

# Pain Science - Ref 143MH

with Marten Hogh 8<sup>th</sup> February 2021

# **TRANSCRIPT**

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#### Steven Bruce

I am joined by Marten Hoegh. Morten is a physiotherapist by training, but he also has an MSc in pain from King's College in London, a PhD in pain from Aalborg University in Denmark. And he's also the chair of the educational platform working group in Brussels, which I'm sure he'll tell us more about in a moment. He spends half of his time in clinic and in university and the other half of his time on education and research. Morten, great to have you back again, thank you for joining us for a second time because of British Telecom's cock-up last time. You said, before we came on air that you thought you talked too much last time while we were doing our abortive stream, I'm hoping you'll carry on today because I can feel my voice going as we as we speak. Just tell me a bit about your work in education, because I hadn't actually picked up that you were the chair of the education working group at EFIC, which is the European Pain Federation?

## Morten Hoegh

That's correct. Yeah, well, first of all, you might want to say that people don't necessarily flag around when they do education as part of their professional work life, because it seems to have no qualification to it. It's more like something you do if you can't do anything else. And I think that's a shame because there are some excellent educators out there, who may or may not have a solid scientific background, but who can still teach and explain things in a way that makes sense for others so that you can make this transition between the clinic and the research and backwards again. So that's actually what the European Pain Federation or EFIC is trying to do in this new academy. They're trying to set up a board of people who know how to do education but also have a background in either paid research and or the clinic and trying to support other people who want to learn about pain and perhaps chronic pain in particular. We developed a few years back a curriculum for physiotherapists, there's one for doctors, MDs, as well. There's one for nurses now and one for psychologists. And they all attach to an exam, which is a sort of one day or two-day event, what we're now trying to build is this platform where you can do online education from qualified educators with a scientific background, of course, who can then try and make you understand the stuff that is in the curriculum so that if you were to have an interest in the field of pain, there is a go to place where you in the future will be able to go and learn your stuff. So we are just in the midst of getting everything up and running. And we did a virtual congress or seminar last year, which was really well attended with more than a 1000 people attending over the four days. And we hope to do once again, every so, actually we're doing one again this year, I think, and then it'll be every second year after that.

## Steven Bruce

You say, if you're interested in pain, it's hard to imagine a physiotherapist and osteopath or a chiropractor who's not interested in pain. But you did in earlier discussions about this, this broadcast, say that you wanted to, perhaps flag up the question of whether neuroscience is applicable in clinic? Is that what you mean neuroscience as opposed to an interest in pain itself?

## Morten Hoegh

Yeah, well, it's probably a, we need to see it in context. The idea that we are all of course interested in pain has probably not always been like that. When I started the MSc program, for instance, about 11 years ago, it was a really weird and nerdy thing to have an interest in pain, because everyone else were thinking that we

were dealing with joints and muscles and fascias and tissues in general. So why deal with the pain that, you know, for many people, it doesn't make sense, because we have this approach that we are dealing with the tissues and when the tissues are solid or changed or, you know, normal, the pain will go away. So, pain as a symptom was the dominating belief at the time, but it has changed and I do agree with you now that if you know anything about musculoskeletal injuries and pain, I would say they're two separate things, then you would need one set of skills to deal with tissue injuries, like fracture. And you really need a different skill set to manage ongoing persistent pain in the lower back or neck or joints or whatever. And that has become much more clear. And then coming back to your question regarding the neuroscience. The way we study it really gives us a good insight into how nociception, so that would be these nerve signals in high threshold neurons, how that relates to pain. But when it comes to pain that is maintained without any obvious source of nociception in the body, it's really tricky to study that. And that's to become much clearer in a sort of scientific basic science approach. So, what we're trying to study instead will be the descending modulatory mechanisms, which we find studied well in, for instance, placebo and nocebo responses.

## Steven Bruce

So, is there a lot of overlap between what you're doing and the other big noises in pain research? There's Greg Lehman in Canada, isn't there the temporary root understanding pain, who I believe works out of Australia and whose name has escaped me for a second?

