

The Pain Practitioner

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A painting of Frida Kahlo, showing her face and upper body. She has dark hair styled in a bun and is wearing a white garment with a red braided cord. To her left is a large bird of paradise flower with orange and blue petals. In the bottom left corner, a small black monkey is visible.

Frida Kahlo

Many historians agree she suffered chronic widespread pain with symptoms that were identified as being typical of fibromyalgia.



**Integrative Approaches
to Fibromyalgia**

Empowered Pain Management

**Fibromyalgia Treatment at
Brooke Army Medical Center**

**Mindful Awareness Training
for Persistent Pain**

Mindful Awareness Training: A Promising Treatment Approach for Persistent Pain

Carolyn McManus, PT, MS, MA

The National Pain Strategy identifies the biopsychosocial model and pain self-management approaches as important components of chronic pain treatment and prevention (1). Mindfulness training actively engages patients in pain self-management within a biopsychosocial framework consistent with these national recommendations.

Mindful awareness has been defined as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding experience, moment by moment” (2). It includes the observation of thoughts, emotions, and sensory experiences. Whether the object of one’s attention is pleasant, unpleasant, or neutral, all perceptions are met with acceptance, friendliness, and curiosity. No effort is made to suppress, eliminate, or change the experience.

Jon Kabat-Zinn pioneered the training of clinical populations in mindful awareness when he developed and taught Mindfulness-Based Stress Reduction (MBSR) at the University of Massachusetts Medical Center in 1979. This initial program has expanded over the years to become the University of Massachusetts Medical School Center for Mindfulness in Medicine, Health Care, and Society and its success has led to the establishment of MBSR programs throughout the United States and around the world.

The program is not limited to patients with chronic pain conditions. It meets weekly for 2.5 hours for eight consecutive weeks and includes a six-hour day of mindfulness. Class size is 20 to 30 participants. As the program requires a commitment to daily meditation and the integration of mindfulness into life circumstances, MBSR draws self-motivated individuals ready to take an active role in managing their symptoms.

Mindful awareness is cultivated through instruction in and practice of sitting meditation, the mindful observation of body areas also known as the body scan, walking meditation, and gentle yoga. Periods of group discussion promote the exploration of participants’ experiences of mindfulness practices and their application to symptom management and daily life. A structured home program includes a workbook that covers class material and weekly home assignments, instructions to incorporate mindfulness into neutral, pleasant, and unpleasant experiences and guided audio recordings for daily practice.

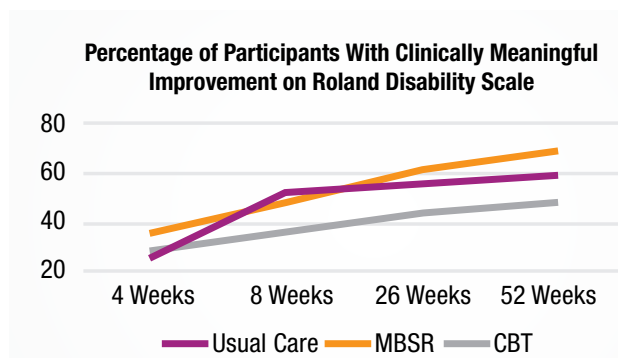
An expanding body of medical literature has identified physical and mental health benefits for patients with persistent pain who receive training in mindful awareness (3-8). In a recent randomized, interviewer-blind, clinical trial, Cherkin and colleagues randomly assigned 342 adults aged 20 to 70 years with chronic low back pain to receive MBSR ($n = 116$), an 8-week cognitive behavioral therapy program (CBT) ($n = 113$), or usual care ($n = 113$) (5). At 26 weeks from trial entry, follow-up assessments demonstrated the percentage of participants with clinically meaningful improvement in disability was significantly higher for those who received MBSR or CBT than for those who received usual care (see Figure 1). The MBSR group showed continued improvements in disability between follow-up assessments at weeks 26 and 52, suggesting MBSR provides patients with lasting skills effective for managing pain.



