# The EdAChe project with Liz Huzzey

#### Steven Bruce

Good afternoon. Great to have you with us. As always, we've got a particularly personal it's a particularly relevant topic to discuss today. I'm joined by osteopath Liz Hussey. Now if you've been paying attention over the last two years, you'll know that she joined us at the start of what is known as the headache project. I don't know how people come up with these acronyms, but it stands for education and assessment in the competence with headaches. She'll tell us a minute, but Edie says it all doesn't it. So she is the project leader in that she's also a founding member of osteopathy, and practice for headache management. She has been an osteopath for quite some time now. She's recently earned her master's in headache management. I probably got that wrong at the university, I think in Copenhagen. But anyway, it's loose. It's great to have you with us once again. Hello, dropping osteopath. You're here straight from clinic Jason clinic. And you are probably certainly in manual medicine terms, one of this country's experts Leaders in Knowledge about headaches I thought by now.

## Liz Huzzey

Yes, I think I could probably hold my hand up to that. But yes. Firstly, what is Do you started this at a project two years ago? Yes. And I like to think that we helped to stimulate you to a fair oak, final number of participants in the how many did you get enormously for phase one and let just for reminding Phase One was a study to see the existing headache knowledge amongst UK osteopaths. And that was what we came on two years to ask your help to get people to participate. And with your help, and we managed to get 398 participants, which was it was amazing number it was almost 10% of the UK population, osteopathic population, almost five times as many as you expected. Yeah. Yeah. So it gave us a really robust piece of research, and gave us really robust data. It was a very representative number. From representative for people in all the regions, Scotland, Northern Ireland, Wales, across all years, qualified all ages or genders. So it was a really it was a cohort that really represented the UK osteopathic population. So that was phase one, two years ago, yeah, has that phase taken home over two years, no, phase one finished, that took the first six months, we collected the data. So we know where the gaps are, where the knowledge is good, where it's reasonable, and where there was Kunti. So and then, for the last 18 months, we have taken that information. And we have put together an elearning course for That's clinically relevant and academically robust, that it was the idea. And that's just been finished now. And we're ready to roll that out. So actually, we now have a fairly robust platform on which to which to build this probably as robust as anything in headache management in the UK, certainly, but this is, well, why doesn't you've got participants in Australia. I think as well, we have I presented it to get on the globally through an Australian

## **Steven Bruce**

physiotherapist who Watson people may know of who's very high up in the head. And so I presented the project through his online symposium a couple of unfought. At this point in time, we are still in the research basis because so phase three, which we're in now is all about doing a before and after. See how effective the elearning course is at increasing people's knowledge that you pass tacked. So is the