## Morten Hoegh

That would be Laura I assume or David Butler. Yeah. Well, David Butler and Laura of course, they were the pioneers in what people refer to now as the pain revolution, which is basically what we just talked about coming from this older construct to a much newer construct. So, they are regarded as and should be regarded as the father of that revolution. And then there's a lot of people surrounding them and building upon this revolution, who have made, you could say a name of themselves, but they've done great jobs in trying to both interpret but also to translate into different cultures and different professions what it really means if pain itself can be a disease. And I think that's what many people are now trying to do. I chose a slightly different approach, since I think there are so many great people out there telling what can be considered to be sort of clinical truths or theories about how pain relates to patients, that I tried to use a bit of time studying first, the MSc and then doing the PhD to sort of get a more academic and a more basic science approach to understanding how is it really that science and a clinic may or may not actually be tied together when it comes to chronic pain?

#### Steven Bruce

And where is that taking you?

## Morten Hoegh

Yeah, that's a good question. Well, first of all, I should say that being a physio, my primary interest is within musculoskeletal pain. And coming back to the ICD-11, which people may or may not know, so the WHO's ICD-11, they have now coined the terms, chronic primary pain and chronic secondary pain. And if we look at this spectrum of diseases or categories of diseases underlying the ICD-11, chronic primary pain, you will

find on one side a fibromyalgia, and on the other side you will find, for instance, low back pain. The overarching definition is that it's been lasting for more than three months. And more importantly, that it interferes with your life, that could be social roles, it could be function, that could be mood or any other sort of way that your life is affected by the pain you suffer. And what I really like about that definition is that, if that's true, if that's how we should see, for instance, low back pain, then you can be cured from chronic low back pain the minute it doesn't interfere with your life. And it also directs how we should approach the patients. And that is where the evidence has taken us now, is that rather than looking for a specific key to a specific lock that will unlock the pain free life of the patient, we should probably much rather be looking at how we can help the patients manage their own pain, and what that means to the way we approach the patients. And that then again ties together with this whole patient related approach or patient centered approach where we try to understand that patients are really experts on what helps, what doesn't help. What do I need? What do I want? What can I do? What resources do I have, all of this? That's their expertise. And I'm merely the sort of supporter, coach, helper to support the patient in reaching that.

## Steven Bruce

Can you elaborate a bit on that? Because the way you phrased it there, one could think that what the WHO have done is created a definition, which means there's an easy way of saying when somebody's no longer in pain. You said as long as you get rid of one of those three elements, then it doesn't count as chronic pain anymore. But I'm struggling to imagine how, if you are in pain that doesn't interfere with your daily life, anyway.

## Morten Hoegh

Yeah, that's good and very common, but I would say, who of us, even I'm not under the definition of chronic pain, but obviously I have pain now and then, if that pain meant that I couldn't work or if it had a strong influence on my mental health or my social roles, for instance, being a father, if I couldn't, whatever, play with my kids or whatever, then that would be a problem. So, if that problem was solved, I would still have the pain, but the problem in my life would be solved. And that's probably the way we should approach it. Once we know that it's not a disease, it's not a pathology that we can actually manage. And in the case of low back pain, for instance, the common sort of rotation is that about anywhere between 80 and 95% of all our back pain is nonspecific in nature, which basically means that it has multiple causes. So, my sort of picture, metaphor would be the hand again, if you have nociception, that could be one part of it, even if you remove nociception, there will still be lots of bits left in it. So, in the case of ongoing long-lasting pain, the most likely scenario is if patients don't get well, from a brief episode of treatment, whatever the treatment might be, then they're unlikely to be cured from the pain if they do four, five, or six or seven or continuous treatments in either the same round, which could be manual therapy, or even if they change and mix different therapies. So, I think we came from this idea that there was a dysfunction that should be treated and that dysfunction was tissue related, for instance, a facet joint or fascia or whatever. Then we started to talk about interdisciplinary, that there will be a bio and a psycho and a social aspect to the pain. And if someone was dealing with each of those aspects, you could deal with the patient in pain. And where I see it's going is much more in a patient centered approach where we're looking at the person in front of us saying,

what is it that pain stops you from doing that you either need to or want to do? And that is, by the way, not my quote. That's Professor Chen lotia from Washington, Washington University in Seattle that is.

