

Mindfulness + Chronic Pain

Maya D'Eon, Ph.D. 12/7/2017

Plan for today

As a result of this workshop, you will be able to:

 Discuss what mindfulness is and its relevance for chronic pain patients

Practice mindfulness as a provider and with patients

Know where to get great mindfulness resources



My Professional Background

• Education:

- M.A., personality psychology
- Ph.D., clinical psychology (Behavioral Medicine)
- Pain Psychology: CBT and Third-Wave Therapies
- Research focused on Treatment Development

Occupation:

- Clinical Faculty at UCSD, Department of Psychiatry
- Lead Psychologist in the Pain Psychology Clinic
- Program Director for the Pain Intensive Outpatient Program
- Instruct and Practice Mindfulness Strategies





- 30-40% of adults in the U.S. with chronic pain (Gatchel, et al., 2014)
- Greater than number of individuals with diabetes, heart disease, and cancer COMBINED
- Annual economic cost of chronic pain in the U.S. at least \$560-635 billion
 - Includes incremental cost of health care (\$261-300 billion) and lost productivity (\$297-336 billion)

The Problem of Chronic Pain

 Pharmacological, medical, or surgical interventions alone are often insufficient in eliminating pain and significantly improving functioning (Chiesa & Serretti, 2011; Veehof et al, 2017).

Movement away from prescription of opioid medications
 need for alternative treatments

CLINICAL GUIDELINE

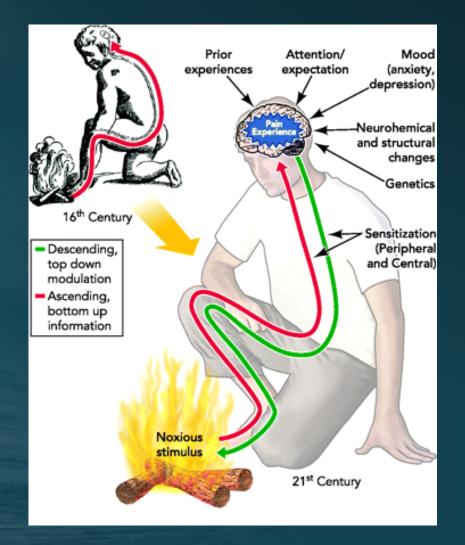


Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert M. McLean, MD; and Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians*

Recommendation 2: For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncmindfulness-based stress reduction (moderate-quality evitai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy, or spinal manipulation (low-quality evidence). (Grade: strong recommendation)

Complexity of the Pain Experience



Physical factors

- Extent of injury/disease
- Readiness of nervous system to receive pain signals
- Inappropriate activity level

Thought-related factors

- Focusing on the pain
- Boredom
- Non-adaptive attitudes
- Negative thoughts

Emotional factors

- Tension
- Stress
- Depression
- Anxiety (e.g. fear of pain)

Social factors

- Social isolation
- Criticism from others

URGES/ACTIONS

Staying in bed all day
Staying away from friends
Decreasing activities
Relying more on medication

THOUGHTS

"My pain is going to kill me"

"This is never going to end"

"I'm worthless to my family"

"I'm disabled"

"There is nothing I can do"



EMOTIONS

Depression,
Anxiety,
Stress,
Anger, ...

Research Shows:

- pain catastrophizing (interpret bodily sensations as severe threat and underestimate ability to cope) promotes increased fear, intensified pain, and greater functional disability (Garland, 2016)
 - Can assess with the Pain Catastrophizing Scale (Score >30)

 Stress and negative affect activate the SNS associated with pain, and anxiety/tension may be perceived by patient as painful muscle spasms (Garland, 2016) Over time...

