Programme 9: Relieving Pain: TENS and Acupuncture

How acupuncture and TENS can help relieve pain, plus, a new web service aiming to educate health professionals about pain.

We take a look at the role of the pain specialist nurse in the community, eavesdropping on two consultations given by Kathryn Nur at her nurse-led clinic at Tenby Cottage Hospital, Pembrokeshire. We hear how Kath helps her patients, learning about what TENS machines are, how to use them and how they can help those in pain, how acupuncture can also help, and the importance of listening to what the patient has to say.

On the contentious issue of how little training medical students receive on pain matters – fewer hours than vets – Ann Taylor from the faculty of pain medicine at Cardiff University talks about a web service that may go some way towards redressing the imbalance.

Paul Evans: Hello and welcome to ***Airing Pain***, a programme brought to you by Pain Concern, a UK charity that provides information and support for those of us who live with pain. Pain Concern was awarded first prize in the 2009 NAPP Awards in Chronic Pain and, with additional funding from The Big Lottery Fund's Awards For All Program and the Voluntary Action Fund Community Chest, this has enabled us to make these programmes.

I'm Paul Evans and in today's programme I'll be looking at an alternative therapy that's become more widely available in the health service.

Richard: I'll be honest with you. I don't know whether there is any scientific worth in it or whether it's a placebo effect, but I don't care because it works for me. It's as simple as that.

Evans: And I'll be looking at how a new website should help health professionals become more conversant with chronic pain-related issues.

Ann Taylor: The British Pain Society has recently done a survey and it shows that, in fact, vets get more education than health care professionals.

Evans: And I'll be looking at the role of the pain specialist nurse in the community.

Kathryn Nur: The treatments that I tend to offer in my area of being a nurse specialist is that I do acupuncture, which involves manual acupuncture or electro-acupuncture. I also do

trigger-point injections to muscles, such as trapezius muscles, using steroids and local anaesthetics. I show them how to use things like TENS machines and then other things are relaxation techniques, management advice about medication, the problems that they might be having with other sleep issues, things like that.

Evans: Kathryn Nur is a specialist nurse in Pembrokeshire, West Wales. She works with people in chronic pain. I joined her at her nurse-led clinic in Tenby Community Hospital.

Nur: We're doing some treatment with this gentleman called electro-acupuncture, where we apply electrical current to pairs of needles. The idea behind that is that with long-term acupuncture treatment, what you want is to try and extend the benefit as long as you can, obviously, between each treatment. The evidence suggests that slightly more stimulation produces a longer benefit, so we use electrical current to incite a deeper stimulation effect.

So that's what we're going to do this morning. We obviously target the area where this gentleman's got pain. There are some recognised acupuncture points, which overlie the area, which we use, but we also use a Western approach, which is trigger point needling, which is often over the myofascial points, so we tend to use a combined approach. We use some traditional Chinese points and some Western points, which are the trigger points.

How long have you been coming in now, Richard? It's a quite a while, isn't it? About a few years now.

Richard: A few years with you. I started off with Dr Evans. The first treatment I had with my GP and I told her if I thought it would work, I would tell her and if it didn't, I would also tell her. I've lost count of how many pins and needles she's stuck in me and God knows what else. And I went away from there thinking, 'Well, that ain't much.' The following morning – I didn't even connect it because it had just gone from my mind because it didn't do anything the day before – the following morning, I woke up, and I can honestly say it was the first morning for, however many years it was, since 1993 that I didn't wake up in the morning, thinking, 'Oh, I've got to sit up in bed, and this is going to kill me.' And it wasn't until later in the day that I was feeling better and I thought to myself about the day before and it was good. She gave me an intensive course for a few weeks and I used to go back to her about once a month. Just for top up.

Evans: And where is your pain?

Richard: It's sort of a back pain-ish. I'd describe it like a toothache pain: you know where it is, but you actually can't put your finger on it, you know? It's one of those. And it would move about and it would be here, there and all over the place. Because I had my sternum removed, problem with that being is, of course, bits and pieces move in entirely different directions than nature intended. And the other thing, of course, is with no sternum, my clavicles – that's a good word, isn't it?

