

How can mindfulness change the lives of people with chronic pain?

G Davidson

Mindfulness is purposefully paying attention in a non-judgemental way to what is going on in your body, your mind and in the world around you.

Since 1979 mindfulness has been weaving its way into western healthcare. Jon Kabat-Zinn, a pioneer in this field, taught the first Mindfulness Based Stress Reduction (MBSR) course at the University of Massachusetts Medical School, to people who were suffering despite receiving the best medical care (Kabat-Zinn 1990). Over thirty years later there is now considerable clinical and physiological evidence for the efficacy of MBSR for a range of health issues. The surge of interest in the last decade coincides with the advancement of technologies that have enabled researchers to discover more about the brain and how it changes with mindfulness practice.

How can a practice that sounds simple and 'non medical' help the complex and often treatment resistant issue of chronic pain? To answer this question we need to better understand the nature of chronic pain and this is best explained with a case study.

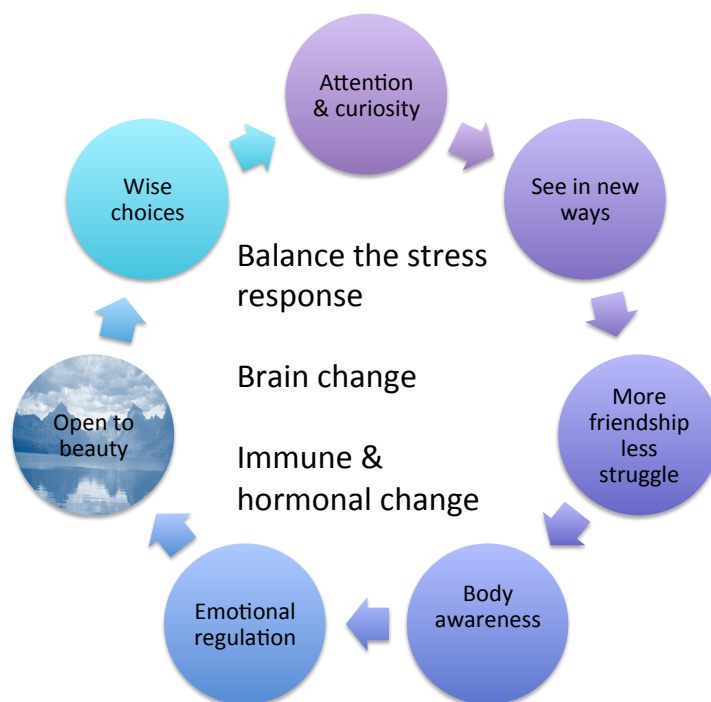
KATE'S PAIN STORY

This is Kate's story but with 1 in 5 people in Australia with chronic pain, it could be your story too. **Kate has had back pain every day for over two years.** It started when she slipped and jarred herself at work. At the time she didn't think it was that bad and continued working through the day. The next day, however, she awoke with back and leg pain and became really worried. Her friend's pain started this way and it changed her life in unfortunate ways. Kate feared that her back would follow the same pattern. She visited her GP and one week later had a scan that showed a disc bulge. Now she was really worried feeling that she had a serious problem that would last a long time. This perceived threat to her body, her ability to work, finances, relationships and future goals caused Kate's body automatically to move into protection mode. Stress hormones flushed through her system causing her muscles to tense, she moved differently to protect herself and her thinking was focused on trying to work out what, why and how this happened. She was on the pathway to chronic pain - not because she was at fault in any way but because she was human and her body was primed for protection.

