so you have to use a biopsychosocial. Whether it's a buzzword used in a negative sense, you are addressing their psychology in their social surroundings while addressing their biology.
- SB The same applies to mindfulness, doesn't it? I mean that's been quite a buzzword across the NHS at the moment. And I wonder sometimes whether the term is overused. Is it effective, do we have evidence to say that mindfulness is effective?
- SL I think there is growing evidence that shows that any type of modulation of beliefs and calming of the autonomic nervous system, suppressing sympathetic tone as it's sometimes banded about is very helpful in reducing heart rate, reducing blood pressure, reducing respiratory rate. Having very positive effects on the physical body, reducing pain.
- DW Reducing catastrophization.
- SL Reducing catastrophization.

- SB That doesn't sound specific enough to me. It's a bit like saying osteopathy or chiropractic help.
- SL The point is, we're all the same organism. And we all have the same foibles and beliefs. And the majority of the way, how we interact with the world is through our sensory perception, through our neurological system. And how we modulate that is very difficult to understand, but when you think about the sort of nature of being a person, being a person, when you're cared for, you're generally somewhat healthier. And if you're listened to and thought of with kindness, and you have space to relax, that's good health. That's natural and everybody will say, I really need a holiday because I'm really stressed. I can't deal with it anymore, and you go on holiday, you feel loads better, because you are allowing your body the space and time to sort of homeostatically organize itself and return to something that's akin to normal. So you know, the idea of a psychosocial model being today's placebo, I would say well in fact yes it is in some respects engaging a placebo effect. But it's also helping people normalize and think carefully and think rationally about how they're feeling and behaving. And understanding what's wrong with them.
- SB That's actually a slightly more sophisticated placebo, isn't it? 'Cause if a placebo is thinking this drug is going to help and therefore it does, then going further like this--
- SL I think actually a biopsychosocial model is more than that, it's empowering. It empowers the person to think differently about their health beliefs. If I think that if I've got a slipped disc and I pick up this table, it's going to break my back and I'm gonna be paralyzed, clearly I'm not gonna want to do anything physical. Now we know that that's not true. I might believe it's true. And it might require somebody like you or Dan or Duncan to explain that to me carefully and logically, and to allow me to then do that, takes away all of that fear and anxiety. And that's a very positive act. And most people would say, well that's a bad example. But that's how people think, because they don't understand their bodies, they think we are mechanical organisms, and if something hurts, I've broken it. And we know that that is far from true in the majority of cases. And that's why non-specific low back pain, and saying, well sure, we can diagnose a facet or we can diagnose a pulled ligament, we know that it's more complex than that. And trying to compartmentalize it actually muddies the water and makes it harder for people to understand. And therefore it gets in the way of them feeling better. Because it begins to medicalize it and focus it and make it something that they can make worse.
- DW At the same time, though, I think it is important, the treatment interaction does involve the treatment as well. There's a danger when we talk about this sort of thing that we'll spend the whole time going on about this other stuff, and then people become very defensive. And they say, but I'm doing a treatment. And I think that section in the middle where we actually do a

physical intervention has to be important. And that's something else that we do need to investigate.

SL I totally agree.

DO I think within the biopsychosocial, you know, if the bio is significant enough, then obviously it needs to, you know, it could be surgery, or it could be something replace that tissue. But sometimes we get dragged into that bio bit, whereas actually that person is so caught up on that sort of fearfulness of it that it's the psychosocial that's actually the bigger part. So I think it's just a way we've always looked at stuff, but just re-coined.

SB I need to cover some of the comments that are coming in as we speak. Now this goes back to the measurement of adverse effects, and it's Keith, who is apparently drinking a damson gin and tonic, that's jolly good for you, Keith. I'm a few hours away from my gin and tonic, as I've gotta drive back. He says, very difficult to measure negative outcomes unless it's immediate, i.e., the patient felt better, so cut the grass, built a shed, then felt worse. We'll never know exactly what causes a negative effect if delayed. Fair point.

DO I think even with things like stroke and psych manipulation, sometimes the patient's coming in with stiff neck, which is a symptom of pre-stroke. And it was gonna happen anyway, and this is really difficult, it's impossible to tell. But because they had intervention, it's then classed as causing that problem. So I think it's just very difficult.

DW And the truth is in that situation, perhaps the patient wouldn't report it anyway. If it is patient-reported, then that's how it goes.

