

# Presenter's Bio

Katherine Bailey, PhD, is a licensed clinical psychologist at the VA Greater Los Angeles Healthcare Center and Chief of the SUD Subdivision. She is a Health Sciences Assistant Clinical Professor for the UCLA Department of Psychiatry and Biobehavioral Sciences.

Dr. Bailey provides clinical services and supervision in the outpatient Substance Use Disorders (SUD) and Pain Clinics with a focus on evidence-based psychotherapies. She earned a PhD in clinical psychology from the University of Illinois in Chicago, completed a clinical internship at the West LA VA Healthcare Center, and a clinical fellowship in health psychology at the San Francisco VA. She is a trainer for the national VA CBT-Chronic Pain evidence-based psychotherapy rollout, and also certified in acceptance and commitment therapy (ACT), and mindfulness.

Dr. Bailey's research interests include chronic pain, SUD, and smoking.

# Cognitive Behavioral Therapy (CBT) for Chronic Pain (CP) & Addiction

November 7, 2024

6:30 pm - 8:30 pm PST, 2 CME / CE Credits

Directly Provided CME/CE Activity by L.A. Care Health Plan

**Katherine Bailey, PhD**

**Clinical Psychologist & Chief SUD Subdivision;**

**Behavioral Health Division, GLA VA Healthcare Center**

**Health Sciences Assistant Clinical Professor; UCLA Department of Psychiatry &  
Biobehavioral Sciences**

***Trainer, VA Training Program in CBT-CP; Mental Health Services, VA Central Office***

**Disclaimer: These slides do not represent the VA**

# Disclosures

The following CME planners and faculty do not have any financial relationships with ineligible companies in the past 24 months.

- Leilanie Mercurio, L.A. Care PCE Program Manager, CME Planner.
- Katherine Bailey, PhD, Licensed Clinical Psychologist, Chief of the SUD Subdivision at the Greater Los Angeles VA Healthcare System, CME Planner and Faculty.

An ineligible company is any entity whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Commercial support was not received for this CME activity.

# Learning Objectives

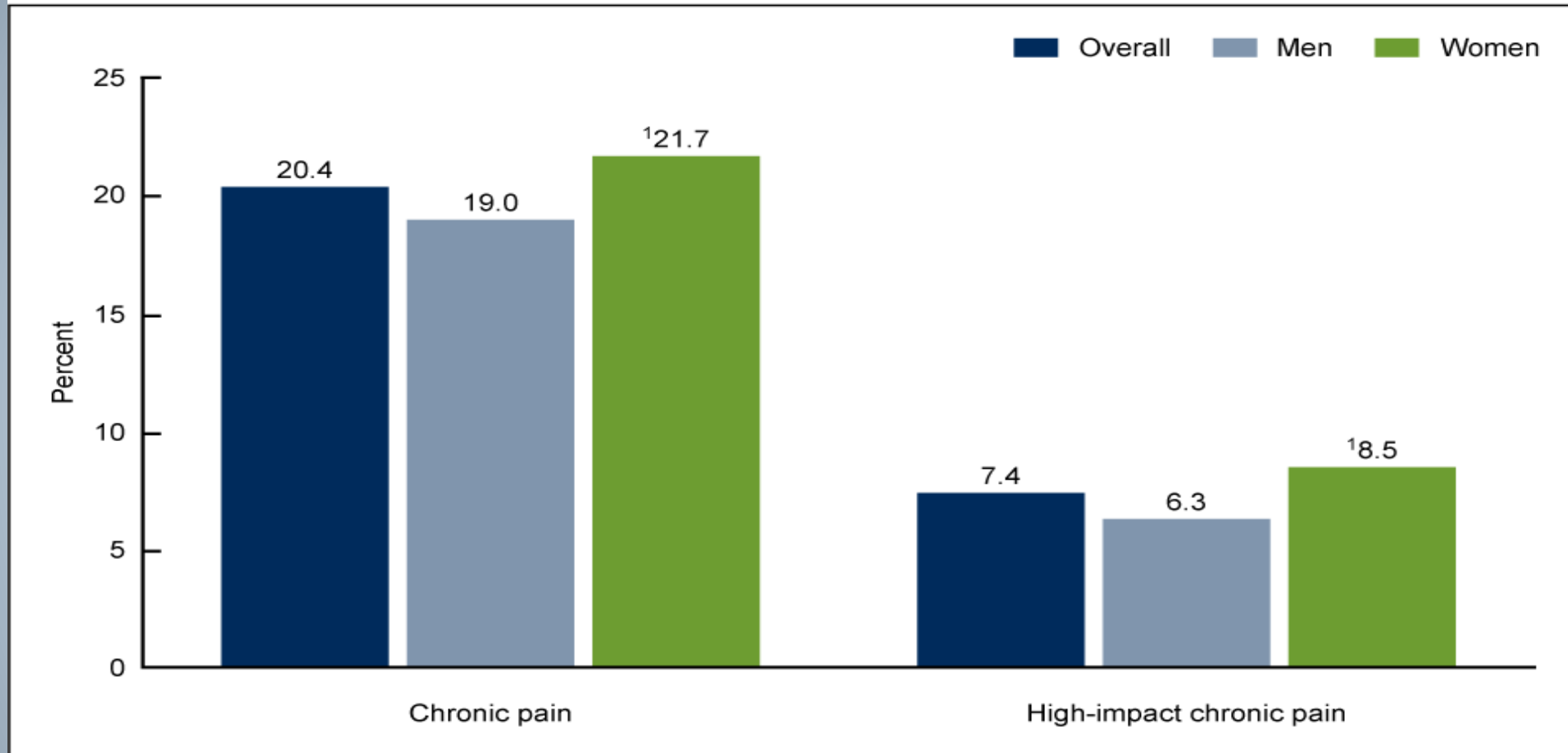
- Explain two (2) factors when to use CBT as an evidence-based treatment for chronic pain and addiction.
- Summarize two (2) differences between the biomedical and biopsychosocial models of chronic pain.
- Identify two (2) risk factors for addiction or overdose in the context of chronic pain.
- List two (2) CBT-CP skills that can be utilized for pain and addiction management.

# Chronic Pain Prevalence & Impact

- Prevalence – 21% of Americans experience chronic pain and 8% experience high-impact chronic pain (Nahin, 2023)
  - One of the most common reasons to seek care
  - Linked to opioid use disorder, depression, anxiety
  - Most common cause of long-term disability
  - New cases occur more often than diabetes, depression and high blood pressure
- Conservative cost to US Economy is \$560-630 billion (IOM, 2011)

# Gender Differences

Figure 1. Percentage of adults aged 18 and over with chronic pain and high-impact chronic pain in the past 3 months, overall and by sex: United States, 2019



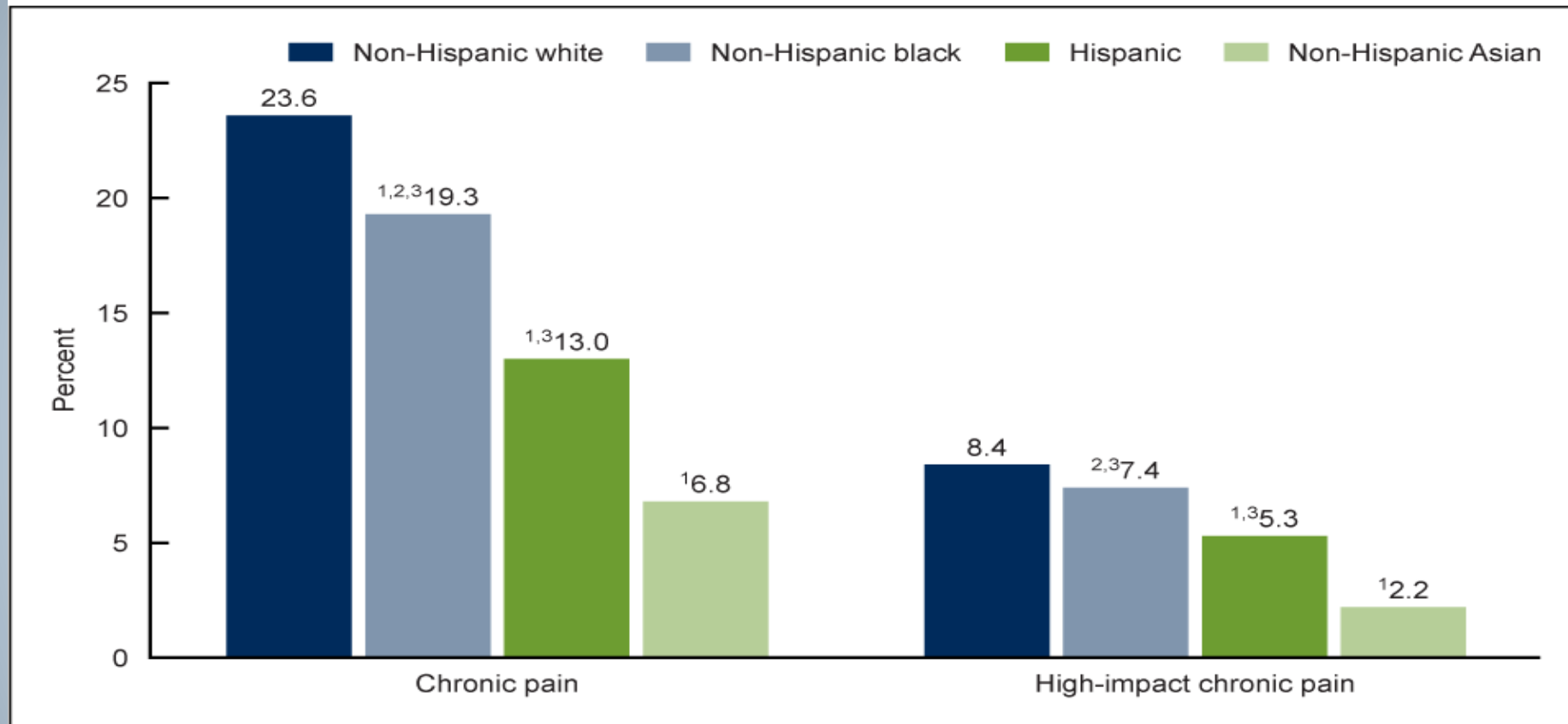
<sup>1</sup>Significantly different from men ( $p < 0.05$ ).

