

Mindfulness-based chronic pain management: Supporting mindfulness strategies in clinical practice

Allen Steverman, MD, CCFP
Clinique Antidouleur CHUM
Jewish Rehabilitation Hospital
Mindspace Clinic

Disclosure

- Advisory Board: Purdue Dec 2016, Paladin Dec 2016, Knight Therapeutic May 2017

Objectives

- As a result of attending this session, participants will be able to:
 - ❑ **Better understand the mind-body connection and where it breaks down in chronic pain**
 - ❑ **Explore the content of a mindfulness based trauma-informed approach to pain management**
 - ❑ **Appreciate how to support mindfulness strategies in clinical practice**

The Mind/Body Connection

- **Suffering** caused by chronic pain comes from the combination of the pain sensation and what it means to the sufferer - how it is interpreted
- Pain is an experience - not just a sensation
- Physical pain and mental pain often inseparable
- The experience of pain always has both a physical and psycho-emotional component

The Mind/Body Connection

- Chronic pain : Mind-Body Connection "windup"
- Pain is not just a "body" problem, it is a whole-systems problem (Jon Kabat-Zinn)
- Mind plays an important role in physical illness
- This is **certainly not** to say that pain is "all in their heads"

Why Mindfulness for chronic pain?

- With mindfulness, learn to uncouple the somatic sensations from thoughts and emotions
- Invitation to turn in towards the pain – tune in to the sensations
- Unpleasant sensation still there, but the knowing of unpleasant sensation is actually liberated from the suffering
- Goal is not to change the content of one's experience, but rather altering the way in which it is experienced
- Befriend the way things are - Do I want it ? No. But is it eroding the quality of my life? Not like before (Kabat-Zinn)

Why Mindfulness for chronic pain?

- What Doc? You want me to bring attention and awareness to my pain ?!?
- Internal or Interoceptive awareness of what's going on in the body: Initial increase in pain, then over time reduced
- When we pay attention, usual reflex is to take consciousness away from pain – stress response – but letting it go there and stay there seems to play a role in healing process
- When you go there, you go there with compassion

Mindfulness based chronic pain management MBCPM™ program – Dr Jackie Gardner-Nix

- Based on MBSR (Mindfulness based stress reduction) – Jon Kabat-Zinn
- Elements in common with MBCT (based on traditional CBT) – Noticing automatic reactions to various challenges
- Elements from ACT (Acceptance and Commitment Therapy) – prolonged exposure to events that may be causing psychological distress in order to cultivate acceptance and reduce avoidance
- MBCPM™: Program more customized to the needs of those dealing with chronic pain