In addition to the MBSR program model, mindful awareness instruction can be integrated into individual patient care. With individual mindfulness training, instruction is tailored to a patient’s specific goals and needs. As with the group model, patients are taught mindful breathing, body scan, and walking. They are instructed to bring mindful awareness to movement during exercise. A home program can include such mindful practices as:

- Pausing and practicing mindful breathing throughout the day
- Meeting the experience of pain with mindful awareness
- Labeling pain as “sensation”
- Integrating mindful awareness into routine activities such as handwashing
- Planning a pleasant activity and being mindful of the experience
- Practicing 10 minutes of a mindful meditation daily

Figure 1. Mindfulness-Based Stress Reduction vs. cognitive behavioral therapy or usual care on back pain and functional limitations in adults with chronic low back pain (5).



WHAT PATIENTS LEARN

I have taught mindfulness in a clinical setting for more than 20 years and was one of the MBSR instructors for the Cherkin study. With training in mindful awareness, patients learn to observe the sensation of pain as distinguished from their additional physical, cognitive, and emotional reactions to the sensation. With stable, kind, and curious attention, they witness the constant flow of sensations, thoughts, and emotions and uncouple the immediate sensory experience of pain from secondary reactions to the sensation. This calm observation of the component parts of the pain experience makes available the possibility of new choices.

Patients frequently have automatic, unconscious habitual reactions to the experience of pain that exacerbate their distress. These include shallow breathing, muscle guarding, catastrophic thinking, worry, fear, and anger. By observing the sensation of pain and these reactions with mindful awareness, patients gain insight into how these reactions escalate pain and suffering. They experiment with new choices that include diaphragmatic breathing, muscle relaxation, and self-compassion. They learn to recognize that fear and worry are often about the future and can shift their focus from fruitlessly stressing about the unknowns of tomorrow to making healthy choices today.

Through mindful breathing, body scan, and movement, patients build body awareness and learn to sense and interpret bodily sensations in new, non-threatening ways. For those alienated from their body due to pain, mindful practices can help them learn to feel more at home and at ease in their body, even while experiencing pain. Improved body awareness can help patients perform exercises correctly, pace their activities, and appropriately adjust posture and body position as a means to prevent pain and tension escalation. Body awareness is also necessary for the awareness and regulation of emotions.

I frequently hear patients describe many themes identified in a qualitative study by Doran that examined the role of mindfulness-based therapy in chronic back pain (6). Patients reported they:

- Became familiar with the pattern of pain and their habitual reactions to pain
- Recognized the difference between being tense and being relaxed in relation to pain
- Identified early warning signs that precede a pain flare-up
- Stopped the cycle of projecting past experience of pain onto a fear of future pain
- Changed maladaptive attitudes and approaches to pain
- Reduced identification with the diagnostic label or story about pain
- Became more flexible in their attitude toward pain
- Reduced self-blame and inner conflict
- Felt less “fragmented” and experienced a greater integration of mind and body

CASE STUDY

Tom was a 58-year-old man with a 39-year history of back pain following a lifting injury. He managed his pain successfully with exercise until two years prior to participating in MBSR. His pain had grown constant and became more intense, which significantly limited his ability to perform household chores and participate in social activities. His MRI was normal. Tom's previous treatment included various medications, chiropractic manipulation, several physical therapy approaches and exercise. After reading *Back in Control* by David Hanscom, MD (9), he was inspired to take a

more active role in his pain management and enrolled in MBSR training at Swedish Medical Center, Seattle, Washington.

He describes his experience: “I had reached a crisis of pain and anxiety. I decided I needed to take action as my life was being seriously degraded, and at 58, I saw that it was likely going to get worse in the years to come unless I took control. The transformation that this course and the larger engagement in mindfulness has had on me is quite remarkable. I cannot say my pain is gone, but it is substantially diminished. My experience of my own body and mind has begun to shift in fundamental ways. I now appreciate that I can control anxiety by slowing down, breathing, and ‘stepping back’ from it, realizing that the anxious state is just that—a state—and a transient one. That pain is a sensation, not my life, and not even in all of my body. Pain is also often transient, if I step back, move to a different position, and breathe.

“But perhaps most important, the process of focusing my awareness and being present in my body has begun to teach me to sense, discriminate, and control my muscles in ways I had never thought I could before. This allows me to change my muscle engagement and the feelings in them and, in many cases, substantially alleviate pain. This has enabled me to increase my activity and return to doing things I enjoy.

“I am just beginning this exploration of mindfulness, and I guess, based on what I read and hear, I may look forward to always be ‘just beginning.’ All I can say for certain is that this beginning feels very encouraging, much like the spring renewal I’m seeing all around me in this month of March, after just a few weeks of practice.”