SB Yeah, again about adverse reactions. This person is anonymous. It says, I usually explain approximately 55%, question mark, of people may have some kind of reaction across the physical therapy. But that discomfort after treatment is not essential to a positive treatment outcome, so they can feel no pain afterwards and still have a good outcome. Some discomfort after might happen, but it is not a question of no pain, no gain. Patients love that expression, don't they, no pain, no gain. All a bit wordy, but I think it helps me get a true answer when I ask them how they've been, and also not set a mindset that they should expect soreness afterwards.

DO That's an interesting one with the pain stuff, because a therapist can inflict a bit of pain that's classed as good pain, and the patient believes it's doing them good, and it will have a sort of numbing effect afterwards that will kick in their endogenous opioids and help reduce the pain. If they try and do it themselves or they don't believe in the practitioner, it will actually create a nocebo effect. It will decrease their threshold, make it more painful. So if you're giving them exercises and they think they're damaging it, it's harder to actually get to that sort of good pain barrier. So I think an adverse reaction

can be positive if used within that framework, if that makes sense. If it's a contained bit of extra pain or discomfort. Whereas if it's a huge flare up 'cause you haven't really been aware of the patient's stress levels and other factors.

- SB I've been saving this one 'cause I'm not quite sure I understand the point of this question. It comes from Kim, who's on a holiday in Spain with a glass of white wine, which probably explains why I'm not quite sure I. Are we better off gathering manual therapy data even if we love osteopathy or chiropractic to our very core? I'm not quite sure--
- DO Suggesting that we lose it if we do study it?
- SB Yeah, I'm not sure, Kim, you'd better come back to me if you still can just to elaborate on what you mean by that. I mean perhaps he's saying well, should we bother? We love osteopathy or chiropractic, we believe it works, should we bother with gathering data?
- DW I mean obviously I think the answer is yes. Otherwise we wouldn't be here. But I think one really obvious sense in which it's important purely in terms of osteopathy for a second, how many people, what percentage of the population, actually know that osteopathy exists, or what it does? And I don't think it's as high as we'd like it to be. I don't think it's even that high. How many patients, perspective patients, come in and they say, oh, is that something to do with bones? Or one step better, that's backs, right? Yes, absolutely, but not just those things. And how many of them are then aware of why we do what we do, or how we interact with a biopsychosocial model, or how we're able to deal with pain, or anything, really. If we don't get better evidence, we're going to really struggle to get more recognition. Unless we just chuck a load of money at advertising, I guess. That's not my favorite choice.
- DO I think also for the new graduates coming out it's a lot harder nowadays to get the patient base. There's a lot of different people, massage therapists, personal trainers, sort of helping back pain and neck pain. I'm not saying it was easy 10, 20 years ago.
- DW Might say unencumbered by the proof that we have to demonstrate.
- DO Yeah, 20 years ago it was a lot harder for manual therapist to do what they did without being called quacks or such, so people who've been around for a long time definitely fought a great battle, sort of thing. But the next battle is getting more research out there so that we can show the beneficial effects. But also for, you know, strange, maybe things that we don't treat as much. Things that we want to look at. Diabetic neuropathy. And wound healing, because these are really basic physiological things that we learn at college how we address it. But it's very hard to do studies on them. Or they just don't

get done. And these are things that we could get quite good results quite quickly, we hope.

DW We hope, obviously.

SB Yeah, I mean is your research here going to be funded by somebody?

DW Yeah, so we've unfortunately just narrowly didn't get a grant for researching the effects of osteopathy and dance as an intervention for a three year study via Zurich, which was unfortunate. We were in the final two and it went to a diab, sorry, did I say diabetic? I meant dementia. It went to a dementia cafe instead. 'Cause ours was an untested model. But that's something we're going for. We're talking to lots of different charities about that sort of funding. So we have been speaking a little bit in the past to Diabetes UK. That hasn't yet progressed anywhere. But we're in conjunction with London South Bank, we've been talking to the engineering department, because they've developed a machine that's particularly good at detecting diabetic neuropathy. And so we have put in some time ago a grant for European funding to try and test that machine that we would also combine with testing the treatment protocols. So we're definitely looking for that sort of thing.

SB I imagine it must be much more difficult to get funding for unglamorous research, where you're not using great big machines or cutting people's legs off or something like that.