NOTES: Chronic pain is based on responses of "most days" or "every day" to the survey question, "In the past 3 months, how often did you have pain? Would you say never, some days, most days, or every day?" High-impact chronic pain is defined as adults who have chronic pain and who responded "most days" or "every day" to the survey question, "Over the past 3 months, how often did your pain limit your life or work activities? Would you say never, some days, most days, or every day?" Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Access data table for Figure 1 at: <https://www.cdc.gov/nchs/data/databriefs/db390-tables-508.pdf#1>.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019.

# Race & Ethnic Differences

Figure 3. Percentage of adults aged 18 and over with chronic pain and high-impact chronic pain in the past 3 months, by race and Hispanic origin: United States, 2019



<sup>1</sup>Significantly different from non-Hispanic white adults ( $p < 0.05$ ).

<sup>2</sup>Significantly different from Hispanic adults ( $p < 0.05$ ).

<sup>3</sup>Significantly different from non-Hispanic Asian adults ( $p < 0.05$ ).

NOTES: Chronic pain is based on responses of "most days" or "every day" to the survey question, "In the past 3 months, how often did you have pain? Would you say never, some days, most days, or every day?" High-impact chronic pain is defined as adults who have chronic pain and who responded "most days" or "every day" to the survey question, "Over the past 3 months, how often did your pain limit your life or work activities? Would you say never, some days, most days, or every day?" Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Access data table for Figure 3 at:

<https://www.cdc.gov/nchs/data/databriefs/db390-tables-508.pdf#3>.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019.

# Chronic Pain Disparities

- Race and ethnic related differences in pain experience and coping:
  - Black people report greater pain/suffering, lower pain threshold & more disability compared to white people
  - American Indian/Alaska Natives higher prevalence of pain compared to whites (Jimenez et al., 2011)
  - Asian-Americans report lower pain threshold and tolerance
  - Ethnic differences in acceptability of emotional expression related to pain (i.e., Latino and Italian American believe emotional expression is appropriate compared to Polish and other non-Latino whites) (Campbell et al., 2012)
  - Preference for prayer as coping among Black people
- Communication is diminished for minority patients when provider encounters are race discordant
- Higher education associated with lower pain-related disability
- Black people 3x and Latinos 2x more likely to view racism as a major health care problem
  - Racism and implicit biases limit access to treatments (e.g., opioids)
  - PCPs more likely to underestimate pain in Black people than other sociodemographic groups
  - Interferes with expectations of benefits and participation in treatment

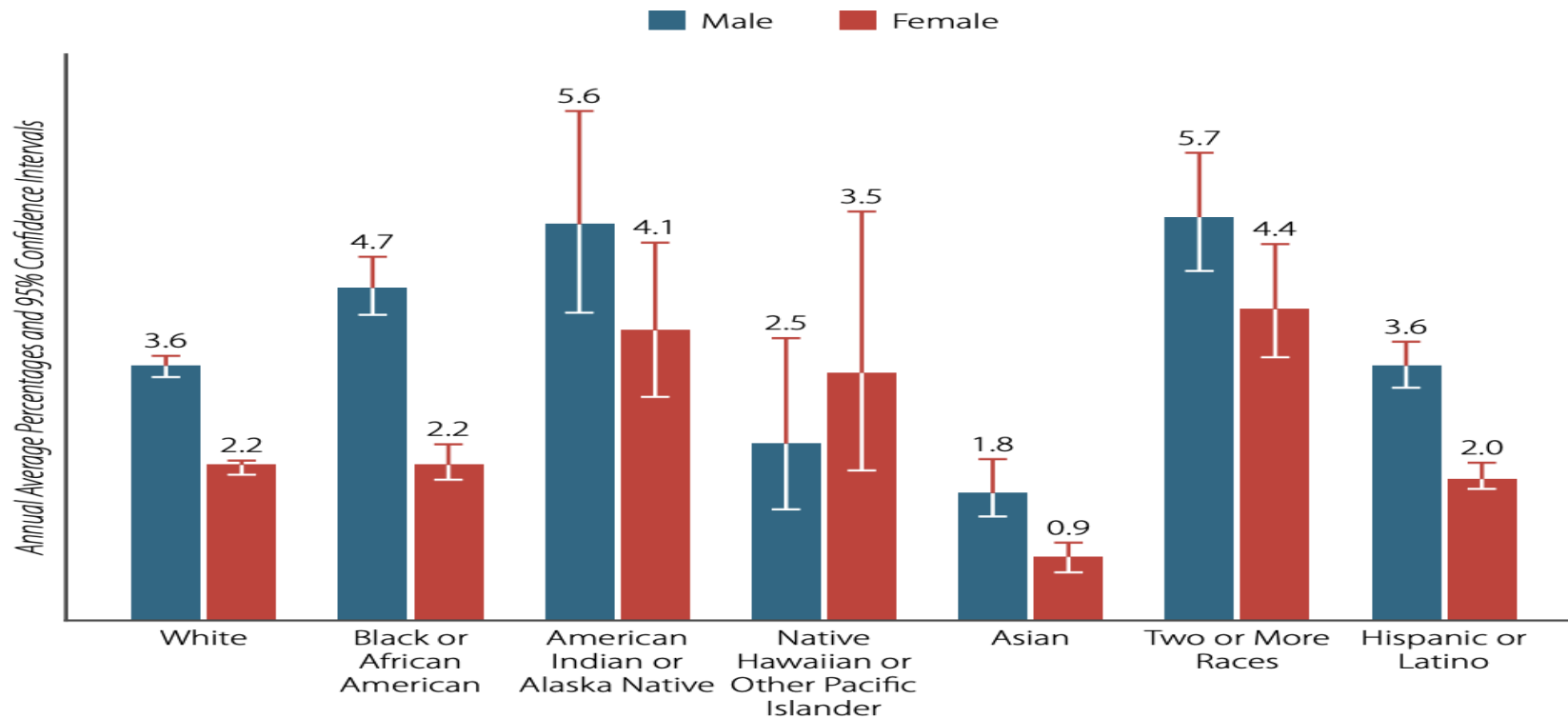


# Language Related Disparities

- Non-native speakers have barriers to health care (Bekanich et al., 2014)
  - limited health literacy
  - difficulties navigating healthcare system
  - communication challenges including privacy issues when translation is needed
  - Less than 20% of professionals treating Spanish-speakers report advanced Spanish proficiency (Chiauzzi et al., 2011)

# Substance Use Disorder (SUD) Race/Ethnicity x Gender Differences

**FIGURE 4.2 Illicit Drug Use Disorder in the Past Year among People Aged 12 or Older, by Race/Ethnicity and Gender: 2015–2019, Annual Averages**



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015–2019.

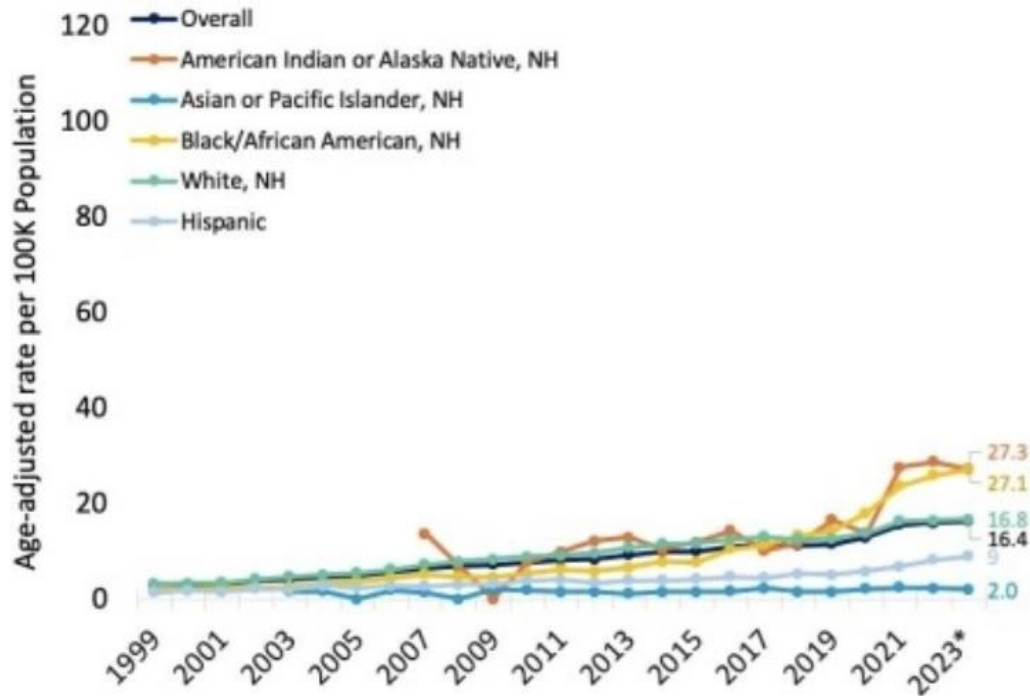
# SUD Related Disparities

- Sexual and gender minorities (LGBTQI+) have higher rates of substance misuse and SUDs in part due to stigma, harassment and trauma
- Although white and Black people use drugs at similar rates, fatal overdoses have escalated in Black people (particularly older Black men) at higher rates