## Steven Bruce

Okay. Good question from Windy here is what I was about to ask the same myself. So, what are your thoughts on fibromyalgia which you raised a moment ago? Personally, it's one of those conditions when a patient comes through the clinic and they've had that diagnosis, they believe themselves they have fibromyalgia, they tick all the boxes that suggest it, your heart tends to sink because they're very hard to fix. And Wendy says she has patients who've been diagnosed with it, but we found it's maybe pronation of the feet, or scoliosis or whatever that's causing issues. Do you get many true fibromyalgia patients coming to see you?

## Morten Hoegh

That's a good question. So, let's say, for the sake of the argument that we have a diagnosis called runner's knee, which in clinical terms would mean that someone has lateral knee pain. But it also means that they have a history of maybe doing exercise that started to increase that pain. And over a period of time, the pain became less and less predictable, less and less controllable, until the state where they couldn't do anything, because every time they did it, or most of the times they did something, the pain would come and go. We would happily say that's a runner's knee, that would fit the clinical description. Now what if that same patient also had a lateral tennis elbow problem, a neck pain and maybe an ankle pain, then they could actually qualify for also having a diagnosis of, for instance, fibromyalgia, if they are affected cognitively. So maybe memory, concentration, sleep is also influenced by the sort of whole condition. So, what I'm trying to say is that there's an arbitrary distinction between local and global responses. And what I try not to do is to treat the diagnosis, but rather have a look at the patient in front of me. So, if a patient comes in with a diagnosis of fibromyalgia, I don't treat that fibromyalgia. So, in case of the question, if there's a true case of fibromyalgia, I wouldn't know what that is, unless it's a diagnosis. So, a nominal diagnosis, that's all it is, which is equally as true and right and out there as any other of these nominal diagnosis such as derangements of the back or runner's knee of the knee. So, I guess my point is that if there's no underlying known pathology or etiology to the disease, they are pain related diseases, and they should be considered as such. So, coming back to the ICD-11, what we need to do is look at how they influence the patient, whether or not that is a foot problem, a knee problem or a whole body or what we call widespread pain problem. I don't know if that responds to the question well enough?

#### Steven Bruce

Well, I think the final part of Wendy's question was, do you get many true fibromyalgia patients come to see you, but I suppose as you say, if you tick those boxes, then by definition, it's fibromyalgia. Although I don't know, I think the psychological component seems to be a strong part of fibromyalgia, doesn't it, they tend to be a very depressed patient, with perhaps what would appear to be less incentive determination to get well, they don't believe they can?

## Morten Hoegh

Yeah, but it's not all that clear, I think. If you look at back pain, you could say the same thing. But if you were to say that there was something common to people who have a diagnosis of fibromyalgia, it will be that they have visited a rheumatologist. And they have widespread pain. So, it's much more about who you visit to get that diagnosis. But also, it could be to coming back to what the patient is feeling comfortable with. I had a patient once with bilateral tennis elbow problems, but she also had neck pain and hip pain and groin pain and some foot pain. So, by definition, with all the other things included, she could either have a bilateral tennis elbow and some other problems, or she could have fibromyalgia. So I asked her, would you rather have bilateral tennis elbow or fibromyalgia syndrome. And she chose to have bilateral elbow problems, because she was a hairdresser and that was a common thing in sort of her environment, whereas others, they like to have a diagnosis where they can have a community or there's something in that diagnosis that they can relate to. And I think this goes really well in hand with the whole idea of narrative medicine, where the approach, the explanation, the narrative you create around a certain disease is part of that disease as well. But it might also be part of the solution, that's when it turns into a narrative medicine approach. So, let's say you have widespread pain, and you think, if I have fibromyalgia, it's something I need to learn how to live with and get the best out my life. Maybe having that narrative could be supportive. Whereas if you think it's me, it means that nobody believes me, it means that I'm a weak person, it means that I can't do anything. And if I do too much, I'll be crippled, then that's the opposite of what we want. And you will probably help that person create a different narrative. And the symptoms in these two cases could be exactly the same.