Nur: Yeah.

Richard: Laying on my side sometimes they cross over in the night. That's not too bad, but when you sit up, it's when they uncross. It's like someone just hit you in the chest with a sledgehammer. Literally.

Evans: And for those of us who didn't know, the sternum is the breastbone that joins the ribs and the chest and the clavicles are the collarbones.

Nur: Ready to switch on?

Richard: Yep.

Nur: Also, I'll need to prepare your lower arm first, Richard, okay. Let me know when we hit the spot.

Richard: Yeah, got one there.

Nur: Happy with that? That's okay?

Richard: Yeah.

Nur: What the electrical stimulant is doing its causing sort of a noxious stimulant almost. When we do manual acupuncture, some acupuncturists just put the needles in and leave them and some would say, 'That's enough stimulation [now] that the needle's in place.' When I did my training we would sort of manually rotate the needle. We'd give them manual stimulation, which is what a lot of acupuncturists do. But we find in our pain clinic, over the years, that by applying electrical current, it seems to last longer between each one rather than with the manual way. You get a few days where it's better and, again, there isn't a lot of scientific evidence to support one way or the other. I think a lot of it is cultural norms and what certain pain clinics have developed, but it seems to work for our client group reasonably well.

Richard: I'll be honest with you. I don't know whether there is any scientific worth in it or whether it's a placebo effect, but I don't care because it works for me. It's as simple as that.

Nur: It's very small, so the machine's quite portable, so it can go with me to the various outreach clinics, to people's homes, if necessary. There isn't any evidence to say it's got to be a sterile procedure. In fact, traditional acupuncturists would shy away from a lot of the over-medicalization of it, really. I mean, certainly, we haven't resorted to wearing gloves or anything like that. We still very much use the techniques of almost passing on our energy to patients by actually manually, physically touching the needle and hopefully transferring our good energy, our good qi, to get rid of your bad qi.

Richard: It's like anything that's got some sort of mysticism about it. There's a lot of charlatans out there which will jump on the bandwagon, pretend all sorts and then they make up more mumbo jumbo, so then a cynic like me dismisses the whole lot. It's a shame, really, because as I say, for me it works. I wish I had tried it years ago, but then, it wasn't suggested to me years ago. It does annoy me that there's not more open discussion about it within the National Health Service and those people affected by it, because this lady does a brilliant service. It would be nice to think she had a bit more assistance, so you could get more times, you know? I can't praise her enough, because she's squeezed me in sometimes when she's had a full day. So I'm grateful.

Nur: Oh, you're going to start me off now.

Richard: It's alright. She's a good girl.

Evans: I'm sorry to say that Kath's patient Richard passed away shortly after we met and I'm very grateful to his family for allowing us to broadcast this, particularly in that what he says next should be a real wake up call to some health professionals. Let us know at Pain Concern what you think:

Richard: I got a bit annoyed. I went to a pain clinic eventually in Cardiff and she put me onto somebody who was in some sort of pain organization. I spoke to this person and I was a bit annoyed because she really didn't have any perception of what I was talking about. She wrote me a letter – she didn't actually tell me to my face – she wrote me a letter which said there was nothing else she could do because I had tried some of her options and they were absolutely useless.

You see, with one of the things she gave me I was probably conscious for about three hours a day and it was spurts, you know? Which doesn't work. It doesn't hurt, but what's the point of that? I might as well be dead if I'm going to do with something like that [**Nur:** Nope. No quality of life.]. Yeah, nothing.

And then she said I was letting the pain run my life. The problem that she didn't seem to grasp was it's because I didn't let it run my life, overdoing things made it worse. That was the problem. She could not get that. I'm not knocking on the Health Service completely and all the rest, but some doctors, they're sort of in a world of their own. Well, they don't see people, they see patients, they see cases, numbers, that's it, you know.

As far as this bypass business, I'm a success, because I've survived three years – 'survived' being the word. There's a lot of difference between surviving and living. A lot of people in the medical profession... it's the old thing isn't it? Never mind the quality, feel the width.