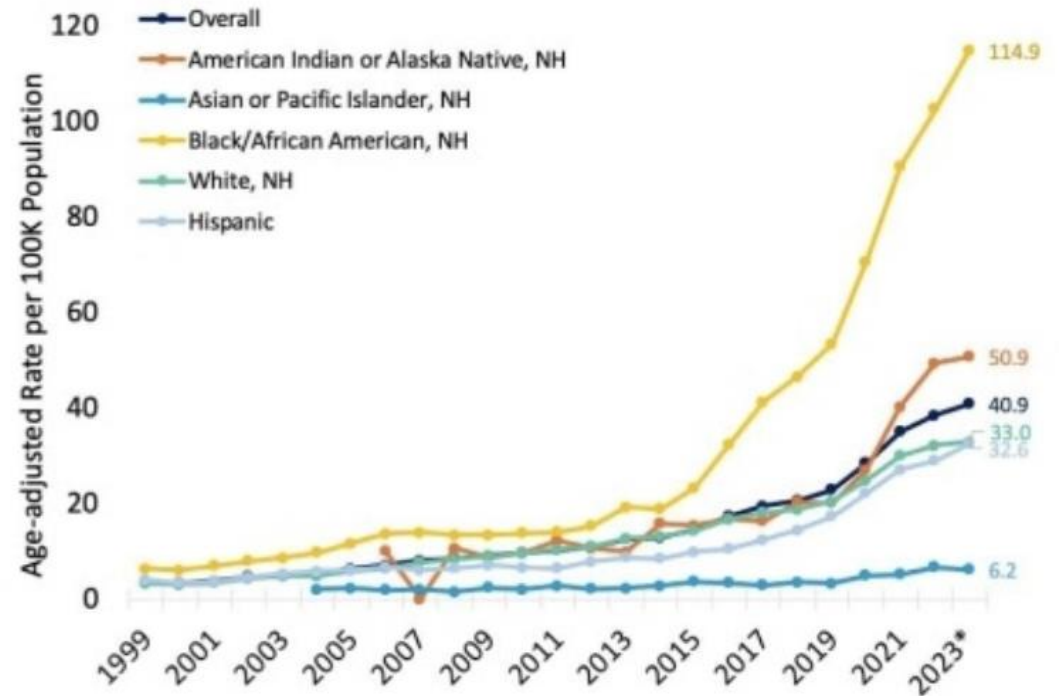
# SUD Disparities

## Among Older Americans, Drug Overdose is Highest Among Black, non-Hispanic Males

Adults Females, Aged 55-85+ years, by Race



Adult Males, Aged 55-85+ years, by Race



# Tailoring CBT-CP to Culture



- Critical to examine personal attitudes and biases regarding chronic pain and diversity
- CBT-CP should be culturally adapted as appropriate
  - Assess diversity factors -- ADDRESSING
  - Look for opportunities to tailor treatment (i.e. including prayer, or meditation, eliciting values, discussing when skills don't fit with cultural, spiritual and/or gender values)

# ADDRESSING Model

## ADDRESSING Model Framework and Overview

Cultural characteristic	Power	Less power
<b>Age and Generational Influences</b>	Adults	Children, adolescents, elders
<b>Developmental Disability</b>	Temporarily able-bodied	<i>Individuals</i> with disabilities
<b>Disability Acquired Later in Life</b>	Temporarily able-bodied	<i>Individuals</i> with disabilities (e.g., multiple sclerosis or dementia caused by stroke)
<b>Religion and Spiritual Orientation</b>	Christians	<i>non-Christian</i>
<b>Ethnicity/Race Identity</b>	White or Caucasian	<i>Persons of color</i>
<b>Socioeconomic Status</b>	Owning & Middle Class (access to higher ed.)	People of lower status because of occupation, education, income, or rural habitat
<b>Sexual Orientation</b>	Heterosexuals	Gay, lesbians, and bisexual people
<b>Indigenous Heritage</b>	Non-native	Native
<b>National Origin</b>	U.S. born	Immigrants, refugees, and international students
<b>Gender</b>	Male	Women, transgender, and intersex people

Hays, P. A. (2001). Addressing Cultural Complexities in Practice: A Framework for Clinicians and Counselors. Washington, D. C.: American Psychological Association.

*\*Please note: The influences and examples of corresponding minority groups provided within the A.D.D.R.E.S.S.I.N.G. model are applicable within United States and Canada.*

# Chronic Pain & SUD

- Prevalence of chronic pain is approximately 30% of adult population (Volkow & McClellan, 2016)
- Higher among Vets (i.e. 50% M, 75% F) report CNCP (Gibson, 2012)
- Lifetime prevalence of SUD among chronic pain patients varies from 20-81% depending on setting (c.f. Chang & Compton, 2013, Voon et al., 2017)
- Those with hx SUD on opioids for pain tend to be on higher doses with longer supply (Eilender et al., 2016)

# SUD & Chronic Pain

- Prevalence of pain among those with SUD ranges from 33% to 75% (John & Wu, 2020; Caldeiro et al., 2008; Ilgen et al., 2010)
  - less likely to be abstinent at 1-year follow up or drop out of treatment (Caldeiro, et al., 2008)
- Almost half of people who inject drugs reported chronic pain (most commonly in back, LE) for an average of 3 years
  - Doubled odds of non-medical use of prescription opioids in the last 24 hours (Dahlman et al., 2017)
- Two cross-sectional samples showed interaction between pain and moderate-higher etoh use resulted in opioid misuse (Paulus et al., 2019)
- Uncertain whether pain or SUD began first, some studies show that SUD starts before pain (Heimer et al., 2015)



# Risks for Overdose or SUD

Factor	Risk
<b>Medication-Related</b>	
-Daily Dose >100 MME (starts >20)	Overdose, SUD
-Long acting (i.e. methadone, fentanyl)	Overdose
-Combining with benzodiazepines	Overdose
-Use >3 months	Overdose, SUD
-Period after starting long-acting (<2 wk)	Overdose
-Dual opioid prescription	Overdose
-Combining with gabapentin (>900mg/daily)	Overdose
<b>Patient-Related</b>	
-Age >65	Overdose
-Sleep-disordered breathing (i.e. OSA)	Overdose
-Renal or hepatic impairment	Overdose
-Depression	Overdose, SUD
-SUD including etoh, nicotine	Overdose, SUD
-Hx of overdose	Overdose
-Adolescence	SUD
<i>c.f. Volkow &amp; McClellan, 2016 &amp; Chang &amp; Compton, 2013, Moyo et al., 2019; Gomes et al., 2017</i>	

# CPG Chronic Pain Provider Summary

Topic	#	Recommendation	Strength <sup>a</sup>	Category <sup>b</sup>
Evaluation and Diagnostic Approach	1.	For patients with low back pain, we recommend the history and physical examination include evaluation for progressive or otherwise serious neurologic deficits and other red flags (e.g., signs, symptoms, history) associated with serious underlying pathology (e.g., malignancy, fracture, infection).	Strong for	Reviewed, Amended
	2.	For patients with low back pain, we recommend diagnostic imaging and appropriate laboratory testing when neurologic deficits are progressive or otherwise serious or when other red flags (e.g., signs, symptoms, history) are present.	Strong for	Reviewed, Amended
	3.	For patients with acute low back pain, without focal neurologic deficits or other red flags (e.g., signs, symptoms, history), we recommend against routinely obtaining imaging studies or performing invasive diagnostic tests.	Strong against	Reviewed, New-replaced
	4.	For patients with low back pain, we suggest assessing psychosocial factors and using predictive screening instruments (e.g., STarT Back and The Orebro Musculoskeletal Pain Screening Questionnaire) to inform treatment planning.	Weak for	Reviewed, New-replaced
	5.	For patients with low back pain, with or without radicular symptoms, there is insufficient evidence to recommend for or against specific physical exam maneuvers to assist in the diagnosis of facet or sacroiliac joint pain, or a lumbar/lumbo-sacral radiculopathy.	Neither for nor against	Reviewed, New-added
Patient Education and Self-care	6.	For patients with low back pain, there is insufficient evidence to recommend for or against pain neuroscience education, clinician-directed education with patient-led goal setting, or back school.	Neither for nor against	Reviewed, New-replaced
	7.	For the self-management of low back pain, there is insufficient evidence to recommend for or against technology-based modalities.	Neither for nor against	Reviewed, New-added
Non-pharmacologic and Non-invasive Therapy	8.	For patients with chronic low back pain, we suggest cognitive behavioral therapy.	Weak for	Reviewed, New-replaced
	9.	For patients with low back pain, we suggest a structured clinician-directed exercise program (e.g., aerobic, aquatic, mechanical diagnosis and therapy, mobility, motor control, Pilates, strengthening exercises, structured walking program, tai chi).	Weak for	Reviewed, New-replaced
	10.	For patients with chronic low back pain, we suggest spinal mobilization/manipulation.	Weak for	Reviewed, New-replaced
	11.	For patients with acute low back pain, there is insufficient evidence to recommend for or against spinal mobilization/manipulation.	Neither for nor against	Reviewed, New-replaced
	12.	For patients with chronic low back pain, there is insufficient evidence to recommend for or against mindfulness-based stress reduction.	Neither for nor against	Reviewed, New-replaced
	13.	For patients with low back pain, there is insufficient evidence to recommend for or against lumbar supports.	Neither for nor against	Reviewed, Amended