#### Steven Bruce

Okay, well, Wendy I hope that one goes some way to answering the question that you asked. Caroline has sent in an observation, there's an approach from Gabor Maté, which goes further than the basic patient centered one, the bio-psycho-social neuroimmunological approach. Do you have thoughts on that you? Are you aware of that?

## Morten Hoegh

I'm not aware of that specific thing. So, I guess the reference would be here that, if I understand it correctly, and Caroline just write and correct me. But if I understand it, your question is, could it be that there is something that we cannot currently measure in either the neuroimmune endocrine type system, which also relates to being diseased, or having a disease, a painful disease. If that's the question, I would say, well, it's a tricky one to answer theoretically, because you easily get into the distinction between the body and the mind. And I don't believe that there is such a distinction. But I also do not believe that we are a body with a brain and the brain causes consciousness. So, there's a whole lot of research looking into more like philosophical literature that looks into the whole concept of, what is consciousness? And where does it start and end compared to your nervous system? And I think that's so intriguing and interesting, but we don't really know. And just as a side note, that's why all the brain studies that are out there looking at, for instance, chronic pain from a brain science perspective, so looking at brain activities, is so difficult to interpret. You get these wonderful studies. They're basic research studies, and they're brilliantly made. They're made by great clinicians as well sometimes. But interpreting data from the brain, in terms of what that means to

conscious experiences is anything but trivial. And we simply don't have any models that reliably can say, if this happens at a brain level, this is what the patient is likely to perceive.

## Steven Bruce

Well, I missed off the last part of Caroline's question, which was looking at a bio-psycho-social neurological immunological approach, not only what are your thoughts on that, but how would you incorporate it into clinic?

## Morten Hoegh

Okay, well, I think understanding that all of these so-called systems, bodily systems, what we used to believe were separate systems and just look at the way that doctors are specialised. So, looking at these different systems has proven to be very, very good for detecting and treating some diseases, especially diseases that fit into the biomechanical model. And just to be sort of really hard, I would say the end outcome there would often be life or death. So, it's a really hard endpoint. When you come to the things that really cost us liveliness and quality of life today, such as musculoskeletal pain, depression, anxiety, then that seems to be a less sufficient model. Because if you don't understand that the person in front of you has a perception of the world, but also has a body that influences everything they do, or is influenced by everything to do as well, then we don't know too much. So rather than looking at a nervous system and studying that alone and thinking of that as a standalone system, we now know that if we don't look at older systems, we are not going to get a broader picture. And we need that broader picture in order to understand the person who carries these systems, so called systems, but the data is still sparse. And one reason for that is that looking at, so when you do basic research, either that be in humans or in other animals, we always use models. So, you have this baseline sort of thing, let's say you poke the foot of a mouse or the tail of a mouse and then you do something to the mouse, you might be stressing it, or you might be cutting it or you might be feeding it something and then you poke the tail again and you see if the pain response, is what we call it, has changed. And then you start to look at the data and say, what could that mean? How could that be? But the minute you start to look at more systems at once, it gets so much more complicated. And you also deviate from the good scientific approach. So, it's sort of a really new topic that we need to address in a much, much better way. And one way to do that is to say, let's stick to the so-called neuron doctrine, let's measure what happens in the nerves. And then do all the other stuff, for instance stress or attention or whatever, things that are related to your cognition and your consciousness, but measure them in the nervous system. And that is what we talked about before, what is done brilliantly in the nocebo and placebo research currently.

#### Steven Bruce

When you say the good scientific approach, I presume you mean that business of changing only one variable at a time, which I've often thought doesn't lend itself to our sort of therapy because there's no occasion when we only do one thing to a patient. But as you say, measuring the response to whatever we do is perhaps a bit more useful. Christina has said, is fibromyalgia not an autoimmune problem? And Marie has asked, is that depression? Which I think I spoke about in fibromyalgia cause or effect, I'd always assumed that it was an effect of the fibromyalgia, but I suspect that that may be a flexible thing.