Sadly, no one told Kate that pain after an injury is normal as the body protects itself to enable it to heal; that disc bulges occur in most people and are often painless; and that after the initial period of healing it is our protective mechanisms that contribute to the persistence of pain. But now after two years of multiple visits to specialists and health professionals with conflicting advice and an array of treatments, Kate is stuck in a place of pain, anxiety and low mood. Brain scans at this stage would likely show alterations in the connection between different areas of the brain, an altered inner map of the body, and changes in the density of brain tissue in the areas of problem solving, attention regulation, interoceptive awareness, emotional regulation, memory and threat detection. These changes in the hardwiring of the brain lock in the traumatic memory of the pain, prime the body for stress reactivity and trigger the sensory experience of pain. This happens in the same way that the brain compiles information to create experiences of sight, sound, smell and taste. When the body-mind interprets danger the brain triggers the experience of pain. **Pain can then be generated by anything that is interpreted as danger: the memory of the injury, the smell of the workplace where the injury occurred, protective movement patterns, thoughts such as 'this is going to last forever'.**

HOW CAN MINDFULNESS HELP?

Mindfulness offers a person in pain a way to pay attention to what is happening in their body-mind. When an attitude of approach and curiosity is brought to the investigation, new ways of seeing the situation arise with a more accepting relationship to pain. There is less struggle and with less struggle there is a calming of the stress response, balancing of hormones and immune factors and an improved brain environment for new connections to form. The normal human response to challenge is to try to problem solve with lots of thinking. This doesn't work when the problem is in the body. Ruminating thought processes actually trigger the danger response causing more pain. Mindfulness offers a switch from thinking to feeling, with a tuning into the sensations of the body. Noticing sensations during the practices of body scan meditation, sitting meditation and mindful movement can help to shift patterns of emotional reactivity. Structural changes occur in the brain in regions responsible for attention and emotional regulatory processes, memory, self-referential processing, empathy, self-compassion and perspective taking (Holzel et al 2011a,b). More flexible connections in the brain occur so there is less getting stuck in automatic patterns of reverberating pain or worrying thoughts (Kerr et al 2013). This offers a new perspective with space for appreciation of beauty, engagement in creative pursuits and personal empowerment.



A question often asked is - why would someone with pain want to observe it? It's a good question because it does sound quite cruel to ask someone to inhibit their natural reaction to get away from pain. When we turn away from feeling our present moment physical and emotional pain we also turn away from truly feeling our full range of sensory and emotional experiences. The present moment is the space of seeing the colours of the sunrise, feeling the gentle warmth of the sun on your skin, hearing the symphony of birdsong. It is the experiencing of peace and joy. It is the learning about personal patterns that may trigger or exacerbate the pain. It is the seeing of pain as a medley of shifting moment to moment sensations rather than being the rigid truth. It is the place of forming an accepting and compassionate relationship to oneself. Not being able to access the richness, the beauty and the full potential that life has to offer - that is cruel. Mindfulness is certainly not an 'easy' path to follow but for many it's a worthwhile journey.

HELPING KATE

There are different ways that mindfulness can help Kate.

Mindfulness training

The most effective option would be offering Kate an evidence-based and practice-based program (MBSR, MiBCT) which will educate her experientially in how to cultivate a new relationship with her pain, interrupt painful patterns and begin making new choices in feeling, thinking, relating and living more generally. Engaging in these programs are relatively short, cost-effective ways of empowering people to really get to know their own patterns and how to generate new, more life-affirming ones.

Mindfulness facilitated practice

Practitioners who practice mindfulness themselves can bring a presence and skill to helping Kate understand her dilemma. They can help Kate sit with what she is feeling physically and emotionally and be a mirror to her suffering and her potential to find new ways of relating. Practitioners not trained to teach mindfulness and facilitate an intensive practice can integrate the knowledge from the mindfulness programs into their approaches (using a cognitive/emotional approach and/or a body-based approach). This may inspire Kate to undertake further intensive training in mindfulness.

Attempting to teach a sustained mindfulness practice in the face of great suffering without proper training can be ineffective and even harmful.

Mindfulness is offering a new approach within our health care system. We are still at the threshold of understanding how it can be helpful for people with chronic pain but we have exciting times ahead. Mindfulness may offer a pathway to decreasing the massive burden to our society created by the epidemic of chronic pain. It offers hope to people like Kate.

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