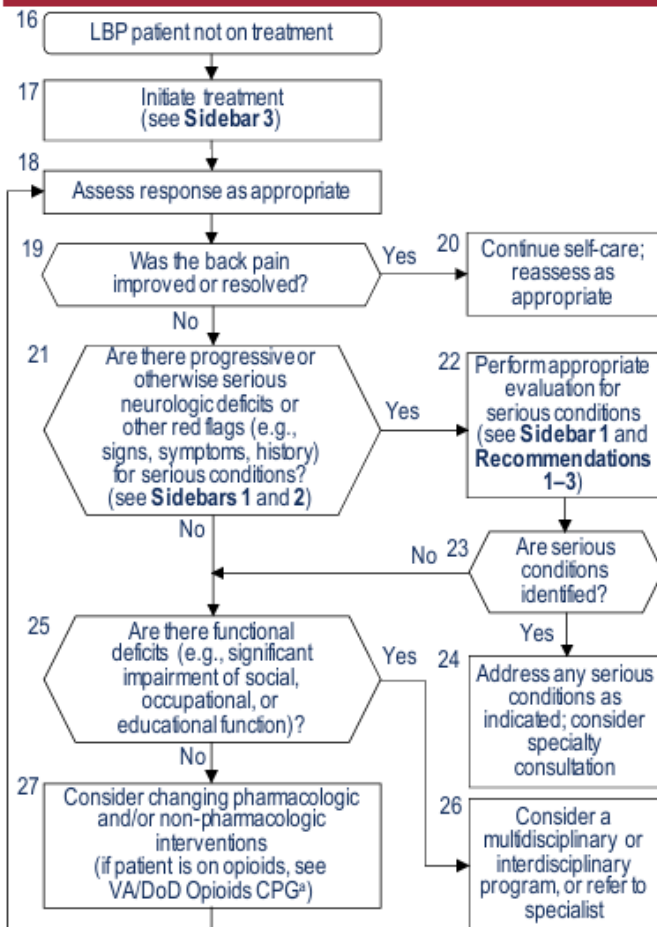
Topic	#	Recommendation	Strength <sup>a</sup>	Category <sup>b</sup>
Non-pharmacologic and Non-invasive Therapy (cont.)	14.	For patients with low back pain, with or without radicular symptoms, there is insufficient evidence to recommend for or against mechanical lumbar traction.	Neither for nor against	Reviewed, New-replaced
	15.	For patients with chronic low back pain, there is insufficient evidence to recommend for or against auricular acupressure.	Neither for nor against	Reviewed, New-added
	16.	For patients with low back pain, there is insufficient evidence to recommend for or against yoga or qi gong.	Neither for nor against	Reviewed, New-replaced
	17.	For patients with low back pain, there is insufficient evidence to recommend for or against cupping, laser therapy, transcutaneous electrical nerve stimulation, and ultrasound.	Neither for nor against	Reviewed, New-replaced
Pharmacotherapy	18.	For patients with chronic low back pain, we suggest duloxetine.	Weak for	Reviewed, New-replaced
	19.	For patients with low back pain, we suggest nonsteroidal anti-inflammatory drugs.	Weak for	Reviewed, New-replaced
	20.	For patients with low back pain, with or without radicular symptoms, there is insufficient evidence to recommend for or against gabapentin or pregabalin.	Neither for nor against	Reviewed, Amended
	21.	For patients with low back pain, there is insufficient evidence to recommend for or against tricyclic antidepressants.	Neither for nor against	Reviewed, New-added
	22.	For patients with low back pain, there is insufficient evidence to recommend for or against topical preparations.	Neither for nor against	Reviewed, Amended
	23.	For patients with acute low back pain, there is insufficient evidence to recommend for or against a non-benzodiazepine muscle relaxant for short-term use.	Neither for nor against	Reviewed, New-replaced
	24.	For patients with chronic low back pain, we suggest against offering a non-benzodiazepine muscle relaxant.	Weak against	Reviewed, Not changed
	25.	For patients with low back pain, we suggest against acetaminophen.	Weak against	Reviewed, New-replaced
	26.	For patients with low back pain, we suggest against monoclonal antibodies.	Weak against	Reviewed, New-added
	27.	For patients with chronic low back pain, we suggest against opioids. For patients who are already using long-term opioids, see the VA/DoD CPG for the Use of Opioids in the Management of Chronic Pain.	Weak against	Reviewed, New-replaced
Dietary Supplements	28.	For patients with low back pain, with or without radicular symptoms, we suggest against systemic corticosteroids (oral or intramuscular injection).	Weak against	Not reviewed, Amended
	29.	For patients with low back pain, we recommend against benzodiazepines.	Strong against	Reviewed, Not changed
	30.	For patients with low back pain, there is insufficient evidence to recommend for or against any specific diet or nutritional, herbal, or homeopathic supplements (e.g., anti-inflammatory diet, turmeric, vitamin D), cannabis, or cannabinoids.	Neither for nor against	Reviewed, New-replaced

# CPG Chronic Pain Pocket Card

VA/DoD CLINICAL PRACTICE GUIDELINES

February 2022

## Module B: Management of Low Back Pain



<sup>a</sup> See the VA/DoD Clinical Practice Guideline for the Use of Opioids in the Management of Chronic Pain. Available at: <https://www.healthquality.va.gov/>.



Sidebar 2: Evaluation for Possible Other Conditions <sup>a</sup>		
Possible Other Conditions	Red Flags (e.g., signs, symptoms, history)	Suggested Evaluation <sup>b</sup>
Herniated disc	<ul style="list-style-type: none"> <li>• Radicular back pain (e.g., sciatica)</li> <li>• Lower extremity dysesthesia and/or paresthesia</li> </ul>	None
	<ul style="list-style-type: none"> <li>• Severe/progressive lower extremity neurologic deficits</li> <li>• Symptoms present &gt;1 month</li> </ul>	MRI <sup>c</sup>
Spinal stenosis	<ul style="list-style-type: none"> <li>• Radicular back pain (e.g., sciatica)</li> <li>• Lower extremity dysesthesia and/or paresthesia</li> <li>• Neurogenic claudication</li> <li>• Older age</li> </ul>	None
	<ul style="list-style-type: none"> <li>• Severe/progressive lower extremity neurologic deficits</li> <li>• Symptoms present &gt;1 month</li> </ul>	MRI <sup>c</sup>
Inflammatory LBP	<ul style="list-style-type: none"> <li>• Morning stiffness</li> <li>• Improvement with exercise</li> <li>• Alternating buttock pain</li> <li>• Awakening due to LBP during the second part of the night (early morning awakening)</li> <li>• Younger age</li> </ul>	Radiography of pelvis, SI joint, and spine area of interest

<sup>a</sup> These conditions usually do not require urgent diagnostic evaluation

<sup>b</sup> Consider specialty consultation

<sup>c</sup> Some patients may have contraindications to MRI, contrast usually not required

**Abbreviations:** CBT: cognitive behavioral therapy; CPG: clinical practice guideline; DoD: Department of Defense; LBP: low back pain; MBSR: mindfulness-based stress reduction; MRI: magnetic resonance imaging; NSAIDs: nonsteroidal anti-inflammatory drugs; SI: sacroiliac; VA: Department of Veterans Affairs

Sidebar 3: Management of Low Back Pain			
Category	Intervention (listed alphabetically by category)	Low Back Pain Duration <sup>a</sup>	
		Acute <4 Weeks	Subacute or Chronic ≥4 Weeks
Self-care	Advice to remain active	X	X
	Acupuncture		X Recommendation 34
Non-pharmacologic treatment	CBT and/or MBSR		X Recommendation 8 and Recommendation 12
	Clinician-directed exercise program		X Recommendation 9
	Spinal mobilization/manipulation		X Recommendation 10
Pharmacologic treatment	Duloxetine		X Recommendation 18
	NSAIDs	X Recommendation 19	X Recommendation 19
Other treatment	Multidisciplinary or interdisciplinary program		X Recommendation 39

<sup>a</sup> Recommendations can be accessed in the full guideline. Available at: <https://www.healthquality.va.gov/>.



# Practice Guidelines for SUD Treatment

SUD	Psychosocial Interventions	Medications
Alcohol	<ul style="list-style-type: none"> <li>-Behavioral Couples Therapy</li> <li>-CBT</li> <li>-Motivation Enhancement Therapy (MET)</li> <li>-Twelve Step Facilitation (TSF)</li> <li>-Community Reinforcement Approach</li> </ul>	<p>Strong evidence:</p> <ul style="list-style-type: none"> <li>-Naltrexone</li> <li>-Topiramate</li> </ul> <p>Weak evidence:</p> <ul style="list-style-type: none"> <li>-Acamprosate</li> <li>-Disulfiram</li> <li>-2<sup>nd</sup> line: Gabapentin</li> </ul>
Opioids		<p>Strongest evidence:</p> <ul style="list-style-type: none"> <li>-Buprenorphine/naloxone</li> <li>-Methadone</li> </ul> <p>Weak evidence:</p> <ul style="list-style-type: none"> <li>-Injectable Naltrexone (Vivitrol)</li> </ul>
Cannabis	CBT/MET	
Stimulants	<p>Cocaine: CBT &amp; Contingency Management (CM)</p> <p>Amphetamine/Methamphetamine: CM</p>	

# Tx Co-morbid SUD & Pain

- Pts with opioid dependence and pain present with higher rates of polysubstance use (i.e. etoh, sedatives, cannabis) compared to those without pain (Trafton et al., 2004)
- Methadone maintenance effective for OUD regardless of baseline pain (Ilgen et al., 2006):
  - Vets with pain at baseline showed similar reductions in illicit substance use (except cannabis) at 1-year follow-up
  - Ratings of MH outcomes improved for all though pain patients had lower MH ratings at baseline
- Buprenorphine may be preferred pharmacotherapy for co-morbid pain & opioid use disorder (Ling, Mooney, & Hillhouse, 2011)
  - At higher doses, effects plateau reducing dose dependent euphoria and respiratory depression
  - No ceiling effect for analgesia
  - Some preliminary evidence that buprenorphine (also, gabapentin) may counteract opioid induced hyperalgesia (Compton et al., 2010; Lee et al., 2011))
- Review found small body of evidence to support psychotherapy for treating co-morbid pain & SUD (Eilender et al., 2016)
- RCT of CBT & ACT based tx for pain among Vets with SUD showed improved pain related functioning and reduced alcohol use among CBT/ACT group compared to tx as usual for AUD (Ilgen et al., 2016).
- Small pilot study suggests feasibility of CBT for pain and addiction with reduced pain ratings, etoh use, and decrease in running out of prescribed meds early (Ilgen et al., 2011).
- Pilot comparing CBT for pain & OUD v. Methadone Counseling (Tx as usual) among patient with OUD on methadone showed higher rates of abstinence from nonmedical opioid use among CBT condition with similar outcomes on pain (Barry et al., 2019)
- Note abstinence-based detox is not indicated for co-occurring OUD and pain (c.f. Voon et al., 2017)

# CBT for Chronic Pain

- CBT-CP is an evidence based, behaviorally oriented psychotherapy that can be delivered in an individual or group format
- Current VA/DOD Clinical Practice Guidelines (CPG, 2022) recommend CBT-CP for chronic low back pain, with weak evidence
- Of note, VA/DOD CPG also recommend:
  - Clinician directed exercise programs
  - Against benzodiazepines
  - Against initiation of long-term opioid therapy
  - Evidence is too mixed to recommend for or against short-term opioid therapy for acute exacerbations of LBP

# Efficacy of CBT for Pain

- Cochrane review (2020) suggests small effects on pain and disability (compared to TAU, waitlist), and moderate effects on mood and catastrophizing, posttreatment (Williams et al., 2020)
- Meta-analysis on CBT for chronic back pain shows (Hoffman et al., 2007):
  - CBT intervention superior to waitlist control for pain intensity, but no impact on depression and quality of life
  - Self-regulatory treatments (mindfulness, relaxation, biofeedback) superior to waitlist control on pain intensity and depression
- CBT, Exercise/PT, and Exercise/PT + CBT all showed improvement compared to control (Smeets et al., 2006).
- Group CBT shown superior to education + PT at 12 months (Lamb et al., 2010)
- Mechanisms of CBT benefits on pain (Turner et al., 2007):
  - Decreased catastrophizing (Smeets, 2006; Lamb, 2010)
  - Perceived control over pain
  - Decreased kinesiophobia (Lamb, Hansen et al., 2010)
  - Level of disability
  - Belief that pain signals harm

# Effectiveness of CBT-CP

- CBT-CP provides benefits for pain and related outcomes with medium effect sizes (Murphy, Cordova & Dedert, 2020; Stewart et al., 2015).
- Murphy et al., n=1331 (81% male; 69% white, mean age = 52.3):
  - large effect size (Cohen's  $d$  0.78) for pain catastrophizing
  - medium to large effect sizes ( $d$  0.60) for worst pain intensity, pain interference, depression, and physical quality of life
- Stewart et al. (2015): 148 Veterans received at least one CBT-CP treatment session (ITT sample)
  - 117 (79%) completed a full course of treatment through Termination
  - 31 (21%) non-completers
- Basic participant demographics
  - **Gender:** Male = 77%; Female = 21% (no response = 2%)
  - **Age:** Mean = 50.6 yrs/o (SD = 11.7); Range = 25-69
  - **Ethnicity:** Caucasian = 70%; African American = 16.5%; Other = 13.5%
  - **Service Era:** Vietnam = 28%; Post-Vietnam = 26% OEF/OIF/OND = 26%; Other = 20%
- ITT sample demonstrated significant improvement on nearly all outcome measures (except pain ratings)



# Factors when to use CBT-CP for Pain & Addiction

- Chronic pain condition and/or substance use that causes impairment AND distress
- Trigger or cue for substance use is pain
- Willing and able to engage in some form of physical activity
- Has mood and/or quality of life related goals
- Absence of severe cognitive impairment
- Absence of psychiatric problems that interfere with participation
- Will practice between sessions
- Those willing to make behavior changes do benefit!

