The Role of Behavioral Health in Managing Chronic Pain

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Disclosures

No conflict of interest

Learning Objectives

- Understand the definition of a biopsychosocial model of pain
- Understand factors used to identify risk of addiction with opioid medications
- Understand behavioral health strategies designed to increase patients' efficacy coping with pain

Session Outline

- Role of pain psychologist as part of interdisciplinary approach to chronic pain management
- A biopsychosocial view of health and pain
- Prevalence and co-occurrence of chronic pain, depression, anxiety, trauma
- Pain and substance abuse
- Factors to consider with opioid risk
- Behavioral health interventions for chronic pain

Water’s Edge Pain Clinic

- 4 Physicians
- 3 full time Advanced Practice Providers
- 2 part time APP’s
- 1 Psychologist specializing in behavioral health and pain management

Services Offered

- Pain management (Primarily outpatient and limited inpatient)
  - Consultations
  - Long term management (including opioid management)
  - Interventional procedures
    - Fluroscopic procedures
    - Ultrasound and EMG guided injections
  - Spinal cord stimulators and intra-thecal pumps
- Pain Psychology/Behavioral Health
- Physical Therapy (and allied health)
  - Collaboration with Lakeview and the community

Role of Behavioral Health at Water's Edge

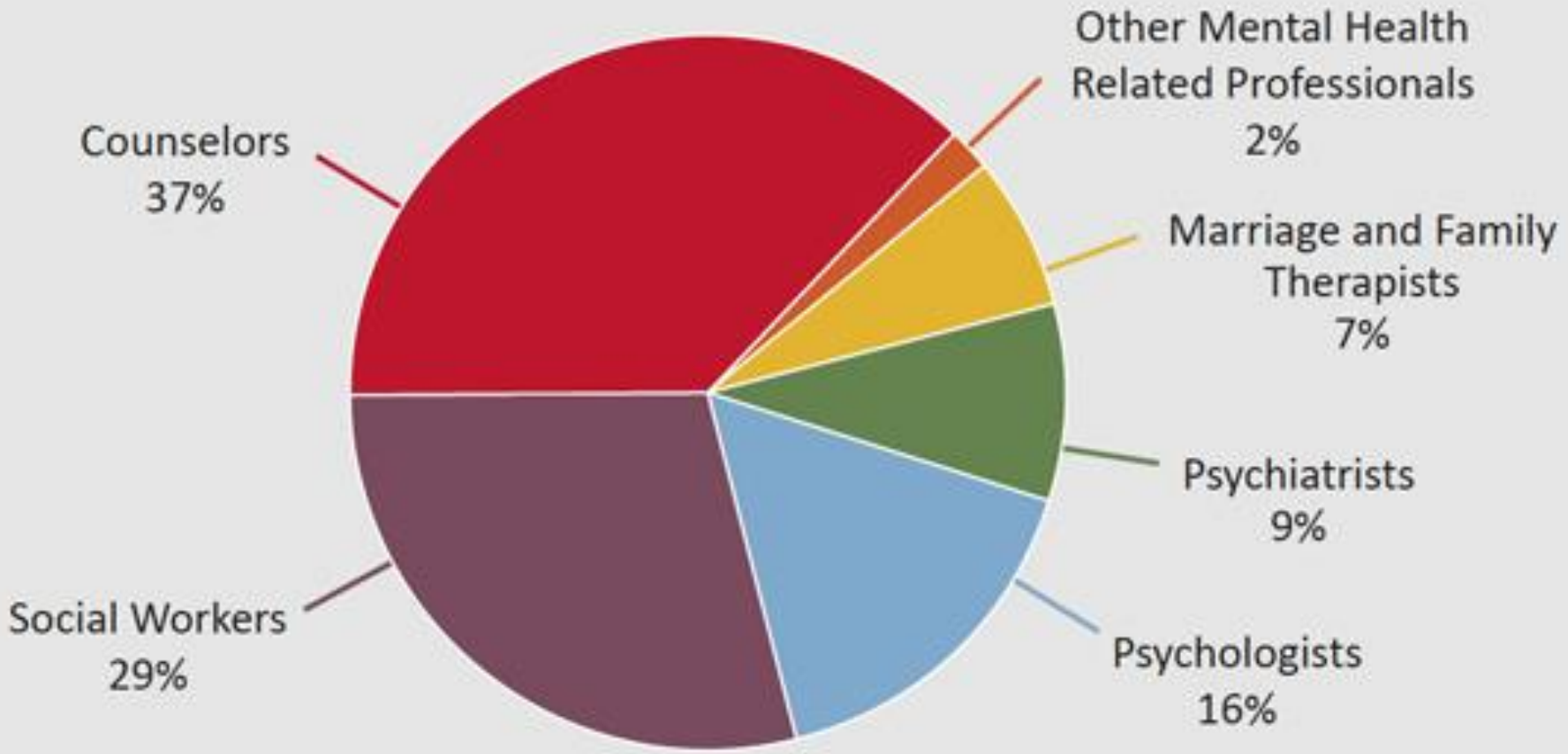
- Behavioral health assessment
- Work individually or in class format
- Assist in learning new skills to address anxiety, and depression with chronic pain
- Teach stress management skills and sleep strategies, both of which impact chronic pain
- Psychoeducation for both the patient and the family
- Identify and refer for specific treatments if necessary (psychiatric care, counseling, sleep specialist)
- Attend and participate in interdisciplinary treatment team meetings