Thought → Facts

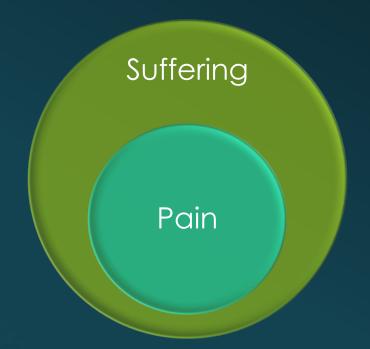
Emotions → Warning Bells

Action → Reactions



Pain, Pain, and More Pain

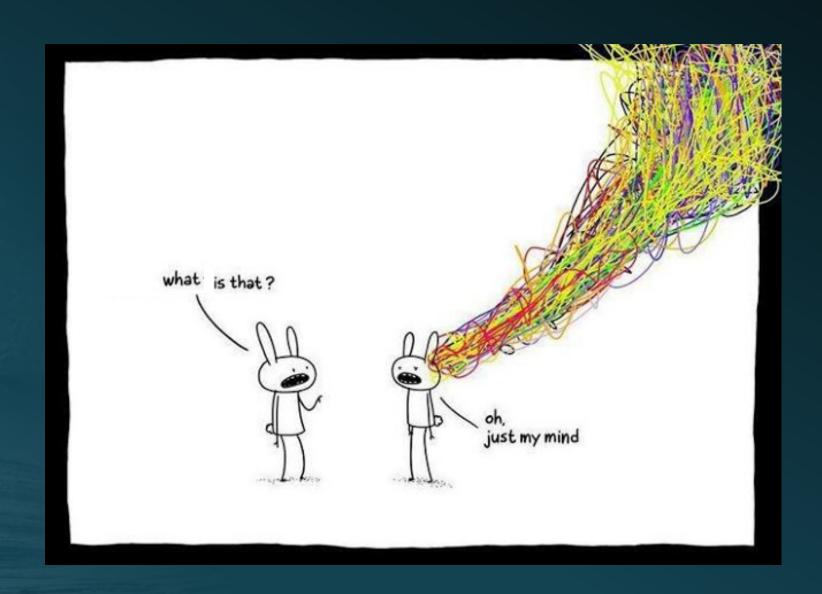
- Autopilot reacting is often aimed at controlling or 'fixing' pain or emotional discomfort
- The foundation of mindfulness is that our autopilot thinking, emotional and behavioral reactions cause suffering



What is Mindfulness?



"Turn off autopilot and get back in the driver's seat..."



"...by observing what is driving you in the moment with curiosity and compassion, so that you can respond with flexibility and awareness"



- Maya D'Eon

Paying Attention

 listening, watching or considering what naturally exists

On Purpose

intentionally increasing awareness of experience

Mindfulness

...as if your life depended on it.

in the Present Moment

 focusing on the here and now Non-Judgmentally

 being curious and objective about experience

Mindfulness Def'n expanded

What do you think he meant by the last part of the sentence:

"... as if your life depended on it?"



A few other definitions for good measure

 Observe, describe, and act with awareness, nonjudgment, and non-reactively

Moment-to-moment awareness

 Pay attention to present moment with openness, curiosity, and acceptance

Mindfulness Exercise #1: Body Scan



Sit in upright, wakeful posture







Observe what arises without holding on or pushing away

Take a moment to bring the focus to your body



Easy... right?

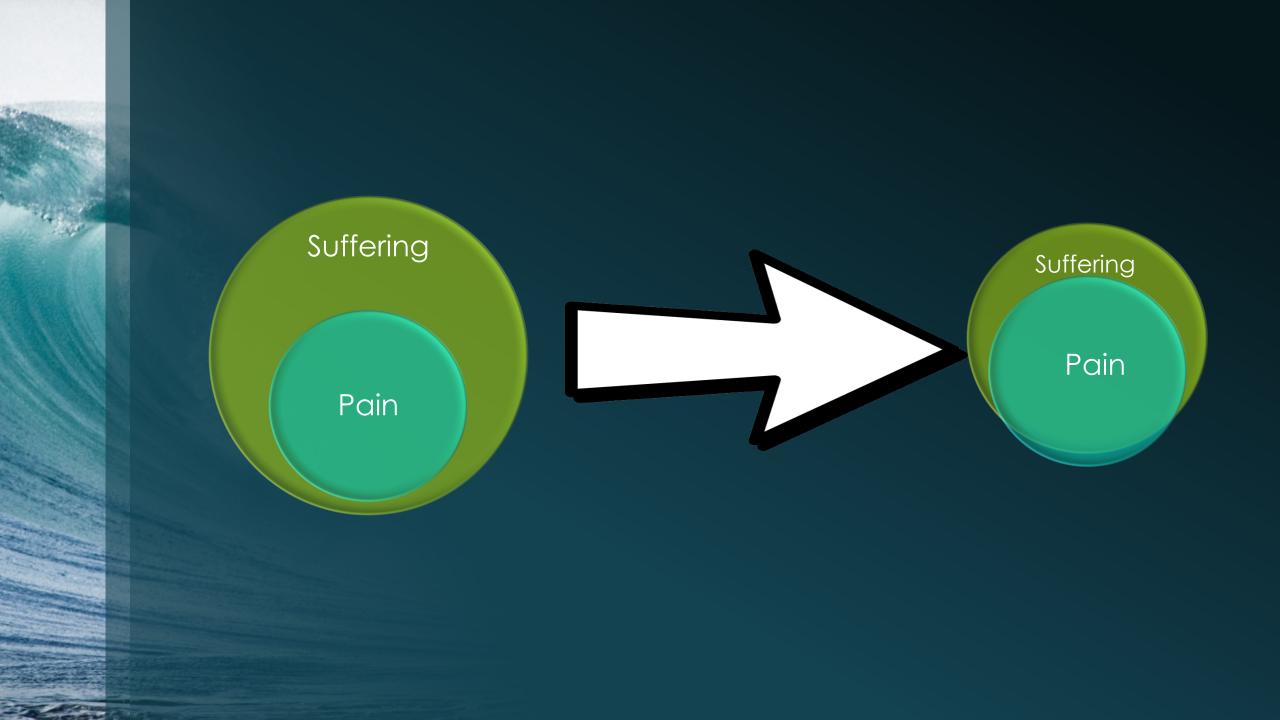
Pay attention, don't react, be open and accepting