it's all aimed at that but for the purpose of research, we had to define a cohort. And so the one that we obviously identify most with and is the easiest for us to access is UK practising osteopath. So for this before and after study that we're writing now and the deadline is in the next 24 hours. When if people wish to participate, they'll get the whole eight hour elearning course free of charge. All we ask is they do a 20 minute clinically relevant questionnaire before and after. So that we can really determine how effective the court is. Right? So they're gonna do eight hours of training all of which is, of course, valid CPD? Yes. Could you? I'm thinking off the wall, but could you conceivably sign up as as an acupuncturist or a chiropractor just to do that learning even if you can't take part in the research at the moment? No, but but as soon as this is done, which will be the new year, then it's going to be a big year. In the new year, the data analysis and the writing up will take a little while, but we definitely expect the elearning course to be available in 2022. And that will be to everybody, obviously. And that elearning course, I would imagine, based on what I know, what you've been doing, and what you know, it's gonna be completely new, isn't it? It's not the stuff that we learned in college just rehashed because basically, they didn't know this stuff. When we were in college. They didn't know where the evidence let us know, it's it's all about knowledge that you need in clinic. So it's about the premise is a patient walks in with a headache. Do you know the worrisome signs? Are you sure they're safe? Are you confident in your diagnosis? And you know, when you can treat and when you should refer? And if you should refer who should you refer to and why. So it's putting taking you through that journey to make sure that you have all the knowledge you need to take all of those steps. Just go back a step. I said, you did a master's, you've just finished a master's, it was easy in headache disorders. disorders, I'm sorry. You also presented that not just to a manual therapist, audience didn't you know, I mean, I was very lucky in that they accepted me on to the master's programme, it is really meant for headache neurologists. And so I was the first practitioner non and it within a non medical framework to be accepted. And they were very open minded and very welcoming. The advantage of it is that we just got the best science in the world to come and present to lecture me. So it's the most up to date, information on what treatment on the science and up to date, evidence and what we know about headaches, what we know about migraines, and how many on course 20 Right. But presumably it runs every year or every two years. Can we assume now? Oh, well, let me let me start with what I imagine would have been the basis of that course that is largely about it would have been largely about conventional management of headaches, which is quite probably drug related. It is it now will it be different? Will it be better? No, it isn't. But you know, if we're going to start, I definitely believe progress is all about collaboration, and professional respect. And the one thing that they do have is access to the best science. Beyond that the treatment obviously, the treatment modalities that they look at are all medical. But that's it's still really important because the patients that come in and see you will have been through those journeys. So if you have a knowledge of what medications, acute medications, prophylactic medications, if you have knowledge on Botox, at least you can then give informed opinion an informed suggestion to your headache patients. So an example would be cluster headache. The number of you know, the best treatment for cluster headaches is fast flow oxygen, or sumatriptan. And it's probably not, it doesn't mean to say that you can't treat them whether you're an osteopath, or a chiropractor and acupuncturist. But you can have that conversation from an informed point of view as this headache is known that you'll come to see me it's, I can tell you it's known as a cluster headache, because I recognise the diagnostic criteria. And these are your treatment options. These are the medical options, and then I'm happy to treat as well but you can make a decision on where you want to go with it. So it's having the knowledge to be safe, and give the patients all the information Meishan they need to and to treat with confidence

really interesting. Just taking cluster headaches because you've mentioned Yes, instinctively one would say well, a patient wouldn't be in the least bit averse to having fast flow oxygen because oxygen is not a drug Of course it is a drug like any other chemical especially if delivered in abnormal quantities. As manual medicine fitting into that, what do we have a significant role to play or is it just palliative? I will look you know I'm I'm passionate about what osteopathic got and chiropractors and physios have got to contribute to this to the headache world. We're gonna have to come up with a word aren't we? We always say osteopath. And I think we got the most ever practice and massive role to play. But the moment we're on very weak footings because we don't have a strong evidence base, we don't have strong science behind us. So we may have patients that know what we can do. We may have lots of anecdotal stories, but it doesn't really change anything in the in the, on the bigger picture of the headache world. There we've got nothing we can go to now up with and say look, the evidence says that I am a good bet for this particular disorder. Now, I mean example is the nice A good example is the nice guidelines in 2012. That came out for headache recommendations. Chiropractors and osteopaths aren't, and physiotherapists weren't on there a little bit, but not the stakeholders. They weren't really but acupuncture got in there because the acupuncture is the PMA and Mike Cummings got some really good data, really good RCT trials, and a nice looked at it and they're now nice recommendations for migraine prevention is nine to 12 acupuncture sessions. So if we aspire to do that, that's where I'm at at the moment. If we can, I'm sure we can do that. Now. But in order to do that, we have to have people within our professions that can know the difference between the diagnostic criteria of attention type headache, migraine, migraine with ortho or cluster headache, Hypnic, headache, post traumatic headache, medication overuse headache, and, or without pain. And, of course, the psychogenic case, I only say that because I admitted that I get that from time on I want treatment. So that's why you're here really. I guess everybody's going to ask well, you know, what does the evidence, as far as you're aware, currently say about which manual therapies are available for are effective or which treatments? They're very low down? You know, there's not a huge the evidence is there, but it's still relatively small compared to the big hitters. And so it's always comes as an after thought it's always and physical therapies could help. Well, most of the BMA have the British Medical acupuncture society bmes How much do they have? Because, you know, they couldn't imagine they're any wealthier than osteopathic organising in terms of research, but they had enough evidence to sneak into the nice guide. But the advantages that Mike is what Mike Cummings was a medical doctor, and he understands the language the new need to this and the science, and he has does puncher at the I think it's the homoeopathic Hospital in London. So being cohort of people to come coming through that can get this on National Health Service. So he's got, he's got the participants. And he, he's, he's, he's presented acupuncture in a way that NICE guidelines can understand. I think that's my take on it. My sorry, my personal take on it. And I think if I mean, there is a big argument about whether the medical framework of God has called it completely right, and they don't understand. They only looking at it from one angle. But the fact is that that's majority rules at the moment. So I think collaborating is definitely the way forward. Definitely, I never really know how unlevel the playing field is until you mentioned what you just if you are a doctor, it means you've done a lot of medical training. But when you become skilled in anything else, you are entitled to use that as therapy, which means you've got an unlimited number of patients at your disposal because of the NHS system. Of course, unless you're a doctor who is trained in osteopathy, and there are very few who would want to spend another three or four years qualifying in a different medical discipline. That's never going to be one of those options that they use, which cuts on the pool that you can put into the research pot. Yes, yeah, I mean, there's good research is a whole other