## Morten Hoegh

Yeah, well, I guess first of all, that's individual, that there could be some heritage in it. So genetic parts of that. And is fibromyalgia and autoimmune system both. That's one approach to it. Hence, why people would see it or get diagnosed from a rheumatologist. But if you look at some of the research coming out of Switzerland, for instance, they have looked at lots of patients with fibromyalgia. And they've done biopsies of the skin to look at the thin unmyelinated c fibers in the outer layers of the skin. And they have documentation that some of the patients with the label fibromyalgia or the diagnosis of fibromyalgia have what they call a small fiber neuropathy. So, I assume, and that's my assumption, I have no data to support that other than it seems that fibromyalgia is nothing more than a nominal diagnosis, which constitutes a syndrome that we can find in the clinic and that's relevant to the level where the patient feels that encouraging or helpful or meaningful. But if it doesn't it, it really isn't useful because you cannot treat the fibromyalgia, you will end up treating the patient. As long as you can't say that it's in this gene or is in that muscle always, if all we can do is do our clinical examinations and find common denominators, for instance, hyperalgesia to pressure, then all we know is that they have hyperalgesia to pressure. And if we decide to call that fibromyalgia, then so be it, it doesn't change how we should, or doesn't tell us how we should treat the patient, because they could have hyperalgesia for a plethora of methods or reasons that we don't understand yet. I assume that's where science at some point will be the better approach to it. So, compared to using a completely nonscientific approach. And just to parallel, though, that so the neuroscience-based approach, which I'm sort of alluding to as one model here. An alternative could be to use the biomechanical approach, where we look at things from a biomechanical perspective, for instance, that you move differently, or your muscles are too weak or too strong, or your fascias are tight or lose, whatever. Since we can't change that, I know we say that, that's jargon, we say we change the joints' movement, or whatever. But that's jargon, it's not really what we're doing. And if we are doing it, it's not a lasting process that will, you know, follow the patient for, you know, for years and years. So, I think we are moving from this biomechanical bioanatomical approach to a more neuroscience-based approach. And ideally, that will give us new evidence every day to become wiser. But if you then compare these things under the umbrella of chronic primary pain, to diabetes, or even to neuropathies, where we have good models to study it, it seems that musculoskeletal pain is simply too complex at the moment to understand, because even the most simple things about musculoskeletal pain we don't really have a clue about. When I say the most simple thing, it's the transduction of mechanical energy into nociception. We know a lot about temperature and chemicals. But we have no idea. No good idea. We have good arguments and good research, but we don't really know how pressure causes action potentials. And since we don't do that, I mean, imagine someone found out yesterday how pressure turns into two action potentials, they could possibly, or at least nociceptive action potentials, they could create a pill within the next two or three years that could cure any palpation related pain, any hyperalgesia, mechanical hyperalgesia. So, I mean, there's so much out there if we get more knowledge, but it's not transferable, as it is now into the clinic. We need that understanding of what neuroscience is, just like we needed that understanding of how biomechanics works in order to understand why you should move or not move in a specific manner beforehand, or before, in the earlier approach.

#### Steven Bruce

That research you talked to the Swiss research that you just mentioned, was that small fiber myelopathy statistically significant, was it just a possible commonality?

## Morten Hoegh

No, so it's not my it's not myopathy, it's actually neuropathy, which is quite interesting. So, it could be that a minority of the patients with fibromyalgia diagnosis, have a neuropathic disease, where the small fibers are simply degenerating, leading them to have a neuropathic pain condition. And that's really solid evidence. The problem is, again, we don't know how to treat them. They don't necessarily respond to the treatment you would give to neuropathies. But from a scientific perspective, is really sound and interesting studies. I'm afraid to say the first author's name because I can't pronounce it. But if you look at Annina Schmidt from Oxford, she's one of the authors who has been lucky enough to be part of this group. And it's first of all those who closed something I'm really sorry about the pronunciation.

