

INTERVIEWS WITH WORLD-LEADING EXPERTS



EASING INTO MOVEMENT AND MINDFULNESS

SHIRLEY KESSEL EXECUTIVE DIRECTOR MILES FOR MIGRAINE



Introduction (00:05): These endorphins will interact with the receptors in the brain that reduce your perception of pain. Endorphins also trigger a positive feeling in the body similar to that of morphine. So regular exercise can reduce stress, ward off anxiety and feelings of depression, boost self-esteem, improve sleep, strengthen your heart, all things that are really necessary to people who [have] a long-term chronic illness, such as migraine or other headache disorders.

Lisa Horwitz (00:34): Exercise can improve our bodies and our mental state. However, it can also trigger pain or a migraine attack. How can people living in chronic pain incorporate movement into their lives? What is the best approach to moving your body when movement causes discomfort? Shirley Kessel from Miles for Migraine encourages patients to incorporate movement into their care routines, and is here to guide us through the benefits and obstacles of moving with migraine. Shirley, welcome back to the Migraine World Summit.

Shirley Kessel (01:05): Hi, Lisa. Thanks for having me.

Lisa Horwitz (01:07): So, this is a huge topic, but we're going to try to cover as much as we can. What are the benefits of exercise for people with migraine?

Shirley Kessel (01:18): Well, first of all, I want to say that exercise may not be the best term to use for people if you want to encourage them to start moving their bodies. I prefer to actually use the word "movement" because exercise denotes heart pounding and sweatiness, which can also lead to more head pounding. Also, some people really can't move very much at all. And so, whether you are calling it exercise or movement, the suggestions that I will be talking about today may not be appropriate for certain people.

Shirley Kessel (01:49): But let's talk about the benefits first. Starting with the short-term benefits, which include the release of certain neurotransmitters. These endorphins will interact with the receptors in the brain that reduce your perception of pain. Endorphins also trigger a positive feeling in the body similar to that of morphine. So regular exercise can reduce stress, ward off anxiety and feelings of depression, boost self-esteem, improve sleep, strengthen your heart, all things that are really necessary to people who [have] a long-term chronic illness such as migraine or other headache disorders.

Lisa Horwitz (02:27): OK. So, what you just said just kind of really blew my mind. You're saying that with regular body movement, our bodies actually produce endorphins that provide pain relief.

Shirley Kessel (02:41): That's right. That is what the research shows. And, that is why, for example, the Department of Health [and Human Services] will say: "This is why you need to exercise 150 minutes of moderate aerobic activity." But this is something that obviously we have to work toward and not start with.

Lisa Horwitz (03:01): Right. So, some of the short-term benefits of moving or exercise, can you highlight some of those?

Shirley Kessel (03:09): Right. So yes, the short-term benefits will be stress reduction; hopefully a reduction of anxiety and depression; boosting self-esteem; improving sleep; strengthening your heart; increasing energy levels; lowering blood pressure; improved muscle tone and strength; and even strengthening bones, which is for women, very important. And a reduction of body fat, if that's something that you're looking to do.



Lisa Horwitz (03:39): So if those are just the short-term benefits, are there any additional long-term benefits to having a weekly, monthly, yearly movement regimen?

Shirley Kessel (03:50): Yes, well, regular exercise has been shown to counter the shrinking of the hippocampus, which is part of the brain, and that's where memory impairment can happen — which can occur later in life. Disorders of the hippocampus include reduced memory, stress, aging such as dementia — something that we're all thinking about — and also in depression. So of course we want to keep the brain in good health and movement can help with this.

Lisa Horwitz (04:19): That sounds really important, especially so many times as people with migraine we can have memory difficulties during an attack. So that seems really interesting to me that just moving more can help our brains in an attack and outside of an attack. Do you think that movement makes us more resilient in our bodies?

Shirley Kessel (04:41): Well, yes, the literature has clearly demonstrated that aerobic fitness is one of the best indicators of resilience. For example, we know that anxiety and depression are comorbid with migraine; and physical activity reorganizes the brain so that its response to stress is reduced and anxiety is less likely to interfere with normal brain function.

Lisa Horwitz (05:06): It's almost like the movement is helping us to rewire our brains in some ways.

Shirley Kessel (05:11): Mm-hmm.

Lisa Horwitz (05:12): So, people are sitting at home, maybe in the dark, maybe looking for pain relief. How frequently do people need to exercise, or move, in order to reap some of the benefits we just discussed?