conversation to be had. But definitely the more knowledge we have, the better place we are to collaborate with patients with medical with the medics or with research. So if your the more solid knowledge you have, the safer and the more effective you're going to be for your patients. And that's after all, what we will do it for, but also you're going to be able to collaborate and you're going to be able to speak with the GP in a language they understand and they they're going to know that you're safe and you understand the limits of your scope of practice. You're not going to you're not going to prop and ignore going back to the cluster headache. You're aware that fast flow oxygen is a good option. And you're not stopping patients find that easy is that to administer. To remove administered high volume oxygens or people in first aid situations before is it no different to that? I do. I've never administered it, either. It's not something I offer. It's fast flow, but I know about it isn't readily available. It is there's a bit of complication, because oxygen, it's explosive, flammable, and all of that sort of thing. But if there is a, you know, ouch, which is the patient for cluster headache, the advocacy, what's the word I'm looking for their patient advocates for cluster headaches. Out is called Ouch. And you shouldn't get into contact them or contact their GP, but just giving the patient the right information. Based from accurate knowledge is so important. We're in such a perfect position. We have time we to ask these questions we can manage even if patients even if your patients don't come to you with headaches, we know that patients with migraines are more likely pain, by far. They may come in with you for him to see you for their low back pain. When you're taking their case history. They will they may not come to you for their headaches but you're in a great position with with good knowledge to really help them manage their and find the right treatments whether that's treatment or lifestyle advice, whatever it makes a difference you can really important part of that headache patient's journey. You kind of answered this. Presenting a question a little while ago asking whether you whether the programme included migraines as well as general headaches, which clearly it does, because you've talked about those already. I often wonder whether migraines ought to be a completely separate subject from headaches because the mechanisms seem to be totally different. Am I right? Whether they tease them they they divide the way the the framework for the knowledge that's included in the course is based on internationally accepted framework for the headaches, you should be able to recognise within a primary care setting. So obviously, those are the worries some headaches. So you need to you know, get to see a huge amount of those because people will tend to go to a&e or their GP, but if they're not feeling well or if it comes on too guickly, a thunderclap headache. But there are other ones that do slip through the net. And so obviously you need to be able to recognise potential red flags. And what to do with them. How quickly should you refer them to the GP? Or where what investigations should they have? That's all in the course. Am I going to be surprised by those red flags? What are they? Well, they these are what we call potential red flags. So this means not every single person with them is worrisome headaches, but it's it's something that you should just think about. So it would be new onset over the age of 50. It would be anything any changing headache, obviously sudden headache or thunderclap headache, anything where there's general unwellness if there's a history of HIV or cancer, so there's a few that you can just tick off and you need to know those are because potential is guite strange. I say again, going back to first aid when we teach first aid we talk about stroke and everybody rather fast test but one of the major potential warning signs of a stroke is a sudden onset of headaches, sudden severe headache, but it's not mentioned in any of the campaigns that are going out on the various the various media from the NHS. Yes, well, I mean, fortunately, I think and that's one thing they press upon actually most cases head pain is the pain is the least reliable of the red flags. So that's not one of them. But anyways, so the framework goes through that this course so we start off the course with safety. So then you get to a