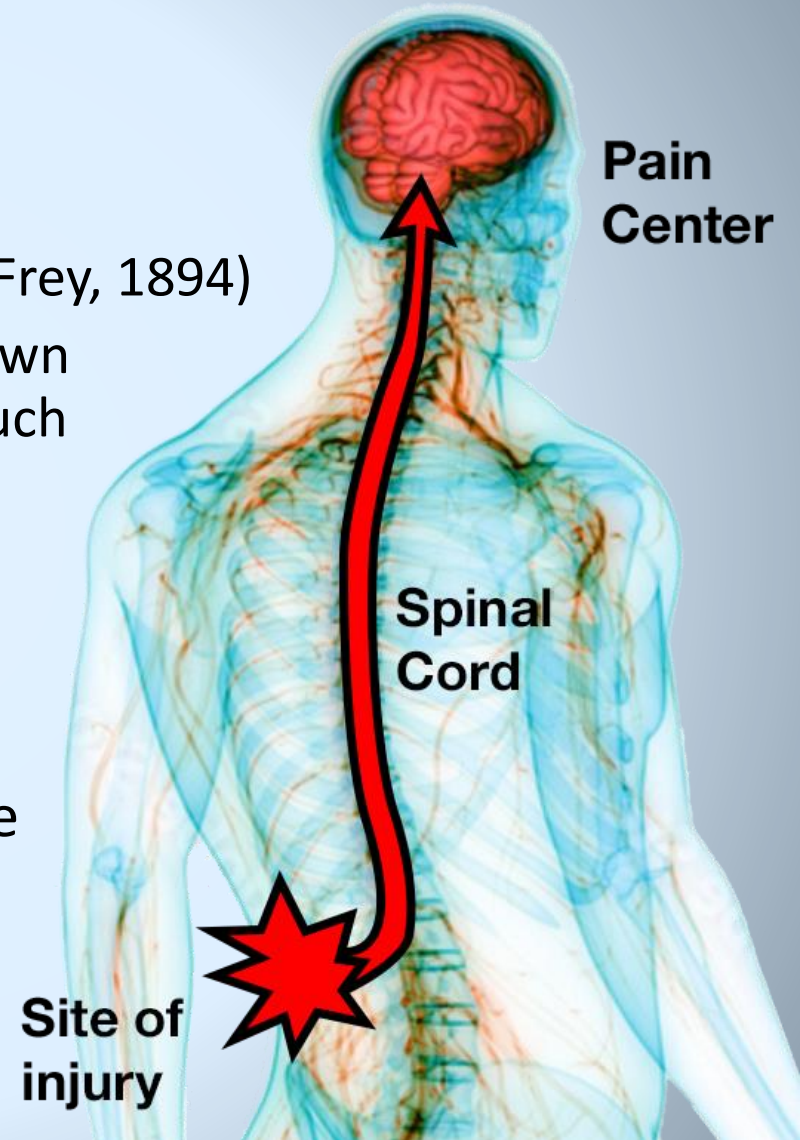
# Pain Theories & Models

## Specificity Theory

- Pain intensity = severity of injury
- Old theory with intuitive appeal (von Frey, 1894)
- Pain is “a specific sensation, with its own sensory apparatus independent of touch and other senses”

## Biomedical Model

- Pain explained by bio factors only
- Treatment focused on tissue & disease
- Largely passive treatments performed by experts



# Challenging Specificity Theory

- Gunshot wound v. papercut
- Examples from battlefield and athletic fields
- Scans in older adults may reveal changes that aren't perceived, don't impact functioning
- Phantom limb pain

# Pain: Theories

## Gate Control Theory

- Ronald Melzack & Patrick Wall, 1965
- Integrates a physiological explanation with psychology of pain perception
- Nerve fibers transmit pain signals to spinal cord and then brain -- signals can be suppressed
- “Gate” in dorsal horn of spinal cord – how wide the gate opens to let pain signals in is affected by factors such as:
  - Positive/negative thoughts and emotions
  - Attention/distraction level
- Combining the physiological and psychological was groundbreaking

# Pain: Theories



## Neuromatrix Model – Melzack, 1999

- Gate control plus stress models (Selye, 1950; Selye, 1976)
- No single pain center
- Pain is multidimensional experience related to pattern or *neuromatrix* of nerve impulses that are impacted by factors such as sensory experiences and learning
- Chronic pain as chronic stressor – less input needed to produce pain over time
- Brain areas that process pain include those that underlie psychological process
  - Prefrontal cortex process meaning of pain
  - Anterior cingulate cortex process emotional or affective response to pain
  - Insula processing info related to sense of physical condition
  - Treatments that alter thoughts, sense of comfort and calm alter activity in prefrontal cortex, sensory cortex and limbic system (including ACC and insula)
- Pain relief occurs when these systems are disengaged or interrupted

# Pain: Theories

## Neuroplasticity

- Nervous system is adaptable/changeable
- In chronic pain neuroplasticity works against us -- reorganization is maladaptive
- Pain signals are more easily triggered and perception of painful input is exaggerated
- Part of why pain persists after injury has resolved
- CBT seeks to:
  - build 'new' roads in the brain to promote positive changes
  - reduce use of 'old' roads



# Theoretical Underpinnings of CBT-CP

## Operant Conditioning Model for Pain (Fordyce et al., 1968, 1973)

- All behavior is sensitive to environmental response to that behavior
- Pain behaviors (i.e. grimacing, guarding, resting) reinforced by social support, sanctioned time out from responsibilities
- Adaptive for acute pain but maladaptive for chronic pain

## Treatment Strategies:

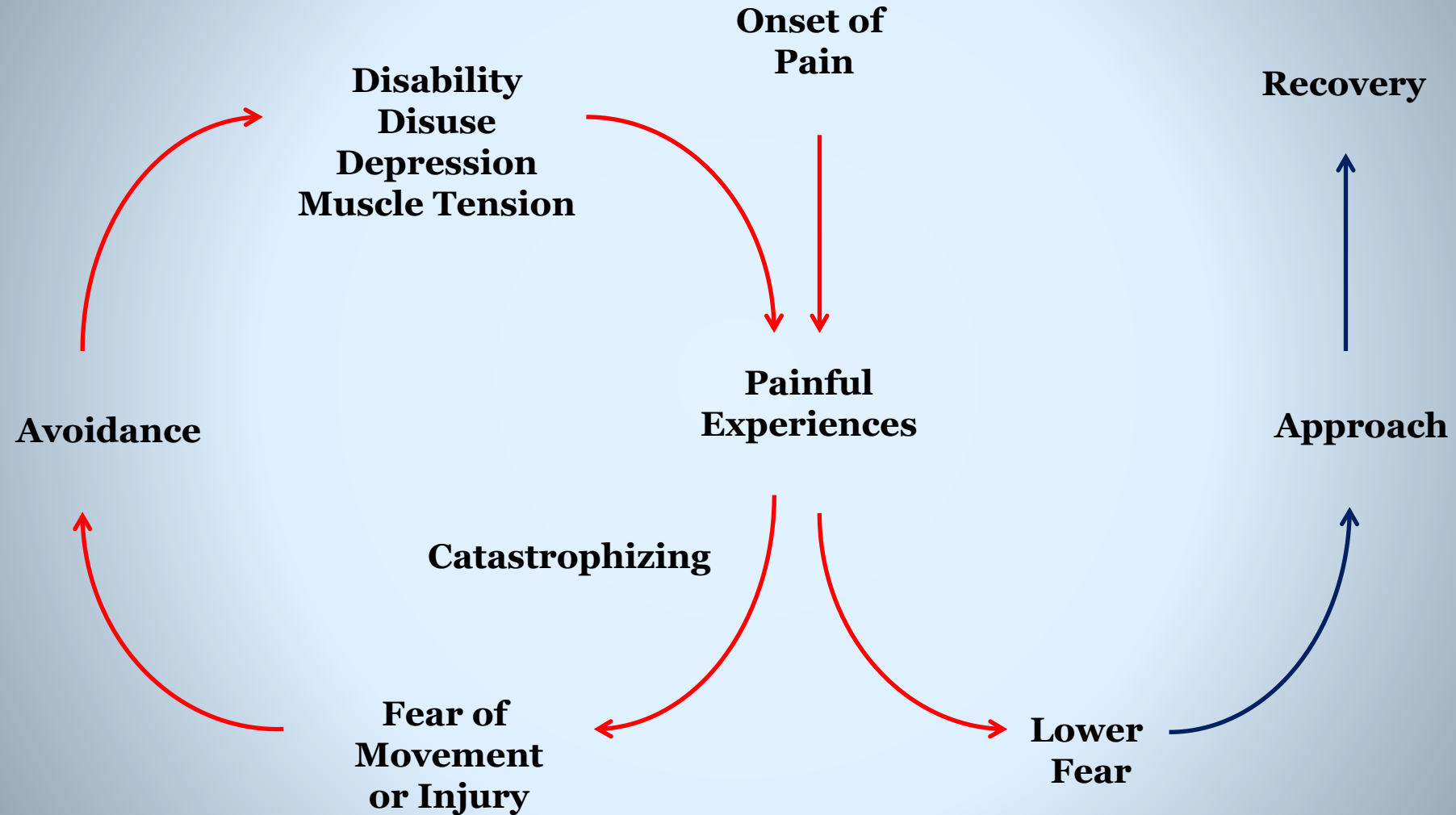
- Ignore pain behaviors and reward well behaviors
- Educate, change environmental reinforcers or remove from the environment
- Focus on life goals and functioning, change focus to time rather than pain (i.e., medication taking, pacing)