## Morten Hoegh

So it was, did you say Radina?

## Morten Hoegh

Annina.

## Steven Bruce

Annina, sorry.

## Morten Hoegh

Annina Schmidt, from Oxford.

## Steven Bruce

We'll make sure that that's upon the references. Christina has come back in again...

## Morten Hoegh

Can I say, we just had an interview, if you look at MOWP, so moving on with pain initials, the podcast, there is an interview where I interview Annina about this. So that's freely available on any podcast.

## Steven Bruce

We'll put up a link to that as well. Christine has come back in to ask how polymyalgia fits in.

# Morten Hoegh

I don't, I think polymyalgia, as far as I know, but correct me please if I'm wrong, is sort of a, again, a misnomer. What we have taken from polyneuropathy, so more than one neuron affected to a polymyopathy. And as far as I understand that is one of these nominal ideas, just like the widespread musculoskeletal related pain, as you would see in some types of arthritis as well. But if you don't see an inflammatory response, it's really difficult to argue that we know the underlying cause or pathology, or even

etiology of the hyperalgesia that is sort of the hallmark of these cases. So simply said, if we can't find anything on scans, or blood samples, or whatever, it's really difficult to argue that there's a change in the body, that is a direct cause to the pain, to the patient experiences. But the pain is always real. So, in the absence of a good pathology that we could target our treatments to, what we need is an understanding of how the nervous system for instance can relate to hyperalgesia. We call that sensitisation. That's one of the most known principles of neuroscience that could explain why you get high voltage music without actually having a damage to your skin or to your bones or tissues. And then you also have this, what some people refer to now as nosy plastic response, where we argue that there's changes in the nervous system which makes your nervous system more sensitised, but not bound to, not limited to the phenomenon of sensitisation at the spinal cord level. But again, that's more of a hypothesis that we use to understand that pain is real, even though we can't find anything. So, I think in my sort of terminology, we will have this clear tissue damage, leading to sensitisation once the tissue heals, inflammatory responses will go down, and the pain will disappear in the majority of cases. Then you will have the common, what in sports medicine is usually referred to as an overuse injury. So, you do something if you stop doing it, the pain would go away. That seems really well explained by sensitisation and maybe a minor inflammatory response. And the trick is not to keep doing the same thing and you'll be fine. And then we have these painful conditions, which are mainly under the umbrella of the primary chronic pain, ICD-11 diagnosis or categories. And they're the ones that are really tricky, where I would say, this is probably where we should be much better at diagnosing chronic pain, like the word or not, it's what the WHO uses. So, we should be much better at using those, those knowledges we have now to understand that you can't actually cure that pain systematically and significantly in a cohort. So, if you can do it one patient at a time, I mean, you can never argue success. So, if you can cure a patient with any type of chronic pain, you're my hero, even if it only happens once and again. But in all the others where we do our treatment, and it doesn't work, I think we should much, much sooner relate to the fact that maybe statistics are against us on this patient. And maybe the best thing we can do is help the patient not to become any worse. So, help them maintain their job workability competences, make sure they have a social network, that they don't get divorced. So, all the things that you refer to earlier with depression and loss of socioeconomic status and all of that. They're the things that we can almost never change in patients when the pain has been going on for quite some time. So, we could use that to maybe say to ourselves, what if work was therapy? What if we could help this patient maintain a social, financial and sort of personal relation to the workplace? Maybe that's the best thing this patient could do. So rather than staying home with pain, maybe you should learn to go to work with pain. If that work is meaningful for you, of course, but if it isn't, you could find something else. Just trying to maybe to challenge the fact that we keep treating patients, even though the statistics suggest that we should have stopped years ago.

## Steven Bruce

But you seem to be suggesting that we should continue to treat in order to stop them getting worse. But that's very difficult to justify ethically, unless you've got evidence to say they would get worse if we didn't treat them.