point of okay, I know that I'm safe to treat the green flags. I know that this is I'm okay. And then the next bit is recognising the kind of headache is and headaches are divided into two primary headache disorders when the headache itself is seen as the condition itself and that is tension type headaches, migraines migraines with aura and tax. These are the cofounders cluster headache as the best known one is a few others sooner and souped. And then there are other secondary headaches. So that's when the headaches is secondary to another condition. And one already always thinks those have tumours and you know worrisome ones, but there's a lot in there that are worrisome, cervicogenic headaches would be considered a secondary headache because it's secondary to spondylosis or disc issues or something like that. Post Traumatic headache, which we see in post traumatic headache, which we'll see in headache. What because it's come after a trauma, medication overuse headache, that's a secondary headache that we would see an enormous I see a lot in practice. And if you know how to recognise medication overuse headache, just by and how to deal with it, and when and how to, to, when it's complex, or when it's simple and what to do with it, what the benchmarks are to make it medication overuse headache, then you can be really helpful to your patients. Because then you know, when you come off, that's 50%, immediate reduction in frequency and intensity of headaches, if it's medication overuse, just by knowing what to do about it. So that's these and that's what's in the course, those basics you make it sound as though it's a nice clear cut of things someone comes in, you'll immediately be able to compartmentalise them into migraine medication induced headaches, cervicogenic. But it's not that simple. It's not that simple. I mean, and there's lots of blurry, there's lots of grey hairs, most Pedic patients will come in, and they'll have two types of headaches, they'll have an ordinary background headache that they can kind of work through, and then they'll have the headaches that make them, floor them and make them go to bed. Take them to their bed. So it's a clinically it's not black and white. But I think what really helps is having black and white structure to your case history knowing what guestions to ask and knowing what's important. Being able to and I know as osteopath, we generally and short same chiropractors and faces, we don't like to put a medical label on it. But what that does do is give us a really strong structure to then know what to do about it. And I think that helps. I know it definitely in my practice, it helps me manage my headaches with some clear boundaries. Obviously clinic we know things merge, clinically, things merge, but it does help. One of the key things of course, in good outcomes for patients as well as safety is making your decision on what it is you're treating based on good evidence, isn't it knowledge of what the signs and symptoms everything else can see. And I I suspect my tutors will say it's because I didn't pay attention. But, you know, when I came out of college I tended, I don't think I really considered the different causes of headache. It was very often a case of well, manipulating epicycles or 33 always helps often helps with a headache. Let's try that which isn't a good basis to justify yourself in the subsequent court of inquiry. No. And the fact is that see two, three upper cervical efforts are hugely important in headache pathways, whether it's whether it's, you know, via the trigeminal survive complex, and that what that the part that plays in migraines, whether it's a psychogenic issue, whether it is hugely important. So I what this does is not change your treatment. I haven't I haven't found it's changed my street manners still fundamentally an osteopath, but what it's done is given me the knowledge to use my treatment with confidence, knowing that I'm safe, and I'm clinically relevant. And I have given the patient in front of me all they need to make an informed decision. Actually, we were talking about this in a case based discussion, something similar a few days ago. And very often you cannot come to a firm diagnosis. And so you think well, I'll do what I've done in the past, because quite often that's helped. And then we monitor and see what happens, obviously working within the bounds of safety. And as you say, far