INTEGRATING MINDFULNESS INTO PAIN TREATMENT

Pain professionals have an opportunity to include mindfulness principles and practices in the care of patients with subacute and persistent pain conditions. Prior to introducing mindfulness to patients, pain professionals need personal experience practicing mindfulness meditation and integrating mindfulness into daily life. Trying to teach mindfulness to a patient without personal experience of the practice is like trying to teach someone to swim without having ever been in the water.

Those interested in integrating mindful awareness into patient care can read *Full Catastrophe Living* by Jon Kabat-Zinn (2), participate in an MBSR program, more deeply engage in the practice in a meditation retreat, and take relevant continuing education courses. They can explore applying mindful attitudes to daily life and when in pain or distress. If a pain professional is inspired to teach MBSR, a dedicated study of mindful principles and practices, commitment to a daily meditation practice, participation in several meditation retreats, and a professional training program would be required.

SUMMARY

Mindful awareness offers an innovative treatment approach to patients in pain. A growing body of evidence suggests mindful awareness training contributes to improved outcomes on physical and mental health measures in patients with persistent pain. Through improved body awareness and cognitive and emotional regulation, patients can learn to relate to the sensation of pain in new ways and make choices that improve well-being and function. Pain professionals have the opportunity to train in mindful awareness and integrate attitudes, principles, and practices of mindful awareness into the treatment of patients in pain.

WHERE TO LEARN ABOUT MINDFULNESS

Books

Burch V, Penman D. *You Are Not Your Pain: Using Mindfulness to Relieve Pain, Reduce Stress, and Restore Well-being*. New York, NY: Flatiron Books; 2015.

Kabat-Zinn J. *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress Pain and Illness*. New York: Bantam; 2013.

Salzberg S. *Real Happiness: The Power of Meditation: A 28-Day Program*. New York, NY: Workman Publishing Company; 2010.

Online Resources

Some reflections and guidance on the cultivation of mindfulness with Jon Kabat-Zinn, PhD:
www.youtube.com/watch?v=dd6ktroFf8Q

Brief guided meditations:
www.carolynmcmamus.com/guided-meditations-free-downloads/

Mindfulness apps: Headspace, Smiling Mind, iMindfulness

Professional Training

Center for Mindfulness in Medicine, Health Care, and Society,
UMass Medical School, Worcester, MA:
www.umassmed.edu/cfm/

UC San Diego Center for Mindfulness, San Diego, CA: mbpti.org

Mindfulness-Based Pain Treatment:
www.carolynmcmamus.com/professionals/



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2. Kabat Zinn J. 2013. Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness. 2nd ed. New York: Bantam; 2013.
3. Reiner K, Tibi L, Lipsitz JD. Do mindfulness-based interventions reduce pain intensity? A critical review of the literature. *Pain Med*. 2013;14(2):230-242.
4. Veehof MM, Trompetter HR, Bohlmeijer ET, Schreurs KM. Acceptance- and mindfulness-based interventions for the treatment of chronic pain: a meta-analytic review. *Cogn Behav Ther*. 2016;45(1):5-31.
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6. Doran NJ. Experiencing wellness within illness: Exploring a mindfulness-based approach to chronic back pain. *Qual Health Res*. 2014;24(6):749-760.
7. McCubbin T, Dimidjian S, Kempe, Glassey MS, Ross C, Beck A. Mindfulness-based stress reduction in an integrated care delivery system: one-year impacts on patient-centered outcomes and health care utilization. *Perm J*. 2014;18(4):4-9.
8. Garland EL. Disrupting the downward spiral of chronic pain and opioid addiction with mindfulness-oriented recovery enhancement: a review of clinical outcomes and neurocognitive targets. *J Pain Palliat Care Pharmacother*. 2014;28(2):122-129.
9. Hanscom, D. Back in Control: a Surgeon's Roadmap out of Chronic Pain. 2nd ed. White River Junction, VT: Vertus Press; 2016.

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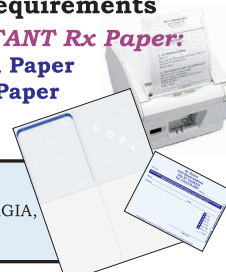
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