Shirley Kessel (05:29): Yes, this is a question that always irks me. Because again, if you look to the science, the Department of Health and Human Services — which is sort of that global body that will tell us what we need to do — is suggesting 150 minutes of moderate aerobic activity, or 75 minutes of vigorous aerobic activity a week. And that's not maybe doable for people like us. I have chronic migraine, and I don't always get in 150 minutes of moderate activity a week. But a combination of moderate and vigorous can be helpful. If you look at 150 minutes, it breaks down into about 20 minutes per day, which is possible for some people with migraine. Just as a side note that, this is a lot, again, for someone just starting. So it's probably better when you're just getting started to really start with five to 10 minutes a day. And know that pain may get worse at first, but chances are that pain may recede with continued movement.

Lisa Horwitz (06:37): Can you break up the exercise or movement within chunks throughout the day? So maybe two minutes in the morning, four minutes in the afternoon. Is that still providing relief or do people need to try to focus into one block-time of movement?

Shirley Kessel (06:54): I don't know what the science would say about that, but I will say this: Not only *can* you do it, but you probably *should* do this. I think it's vital to avoid an increase in attacks. So, I often pause for just five minutes at my desk and practice some chair yoga, which I find helpful to my mind and body. And I can tell you from my own experience, which — N of 1 — is just that I am constantly practicing movement throughout the day. Yes, do I get in 30 minutes? Most days I do. So, I don't know what the science would say about doing it in a couple



of minutes at a time — but for migraine specifically — but there is science to show that taking the stairs, parking your car further away is beneficial.

Lisa Horwitz (07:42): Yeah. And I think just from experience, I know we both are big advocates of body movement and I know that for myself, the more I am able to move throughout the day in small chunks, the better I do feel. So, for what it's worth to you out there: It does help. So, we know for a lot of people, exercise can cause an attack. Do you think these people would still benefit from movement, or should some people just avoid movement altogether?

Shirley Kessel (08:14): Right. Well, we've already determined that some kind of movement is really helpful for overall good health. It's important though, to listen to your body, and figure out what will work with your lifestyle, and help you develop a habit of coming back to something you can accomplish and even enjoy.

Lisa Horwitz (08:31): How would you guide people to make their own decision about the intensity of movement or the type of movement they should take part in?

Shirley Kessel (08:42): Well, there's no question that movement may not be beneficial for people who are triggered by any kind of movement. So that could increase symptoms such as dizziness, or nausea, or more headache. So the best thing someone like that should really be considering is — to increase their movement — is to work with a physical therapist.

Lisa Horwitz (09:06): So, for people who experience chronic pain, exercise or even moving in any way can seem impossible. Studies have shown that mindfulness can prove an entryway into movement. But I know a lot of people are saying, what is mindfulness? Can you tell us a little bit about that?

Shirley Kessel (09:30): Absolutely. And this is where I think that people who are experiencing chronic migraine or any kind of chronic illness really can use mindfulness to your advantage. So, let's start with the definition of what mindfulness is: It's simply bringing awareness to the present moment without judgment. But it's the "without judgment" piece that often gets people stuck. So our minds are programmed to criticize and judge whatever we see, hear, and feel. And so just to give you a quote from Thich Nhat Hanh, he says: "Awareness is like the sun. When it shines on things, they are transformed." So, paying attention to where your mind goes when you hear the word "exercise" is a moment of being mindful. If you add in the body response to this, that's even better. So, notice when you hear the word exercise: Does that trigger any type of thought, negative or positive? That's being mindful.

Lisa Horwitz (10:34): I imagine there's a lot of people out there who do hear that word and they're in chronic pain, and they're in a dark room, and they're thinking, "I don't want to be present in this moment of pain." So it's interesting to think that by naming it, you can kind of tame it in a way. Do you think that's on the right track?

Shirley Kessel (10:57): I think that is probably the hardest part of working with mindfulness for someone who's in chronic pain. And so really what mindfulness tells us, or suggests to us, is that you have to acknowledge, you have to turn toward the feelings of chronic pain. Because not only is it physical, but it's also an emotional piece. And it's the emotional piece that can often get us hung up in living with chronic pain. And so, there are so many ways, though, now to work with that. There's a lot of experts out there that are helping people work with the acceptance —



maybe acceptance is too hard of a word — but perhaps for you it's: acknowledge. And that is what mindfulness does and that's what it is.

Lisa Horwitz (11:47): What would you say are the biggest benefits of mindfulness?