Reasons for a Referral to the Water's Edge Psychologist/Behavioral Health

Concern Noted by WE Provider	Assessment Requested by WE Provider
Sadness, or other depressive symptoms	Opioid Risk Assessment
Anxiety	Spinal Cord Stimulator
Multiple Unmanaged Stressors	
Lifestyle choices impacting health	Intra-thecal Pump
Lack of coping skills/lack of social supports	
Substance use	
Adjustment concerns	
Noncompliance with care	


Clinical Social Worker
Monitoring
Medicare
Bipolar
BHI
Treatment
Depression
Care
Counseling
Behavioral Health
Addiction
Healthcare
Substance Abuse
Schizophrenia
Opioid Epidemic
1 in 5
Psychiatrist
CoCM
Pharmacotherapy
Psychotherapy
Integration
Trauma
Alzheimer's
Mental
Anxiety
Dementia

Behavioral Health and Other Related Providers, by Field[6]



Source: Centers for Medicare and Medicaid Services, National Provider Identifier (NPI) Database (2014)

Health Psychology

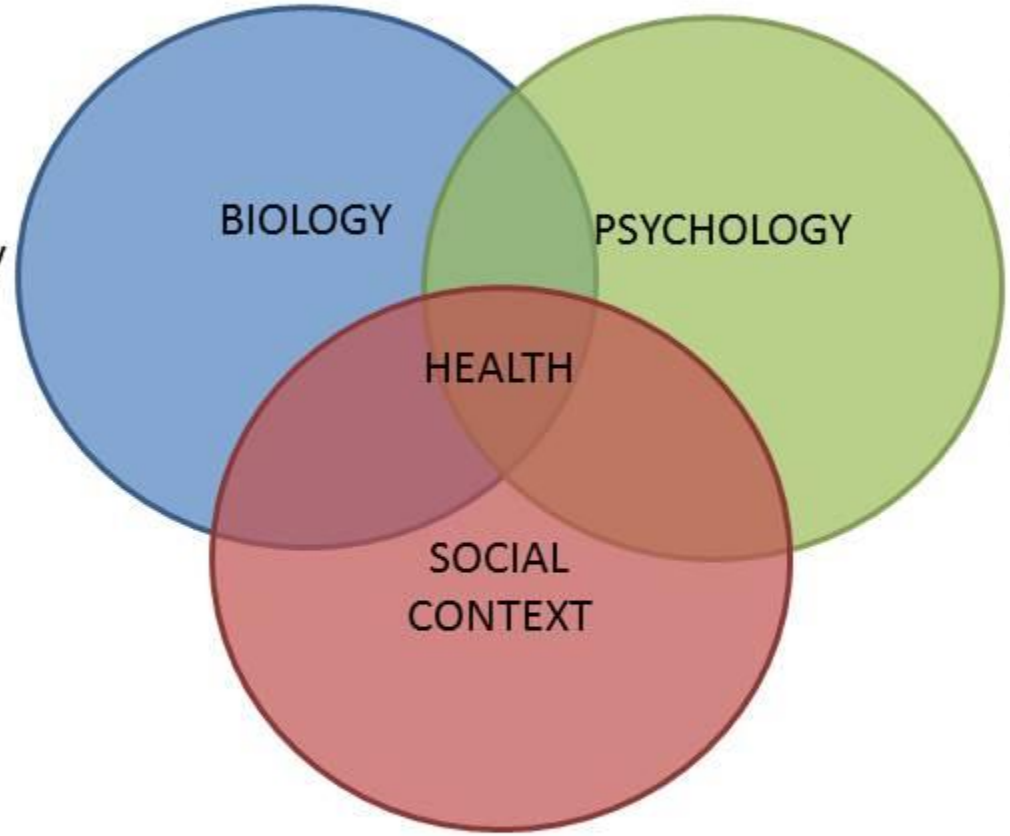
- Biopsychosocial model

health or illness= **biological factors (e.g. genetic predisposition)** + **behavioral factors (e.g. lifestyle, stress, health beliefs)** + **social factors (e.g. cultural influences, social supports)**

  - Health psychology both theoretical (research based) and applied (clinical)
  - Connect how emotional factors are impacting health, contribute to illness
  - Seeks to use psychological knowledge (research based) to positively impact health through psychosocial education, techniques of behavioral change, behavioral health interventions

BIOPSYCHOSOCIAL APPROACH TO UNDERSTANDING HEALTH

Gender
Physical illness
Disability
Genetic vulnerability
Immune function
Neurochemistry
Stress reactivity
Medication effects



Learning/memory
Attitudes/beliefs
Personality
Behaviours
Emotions
Coping skills
Past trauma

Social supports
Family background
Cultural traditions
Social/economic status
Education