Nur: I think going back to what you were saying, we were talking earlier about perhaps people don't always listen to what you're saying. They're making, sort of, judgments about your condition or your pain description rather than actually listening to what the pain's doing to your life. Is that what you were saying?

Richard: That's it, really.

Ann Taylor: The British Pain Society has recently done a survey and it shows that, in fact, vets get more education than health care professionals.

Evans: Quite frankly, I find that a shocking statistic. Ann Taylor, of the Welsh Pain Society and Faculty of Pain Medicine at Cardiff University:

Taylor: The amount of education that health care professionals get is not standardised. It's not obligatory that they have pain education within their undergraduate curriculum and so the British Pain Society's now got a working group looking at guidelines for undergraduate curriculum pain activity, generic pain training with what should be achieved by the time the person qualifies in their pain knowledge. It's ridiculous when you think that fifty per cent of people visit their GP because of a pain problem and yet pain is so low in terms of educational activity that goes on. I mean, obviously, now there's the Faculty of Pain Medicine, which is helping to support and educate anaesthetists to manage pain appropriately, but there isn't that kind of theme inherent in the undergraduate curriculum throughout the UK.

Evans: Addressing some of those issues, Ann Taylor was the main author and facilitator of the chronic pain directives in Wales, part of which concluded that all health care professionals should have access to e-learning about pain education. So she, with the Faculty of Pain Medicine at Cardiff University, has developed paincommunitycentre.org, an online learning facility for healthcare professionals.

Taylor: It is a community for people to share information, for pain education and training, to look at where certain events are that are local to them, so they can make a decision about whether they suit their educational needs. So it's a very important resource for helping to support people who don't want to do formal courses and people who have done formal courses and would like to update in their areas of interest and expertise.

Most of the media has been developed from the MSc in Pain Management at Cardiff, so it is at quite an advanced level. There isn't that much that's suitable for patients and carers, so now in 2011, we'll be working with key organisations, to actually get courses on the site that are more bespoke to the needs of patients and carers. We're following something along the lines of some Open University courses: that if you're diabetic, how do you use your insulin pen? How do you measure your blood glucose? Which gives quite pertinent, important messages and we thought we'd look at maybe that kind of approach: how do you manage your GP? How do you interact with your healthcare professionals? Basic physiology to help you understand why your back's hurting; how to reinforce your goal-setting and pacing messages. So some of those kind of things we're hoping to host on the website eventually. We're open to ideas because it is a community and we have got email addresses if people want to suggest things that they would like to see on the community site.

Richard: I tend to find that some doctors that have problems in their own life, whatever they may be – whether they be mental, financial, physical, whatever – tend to be better listeners, better understanders. They've experienced life, probably, and there're a lot of doctors that really think they're one above God, you know? Because they've had a privileged start and all the rest of it and they've just managed to go through life being on that plane up there which is not quite the same as the vast majority.

Evans: So here's your chance now to talk to an imaginary group of young doctors, young medical professionals in training. Here's your chance to tell them. How should they talk to you? How should they deal with you?

Richard: First of all, don't talk down to me. That's the most important thing. Don't talk to me as if I'm an imbecile, just because I don't necessarily know some of the long words. If I ask a

question, it's not because I want you to lie to me. It's not because I want you to tell me I don't need to know. It's because I want to know. The more I understand about anything that I do, whether it's function in my life or something I want to achieve, the better I can cope with it if it's not right. Just talk to us like people. First of all, find out what the patient wants from you, I suppose, really, isn't it?

Nur: People do find it very difficult. Even ourselves, if we go and see our GP, we're not quite sure how to find the words to explain. I think it's sometimes – it's not maybe the words, the descriptors – I think it's more important to know how that pain's actually affecting you, what it's actually doing to you as a person. I think that gives you a better insight. As health professionals, we appreciate that pain is miserable and although we understand that, we're not feeling that pain for that patient, so it's important more to explain to the health professional the impact that that pain's having. That probably is more important in terms of your management of it than actual the severity of the pain, because severity of the pain is... it's very difficult to put a number on it sometimes. People do find that quite difficult because we're are very focused on assessing people by numbers and percentages; people do find that quite hard, because that doesn't always reflect on the amount of distress or difficulties they're having in dealing with everyday things, so I think just try and encourage people to talk about how it's affecting them.