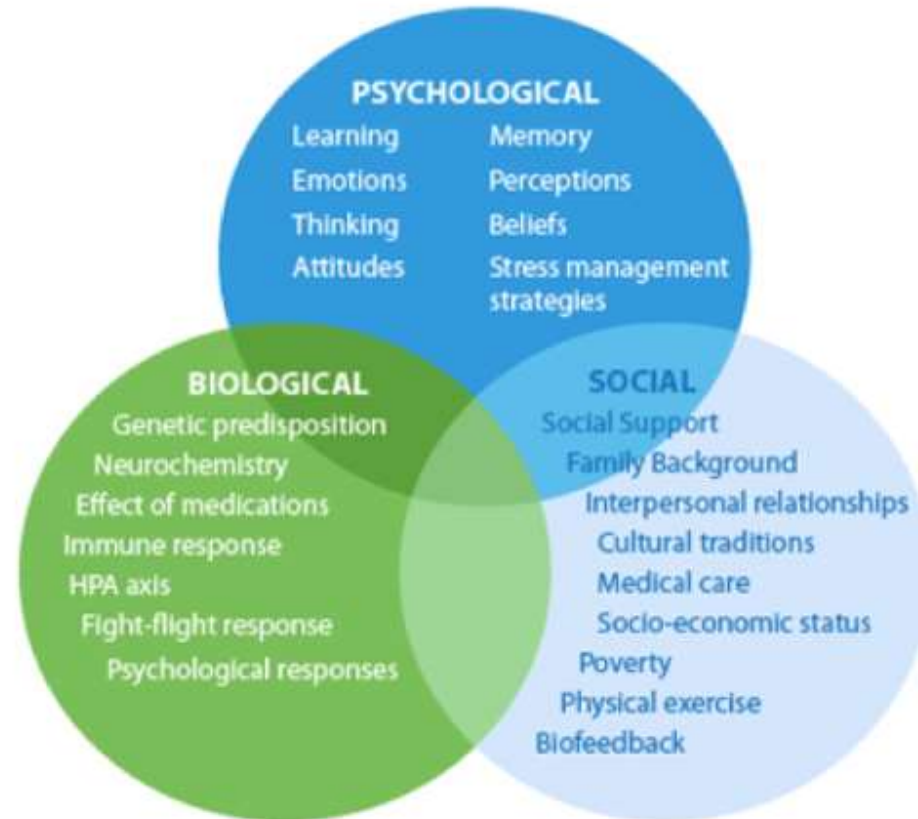
MBCPM™ program

- Weekly education and discussion
- Factors that influence pain
- Through the lens of mindfulness

- Meditation practice

- Not a replacement for usual treatments

Biopsychosocial model



Biopsychosocial model of pain

Championed by Butler and Moseley and others. 2000

MBCPM™ program

- Insights into why pain and suffering have become established
- Giving patients tools to manage the narratives of their own lives in order to help the healing process
- Help understand how physical, psychological and emotional aspects of pain interact
- Reduce reactivity and Increase resilience
- Improve overall health, improve function and decrease suffering

MBCPM™ program

- Particular attention to being **trauma-informed and trauma-sensitive**
- Meditation training – more gentle pace
- 12-13 week (vs 8 week)
- Shorter meditations
- Gradually introduced weekly
- Breath focused, movement based, visualizations, guided imagery
- Weekly discussion and support for meditation related challenges

Course delivered in group

- Get a chance to be with others facing similar challenges
- Feeling understood
- Opportunities to share (smaller groups, dyads)
- Examining damaged lives
- Figure out what can be done together
- Understanding / exploring the suffering of chronic pain

3 Modules of MBCPM™ program

Learning about mindfulness and meditation practice – Module 1

- Introduction to Mindfulness
- The Mind-Body connection and Pain
- Why does the body break down
- Negative emotional states and Acceptance
- Stress and Pain

3 Modules of MBCPM™ program

Self Care and Compassion – Module 2

- Exploring the relationship between eating and pain
- Exploring the relationship between exercise and pain
- Importance of Sleep and Pain
- Understanding attitudes to the damaged self
- Reversal of “neglect” of painful part of body (Body Scan meditation)

3 Modules of MBCPM™ program

Working on Behaviours and Self Awareness in Relationships with Others and with Self – Module 3

- People stress and Pain
- Response to stress and conflict
- Creative work in pain management
- Mindfulness practice beyond the program

3 Modules of MBCPM™ program

- Throughout the program, different meditations introduced weekly
- Meditations connect with themes discussed and support mindfulness practice
- Mindfulness is experiential
- Importance of regular meditation practice, if possible every day

Learning about mindfulness – Module 1

Core concepts of Mindfulness Meditation

- Mindfulness is the awareness that arises through paying attention, on purpose, in the present moment, non-judgementally (Jon Kabat-Zinn)
- Maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment without judging them
- Giving equal attention and value to what is happening in each moment of your life
- Seeing that every moment is transient – including pain in its quality and intensity

Core concepts of Mindfulness Meditation

- Being mindful - Not just paying attention to positive experiences, but also to the neutral and negative ones
- Avoidance of feeling more difficult emotions can prolong their power over health
- When we resist what is, we add another layer to suffering
- When we can find acceptance, our relationship with illness begins to change
- Awareness allows a space between triggers and reactions
- Responding rather than reacting

Principles/Attitudes

- Non-judging
- Beginner's mind
- Patience
- Trust
- Non-Striving
- Acceptance
- Letting go

Mindfulness and Meditation

- Meditation: Setting aside a specific period of time in which we practice focused awareness of what we sense and experience in the present moment
- Practicing daily allows the mind to practice entering a state of lowered arousal and to practice being present without evaluating what is noticed
- Sympathetic activity may decrease and parasympathetic activity increase