Biopsychosocial Behavioral Health Assessment

Bio	Psycho/behavioral	Social
Pain conditions	Mental health history	Relationships/supports
Other medical conditions	Current MH symptoms	Work/disability
Medications/side effects/opioids	Framing about pain and health	Current living situation
Substance history	Trauma/abuse history	Stressors
Smoke/chew/vape	Behavioral activation/exercise	Interests
	Nutrition	Cultural factors
	Sleep habits	Spiritual beliefs

Statistics Chronic Pain

- 100 million Americans or one third of U.S. population experience chronic pain and is the primary reason Americans are on disability (NIH)
- A review of the data- chronic pain more prevalent than heart disease, diabetes, and cancer combined (Jensen, et al., 2014)
- Chronic pain in adults over 65- between 47%-63% (Tsuag et al.)
- Institute of Medicine estimated cost to U.S. economy $560-$630 billion annually (Institute of Medicine 2011)

Prevalence of Depression, Anxiety and Chronic Pain

- Depressive Disorders are ranked third in terms of disease burden as defined by the World Health Organization (WHO, 2014)
- Depression is the leading cause of disability world wide (WHO, 2012)
- Estimates for rates of depression for people with chronic pain- between 30% and 54% (Banks & Kerns, 1996)
- Estimates for rates of anxiety for people with chronic pain- between 20% and 40% (Asmundson & Katz, 2009)

Depression and Chronic Pain

- Patients with depression and chronic pain:
  - Tend to have higher pain scores
  - Report feeling less in control of their lives
  - Use passive-avoidant coping strategies
  - Adhere less to treatment plans
  - Have greater interference from pain, including more pain behaviors
  - Respond less well to pain treatment unless the depression is addressed

  (Substance Abuse and Mental Health Services Administration, 2012)
  - Jarvik, J. et al. 2005- Greatest predictor of back pain 3 years after initial imaging study- depression at baseline- 2 to 3 times more likely to have back pain

Suicide and Chronic Pain

- In patients with chronic pain suicidal risk “appeared to be at least doubled” (Tang & Crane, 2006; Racine 2017)
- People with chronic pain more likely to attempt and commit suicide, not explained by co-occurring substance abuse disorders or mental disorders (Braden & Sullivan, 2008)

Suicide and Chronic Pain

- Review of 123,000 suicides in 18 states between 2003 and 2014 by Petrosky and collegues found:
  - 8.8 percent had evidence of chronic pain
  - 7.4 percent had chronic pain in 2003
  - 10.2 percent had chronic pain in 2014
  - Anxiety and depression diagnosed more often in suicide victims with pain than in those without pain
  - 54% of suicide victims with chronic pain died of gun related injuries
  - 16% of suicide victims died of opioid overdose.
  - Suicide notes indicted more than 2/3 of those with pain mentioned their pain as a direct contributor to suicidal crisis

  (Annals of Internal Medicine, September 2018)

Anxiety and Chronic Pain

- Common with patients experiencing chronic pain
- Often co-occurs with depression (2/3 of anxiety disorders also have co-existing mood disorder present), but anxiety can present without depression
- Women with fibromyalgia 4-5x's more likely to have a diagnosis of OCD, PTSD, or Generalized Anxiety Disorder during their lifetime
- Anxiety impacts functioning and may make patients less able to participate in pain management treatment

(Substance Abuse and Mental Health Services Administration, 2012)

Post-Traumatic Stress Disorder and Chronic Pain

- Chronic Pain and PTSD frequently co-occur
- Pain one of the most commonly reported symptoms of patient's with PTSD
- PTSD symptoms are especially common in patients who have
  - chronic pain and
  - high pain scores and
  - high pain affect and
  - high pain interference

  (Asmundson et al., 2002)

Both Pain and Substance Abuse...

- Are not static conditions
- Fluctuate in intensity over time and different circumstances
- Require ongoing management
- Are neurobiological conditions with evidence of disordered CNS function
- Mediated by genetics and environment
- May have serious harmful consequences if not treated
- Can require a multifaceted treatment
- Treatment for one condition can support or conflict with treatment for the other.

(Substance Abuse and Mental Health Services Administration, 2012)

Opioids

- Overall trends in drug use have decreased since a peak in the 1960's, opioids are the exception (SAMSHA's 2016 National Survey on Drug Use and Health)
- Approximately 25% of individuals receiving long term opioid therapy (90 days or greater) misused opioids (Vowles, et al. 2015)
- Misuse of opioids is defined as aberrant drug-related behaviors such as use of opioids to alleviate negative emotions and inconsistent with prescription directions (Chou et al., 2009)
- Can escalate into Opioid Use Disorder

DSM-5 Criteria for Opioid Use Disorder

1	Opioids are often taken in larger amounts or over a longer period than was intended	The presence of at least 2 of these symptoms indicates an Opioid Use Disorder (OUD) The severity of the OUD is defined as: MILD: The presence of 2 to 3 symptoms MODERATE: The presence of 4 to 5 symptoms SEVERE: The presence of 6 or more symptoms
2	There is a persistent desire or unsuccessful efforts to cut down or control opioid use	
3	A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects	
4	Craving or a strong desire to use opioids	
5	Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home	
6	Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids	
7	Important social, occupational, or recreational activities are given up or reduced because of opioid use	
8	Recurrent opioid use in situations in which it is physically hazardous	
9	Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.	
10	Tolerance,* as defined by either of the following: a) Need for markedly increased amounts of opioids to achieve intoxication or desired effect b) Markedly diminished effect with continued use of the same amount of opioid	
11	Withdrawal,* as manifested by either of the following: a) Characteristic opioid withdrawal syndrome b) Same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms	