better particularly with something where there are potentially some big red flags, far better to work on the basis of good education and be even if you get it wrong, the fact that you followed the right process and you've made your diagnosis on the basis of those key points that's really, really important and very, vep, very reassuring to you, as a clinician very reassuring to the patient. And, again, you can use this clinical reasoning of why you might you might know the figures behind this. I'm springing this on you because it's just occurred to me, but I would venture to suggest that an awful lot of patients who have headaches don't go for any form of medical attention. They'll go to the shop and buy some paracetamol or some aspirin, they'll just take their drug and hope it goes away. Have you any idea how many of those might be helped by some sort of intervention? Not necessarily osteopathy, chiropractic, but I think a few statistics I think 95% of people will have a headache at some time in their life for around 14% And that's pretty globally with developed on development. 14% of women will have migraines 11% of men will will be migraine sufferers. And we know that those are actual things where they just reported migraines I'm guessing it must be the latter they have but there's been a huge studies Steiners done some huge epidemiological studies over the last 10 years across the world Global Burden of Disease of headaches. And that's why so they've got real data from, say, from Nepal, to Argentina to Africa to Europe, they've got a really good map of where people's and it's pretty, I think, South America is quite high and Japan is a little bit lower, but generally, it's pretty much the same across the board. So it's and that's it Steiners work epidemiological study that's really put headings up on the political and health agenda, public health agenda. It's now number three on the World Health Organisation lists. So we've got low back pain, anxiety and depression and number three headaches, and what are the three things that probably come through our front door, so if we need to know about it? Turning back to migraines. Christina has said that she can see off inverted commas a migraine as it first shows itself by giving C to three a flick her terminology, it's also associated with the stomach meridian. Now, I don't know which professional Christina is but clearly she's poke some needles into something I would have thought from that. Is that what you'd have thought, um, you can see off a migraine from C to three adjustment. I don't know, I can't I've never known any robust data to support that. But I understand we, as I said before, we know that the cervical efference C 123. feed into the trigeminal cervical nucleus, and we know that it's complex, and we know that's the engine room of migraines. But alternatively, I think there's a probably get as many people saying, particularly patients as they if they if you have vigorous treatment to see two, three, it will trigger a migraine, really. So this is defines a migraine as opposed to any other sort of headache, or migraine, according to the diet is a genetically predisposed neurological, completely reversible neurological event. So it means you got to have the genetics. But normally, you'll have either a parent or a grandparent who will have and that's one of the questions you need to ask because that will help you with your diagnosis. But they haven't identified a specific genetic marker itself. No, no, I think there is some in genetics, but they, I think there's some there's a lot of work going on to that. But it's not something that I know anything about. But it's yeah, it's completely reversible neurological event. So when you're talking about your aura without the pay head pain, your migraine, that aura is a new neurological event. It's a cortical spreading wave of negative and positive ions that are sweeping through your, your visual cortex. And that will give you those scotomas And that'll they'll come and it will go and be reversible within 20 minutes, generally around that sort of time will leave you washed out, we now know with functional MRIs and that's where the science from a University of Copenhagen from it was so great because it came from Harvard and came from Kings and you got functional MRIs now watching this so that what we know about migraines, it's so much more. And it's it is a neuro vascular event. It's not a musculoskeletal event. Yeah. And I think if as soon as if you know that, you I do believe