Shirley Kessel (11:51): Well, it's different for everyone. But overall, when we pay attention to something happening, we learn to respond rather than react. So, in the case of migraine and headache, we can learn to stay with pain and work with it rather than hold our breath, clench the body, or make the physical symptoms even worse by reacting. And dare I say, catastrophizing, which some experts may say sounds like judgment, and may increase stigma, but I want to use this word as it applies to the thinking mind. Which is really what takes us away from the present moment of, "Oh, this is pain, this is hard, I feel nauseated." And then we are no longer working with what's here now — which is, there's real physical sensations that we have in our body. Because as we add on the extra layer of the thinking mind, this layer produces anxiety and fear from the physical sensations, and now we're going down a rabbit hole of unhelpful thoughts. So working with mindfulness can allow us the opportunity to become curious and decide how to respond versus react. So maybe the response is, "Oh, I need to take meds," "I need to lie down," or "I need to push through."

Lisa Horwitz (13:13): For people who are interested in starting this, how long does it generally take for people to feel results, or a shift, when practicing mindfulness? Weeks ... months ... years ... decades?

Shirley Kessel (13:29): That's a good question. I've been practicing for decades and I'm still learning. So — but overall, you can learn as quickly as you want to if you practice meditation or mindful movement, rather than have someone like me right now trying to explain it to your audience. It would be like me trying to explain how to play the piano; but as you know, you need a general foundation, then you need to practice, practice if you ever want to get into Carnegie Hall.

Lisa Horwitz (13:56): So, for people who are ready to start moving, but have no idea what type of exercise to get into, are there any types of exercise you recommend for beginners?

Shirley Kessel (14:07): I want to say that it's really important for everyone to begin with: What is the biggest obstacle to starting a movement routine? Movement may need to become — it needs to become a new habit. In this case, I will say mindful habit change is the key, and there is actually a program for that, too. But a new habit has to be achievable. So how do you do this? First, I like to say, "Start where you are." But starting where you are does not mean staying where you are. Begin by asking yourself: "What would feel good in my body in this moment?" It may change from day to day, and that's mindful awareness, and that's good. That's what we want.

Shirley Kessel (14:52): For example, if you want to try walking, ask yourself: "Where and how? Where should I do this and how will I accomplish this?" Do you even have the proper sneakers? That may be the first step to get the right equipment. Then: "Where will I go? Outside, a treadmill, at the gym?" These sound like obvious questions, but really they are necessary because you need to get somewhat granular to figure out how we want to move. And keep in mind, you need to pay attention to the breath. People with migraine and other headache disorders — we are constantly holding our breath more than we realize. Anxiety of a looming



attack makes us hold our breath, clench our bodies. Therefore, when we begin to move, make sure that you are also doing something where you can breathe.

Lisa Horwitz (15:42): I love this idea of getting granular and really thinking it out. Because I think so many times we kind of just run and leap into a new habit, and it seems unsustainable because we haven't thought about all the steps it takes us to get there.

Shirley Kessel (15:58): Mm-hmm.

Lisa Horwitz (15:59): I want to move on to yoga. Yoga is often recommended to people with migraine, but there are *many* varied styles of yoga to choose from. What styles do you recommend for people with headache disorders, or migraine specifically?

Shirley Kessel (16:18): Right. Yes, that's a good question. Let's start with, what is yoga? So, yoga is a series of bodily movements, which are called asanas, which ancient meditators actually used to calm the body before hours of sitting meditation. So yoga is really about stretching for these meditating yogis in ancient times. So, but the actual definition of the word "yoga" is about yoking, which is what yoga means — yoking the mind and body. This is the same as stretching though, really, right? But what makes yoga different is the breath. Yoga is yoking the mind and body, and the breath serves as a bridge to make this happen. Now that we [have] the definition — the type of yoga is really irrelevant as long as you are breathing.

Shirley Kessel (17:08): So the thing is, there are so many styles now, it's going to be hard to choose, but I suggest — I'm going to break it down like this: Let's start where you are and notice what kind of yoga practice may benefit you today based on how you're feeling. For example, if you're dealing with difficult emotions, yin yoga might be useful. When working with stress, a slow flow of movement that uses the whole body may be helpful. But if you are tired and stressed, then for example, yoga nidra — which is a kind of sleep yoga — is helpful. In fact, when veterans — this has been studied — who had PTSD used yoga nidra in the iRest tradition (which is a style of yoga), many reported it was the first time they had slept in months. So, beneficial for someone who really can't move very much at all. Hot yoga is good for increasing flexibility because the heat allows the muscles to relax and become more pliable. I did this practice in my younger years, but now I would never do it because my body's totally changed. And so now I mostly practice hatha yoga, which for most people means gentle movement.