Opioid Risk Factors

- Substance abuse history
  - Personal and family history
    - History of substance use/abuse
    - Alcohol use
    - Tobacco use
    - Legal history related to substance abuse including arrests or imprisonment and history of DUI's
- Substance abuse history may be the strongest predictor of abuse, misuse of other aberrant drug related behavior (Steffick et al, 2007)
- Psychiatric diagnoses (ORT) ADD, OCD, bipolar, schizophrenia, depression
- History of preadolescent sexual abuse/trauma
- Age
- Lack of coping skills other than medications/catastrophizing
- Consider using screening tool including ORT or SOAPP-R
- Medical providers have additional considerations, comorbid health conditions, PMP, UDS, etc.

Treatment/Behavioral Health Interventions

- “The goals of chronic pain treatment most often include, along with reduction of pain, relief of associated symptoms such as anxiety, depression, or sleep disturbance and increased function in valued social, vocational/avocational, creative and recreational roles.”

(Savage, et al. 2008)


Chronic pain coping includes how you think and behave related to your pain with the goal of making your pain more manageable and less overwhelming.
Living a life with “sparkle”.

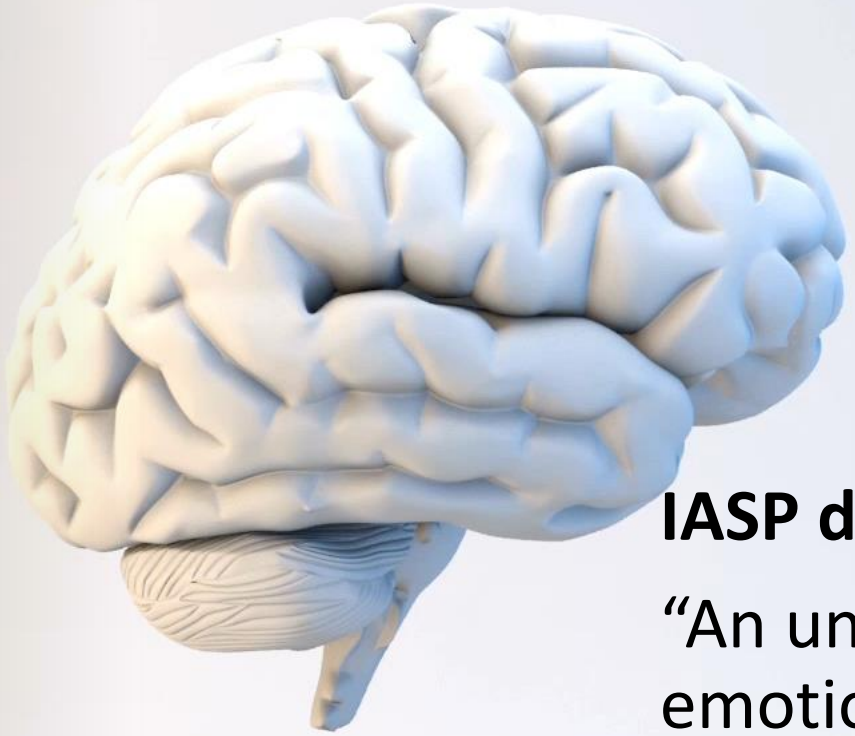
Approach/ Theories Used to Deliver Behavioral Health at Water's Edge

- Psychoeducational approach
- Skill focused
- CBT/ACT informed
- Solution focused
- Draw from Positive Psychology and Motivational Interviewing
- Focus on Mindfulness, gratitude, and meaning and purpose

Psychoeducational Topics

- Definition of pain
- Difference b/t chronic and acute pain
- Biopsychosocial model
- Role of CNS with pain
- Slowing down the CNS
- Neuroplasticity and pain
- Sleep and pain
- Stress
- Importance of nutrition
- Activity pacing and pain
- Behavioral activation/fear of movement
- Coping strategies with pain
- Risk factors with opioid use
- Opioid use disorder/SUD
- Relationship b/t depression, anxiety and pain
- Managing pain attacks
- Trauma and pain
- CBT triangle
- Impact of thoughts
- Catastrophizing

Definition of pain



IASP definition of pain[6]:

"An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."