that the neurology and modulating neurology, with with techniques can feed into that. We think we we still harbour back to the old musculoskeletal causes for migraine, we're never going to be listened to because the science is just not backing that up. But it's not so often true about everything we do in our profession isn't it was long ago, we had these theories about what it was we were treating what we were doing. And I don't get into any specific areas. And actually, we don't really have any proof that our theories were true, we just know that the treatment was effective. And if the treatment isn't addressing those neurological components, but something else which is feeding into them, and that's good, but we still got to prove that we all know prove it. I think we've just got to, to, I think we've got to, you know, evolve and learn and try it and be curious and say okay, I mean, that's one of the whole reason I started this project was because I'd had 25 years in practice and I knew that some patients responded very well to my treat headache patients really well. And I knew some of that some didn't. And I didn't know why. I couldn't tell the difference what to how can i What can you know, how can I think I probably can, well, better than I could. This show will never be 100% I imagine but I think I've got the I've got the knowledge to definitely be the field The gaps. And through that I'm more confident, definitely clinically more confident to treat and do what we all do really well, which is treat effectively. Yes. Christina has admitted to being a chiropractor. He doesn't do her own acupuncture. But so that was the origin of her intervention a moment ago. You've you produced a video, haven't you about the next stage of the project? Yes. So this video, hopefully, you're going to see it now. And what when it starts off this is you'll see this at the beginning of the course as well. So what it is is a an everyday patient that you would see in your clinic with the questions. And with I'd like you just to watch it, and then work out what it is. Is there any signs in there that you would be worried about? Would you refer this patient? What if you would refer them? Why would you refer them what would you want from the referral? Or would you be confident to go ahead and treat them or do you think you should send them somewhere else? Let's have a look at the video

#### Video

is 57 years old, she asks if you can help her with her headaches. The very strong throbbing pain is always around either i She has had eight attacks lasting three days. Over the last 30 days. She visited a&e and her GP but nothing has helped her headaches. So now is looking for answers on her own. She has had migraines since she was 12. But they always went away with tablets she got from her chemist, once in her 20s That was so bad, her face and arm went numb down one side. The brain scan was normal. They said it was stress. For years she has taken painkillers for the neck, lower back and knee pain. Nothing works now, could it be something in her neck causing the pain? She asks? This course will give you the confidence to know what questions to ask to recognise what kind of headache it is to refer appropriately or help her find the right treatment.

### **Steven Bruce**

I like that video? Because it's the second time I've seen it that it throws up all sorts of questions in your mind doesn't it 57 year old year old woman bound to be some menopausal components in that. And then there's some drugs thrown in a bit later on. And visual components and what would you do with that lady?

Well, I can't say because in other ways, our before and after study will be completely dead. But okay, so what do you want to get from that video, and so you need more participants in the next phase of

this? Yes, what's really helpful for us at this stage, so that we've the whole project, we tried to be as robust as possible, which is why we bothered to do phase one. So we found the existing knowledge and where it was good, and it was good in many places where it was reasonable, where there were gaps and where there was a lot of uncertainty, then then we put this eLearning course together based on this framework of knowledge that we know people should have in a primary care setting. And now we're at the point rather, we could just roll it out. But because we want to make sure that it's really robust. We've done this in collaboration with the University College of osteopathy and with ankle. So we want to make sure that I mean, just giving people knowledge doesn't mean to say they're going to take it on board to make it clinically relevant. So we want the people to take a 20 minute questionnaire at the beginning, and they're all clinically relevant cases. And then And there'll be a few questions on what you think's going on. And then do the eight hour course that could do the course and then ask some questions answered some similar questions at the end to see if that journey the course is taking you on a journey and has actually given you the knowledge and the tools to be effective in the clinic room. And once we can put that data together, then we're really confident to roll this out. Now when we roll it out, we'll probably break it up into modules have two hours elearning and face to face courses, but that's another conversation we can have. But for now we need people. The deadline is actually tonight midnight tonight for people it's free tip unfortunately and I'm really sorry all the chiropractors and physios but at the moment we had to choose a cohort because it is research so we have UK practising registered osteopaths you can get it the eight hours free if you just send an email to I think you've got it coming up is Edie three.opa.org and we will do the rest we'll send you all the stuff that you need to do. I've managed to extend the deadline because I knew I was coming on here today. So for you guys and for your viewers. I've extended it till midday tomorrow. So yes is eight hours a week they're 20 modules. Each module is designed to be around 30 minutes so fits perfectly into an appointment, you know an empty appointment slot in Your day. So a good idea that's in an hour, a week, really for eight weeks, this side of Christmas. And it will, once we get this, again is all being presented to the medical profession to my people back into the neurologist back in Copenhagen. So it's really good opportunity to get the knowledge and really show the world that we're taking it seriously. We're taking our role seriously, we're being accountable, and we're gaining the knowledge we need. And on the plus side for the chiropractor's, it means they don't have to do this, but they can still come on the course the face to face course, once this robust three or four month, segmentation complete, yes, once we've got this, and we've got the data, and depending on the data, that's going to be feed back to free, I think there's free text feedback. And we might have to make a few tweaks to just you know, if it's response to make so we can make it better. But the finished product, we're trying to make as high quality as possible. There's nothing in the course that cannot be backed by academically robust papers. So it's, it's, it's up to date and is robust, we will keep it up to date on an annual basis, the team, five of us at OPA gem. So we're constantly reading the research, it's coming out and we will update it all the time. But going forward to make it user can I think we're all a bit screened out at the moment. With firms like that, well, I think you know, going forwards, we're thinking, okay to make, we'll probably put it into module, say one module on safety and case issue taking, we'll send you the elearning modules, and then we'll do face to face where we can have interactive role playing, make it far more. So you can get the knowledge and put it into a real life situation. And we can tell you our experiences, and how best we do it in our own clinics. And on that note, you will probably if not the final one of the very last guests who will ever appear in this studio, because we're moving our studio. And we're having a much bigger studio. But I'm going to lock you in this one until you agree to have run one of your face to face courses in the new