# Theoretical Underpinnings

- Peripheral Physiological Models
  - Relaxation Training (Jacobson, 1938; Schultz, 1932)
  - Self-Regulation Language
  - Techniques include diaphragmatic breathing, PMR, autogenic training, biofeedback
  - Used for anxiety disorders in 1950s, for pain in 1970s
  - Good buy in, fits medical model of acting on perceived cause (i.e., muscle tension) of underlying pain
  - Mechanism appears to be increased self-efficacy (Blanchard et al., 1986; Holroyd et al., 1984)
  - Limited benefit to stand alone self-regulation techniques for pain (Jensen et al., 2009, Thorsell et al., 2011)

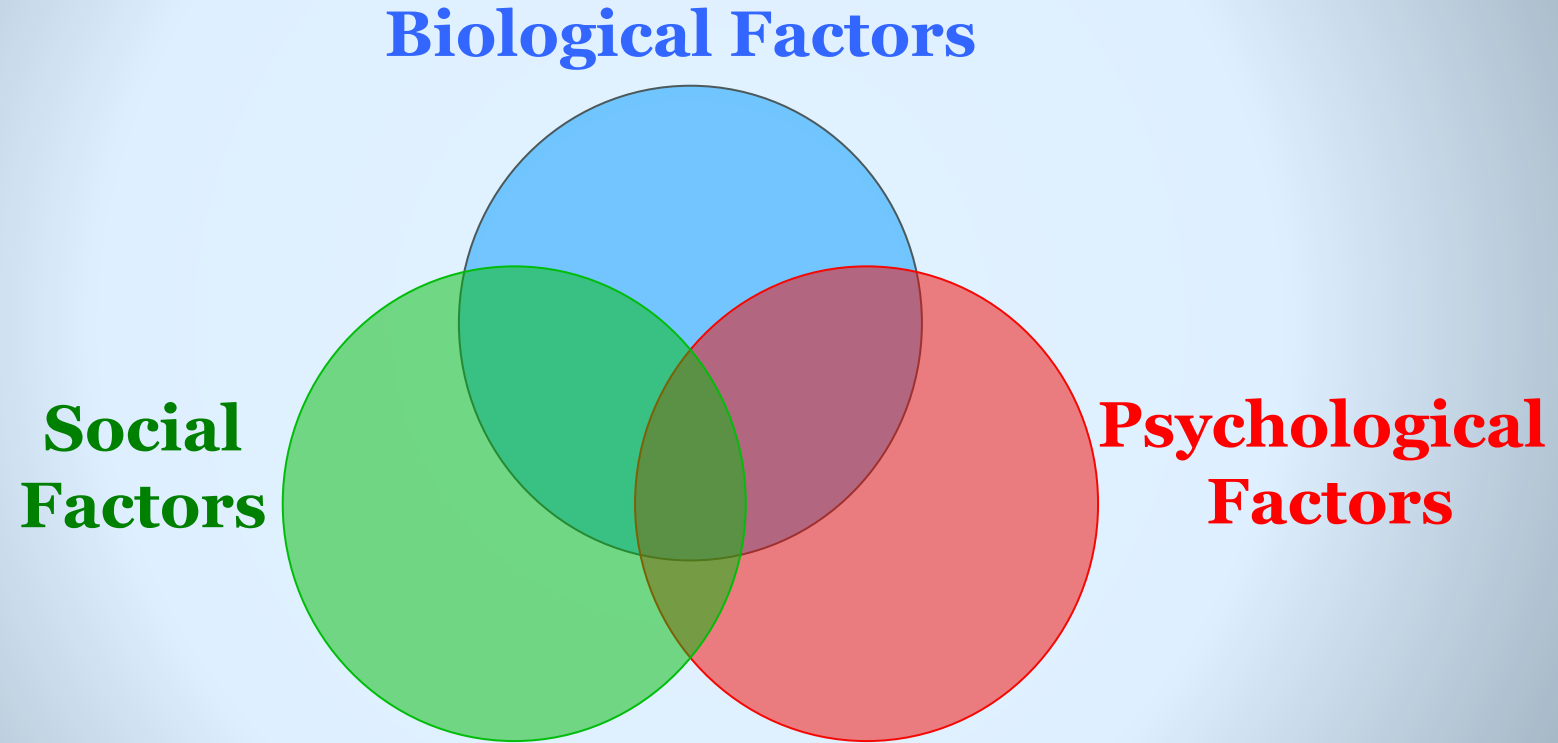


# Fear Avoidance Model



Vlaeyen & Crombez, 1999

# Biopsychosocial Model of Pain



(Gatchel, Peng, Peters,  
Fuchs, & Turk 2007)

# Biopsychosocial Model

Distinguishes between disease and illness:

- Disease = objective biological event involving disruption of specific body structures or organ systems caused by anatomical, pathological, or physiological changes
- Illness = broader concept encompassing disease state AND subjective experience of the individual

Consistent with IASP definition of pain:

**“An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage”**

- Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors.
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- Through their life experiences, individuals learn the concept of pain.
- A person’s report of an experience as pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.

*Etymology:* Middle English, from Anglo-French *peine* (pain, suffering), from Latin *poena* (penalty, punishment), in turn from Greek *poine* (payment, penalty, recompense).

# Differences between Biomedical & Biopsychosocial Models

Biomedical Model	Biopsychosocial Model
-linear relationship between tissue damage and pain	-complex relationship between tissue damage and pain
-pain largely explained by biological factors (i.e. tissue damage, disease)	-pain influenced by biological, psychological, social factors
-focus of treatment is symptom elimination	-focus of treatment is improved quality of life
-treatment of tissues/disease	-treatment of the whole person
-treatments typically passive (i.e. medication, injections, surgery)	-treatments are active, require consistent participation from patient

# Biopsychosocial Variables

## Thoughts

Hurt = Damage

Self-Efficacy/  
Control

Fear of Movement

Pain as Mystery

Catastrophizing

## Emotions

Depression

Anxiety

Post-traumatic  
Stress

## Behaviors

Resting

Attention/Pleasant  
Activities

Guarding

Over-Activity

Exercise

## Social

Loss of Status

Social Support-  
Solicitousness

Social Support-  
Distraction

Isolation

Social Support-  
Punishing

# Psychological Factors-Catastrophizing

Thinking the worst about pain or its implications

- *My pain will never stop*
- *I can't cope with this pain*
- *Nothing can be done*
- Prospectively predicts pain ratings (Sullivan & Neish, 1999; Sullivan et al., 1995; Keefe et al., 1989)
- Associated with increased:
  - Physical and emotional distress (Spanos et al., 1979; Chaves & Brown, 1978; Rosenstiel & Keefe, 1983; Sullivan et al., 1995, 2006).
  - Disability and unemployment (Sullivan, 2009)
  - Depression (Sullivan, 2009)

# Pain Catastrophizing

- Catastrophizing is common
- Over training (i.e. media, special groups including Vets and trauma)
- Language supports catastrophizing
  - Degenerative disc disease
- Context of pain leads to catastrophizing

# Psychological Factors – Depression

- Levels of depression predict LBP 3 years following initial assessment (n=148 Vets without baseline LBP)
- Depression at baseline 2.3 times more likely to report back pain
- Depression stronger predictor of back pain than any other clinical or anatomical risk factor
- Incidence of new MRI findings only 9%

Jarvik et al., 2005



# Social Factors- Solicitous Significant Other

- An individual highly responsive to a patient's pain/pain behaviors
  - May actually increase a patient's pain level (compared to spouses/partners who suggest helpful but distracting coping strategies)
- Demonstrations of increased pain may garner additional attention/assistance
  - May also be secondary gains
- Solicitous Spouse Study
  - Presence of partner increased report of pain from a mild shock to primary pain area by three-fold (Flor et al., 2002)

# Social Factors- Punishing Responses

- Punishing responses involve either angry or ignoring responses
- This dynamic can occur with significant others and with providers
  - Can lead to dramatic/dynamic (loud) expressions of pain experience in an effort to “be heard” by significant others or providers
  - Can also lead to resignation and stoicism about pain

(McCracken, 2005)

# Social Factors-Social Roles

Chronic pain can negatively impact a number of social status variables including:

- Employment
- Finances
- Household roles
- Isolation



# Behavioral Factors-Coping Style



**Note:** Adaptive coping in **blue**, maladaptive in **red**

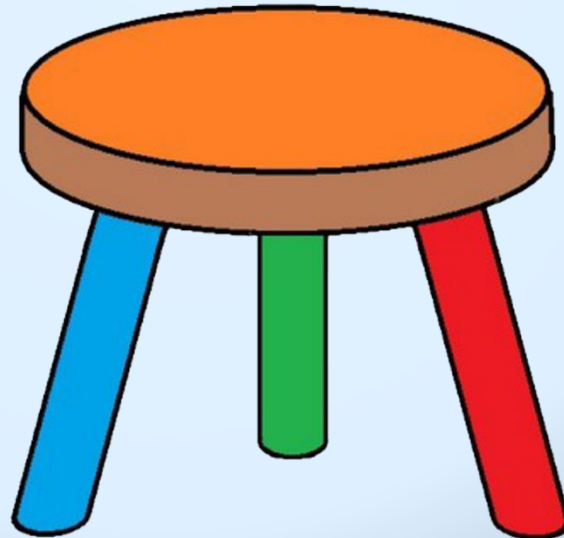
# CBT for Chronic Pain

- Focuses on interaction between thoughts, feelings (physical and emotional) and behaviors that contribute to development and maintenance of chronic pain experience
- Immediate targets:
  - Catastrophizing
  - Perceptions of disability
  - Functional impairment
  - Quality of life
  - Self-efficacy
- Goal is to help patients to “turn down the volume”