The brain makes pain

Nerves detect and send a signal

The brain decides how to interpret it

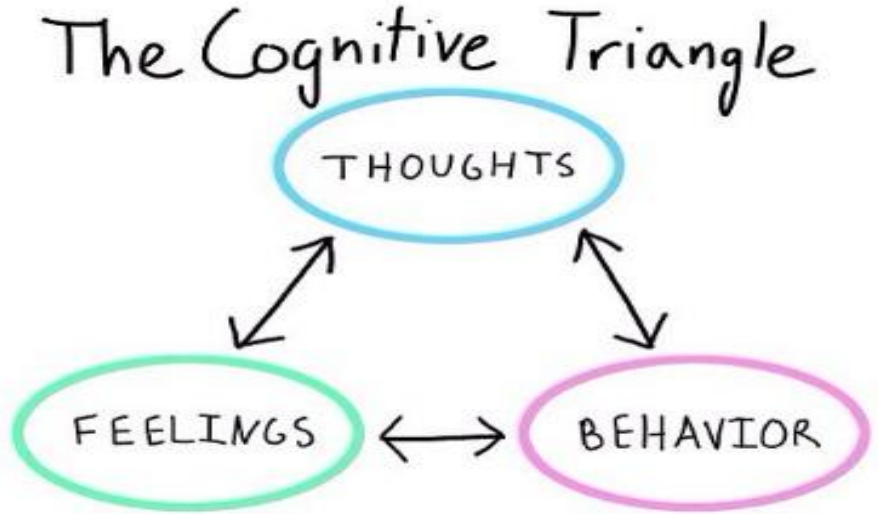
Cognitive Behavioral Therapy (CBT) for Treatment of Chronic Pain

- Considered “strong research support” for CBT for treatment of chronic pain by the American Psychological Association – highest grade possible
- Includes strong research support for…
  - fibromyalgia
  - low back pain
  - rheumatologic pain
  - headaches

CBT Basics

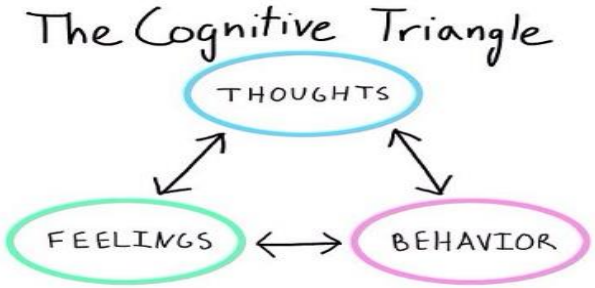
- Originally designed and used as a treatment for depression- now research supports use for a variety of reasons and conditions
- Utilizes psychoeducational approach
- All CBT approaches view-
  - People as “active processors of information”
  - People are able to gain control over their thoughts, feelings and behaviors, and even sometimes their physiology
  - Interrelationships exist between thoughts, feeling and behaviors

  (Jensen M., et al. 2014)
- The premise of CBT- cognitive triangle- thoughts, feelings and behaviors are all connected



- Want to see changes in mood, anxiety? Focusing on feelings is the most difficult place to illicit change, instead CBT focuses on thoughts and behaviors maintaining the symptoms
- Focusing on behaviors means lifestyle changes that impact mood sx's, anxiety, and chronic pain (diet, exercise, sleep hygiene)

The thoughts part of the triangle…



- Focusing on thoughts, means recognizing negative, maladaptive thinking, “cognitive distortions”, sometimes called cognitive errors.
- Some of the types of cognitive distortions: black and white thinking, labeling, overgeneralization, discounting the positive, mind reading, magnification, emotional reasoning and catastrophizing

Catastrophizing and Pain

- Research has looked at the relationship between catastrophizing thoughts and pain for the past 50 years
- Pattern of negative cognitive and emotional responses to pain
- Characterized by feelings of helplessness, rumination, and magnification of pain
- Affects pain coping behavior
- Studies show that pain catastrophizing is an independent risk factor for predicting chronicity of pain and poorer prognosis
- Pain catastrophizing is the most powerful predictor for back pain disability one year after new onset back pain (Darnell, 2019)

Everyone experiences painful situations at some point in their lives. Such experiences may include headaches, tooth pain, joint or muscle pain. People are often exposed to situations that may cause pain such as illness, injury, dental procedures or surgery.

- We are interested in the types of thoughts and feelings that you have when you are in pain. Listed below are thirteen statements describing different thoughts and feelings that may be associated with pain. Using the following scale, please indicate the degree to which you have these thoughts and feelings when you are experiencing pain.
- **0** – not at all **1** – to a slight degree **2** – to a moderate degree **3** – to a great degree **4** – all the time
- ***When I'm in pain …***
- 1☐ I worry all the time about whether the pain will end.
- 2☐ I feel I can't go on.
- 3☐ It's terrible and I think it's never going to get any better.
- 4☐ It's awful and I feel that it overwhelms me.
- 5☐ I feel I can't stand it anymore.
- 6☐ I become afraid that the pain will get worse.
- 7☐ I keep thinking of other painful events.
- 8☐ I anxiously want the pain to go away.
- 9☐ I can't seem to keep it out of my mind.
- 10☐ I keep thinking about how much it hurts.
- 11☐ I keep thinking about how badly I want the pain to stop.
- 12☐ There's nothing I can do to reduce the intensity of the pain.
- 13☐ I wonder whether something serious may happen.
- ***…Total*** Updated 11/11