studio, which will be well, I will have to check with the rest of the team. But I'm sure it will be affirmed. You're not getting any regrets. I'm sure Yeah, I mean, that's we're making plans already going forwards. But the course itself would definitely be rolling out. You're gonna run your country on. Yeah, I mean, that's the idea. The idea is that we'll have teams of two but there's and we will take it the face to face days to you. So we can do some up in Scotland or Wales or, but obviously the elearning modules you can do beforehand. Yeah. So it makes it effective. I got a technical question for you. Okay. Sharon says. Could you explain the hormonal causes or reasons for headaches, particularly in menopause and how to manage it all the massive space of two minutes? Oh, massive question. Massive question. Well, there's two types. There's pure migraine, pure hormonal, menstrual migraines, and they are the category where there's no other factor it is pure hormonal migraines and so they're the ones always happen during a period or always happens, you know, in your cycle usually starts as soon as your 11 inch change. It goes with all when you're pregnant and changes again when your hormone levels changing and there's pure menstrual migraine but they are a such a small part, the most are what they call menstrual Lee related migraines, where it is a factor, but it's not the only factor. So when it comes to menopause, the same can be applied. Now, there's so much now about menopause at the moment, and the same things apply to the migraines, lifestyle stuff that you know, try not to have, you know, a low GI diet so that you don't have sugar peaks and troughs and try and get some exercise we know aerobic exercise 70% max heart rate not 100%. So if you go hard workouts will probably make your migraines worse but around 70% That's a brisk walk. They definitely make it better. There are some supplements that are really good for migraines, and coenzyme 10 is a is an riboflavin magnesium. And that's regardless of menopause. But there's the coenzyme 10 is magnesium can be helped, you know they can be helpful around there. Is this sort of information available on the OPA gem website. It is available in the course in the course. Well portal, not all of it, but not all of it, some of it. We do need to encourage osteopaths to sign up for this course and reassure the chiropractor's there'll be it was definitely not Yeah, we're not keeping anybody out. It's just as safe. We had to choose a cohort and that's the way We could access the part of that question was you said that it's hormonal e related what actually over hormone is doing to promote that provoke that pain? Do we know and I won't profess to be an expert on menopause at this point so i The there's various papers now looking at migraines and some metabolic changes. There's the all the neuro physiology that creates sleeplessness we know sleep and headaches have go hand in hand. So the sleeplessness that you get with menopause can also feed into the migraine pattern. So I it's a, it's a big question. And when they when your patients come in and they are menopausal. Their options for the menopause, you kind of got to separate into two things. Okay, shall we just become deal this is a menopause and your migraines are an expression of the menopause that's going on. So let's stick with the menopause. And those options all down to patient preferences, pay, some patients just aren't very happy. And it's really important to remind ourselves, it's not our preferences, it's the patient's preference. And if they might, some patients are very fine taking medication and HRT and at home or amitriptyline for dental home headaches or propranolol for migraine. They're fine with it doesn't bother them there. That's their choice. They are effective, but there are equally patients that really don't want to take medication. So to be able to offer them accurate information so they can make an informed choice about how they want to deal with it is really our job. I think we've probably got time for one more guestion on this. Actually, I'll feed what I'll feed something into you now Helena has you know, Helen Helen, a bridge? Yes. I don't usually read out people's surnames. But we all know Helen. She says you're a superb ambassador for this project and says thank you, which I'm sure everybody else would. Thank you. Helen has been part of the