DW Yeah, which is a shame, because it's quite affordable.

SB Yeah, now I've got a lot of questions from Jason here. First one here, Jason says, do GPs realize, or possibly, we could help ourselves by explaining that as osteopaths, we also look very closely for other illnesses such as cardiovascular, neurological, rheumatoid symptoms, and we refer regularly. So we're not just talking or looking at things we can treat, but also for a bunch of red and yellow flags which could stop us from treating. I guess that really, you know, how much communication do any of us have with GPs? What about the colleges? I mean you can speak for UCO obviously, but I mean do you involve GPs to any great extent?

SL We do, yes, I mean, we have a GP who sits on our board of directors. Retired GP now, but he's a GP nevertheless, has been. And he's provided some very helpful support and advice. We have a local GP clinic that we run for students to develop an understanding of practice in the NHS, and that's supervised by our clinic faculty. And we have an outreach clinic in a local hospital treating patients with HIV and AIDS. So we have integration at that level from an education perspective. And we have reasonable standing with some of the other local GP practices, we used to have referrals when budgeting was less of an issue for local GPs from a couple of GP practices within the borough. So we have a relatively good standing, but obviously from a funding perspective,

GPs, like any good practitioner, can recommend a range of options for patients if they don't want to wait perhaps to see the physiotherapist at the hospital. And they can recommend us along with others. And because we are cost effective in comparison to private practice, we do see quite a few patients who come directly from the GP. So yes, we have a reason to do this.

- SB Sounds quite individual, though. If their scope, or should we the professions have a relationship with the Royal College of GPs, or some other national body that can spread the word more widely rather than the local GPs to a college or an individual practice?
- SL That's a very good point, yes, and I think it's the kind of thing that the Institute of Osteopathy are trying to lobby for, create those sorts of high level relationships with organizations like the Royal College of GPs and Physicians. Because it's from there that we can gain a lot more momentum in publicizing what we do and getting support for research and getting interest from external bodies.
- SB This one I think, this one's relevant to everybody in practice. Jason has asked, Jason again has asked, is there any specific research on the effects of individual manual therapy techniques and their efficacy that are accepted widely? And I guess the simple answer has to be yes, because we wouldn't have been able to get NHS contracts if they didn't accept that we could treat cervicogenic headaches and low back pain. But is there anything else which is accepted?
- DO Most interventions, most studies looking at specific interventions aren't particularly great. But even studies into palpation aren't great. We can't always palpate at the level we think we can. So I think the studies that do work, like the Ligdoni trial more recently, is when they sort of use a few interventions. And ideally you sort of have 10 different interventions and just take one out, and then do nine or 10 times that trial by taking one different one out each time. That's the only true way of seeing what the intervention and the question. But no, I mean--
- SB You mentioned the fact that there's no inter-rater reliability in which particular segment. Isn't it overrated, you know, does it matter that I can tell whether this is T three, T four, T five? What matters is can I feel a restriction if such a thing exists, and can I release it in some way to the patient's benefit?
- DW That's a big question about specificity that I worry about myself as a practitioner all the time. Because I don't think I can tell the difference between, say, the lateral fibers of gluteus medius and the medial fibers of gluteus minimus. And some people can, and talk about how it activates. They say they can. And they can talk about how they activate in sequence. And sometimes I think that I'm just not very good and I can't do any of that stuff, and sometimes I wonder whether or not it's important. Particularly when we

think about the overall idea of whether or not the specific tissue is as important as we think it is.