## Morten Hoegh

Yeah, again, I would say that there's many ways to treat or to interact with a patient. And if we were to dichotomise them between maybe active and passive treatments. I would say any active thing that your patient learned to do themselves could be done, even if it's putting on, you know, a cold pack on the shoulder, or if it's to use an exercise, I would be happy to support the patient for a period of time doing that. Whereas if we come to the point where we think this is probably not something that I'm going to be able to cure, then the passive treatments should either be stopped, or they should have a very specific target. So, for instance, I get my neck pain and it helps when I get three treatments. In my book that's completely feasible and same with my patients. But doing it in order to keep them at work is probably not the best way to go, because the evidence does suggest that the active approach is where the patient is. I usually use the metaphor of a car, so imagine the patient comes in, and they want to be driven from A to B, and they get inside the car and they sit there and you're on the front seat, and then you open the front door and you get out. And you invite the patient to sit in front and they're like, I don't know how to drive a car, but you teach them slowly. This is how the gears work. This is the break and this is the speeder, so you give them all the information they need. And then you practice with them until they get sufficiently qualified to do the driving themselves. And at a point that you're happy to just know that they can now drive the car, you don't need to be in the car. But of course, that's a transition from being very close with your pace and very supportive and then withdrawing yourself from the sphere of need.

## Steven Bruce

Sounds very good. I'm interested to know your statistics on patient compliance with taking over the therapy themselves. I suspect there are some who never will want to do that, they'll always want the passive approach. And Simon has said, does the subconscious mind have an impact on pain? And can we influence this as manual therapists?

## Morten Hoegh

Again, subconscious, if that means learned behavior, for instance, so let's say I'm used to doing things in a specific way, either physically or even cognitive. I think definitely it could have an influence. So, one example could be a fear avoidance. So fear of the pain itself could definitely be something that has proven to influence, not necessarily the cause of pain, it might, but it could influence the cause. But definitely the intensity of the pain. And I think also, it would be reasonable, even though the data is really tricky to understand, but it would be reasonable to say that if patients get their pain when they do a specific thing and they keep doing that specific thing, there's a good chance that that learned behavior will give them more pain, but that will be interpretation of the data as I know it.

## Steven Bruce

I got an interesting one for you here Morton from Jeff, because I think you addressed this a little bit earlier on, I think. He says, but do you have to go through multiple treatments of different types in order to exhaust the options and then say or admit you can only support them to not get worse rather than striving to get them better. Now, I think that flies in the face of what you said at the beginning of this discussion.

## Morten Hoegh

Yeah. Well, can I just say that all the questions have been marvelous so far. So, I'm just happy for that one as well. Jeff, I would probably not agree with you. Although I do think I know where you're coming from. And I probably should say now that the patients I see have been through so many different therapies before I see them so I'm very biased towards trying to get the patient's help, the kind of help that they are dealing with themselves earlier. Yeah, so that's how I see it and that means that I don't really care if they've been through a good manual therapy program, been in a relationship with a therapist, that is considered positive and they have tried to follow a structured exercise rehab program or whatever, I don't really care if it's at an osteopath, a chiropractor, or whatever, if it's within that sort of sphere. Having said that, I know plenty of patients who have been to, for instance, physios, didn't get anything out of that. And they went to seven or eight physios and then they went to an osteopath, or chiropractor and their pain was gone. So, as I said, I can't argue success, I can't argue against success. What I can see is that, if you look at the data, there's a majority of people who get the same care again and again, but with a different name. And if we look at the research, it seems that there is really no difference between different approaches. So, whether or not you use, we were just doing a systematic review on what is referred to as a subacromial impingement. And there isn't really any difference in outcome measures, so both functionally but also pain after 12 months. If you compare surgery, two types of surgery, one is called the so-called placebo surgery, where you just go in and you clean up. And then there's one way you do the proper surgery, so remove some stuff in there, exercise, and wait and see. So, after 12 months, you don't really get anything. So, the only thing that tells us is that if you have that diagnosis, it's nonspecific. We don't know what it is. That's basically what we're saying. So, any patient that gets better, they're doing well. But what if we should stop surgerising? And perhaps treating, even manually treating and exercising these patients sooner and support them in not losing what they can do. So maybe it would be better to play racquetball with a bit of pain, but manage that pain with rest, rather than going through surgery and being out of the ability to have that social interaction with your friends at racquetball. So, they all, you know, they need to be case-based. I'm not giving any general recommendations, but that would be my approach.