Mindfulness and Meditation

- Meditation ≠ Relaxation
 - Mind focusing vs Mind wandering
- Not mind emptying, not thought suppression
- It is focused, non judgmental awareness in the present moment
- Repeatedly noticing “thinking” arising and returning non judgmentally, gently, to a bare, focused, awareness of the present
- Mind will wander – Bring it back
- No good meditator or bad meditator
- Not Positive thinking

Mindfulness and Meditation

- **Mindfulness:** Moment-to-moment non-judgmental awareness, being fully present with what is happening right now
- **Meditation** is the tool we use to cultivate mindfulness
- **Formal practice:** meditation
- **Informal practice:** mindfulness in everyday moments
 - Being more present, less reactive in daily life

Mind-Body Connection

- Mind and body in constant communication
- Sending messages back and forth - chemical reactions
- Imbalances in the chemistry / neurotransmitters → malfunction
- Imbalances influenced by poor habits including diet, physical activity, but also emotions and thoughts
- Can attempt to restore balance with medication
- Can also restore balance by changing thought processes
- Treatment of anxiety, depression, pain

Mind-Body Connection

- Physical condition of our bodies can influence thoughts and feelings of ourselves
- Thoughts and feelings can influence physical condition of our bodies
- Negative thoughts can worsen pain conditions
- This is not to say the pain is just in the mind: **The pain is real**
- Thoughts will actually change what's going on in the body
- With emotional reactivity → Body clenching

- Negative self-statements can increase sensitivity to pain
- Changing thoughts and feelings can affect healing process

Why does the body break down?

- Illness and healing affected by genetics and life experiences
- How you react to challenging events/stress
- Impact of parental nurturing – managing stress
- Not a blame game – but opportunity for insight

Why does the body break down?

- A lot of negative stress, especially in childhood → negative health impacts
- Chronic stress → long term health impacts
- Teaching how to respond to stress is key

- Epigenetics
- Role of physical stressors AND emotional stressors on
 - How our health is affected
 - How disease-related genes may be expressed
 - How healing is affected
 - How we relate to pain and experience it

But Doc, my pain is not emotional, it's in my BODY

Large international study – The Lancet 2004

Risk factors for Acute Myocardial Infarction

Anger, Depression, Anxiety, Lack of social support, Chronic stress



Contributed to likelihood of having an Acute MI on par with



Physical stressors of smoking, obesity, HTN, High cholesterol

So, "physical illness" highly influenced by "emotional factors"

Persistent negative emotional states

- Persistent negative emotions (helplessness, hopelessness, anger, frustration) can keep you sick
- Antibiotics can't work well to fight infection if immune system compromised
- Pain medications don't work well if emotional state persistently negative

Persistent negative emotional states

- Mindfulness as a complement to usual approaches – increasing their effectiveness
- With Mindfulness, become more aware of:
 - Root of emotions
 - The way your thoughts work
 - Why the body and mind have been functioning the way they have
- Increased awareness of mind-body connection → Deal with chronic pain differently

Acceptance

- Acceptance can influence ability to manage pain
- Springboard to adapting and adaptations
- Acceptance not static – fluctuates
- Acceptance ≠ Resignation
- Evidence that improves emotional and physical function, reduces medication use, and increases likelihood of working
- Level of pain not predictive of level of functioning

- Movement and walking meditations

Stress

- Manifestations of Stress in the Body/Mind – Group exercise
- Realization of the various ways stress can influence the body
- Discussion of the physiology of stress
- Biology of stress – fight or flight
- Parenting and stress
- Becoming more mindful changes the way the mind reacts to stress, changing the pain experience

“Stress can be banked”

- Healing affected by current stress
- Healing also affected by past stress
- Many chronic pain sufferers with severe childhood stressors

- Study (Schofferman and associates 1993) – Outcome post spinal surgery
 - History of physical, emotional, or sexual abuse?
 - Parent or caregiver with alcohol or drug abuse?
 - Parent or caregiver left the home or died?