CBT Techniques for Chronic Pain

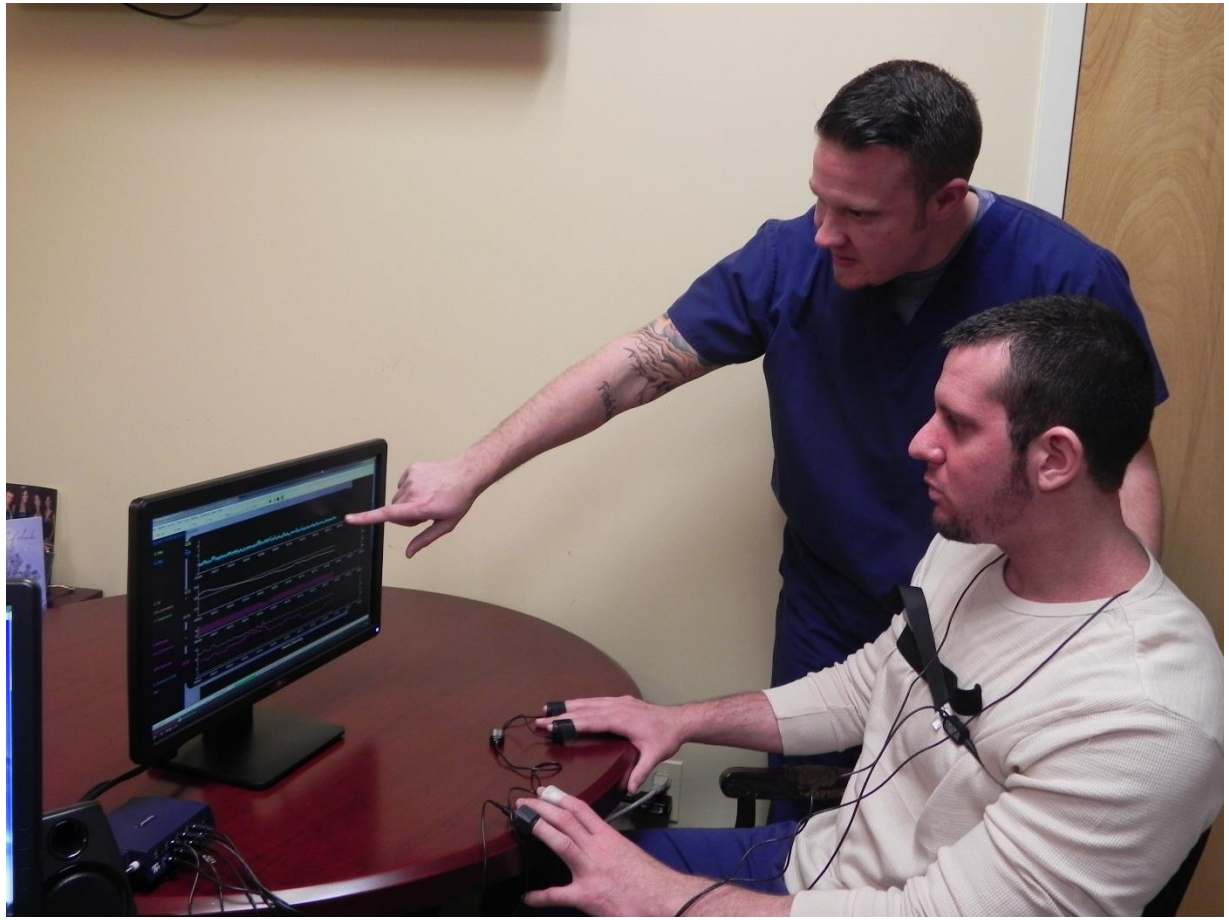
- Recognizing cognitive triggers, limiting beliefs, cognitive distortions, learning to reframe and restructure
- Problem solving
- Psychoeducation related to pain, mechanics of depression and anxiety
- Relaxation techniques (Breathing, Progressive Relaxation, Autogenics, Imagery etc.)
- Understand cognitive triangle and behavior part of equation, specifically behavioral activation (lifestyle factors- movement, smoking, nutrition, sleep, social outlets, etc.)

CBT Techniques for Chronic Pain

- Address lifestyle (behavior) may use charting, homework, psychoeducation r/t process of behavior change and roadblocks etc.
- Activity Pacing
- Mindfulness
- Will employ other techniques including biofeedback and hypnosis

Evidence Supports Use of Biofeedback as a Nonpharmacological Therapy with

- Chronic pain
  - Chronic Low back pain
  - Chronic headaches including chronic migraines
  - fibromyalgia
  - Musculoskeletal pain
  - Useful with a wider range of patients, do not have to be psychologically minded to benefit



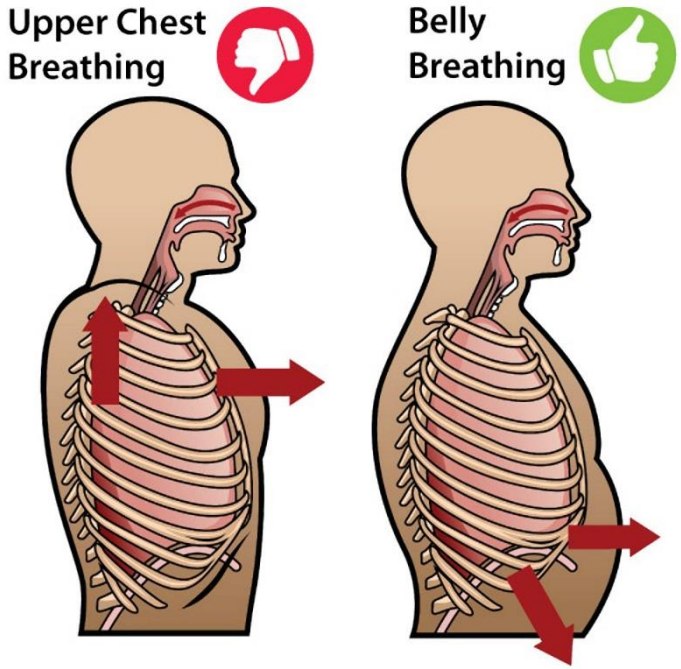
5 Minute Behavioral Health Interventions