#### **Steven Bruce**

Thank you. We actually had a very interesting discussion about subacromial impingement recently, specifically about the shoulder and we gave it that title deliberately, because it's not a title which is used in conventional medicine anymore, Is it? Subacromial pain syndrome and so on. But impingement has fallen out of fashion, it seems. Chris has said that he's currently doing training in narrative medicine, which you mentioned, and he really rates it. Are there many places that provide that sort of trainings to your knowledge?

## Morten Hoegh

I think Chris should be the one to respond to that question. I really don't know, I've been using it for many years before I learned that it was a thing. It just intuitively made sense. Over the over the years, it came from Lorimer Moseley and David Butler's book Explain Pain. They try to explain pain with neuroscience, which in the beginning made a lot of reason for me. But as I knew more about the neuroscience, I could see that it really didn't explain the pain. And in sort of transitioning from using neurobiology to explain what the patient feels, I started to just simply explain the patient back what they told me. And we then decided on a

narrative that would be what I call socially applicable, so something that could help them reintegrate with their family and with their friends, because one of the things that my patients struggle with, not the most, but one of the most urgent things to treat or help them with is to create a narrative an explanation of how they feel. Because if you say chronic pain is like being hung over, then everyone knows what it is. But you also automatically think, well, that's one or two days if you're really going for it, how can you be hung over every day? Right? So, you need to create that narrative that helps people who don't know what chronic pain is to actually embrace the fact that you are living in a constant changed position or world-life-balance that you need to handle and I try to help my patients explain to others how they feel but also how they manage it, and then try to, you know, not to make it a disease in itself but something that is manageable. In, say, if someone had diabetes, once they learn to manage it, they're all good, I mean, they still have diabetes, but if they use the insulin or take care of the diet or whatever, get some exercise, they don't need to involve everyone into that and they can have a job, they can have anything on the side with the, you know, diabetes and they're not considered diabetic patients, unless they're in the system, the NHS or wherever. So, if they're just somewhere with friends, that is Carl or Peter or Marianne, you don't need to be a diabetic patient. And that's, I think, the goal, where we are now, the first and most achievable goal for people with chronic pain as well.

## Steven Bruce

Awesome, thank you for all that, we are out of time. But I wanted to talk just before we go about a course which I believe you're running later in the year.

## Morten Hoegh

Thank you for reminding me. Yeah. I'm really happy to be, as you said I am teaching quite a lot and I don't know if it's been put on the screen, but I do think it is now. I am extending my courses now to do it in English. And I've been trying to come to London to do a course for the last one and a half years. But there's been this virus, I don't know if you heard of it. It's been sort of messing with everything. So, we now decided to do it online. And I'm teaming up with the team behind something called LePubScientific. They have this sort of weird and slightly sideways approach to thinking out of the box. So, if you have an interest in pain research or anything, they're the go to place. And if you want to know more about my approach, I do this full course over four half days. And so, it's online now. So, anyone can attend from it. And it'll be wonderful to have more people there.

## Steven Bruce

Brilliant. Well, thank you again. Thanks for giving up your time today. Thanks for coming back for a second time after the internet failure we had last time. And I seriously I hope loads of people go on that course. I mean, I apologise to those people whose questions I couldn't ask Nick, Joss, Phillip, and several others and Ron. Some really interesting questions to come through, but so we don't have time for that. Thank you again.

#### Steven Bruce

Thank you. Okay, well, that's it. That's what we've got time for today. 45 minutes of learning with others, hope you've enjoyed it. Hope you've gained something for your clinical practice and perhaps you might be interested in that course that's coming up later in the year online with Morten.

# Morten Hoegh

I'm happy to respond to all of those questions if you just reach out to me, probably email would be the easiest thing.