Why is this a useful practice for chronic pain patients?

By shifting attention from the emotional/cognitive to sensory aspects of pain experience:

- Learn to disengage from negative cognitive appraisals of pain, which helps reduce the intensity of the experience
- Practice catching the cycle of pain, emotions, thoughts, urges without reacting, which paves way for flexibility in responding and use of coping skills
- Learn to take a broader perspective of their body (parts of body often ignored)



What to do with pain and discomfort during meditation:

- You may notice that you are focusing on your pain and it is increasing. If this happens, note your emotions and thoughts.
- This increase may be due to fear that there is nothing else to distract you from your pain.
- Is it possible to glimpse the bare sensation of pain, unaffected by your thoughts or emotions?
- In that glimpse, is it possible to see that you are not your physical pain- you are so much bigger than it is?
- Take breaks as needed.

Getting Started

May start with meditative practices to practice focusing the mind on something specific:

- Breath
- Movement
- Mantrum



Getting Started

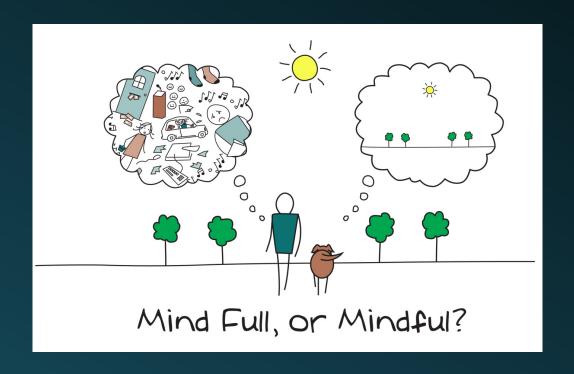
- Timing: Choose a time and place that you are not likely to be interrupted; also choose a time where your pain is not likely to be as intense.
- Duration: Start with 2-5 minutes and work up from there
- What to do with your thoughts: When you are aware that you have drifted, don't push away the thought.
 Recognize it, note it, explore it for a moment, then return your focus.

(Gardner-Nix & Costin-Hall, 2009)

Mindfulness in the Every Day

Focus on the here-and-now when:

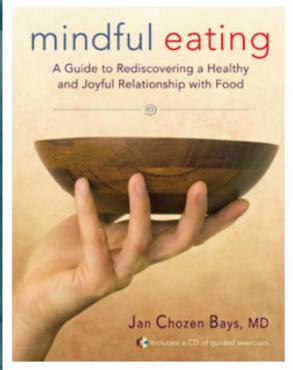
- Eating
- Exercising
- Talking
- Walking
- Activities of Daily Living
- Anything...

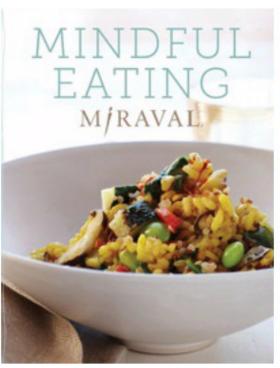


Mindfulness Exercise #2: Mindful Eating





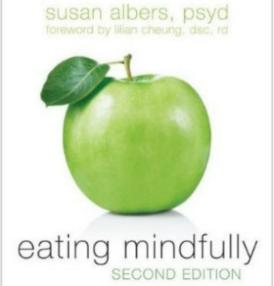




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Savor Mindful Eating, Mindful Life





how to end mindless eating &

enjoy a balanced relationship with food

What does the research say:

 Shown to be effective across pain conditions (e.g., low back, FMS, migraine, OA, neurologic pain, somatization disorder) for a variety of outcomes

CAVEAT

many early studies criticized for lack of scientific rigor, and need for more RCTs

Benefits of Mindfulness in Pain Patients

- Moderate effect size for pain interference and anxiety
- Reduced depression, pain intensity, disability
- Improved emotional functioning
- Increased tolerance and acceptance of pain
- Increased concentration and attention
- Improved immune functioning
- Improved physical functioning
- Enhanced self-compassion
- And more!