Breathing

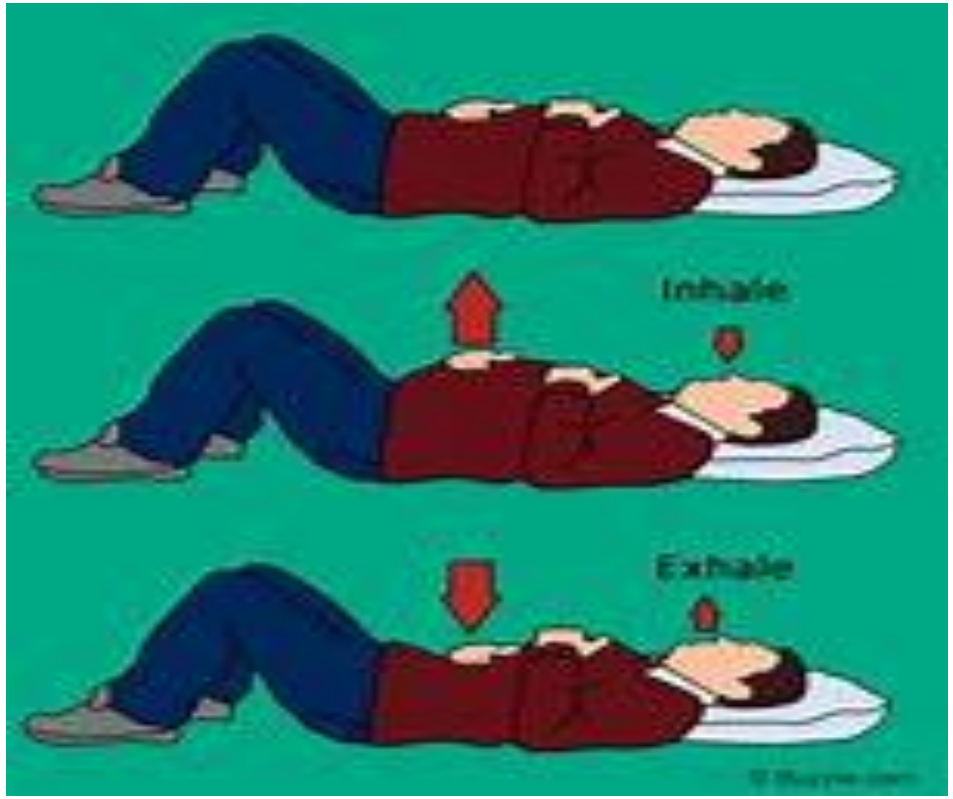
Pain Coping Plans

Mindful relaxation (great for falling asleep too)

Diaphragmatic or Belly Breathing



Belly Breathing



My Pain Plan (shutting the gate)