Taylor: You need to understand why people have got pain, even if it's a very basic understanding. You need to know that very few people who suffer pain fit into a standardised patient group, that chronic pain is a multi-faceted phenomena that needs to be managed appropriately using a whole range of different approaches.

I've done some focus group work with GPs, with people working in the healthcare arena who are not pain specialists and they want short, time-delineated, clear educational activities that meet their needs. What we've done in Pain Community Centre is we've tried to keep all educational activities very short. You can actually go on the site and say, 'I've only got five minutes. Show me all the activities that only take five minutes.' And you get a list of educational activities for five minutes. We've actually geared them so they have got very pertinent take-home messages by key people who are practitioners throughout the UK in the hope that because it's short, because it's very pertinent, because they're key individuals that are providing the learning, the uptake will be good. So, we're hoping that it will have a big impact into the improvement in education, which will only benefit, hopefully, patients' lives.

Evans: Ann Taylor, of the Faculty of Pain Medicine at Cardiff University. That website, once again, is paincommunitycentre.org. There's no gaps in that: paincommunitycentre.org.

You're listening to ***Airing Pain***. And one of our aims is to get answers to questions you've raised with us. Here's one: 'I find TENS machines moderately effective, but have major problems getting the electrodes to stick all day, particularly if I'm also using heat. Does anyone have any ideas?' Well, keep listening – our next consultation at Tenby Community Hospital answers many questions about TENS machines.

Nur: I'm Kath, and obviously we've got you here this morning to show you how to use our TENS machine. Do you feel comfortable just sort of telling me about how your pain started? I know, obviously, you've already gone over this with the doctors, but if you don't mind just going over...

Patient 2: How it started?

Nur: I'm sure it'll be helpful to other people, if you feel confident speaking now.

Patient 2: I don't know what caused it. Probably just life, isn't it? It just went like that, and that's it.

Nur: Hmm. How long ago was this?

Patient 2: Oh, I was, must have been... well, I'm 50 now, must have been about 21 when it started. And I've always been on pills for it, but it just got worse and worse as I was getting older. Just getting more intense, sort of thing. And then I had the operation then.

Nur: You've had surgery on your back?

Patient 2: Yeah, I did a spinal fusion.

Nur: How long ago was that?

Patient 2: That was four years ago.

Nur: Right.

Patient 2: And it just didn't make a difference.

Nur: No. You still had back pain.

Patient 2: Yeah.

Nur: So what else have you tried? Have you had injections?

Patient 2: I've had, yeah, injections.

Nur: Acupuncture?

Patient 2: Acupuncture, yeah.

Nur: That didn't help either?

Patient 2: Nothing.

Nur: Nothing's done.

Patient 2: Nothing at all.

Nur: And medication? Are you having to take that regularly, your medication?

Patient 2: Every day. I'm constantly on tablets every day. Sometimes I think to myself, 'Should I try just one day without taking them?' And I just can't. It's impossible.

Nur: No, no. So what do you say is the biggest part of being in constant pain, in terms of your... how has it affected you as a person and your family life?

Patient 2: Oh, it's affected my whole life! I don't do a lot anymore. My husband does everything. He does the cooking, the cleaning. He does everything, you know? He helps me when I want to get dressed and if I'm having a really bad day. You think you'll get used to it, but you just don't. You don't get used to it. You think one day possibly this is going to stop. This is going to end. But you've got to get used to it. That's it.

Nur: I think probably there's more, I suppose, making adaptations, isn't it? Trying to find other ways of coping with it.

Patient 2: Coping with it, yeah. That's why you have got to try things like this sort of thing, because like I'm saying, if you're out of pain – cause I don't know what it's like to be out of pain now – if you're just out of pain that little bit, oh, it would be a big thing.

Nur: If you could have a goal or an aim, is there anything that you'd wish you could do better or more of?