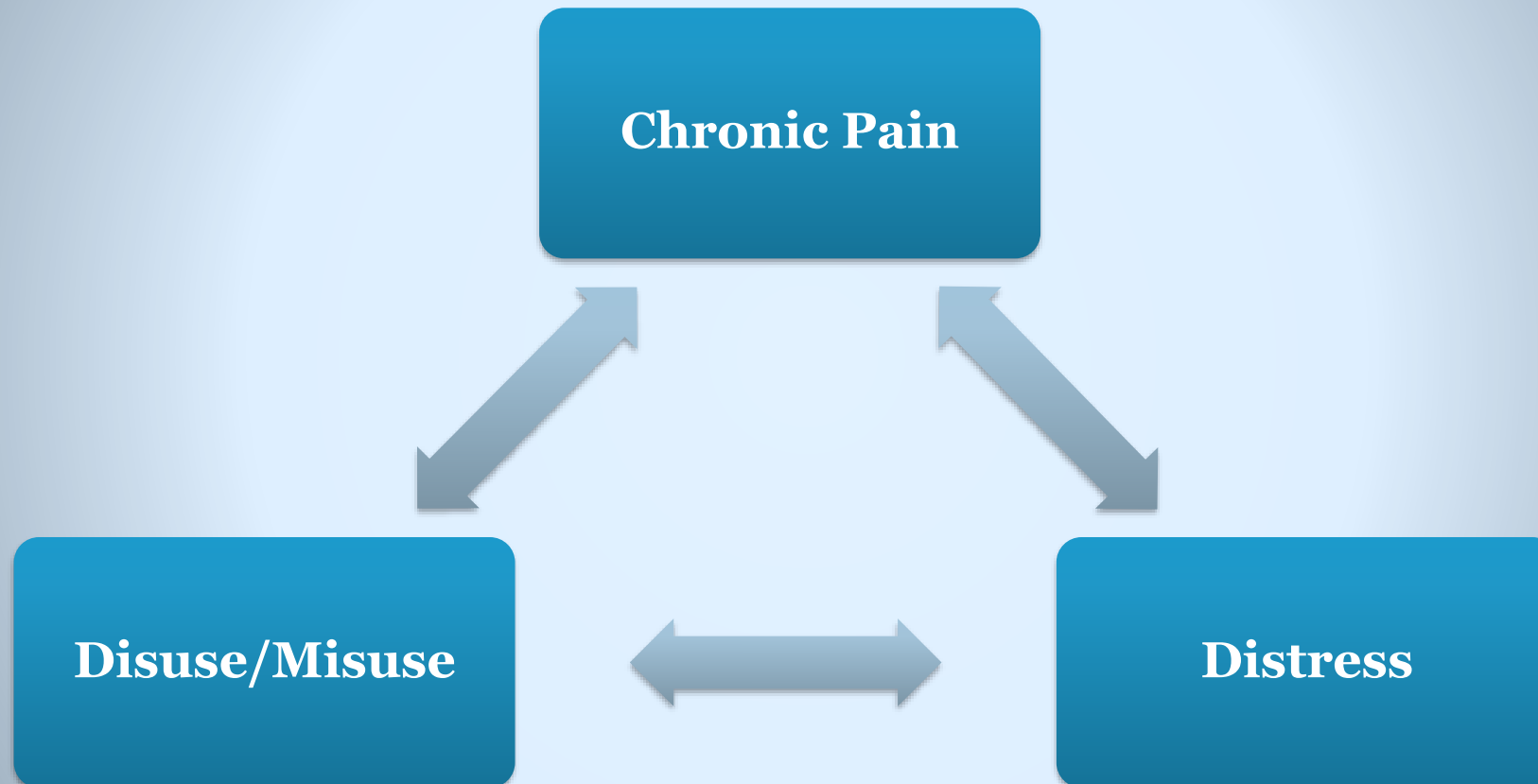


# Presenting CBT for Pain

- Pain isn't in your head
- Behavioral/psychological treatment helps
- Evidence based
- Doing rather than knowing leads to change
- Three-legged stool approach to pain



# The Chronic Pain Cycle



# CBT-CP Protocol

- 11 sessions (plus optional booster)
- Individual or group therapy format
- Addresses medically stable, non-malignant, ambulatory (can be adapted for spinal cord injury), chronic pain disorders
- Individual sessions are 50 minutes; group sessions are 60-75 minutes



# General Goals of CBT-CP

- Teach skills that improve pain and quality of life
- Build motivation to practice
- Encourage an active, problem-solving approach
- Increase self-efficacy, or ability to self-manage pain
- Decrease catastrophizing
- Primary target = decreased pain and improved quality of life

# CBT-CP Sessions

1. Interview and Assessment
2. CBT-CP Orientation (*chronic pain cycle, personal factors*)
3. Assessment Feedback and Goal Planning (*SMART goals*)
4. Exercise and Pacing (*includes “mandatory” walking program*)
5. Self-regulation techniques (*diaphragmatic breathing, PMR, visualization*)
6. Pleasant Activities (1) (*behavioral activation*)
7. Pleasant Activities (2)
8. Cognitive Coping (1) (*cognitive distortions and restructuring*)
9. Cognitive Coping (2)
10. Sleep (*sleep hygiene with an emphasis on stimulus-control* )
11. Coping with Flare-ups and Discharge Planning
12. Booster Session (*as needed*)

Murphy, J.L., McKellar, J.D., Raffa, S.D., Clark, M.E., Kerns, R.D., & Karlin, B.E. *Cognitive behavioral therapy for chronic pain among veterans: Therapist manual*. Washington, DC: U.S. Department of Veterans Affairs.

# CBT Early Sessions

- Pain Education (Acute v. Chronic & Flares)
- Pain-Distress-Disuse Model
- Setting expectations
  - Active treatment requires activity and practice
  - Pain is biopsychosocial problem requiring comprehensive approach
- SMART goals and MI
  - Assess identity and develop personal and culturally congruent goals



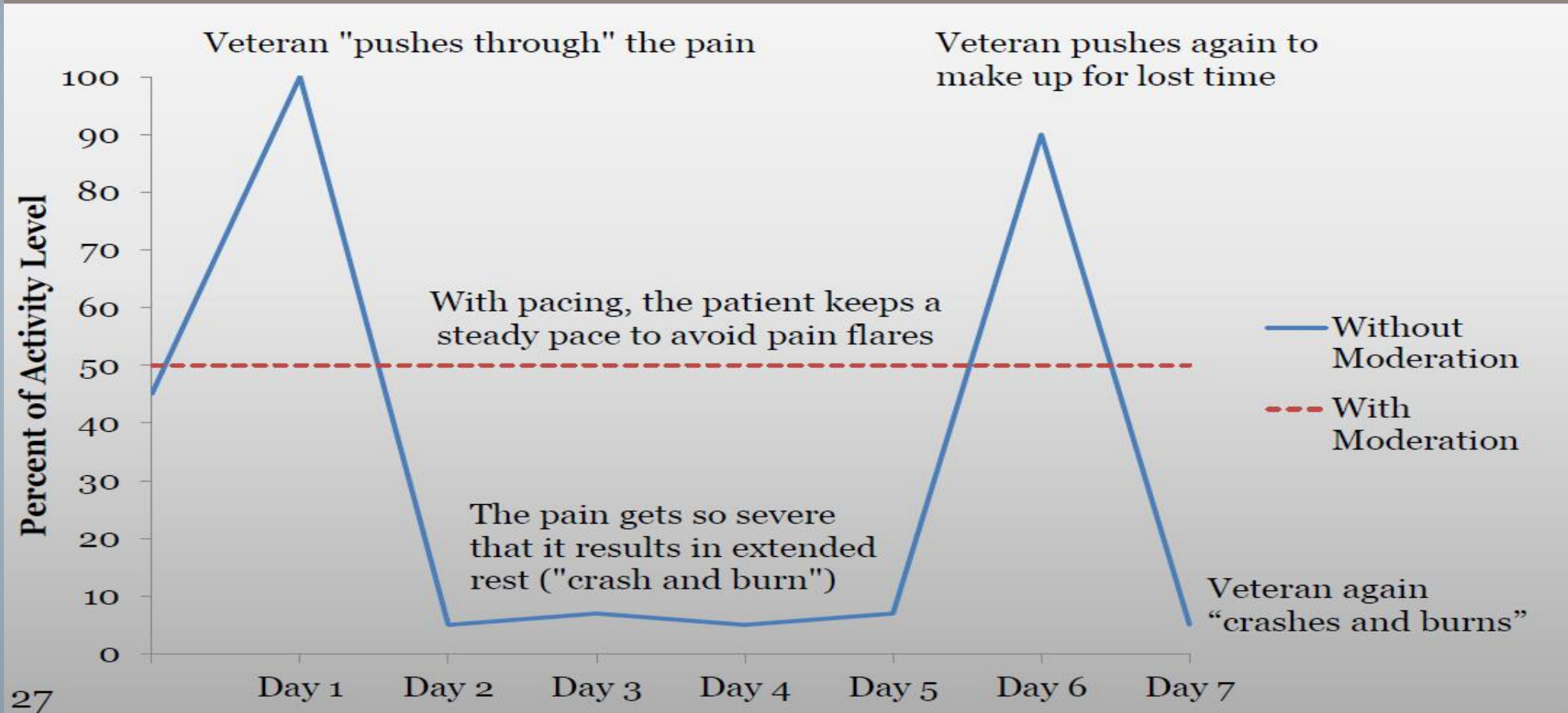
# CBT Skills – Walking

- Walking program
  - Accessible to most but tailor to personal, SES, or cultural barriers
- Hurt vs. harm
- Avoidance leads to harm
- Check engine light metaphor



# CBT Skills – Time Based Pacing

## Push-Crash-Burn Cycle



# CBT Skills – Time Based Pacing

## HOW TO PACE

Estimate how long you can safely do one of your regular activities (e.g., yardwork, dishes) without causing a severe pain flare and set that minus one minute as your “active” goal time for the activity. Approximate the amount of “resting” time you will need in order to safely resume activity or continue your day.

### Remember:

- Approximated times may need to be adjusted after pacing begins.
- Stick to time-based pacing goals whether you are having a ‘good’ or a ‘bad’ pain day to avoid the crash-burn/over-activity cycle or the avoidance/inactivity cycle – moderation is the key.
- Spread out activities during the week and be reasonable with the schedule so you can succeed.