- DO I think also there's areas we're not even looking at. So for example when we're palpating a neck, the neck muscles are reacting. And there's no words to describe this, but it's dystonia or dyskinesia, but there's things that come with pain that affect the muscles, it's not just tight or stiff. And most the research into neck pain, for example, looks at range motion, a bit of glide, things like that, but they're not looking at things that we are looking for. So I think what we need to step outside of the normal protocols and actually look at what it is we're experiencing when we're treating a patient, and then try and look at it. And maybe look using MRI scans to detect stiffness of muscles. It could just be using a protocol, seeing if 10 of us get the same response from that protocol. Doesn't have to be RCT-based.
- SB Somebody, I'm guessing not the same person, has said quit standardized forms for recording treatment outcomes or patient feedback questionnaires be developed and distributed throughout the profession. We did ask that before. Perhaps I didn't get an answer, are we any closer to achieving a result in this?
- DW Well, slightly I guess, based on the fact that NCOR are doing their trial. But as I say, they're using the Bournemouth one, which you found to be hard. Something interesting that came out of theirs, I like the EuroQoL, 'cause it's simple and quick. But they said that they tested that on patients, and patients didn't like the EuroQoL, because it didn't feel like it applied to their symptoms. I don't think we're currently in a position where we have standardized reporting at all.
- SB Someone's asked whether we should be using iPads, paper, or apps for collecting data. Are there any differences?
- DW Well, one thing that we're hoping to, no, take a step back. The answer is yes, we should use all these things. One thing that we're hoping to do here once we're fully set up is as part of your check-in process, you will go through your problems. So there'll be a screen, and if the screen doesn't work for you, you can talk to a receptionist who has a piece of paper. Or maybe you can even do it verbally. But as you check in you'll say, I'm Duncan, and this is my date of birth, how is my pain today? How do I feel on a scale of one to five? And you tick, tick, tick, tick, tick, and it's done. And I saw that done in a private clinic which worked with kind of foot, orthotics, for hip pain. And it was really effective, the checking in process, the orthotic things.
- SB It's actually not that hard to do, because I've used Survey Monkey to get feedback on courses in the past. And you can actually do a proper visual analog scale on those, which gives a numerical result, can't you? Because

wherever the patient puts their mark on the line, it tells you what percentage of 100 that is. Which is quite a useful thing.

DW And even then, as you said, it doesn't even have numbers. So it's a true, true visual analog scale, which is lovely.

SB But it's actually measurable, 'cause it tells us the numbers afterwards. One last question, any research to improve diagnosis in manual therapy, or have we given up compartmentalizing injuries? Jason admits that it's probably very difficult.

DW That is a difficult question. I mean the one thing it always comes back to, and I think about compartmentalizing, is the change in how we categorize knee pain. From whether it's, say, tibial pain, to anterior knee pain, posterior knee pain, medial or lateral knee pain. Which is obviously deeply dissatisfying. But we're not in a position to do that right now, I think.

SB Okay, I said that's the last thing, actually the last thing really before we have to sign off is what can we all do, what can we do, what can practitioners learn things to help CORE Clapton? Or similar enterprises, I mean you need mentors, don't you?

DW We need mentors, and we need mentees, people who want to benefit from the mentoring.

SB So that's relatively new graduates who would like to get the benefit of a senior experienced osteopath helping them with difficult questions?

SL Can I ask, do mentors have to be onsite? Could they be over the phone or Skype, or?

DW That's a good question. We would stage everything. So right now, actually even a step before that, we would welcome volunteers to come and just help us pan out the clinic whilst we get more mentors and mentees. So just somebody here to treat. Then we would want to have sufficient mentees and mentors here. Because one of the things we want to achieve is really just the sense of being in a large clinic. Being able to talk not even necessarily to a mentor, but to someone who you can talk to and exchange ideas.

SB I've got my tongue in my cheek, how do you feel about a chiropractor?

DW Oh, good question. I'm not averse to it, but it would be interesting to see how treatment--

DO Yeah, I've had physiotherapists offer help, yeah. And I guess we sort of think about it when we set this place up. It's something we'll think about.

SB It might be interesting one bit would be, you'd have to think it through, wouldn't you? Because you'd be taking relatively new graduates and maybe exposing them to protocols or methods which might just confuse them in the early stage.

DO I mean they're so clear that they--

SL It's a really beneficial thing.

DO Yeah. Just going to the foremost college, and we get the chiropractors going to our college, so--

SB Fantastic.

DO Yeah, I think anyone who's willing to offer some help would be great, and just get in contact with Danny, or Duncan at coreclapton.org, and take it from there.

SB Okay, I think we have to call it actual close there, because we've reached the end of our scheduled time. Simeon, Duncan, Danny, thank you for your time. Thank you for inviting us into CORE Clapton so that we can talk about research. I think the jury's still out really on where we stand on the success of research into manual therapy, but at least there are people like yourselves trying. And we will bring you what we can through the Academy of Physical Medicine to tell you about how that goes. So again, thank you very much for having us here. It's been a great pleasure talking to you, and I hope that we can do something to help you out as a result of that.