Shirley Kessel (18:29): So basically what I'll say is, when you're beginning, choose something that will be attainable; that's really the most important thing. I think starting with gentle, or yoga nidra, or restorative yoga, because they require the least amount of movement and still allow you to practice ujjayi breathing, which is the most important aspect of yoga. And you can find ujjayi breathing on YouTube; everybody has a video for it. So again, starting where you are —which may mean simple, gentle movement — can lead to a practice of more movement over time.

Lisa Horwitz (19:03): I just want to put out there for people who heard all of that, it's — we used a lot of terms. I think the point is that you don't have to be super flexible. You don't have to be able to touch your toes. You just need to be able to sit and breathe and be willing to try to move your body along with what's going on in the class. Do you think that's a fair assessment?

Shirley Kessel (19:28): The breath is *the* most important part of yoga. That and the final practice of what we call Savasana, which is generally lying down or sitting still. It's really a meditation



practice that happens at the end of a movement practice. Those are the two most important aspects of yoga: It's not how much you're moving; it's how well you are breathing.

Lisa Horwitz (19:51): So it's almost like an extended form of meditation in some ways: You're focusing on the body and your breath in the moment.

Shirley Kessel (19:59): Exactly. And yoga is actually mindful movement; that's what it is. It's not meant to be an exercise, but it can be if that's what you want it to.

Lisa Horwitz (20:08): Yes, it can be both. I know I love yoga.

Shirley Kessel (20:10): Yes.

Lisa Horwitz (20:11): I personally have found the mindfulness portion of it so helpful in the treatment of my own migraine. So I highly recommend it to people who are out there, but I felt very intimidated at first. So, it is ... it can be hard to get started. Shirley, do you think that yoga helps with brain retraining? Does it rewire us in some ways to be less responsive to pain or better equipped to deal with it?

Shirley Kessel (20:42): Well actually, I kind of think it can for both. Yoga practice causes the release of a chemical called GABA [Gamma-aminobutyric acid], which is a neurochemical responsible for regulating nerve activity. Actually though, if you don't use the breath, then again, you are only stretching. And that's not yoga. But of course, there's nothing wrong with stretching. Just understand that this is not yoga. So make sure you understand how to practice ujjayi breath when — which is, again, a specific kind of breathing. So yes, so having the release of these neurochemicals, neurotransmitters — we know are very helpful for rewiring the brain. I just want to add that I went to the first — many years ago when I became a yoga therapist the very first meeting [was] researchers who got together [to present] the research on yoga and yoga therapy. It was amazing. They were from all over the world. And now the research has increased so dramatically how yoga can benefit people with migraine and other chronic illnesses.

Lisa Horwitz (21:51): Yes, I personally feel like sometimes it's like a hug for my nervous system.

Shirley Kessel (21:55): Mm-hmm.

Lisa Horwitz (21:56): It kind of can help slow everything down and just calm things in a way that other movement does not.

Shirley Kessel (22:03): That's lovely.

Lisa Horwitz (22:05): A viewer from the 2022 Summit named Janice asked us: What exercises are beneficial when your movements are limited with daily chronic migraine?

Shirley Kessel (22:15): I'm going to answer that by saying: It depends. And it's going to change from day to day and possibly moment to moment. So an acronym that I like to use that your listeners can also use when trying to decide what is needed now for them, based on how they're feeling. I like to use the acronym of CARE: And the C stands for check in; the A stands for allow or acknowledge; the R stands for respond; and the E stands for embody. So, when we check in to the present moment, you can ask yourself, "What's here now? What's my level of pain? I know I have pain and this is going to be hard for me." And then, when you notice the mind starts



chiming in — which it's going to do, that's what minds do — they wander into all the other possibilities of: "This is going to trigger an attack. I don't feel well, I can't do this."

Shirley Kessel (23:11): You learn to acknowledge that, "OK, this is what the mind is saying to me. I'm going to learn how to work with this. I'm going to respond." You respond by asking the question to yourself, "What's needed now? So, what can I really do despite how I'm feeling? What way can I respond to separating the physical sensations of pain?" Which, believe it or not, you can actually learn how to move with pain if you can begin to separate where the thinking mind is coming in and taking over. So, I like to say, "Pain is inevitable, but suffering is optional." And that is where the practice of responding comes in; that's where you learn how to work with being in a chronic state of physical pain, by separating out the thinking mind. And that's where the E comes in. This is where you learn how to embody the practice of mindfulness by using the CARE acronym as you embody mindfulness. This is really what's going to help you get into a regular movement practice.