- If none of these factors – 95% individuals did well after surgery and did not require as much pain relief
- If 3 or more of the factors - 15% individuals did well after surgery

Trauma and pain

- Life trauma and pain
- Challenging pasts
- Some people don't heal after an injury

- High rates of trauma in people with chronic pain
- Fibromyalgia, arthritis, chronic low-back pain, chronic headache, migraine, chronic pelvic pain
- Age factor: the younger, the more likely to heal OK despite past life experience; as enter middle age the body isn't so forgiving if past experiences were experienced with suffering

Trauma and pain

- Chronic pain – central sensitization
- Relationship between trauma and pain – via central sensitization on nervous system that is already reactive?
- Triggers

- Note: history of trauma not necessary to develop chronic pain

Trauma

- **The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment - Babette Rothschild**
- **The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma - Bessel Van der Kolk**
- **When the body says so: The Cost of Hidden Stress - Gabor Maté**
- **Trauma-Sensitive Mindfulness: Practices for Safe and Transformative Healing – David Treleaven**

Managing stress – increasing resilience

- Capacity to manage stress influenced by:
 - Genetics
 - Childhood experiences
 - Diet
 - Exercise
 - Sleep
 - Relationships

Self-Care and Compassion – Module 2

The relationship between food, eating and pain

- Through the lens of mindfulness
- Poor eating habits – a physical stressor
- Affects mood and pain

- Sometimes we eat because we are hungry...
- Food habits and choices – increasing awareness

- Exploration of food and pain – becoming aware of body and mind's responses to food

The relationship between exercise and pain

- The benefits of movement (*exercise*)
- Endorphins? Endocannabinoids?
- Kinesiophobia
- Regular movement bolsters emotional resilience, affects perception of pain
- Mindful movement meditation

- Finding the right balance - pacing
- Being more mindful - more likely to be aware when limit is reached
- And more likely to accept the limit without regret

Importance of Sleep and Pain

- Consequences of impaired sleep on pain
- Decreased tolerance to pain
- Education on sleep and sleep stages
- Sleep apnea
- Discussion of sleep hygiene
- Sleep meditation

Understanding attitudes to the damaged self

Further Meditations

- Body Scan Meditation
 - Bringing awareness to every part of the body and mind, including those in pain
 - Not introduced until mid-program
 - Reconnecting with the parts of the body that have been shunned
 - Acknowledging and Acceptance
- Loving Kindness Meditation
 - Supports and improves ongoing awareness of the body/mind as a whole

Working on Behaviours and Self-Awareness in Relationships with Others and with Self

Module 3

People Stress and Pain

- If you are emotionally stressed, it's harder to heal and cope with pain
- Pain exacerbation – can be connected to emotional difficult interaction just as much as physical activity
- Story of Gillian

Responses to Stress & Conflict

- Typical responses illustrated by examples from Aikido
 - Doormat response
 - Avoidance response
 - Combative response
 - Blending or Compromise response
- Help identify which behaviours we use most often
- And the associated emotions and impact on physical pain experience

Responses to Stress & Conflict

- With mindfulness: awareness of self in conflict situations
- Increases ability to respond, rather than react
- Setting boundaries

- Mindfulness of body language and tone of voice

- Managing difficult people

Creative work in pain management

- Alternative method of expression
- Opportunity for sharing
- May help communicate when words not adequate
- Opportunity for insight
- Snapshot of present moment experience of pain

- Springboard to healing and acceptance

Supporting mindfulness strategies in clinical practice – Key concepts for the family physician

- Suffering caused by chronic pain comes from the combination of the pain sensation and what it means to the sufferer
- Pain is not just a "body" problem, it is a whole-system problem
- Mind-body imbalances influenced by poor habits including diet, physical activity, but also emotions and thoughts
- Thoughts and feelings can influence physical condition of our bodies
- This is not to say the pain is just in the mind: **The pain is real**

Supporting mindfulness strategies in clinical practice – Key concepts for the family physician

- With mindfulness, learn to uncouple the somatic sensations from thoughts and emotions
- Becoming more mindful changes the way the mind reacts to stress, changing the pain experience
- Can help reduce reactivity and increase resilience
- Acceptance: allows relationship with pain to begin to change and serves as a springboard to adaptation

Supporting mindfulness strategies in clinical practice – Key concepts for the family physician

- Reinforce self care: fostering awareness of impact of eating habits, physical activity and sleep on pain
- Help bring awareness to factors influencing pain beyond physical triggers including emotional stressors and our responses to stress and conflict
- Particular attention to the possibility of trauma
- Support regular meditation practice

Conclusion

- A Mindfulness based chronic pain management program can be a valuable addition to the treatment chronic pain, complementing more traditional approaches
- Potential to decrease pain intensity, improve function, and overall reduction in suffering

References

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