Patient 2: I wish I could just clean up. That would be something! Just to go around with the hoover and things, you know? Like, I do try. Sometimes I try and then I've got to give it to him and he finishes it. You're just living on pain. That's it. That's the only way I can describe it.

Nur: So when you met the doctor, did you discuss any other things, apart from – obviously the TENS machine was something you haven't tried and you thought it was worth a try – but did he talk about longer-term strategies or management or anything?

Patient 2: I think I've tried everything. I don't think there's much else I can try.

Nur: He didn't mention to you about a pain management program or anything like that? No? Okay. I think in the longer term, from what you're telling me about the impact it's having on your life, there might be ways of trying to help you manage the pain better by looking at how it's affecting you and some of the things that we can try and get you to work with. There's a whole program called a pain management program, where you would come along and be in a group setting and again, not everyone feels comfortable with that.

Patient 2: Oh, no, I'm not that type of person, to tell you the truth.

Nur: Yeah, but usually people have similar problems. Anyway, I'm not going to go on, but I just want to put that seed in your mind to start thinking about. You saying you've tried everything, but that might be a point at which you think, 'Well, I have to look maybe beyond getting completely rid of my pain, but actually accepting that I have got pain.' I know it's hard for anyone to say that. But there comes a point at which we have to think, 'Well, we can just give in and say that's it.' But I'm sure you don't want to do that because you've said you want to be able to do things. You have got goals that you want to try and achieve and it may be only that small goal that helps you then move on and feel a bit better about things.

Patient 2: Yeah. Because I was always active all the time, like after six children, you're on the go all the time. When I was in my late 20s and 30s, I used to go to aerobics and things like that, and I used to – because of my back – do it as a just walking sort of thing, not jumping sort of thing, but just walking it. It would just be lovely, but now I feel like I can't do anything. It's just taken over my life, I can honestly say.

Evans: My thanks to Kath Nur's patient for being so open about her pain condition. Sitting in on the consultations and hearing how relationships are being built between her and the patients reinforces the words of caution we give in every edition of ***Airing Pain***. And that is that whilst we believe the information and opinions are accurate and sound and based on the best judgments available, you should always consult your health professional on any matter relating to your health and wellbeing. He or she is the only person who knows you and your circumstances and, therefore, the appropriate action to take on your behalf.

Nur: So what we're going to do today is... the machine I'm going to show you how to use is called a 'TENS machine'. It's an abbreviation for transcutaneous electrical nerve stimulation. Long word, so it's abbreviated down to TENS. And basically what it is, is a little machine that runs from batteries that emits an electrical signal along wires, which are then attached to little sticky pads called 'electrodes' that stick to you. The idea is that by applying these pads on or around the area where you've got pain, you create a sort of stimulation that your brain, if you will, interprets as an irritation. It's very much linked to the theory of... this gate control theory, which is the way that we think pain is transmitted through the body along the nervous mechanisms. It was sort of discovered back in the 60s. Some scientists did some work, and they came up with the idea that applying electrical current might create almost an artificial stimulation, [so] that the brain thinks there's something going on and responds to it by releasing pain-relieving substances and also closing off this 'gating' mechanism.

So for some people it seems to work. Other people it doesn't. Everyone's quite different how they use TENS. Some people would say that they probably use it most days, that it's become part of their everyday pain management strategy. Other people found that they tend to use it for those really bad episodes, which probably you have these flare up days when the pain goes up a notch. Some people will say 'Well, actually, that's when I tend to use it.'

Patient 2: My pain's all the time. It doesn't go up or down, it's just constant.

Nur: Right. Okay, so it might be something that you want to use more or less every day. And is there a particular time of day that you feel is worse?

Patient 2: Mornings, mostly. When the tablet have worn off overnight and then when I try to get up in the morning. It's pretty bad then.

Nur: So you're finding that it's getting going in the morning and that's when...

Patient 2: Yeah, and all through the night. I'm twisting and turning and pain all night.

Nur: Okay, so mornings are the worst for you. But you don't sleep very well at night.

Patient 2: No.