With regular practice, patients report:

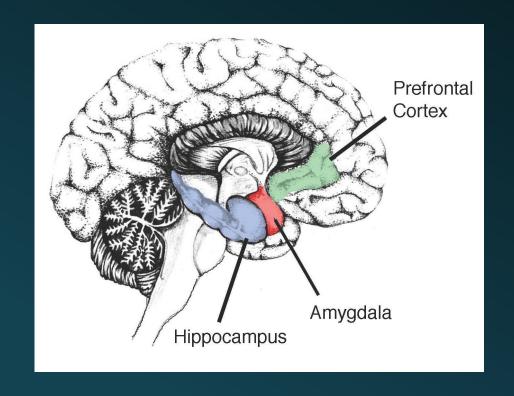


- Lives are less disrupted by challenging events and recover more quickly from such events
- Pain medications work more effectively after meditating or engaging in mindfulness

Neural Mechanisms

 Evidence from structural and functional imaging suggests that mindfulness and meditation impact:

- Pre-Frontal Cortex
- Amygdala
- Hippocampus



Pre-Frontal Cortex

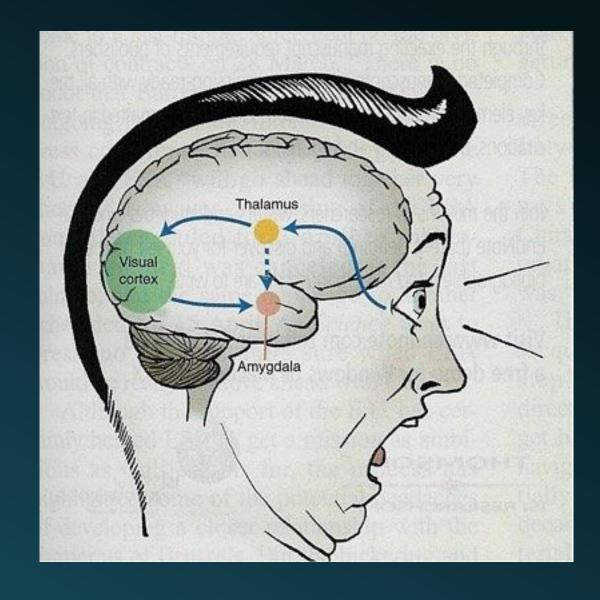
- Involved in:
 - Planning Reflecting
 - Emotion regulation
- Mindfulness changes:
 - Activation
- Psychological impact:
 - Respond with awareness and forethought
 - Increased emotional control



Amygdala

- Involved in:
 - Threat detection
 - Fear/Flight response

- Mindfulness changes:
 - Reduced reactivity



Hippocampus

- Involved in:
 - Learning
 - Memory
 - Emotion regulation
- Mindfulness changes:
 - Grey matter concentration
 - Activation



Practicing Mindfulness as Providers

How might practicing mindfulness help us as providers?

Helps us be more present/connected to our patients when our own internal experience may otherwise pull us away

Respond with greater awareness of our biases, urges, and options

Mindfulness Resources

Websites:

- UCSD Center for Mindfulness (free audio)
- UCLA Mindful Awareness Research Center

Smartphone Apps:

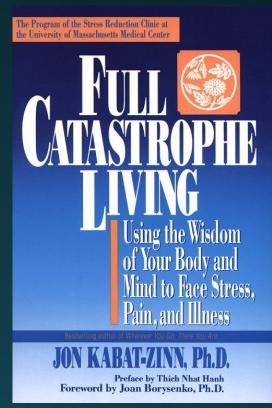
- Insight Timer
- Headspace
- Mindfulness Coach (VA Mobile)
- Many, many more....



Mindfulness-Based Stress Reduction

 Developed and implemented at the University of Massachusetts Medical Center over the past 30 years by Dr. Jon Kabat-Zinn

- Rooted in 2000-year-old Eastern traditions
- Outlined in Full Catastrophe Living by Jon Kabat-Zinn, Ph.D.
- Thousands of pain patients have completed MBSR programs across the country





- Pain is a part of life- suffering does not need to be
- Any activity can be done in a "mindFULL", "mindLESS," or mindful way
- Mindfulness practice can be incorporated into any other treatment provided
- One of the best ways to instruct mindfulness is to practice it