Lisa Horwitz (24:23): I especially love the acknowledge part, because maybe you're acknowledging where your body is that day, and maybe that day your response is to rest. Maybe that day your response isn't to move, which may not be the answer our viewers are looking for. Everybody wants a great, easy solution, but sometimes the best solution is just rest — unfortunately. For people who are not ready to commit to daily movement, three times a week movement — if people do things sporadically, are there activities that are still beneficial, even if you can only do them twice a month?

Shirley Kessel (25:05): I would say in that case: You need to check in for yourself. Again, noticing, "How's that working for me?" If you think it's working for you and you can check in, you know, you can very easily check into the mind and body as you're doing that activity and saying: "How is this feeling for me right now? Is twice a month enough?" And it's going to be different for everyone. It's a hard question to answer. Of course, doing something is better than nothing. I think anyone can agree to that. But again, it's knowing yourself, and when you are embodying this practice of mindfulness, you'll be able to determine how much is enough for you.

Lisa Horwitz (25:44): And I think you'll be able to determine — it's interesting to be mindful before movement, during the movement and after, to really get a full picture of how that activity benefited or didn't benefit you on that day.

Shirley Kessel (26:00): Exactly. And I think you can even notice that in the practice of meditation — you don't have to move to notice how you feel before meditation. What is the mind saying to you? How's the body feeling? And then checking in afterwards. You can usually come up with one word — it's very helpful just to — and it could be negative. That's OK, that's part of the allowing process: Whatever's happening, we're going to be with it.

Lisa Horwitz (26:28): I love that. I love that you bring up: It can be negative. Because I think a lot of people who start meditation or hear about meditation think: "I have to have a clear mind and no thoughts, at all. My mind's supposed to be blank, and I'm not allowed to have negative thoughts." But that's not the case at all, right? It's normal for your mind to move in and out of thoughts while you're in the practice. Is that correct?

Shirley Kessel (26:53): Yeah. If the mind wasn't moving in and out of thoughts, I'd be worrying, so Yeah, so meditation really teaches us, again, using the CARE acronym, it teaches us to



check in, allow those thoughts to be present. Respond — there's a very specific way, very many different ways you can respond in meditation to your own practice — and then you embody this practice of mindfulness; and that's how you're going to transition that practice over to your movement practice.

Lisa Horwitz (27:20): So, for those of you out there who are skeptical: Meditation does not equal happiness and thoughtlessness.

Shirley Kessel (27:28): Not at all. And it can actually — I've been on silent retreats for five days at a time where you don't talk. And it can bring up a lot of unhappy and negative feelings, but you learn to work with it.

Lisa Horwitz (27:44): Yes. It's not all "sunshine and lollipops," which is often something we don't want to feel pressured to feel when we're in such a bad physical state. I think it can be offputting to think, "Well, I have to be positive now," when you just don't feel that way. What resources do you recommend for people looking to start moving?

Shirley Kessel (28:07): The one resource that I would suggest everyone look into — it does not start with movement. Because if you are someone who is having trouble with movement, which we all are on very many days, I would say start with mindfulness-based stress reduction. That program includes mindful movement in the program itself. And if you are interested in starting in a mindful way, moving into a movement program, I highly recommend MBSR (mindfulness-based stress reduction), which can be found on your webpage, I understand, below the interview.

Lisa Horwitz (28:45): So where can we learn more about the work you're doing or follow your work?

Shirley Kessel (28:50): I'm the executive director of Miles for Migraine. So, if you go to our website, milesformigraine.org, you can see that we offer races, which is certainly movement, but we can also walk at our race — you can rest; you don't have to walk or run. We have education, support, and social events also.

Lisa Horwitz (29:13): Are there any other additional resources you would like to recommend or offer to our audience?

Shirley Kessel (29:18): I would just say: Go. I do have other resources to recommend, such as Unwinding Anxiety, mindful-based habit change, and also meditation practices that you can use. That can help you to become more aware of your body; and that's what's really going to help you get moving.

Lisa Horwitz (29:36): In our interview today, we learned that often the first step to movement is mindfulness. And we've seen that the connection between the mind and the body is even more interwoven than previously thought. I really appreciate you taking your time to discuss and delve into these topics with us. Thank you so much, Shirley.

Shirley Kessel (29:58): Thank you for having me.