Nur: Unfortunately, we tend to not recommend that you use the TENS machine through the night. The reason being is that because of the way it works, that you're not really in control of the mechanisms on the controls. What also happens is the electrode, the little sticky pad that you put on your skin, seems to peel off more in the night. They stick to bed covers. They start curling up, so it makes it a little bit more messy. It's probably safer to not use it in the night time. Also we do suggest that if you're going to have a break from using it, you need to have 8 hours within a 24 hour period, so night time's a good time not to have it connected on, really.

We have to be realistic. You know that it's not going to completely eradicate your pain. I think it's useful as an additional treatment maybe – you know, you mentioned early that you take painkillers. It's quite useful as an additional add on we call an 'adjunct treatment', as opposed to being a total – that's all you have and there's nothing else. And other ways of help, you know, other ways in coping – it might be that it enables you to do things a little bit more that you've not been able to do as comfortably – you feel better in yourself, you being a bit more active, you're feeling a bit more on top of things... So it's this sort of twofold buy-off from it, really. You can control the settings on it, so it's giving you back some of the control over your pain that perhaps you feel you haven't really got at the moment.

Patient 2: None at all.

Nur: None at all. Right, so we're going to get started now. To start with, we would suggest you use what we call using a direct approach, where you actually apply the pads on the area where you're actually feeling the sensation of pain. It's all across your back I'm assuming.

Patient 2: Yeah, it is.

Nur: So we put one pad there, and then the next one we can put either horizontally or vertically connected to it or even diagonally, it doesn't matter, because what happens is the area between the pads and underneath is the area that we're going to target.

Patient 2: Do they have to be so much apart or anything?

Nur: No, they can be slightly nearer. You can have them within, I'd say, half an inch. If they touch each other, they do tend to pick up the negative and the positive signals and it gets a

bit confused. So at least half an inch, maximum sort of six inches. What we're going to do now is we're going to switch the actual machine on for you. You won't feel any sharp thing. Don't worry.

Patient 2: That's just what I was just waiting for.

Nur: It's just to reassure you. I know, everyone's waiting, tensing up there. And we'll do it very slowly, so that the pulsing sensation will come in quite slowly and gradually. What I want you to do is to let me know, as soon as you feel something that's not normally there, some kind of impulsing, heartbeat, pulsing sensation, whatever you want to describe it, let me know.

Patient 2: Yes, there.

Nur: Is it irritating, do you think?

Patient 2: No, not really.

Nur: Okay. The main thing is, for people, sometimes they have this preconception that if they turn it on really high and there's really strong pulsing coming out, that it's actually going to make a difference, that they're actually going to control the pain better. There isn't really any evidence to support that. There are some sort of what we call 'prescriptions', that certain types of pain seem to respond slightly better to different levels of the frequency settings, but because often pain is very, very... there's often some neuropathic element to it, some nociceptive element, most people who've got chronic pain tend to prefer to find their own level, if you will. The good thing with TENS, as I said, is that you're in control of it. You can use it whenever you want. There doesn't seem to be any evidence of overdosing, of having a bit too much of it. It's not going to do you any harm. Is that all right?

Patient 2: Yeah, that's fine. Thank you.

Evans: Now, TENS machines vary from model to model so we won't confuse you by going into all the various settings. But do make sure that your health professional explains the model he or she recommends thoroughly. My thanks to Kath Nur, Specialist Pain Nurse in Pembrokeshire and her patients for letting me sit in on their consultations.

And that's the end of today's edition of ***Airing Pain***. If you or someone you know has benefitted from these programs and would like them to continue, then please consider making a donation to secure ***Airing Pain***'s future. Just go to the website at

painconcern.org.uk where you'll find a Make Donation button at the bottom of the page. You can also download all the past editions from there, and if you'd like to put a question to our panel of experts or just make a comment about the program, then please do via our blog, message board, email, Facebook, Twitter, or pen and paper.

I'll leave you with Richard, whose contribution to this program has been invaluable. Thank you.

Richard: I've still got my sense of humour. I've always had a sense of humour. Very warped sense of humour sometimes, but I've always had a sense of humour. There's no point in being miserable about what you've got. You can be miserable inside, but you don't necessarily have to pass it on to everybody else, if you can possibly help it.

Contributors

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