project as well, I think yes, she says a team of four of us, five of us. We Vinod, Helena myself, Mark McWilliams and Karina Brickell. We've all done Helen and Vinod did their headache compaign masters up at the University of Edinburgh. I did mine in Copenhagen. Mark did his in Cardiff. Karina is studying at the moment, but she's got a daughter that was an osteopath trained to be a B. So A B so and had cluster headaches. So she comes from very often that point of failure, very knowledgeable. And we so the four of us together, or five of us together have bought lots of things to the table. But we have one we're all for one reason is that we were all experienced osteopaths all with the same questions. Why does these patients respond? Well, why did these patients don't? Why don't they respond as well or at all? Should I be sending them somewhere else? Oh, am I missing something that I should be worried about? They're all the same questions. And I just finished with just that this project could not have happened without the collaboration of ankle and UK? No, of course no, because it was they've been huge support for us and the O F have funded it. So osteopathic, which is wonderful. It's quite massive collaboration. One very, I had one guestion still in hand. There's one guick one from your Catarina, who asks which magnesium is good. Is it magnesium citrate? That's the one that seems to be come up tops. Right. And my question was, I ought to know, but I can't remember what we're allowed to say about osteopathic or chiropractic treatment of headaches in our advertising. It's probably something along the lines of some headaches will respond to some types of headache or respond to treatment, do you think we'll be able to convince the ASE that we can be more specific in our marketing from now on about? I think marketing, I mean, informing patients through our websites and other means about what we can treat. It's very the stuff at the moment is very vague. And the fact is, it's very vague, because there's no definitive science. So they we can persuade the abs to change anything, if we get some robust research. We don't have to persuade them. But it's our job, you know, to where we have that sort of robustness as a result of this project. You think, Well, I think this was this, this was the beginning. We get the knowledge out there. So people were doing best for the patients. And then for the people that practice osteopath, chiropractors and physios out there that want to collaborate. You know, we're all probably multi centred. So everybody's got to if we're going to do any research is going to have to be that sort of format, but everybody needs to have be speaking the same language. So if we're all going to do multicenter trial on Tension type headaches, then everybody in those centres need to know what the diagnostic criteria for tension is.

In fact, we're sorry I'm so I'm going to have to stop you there. Sorry. Thank you so much for coming. Thanks to you and Helena. And Vinod, enter Corinne for all you're doing at OPHM. It's a great project. Please get involved. And Justin will put up the the details again, the email address on the screen while I'm talking. Thank you, Justin. And get involved if you're an osteopath you can do that, chiropractors, you've got a few months to wait but get involved in this because this is so important in the credibility of our professions. Anyway, I hope you've enjoyed today's show, I know I have and I'm sure we'll be hearing more from Liz and the team in years or months to come. But that's it for now.

Sign up, sign up by the deadline. I've managed to push till midday tomorrow. But if you can do it today, that would be great. Thank all the details on the screen. So sign up as quickly as you possibly can. And I'll look forward to hearing what the results are. Thanks. Thank you for having me Today.