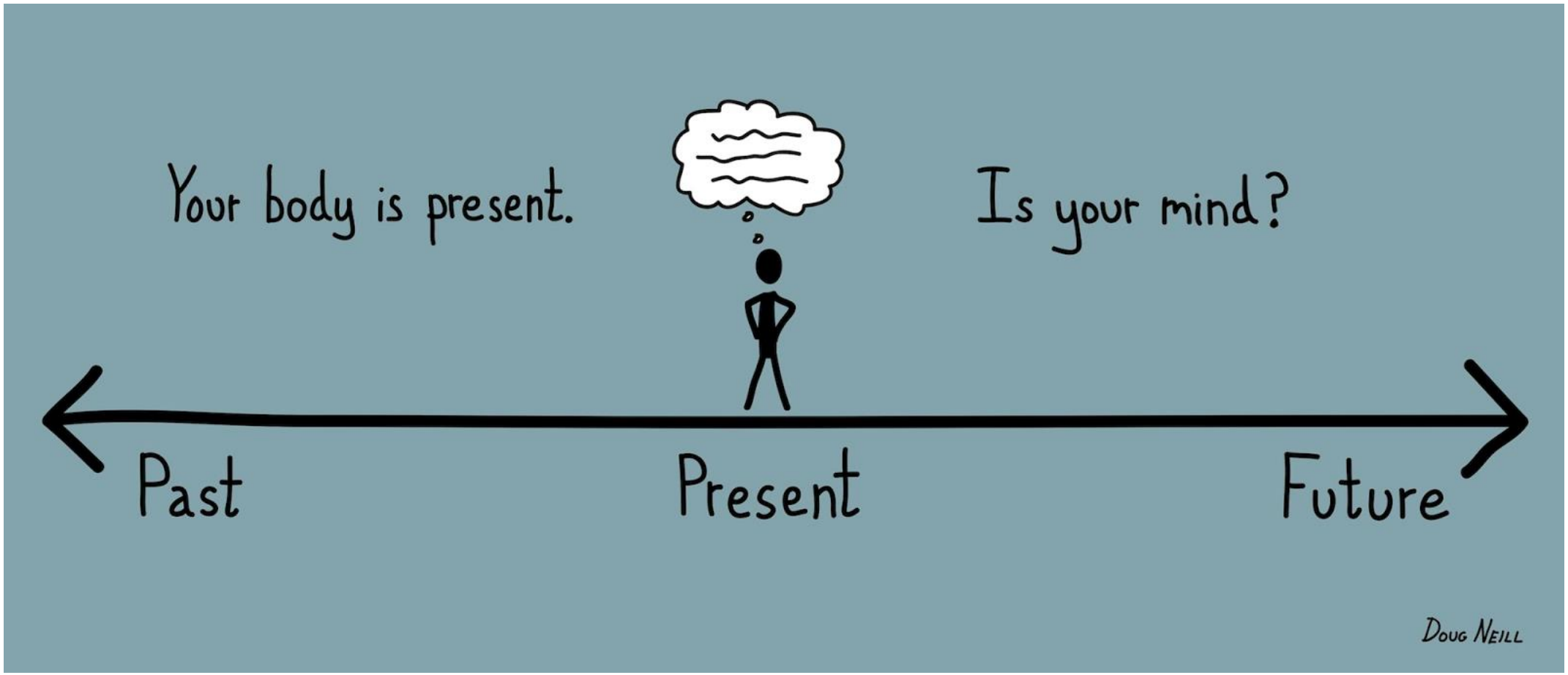
- **<u>Typical Pain</u>**
  - Practice breathing
  - Stretch
  - Heat
  - Use lidocaine
  - Put on favorite music
  - Call friend
  - Go for short walk
  - Play with dog
  - Work on art project
  - _____
    _____
    _____

- **<u>Flare Up</u>**
- Practice breathing
- _____
  _____
  _____
  _____

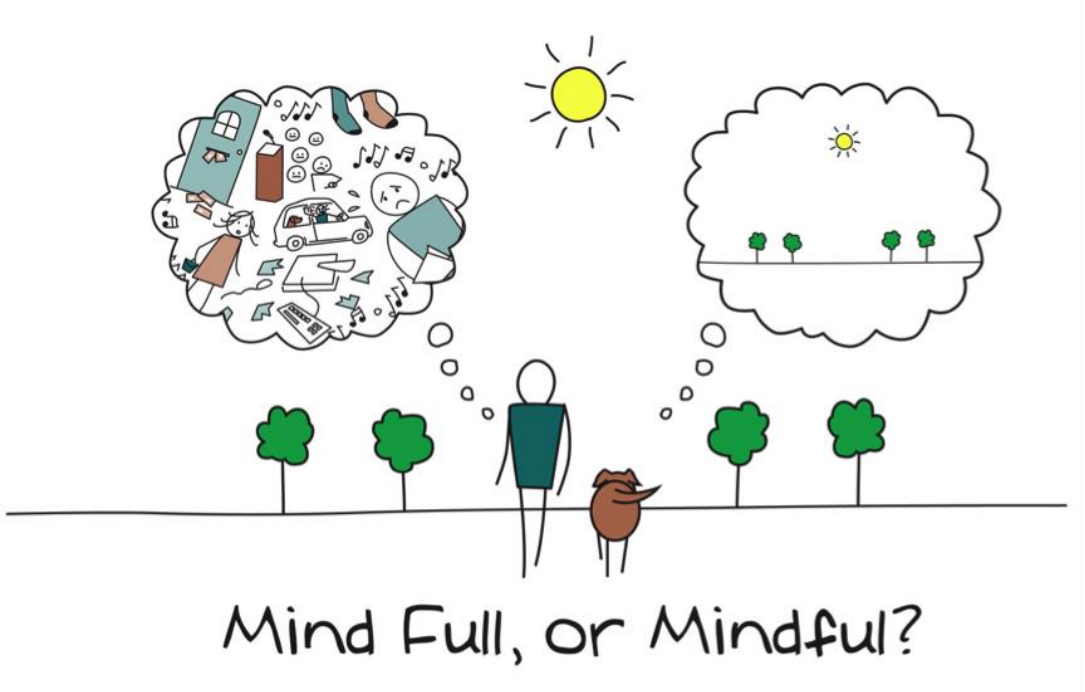
Mindfulness

- Basis thousands of years old
- Selective attention/focused concentration and neutral stance
- Can use while breathing, in the moment, for an event, eating, etc.
- Regular practice of mindfulness can significantly impact pain tolerance and reduced sensitivity (Grant et at, 2011)
- In a mindfulness exercise for pain could notice breathing, notice sensations of pain, notice thoughts related to pain- without judgment, sitting with the pain

(Fancher, J. 2012)


Your body is present.
Is your mind?
Past
Present
Future
Doug Neill

Mindfulness



Brief Mindful Relaxation Demonstration

Thank You! Questions?

Feel free to email me with additional questions not covered today or for a copy of my patient resource list:

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