Use the table below to record how you pace activities this week. Use the sample as your guide, where each period of activity and rest equals one cycle. In the examples provided, **10 : 15 (1)** indicates *working for 10 minutes* and *resting for 15 minutes* for *one cycle* of pacing.

	Sample	Activity 1	Activity 2	Activity 3
Activity	<i>Rake leaves</i>			
Active Goal	<i>10 minutes</i>			
Rest Goal	<i>15 minutes</i>			
Day 1	<i>10 / 15 (1)</i>			
Day 2	<i>10 / 15 (2)</i>			

# Time-Based Pacing Considerations

- Try using the term “time-based”
- Refrain from pairing with exercise
- Identify barriers (i.e. not feeling satisfied, concerns about length of time)
- Choose culturally congruent activities
- Best to pair with chores or ADLs, not pleasant activities





# CBT Skills – Self-Regulation

- Chronic sympathetic activation (fight/flight/freeze)
  - Increased heart rate, BP, breath, muscle tension, blood sugar, digestive disturbance, impaired immune functioning
  - Can be further dysregulated by substance use and withdrawal
- Promote self-regulation to induce parasympathetic response (rest/digest)
  - Decreased heart rate, deeper breath, decreased muscle tension, optimizing blood sugar, digestion, immune functioning
- Diaphragmatic breathing, Progressive Muscle Relaxation & Visual Imagery
- Opportunities to tailor to culture and spirituality (i.e. pair with prayer)

# Useful Apps



# CBT Skills – Pleasant Activities

- Behavioral activation to intervene on distress and disuse
- Making space for grief and loss
- Selecting activities based on the essence of personally and culturally valued activities
- Be creative!



# CBT Skills – Cognitive Coping



This is Alex

# CBT Skills – Cognitive Coping

- Thoughts directly related to pain perception (Lawrence et al., 2011)
- ABC Sheet (neutral and pain examples)
- Highlight catastrophizing
- Evidence for, evidence against
- Coping statements – rely on quotes that resonate with culture and/or spirituality

# CBT Skills – Cognitive Coping

Activating Event (who, what, where, when)	Belief (What are the exact thoughts? Circle the most distressing?)	Consequence Emotions/Behaviors	Evidence that supports the worst thought	Evidence against the worst thought	Balanced thought that incorporates all evidence
I woke up in pain	-Today is going to be terrible and the only thing that helps is drinking or using	Depressed Cancel plans Start drinking	Pain Previous days of pain Drinking/using numbs	-I've been walking even with pain -Something could improve -Drinking damages my heart -Using has led to falls -Substance use hasn't cured me yet	I'm in pain and I'm worried it's going to be a hard day but I can try to go for a walk  Calling someone for support my help me refrain from drinking or using

# CBT Final Sessions

- Sleep
  - You can influence sleep
  - Emphasize stimulus control
- Written flare plan
  - include culturally sensitive activities like prayer, meditation, drumming or dance
- Booster

# Tailoring CBT-CP to Culture

- Develop individualized, culturally tailored SMART goals
- Tailor walking program
  - Plan where someone feels safe
  - Assess whether gender or cultural beliefs are barriers
- Incorporate prayer or meditation into self-regulation skills and/or flare planning
- Identify personal, valued activities that are culturally congruent
- Rely on personal quotes consistent with culture and/or spirituality for coping statements



# Resources for Pain & Addiction

- SUD resources:

LA County Substance Abuse Service Helpline

1-844-804-7500

<http://sapiccis.ph.lacounty.gov/sbat>

- Pain resources:


UCLA Comprehensive Pain Centers

<https://www.uclahealth.org/medical-services/anesthesiology/pain-management>

# Substance Abuse Service Helpline

publichealth.lacounty.gov/sapc/managepainsafely/#btn-safe-pain-management

Program Home About FAQ Comment Contact



Just because your painkillers are prescription **doesn't** mean they're safe.

Habla español, haga clic aquí

## Manage Pain Safely. Manage Addiction.


Jacki Jing | Manage P...  
This is a disease. And these people are in pain. And they want love.

Danny Trejo | Manage ...  
I had two to clean.

Evangelina Madrid-Ker...  
Since I've been in prison, I got my children back.

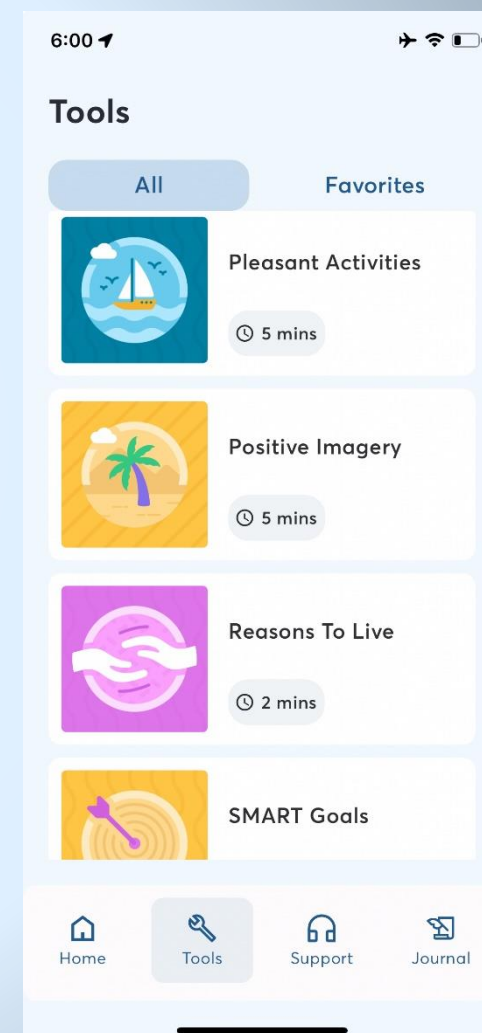
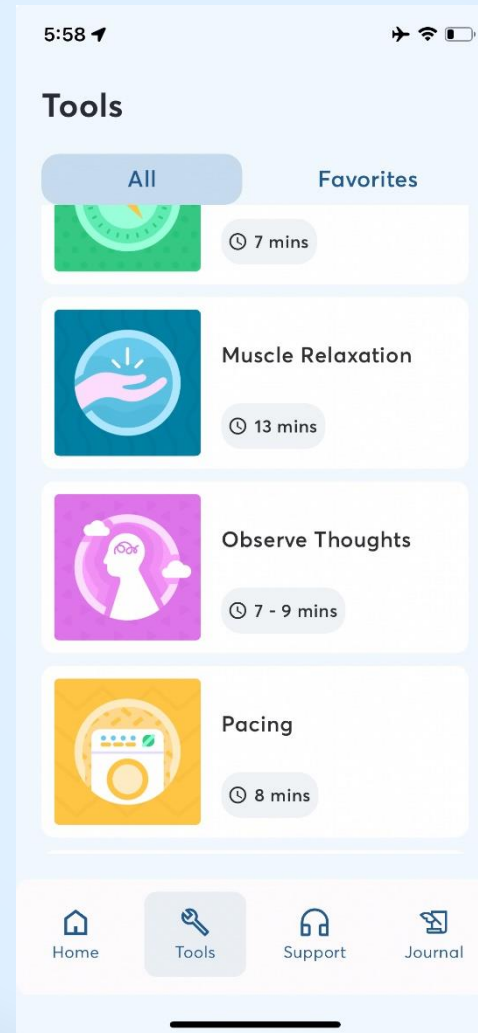
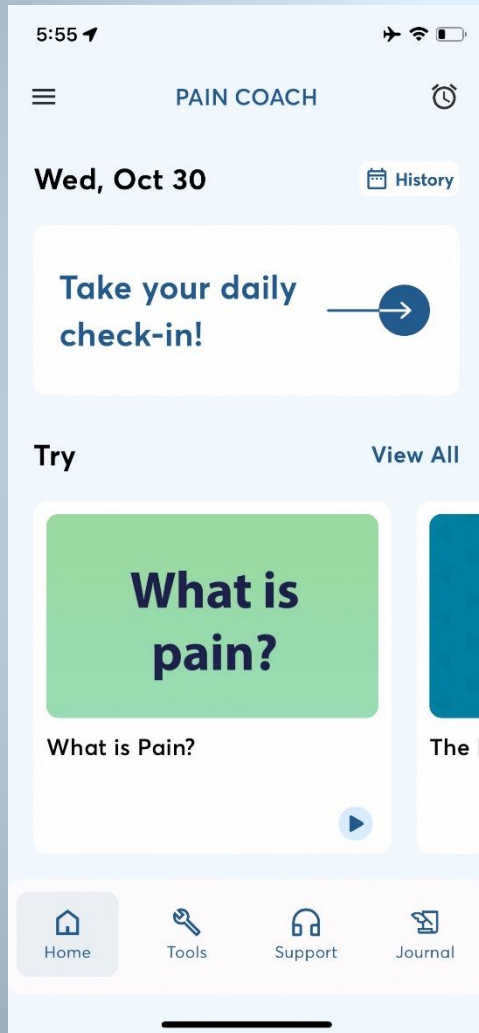
### Ask Yourself These Questions

- Are you currently taking prescription pain medications that were not given to you by a doctor?
- Are you taking prescription pain medications in a way or a dose other than as directed by your doctor?
- Have you used prescription pain medications to cope with stress, sadness or other difficult feelings?
- Are you using more prescription pain medications than you want to?



1-844-804-7500

# Useful Apps – Pain Coach



On the last page, we learned about evidence-based treatments. Now, let's take a look at one of these proven treatments for pain, called CBT for Chronic Pain.



Let's learn about

## Proven Treatment for Chronic Pain



### What is CBT for Chronic Pain?

Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) is an evidence-based treatment option for chronic pain [shown to be effective](#) in helping people better manage and take control of chronic pain and its effects. CBT-CP teaches proven skills for changing thoughts, emotions, and behaviors that affect how people experience pain.

Watch this video to learn more about CBT-CP treatment. And check out the wheel at the bottom of this page to learn about the specific parts of treatment!





Many years of research have shown that CBT-CP is effective in **improving how people experience and manage chronic pain.**



Overall, Veterans who complete CBT-CP report **fewer negative effects of pain** on their daily lives ...

and **fewer unhelpful thoughts** related to pain.

# References

- Dahlhamer J, Lucas J, Zelaya, C, et al. Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults — United States, 2016. *MMWR Morb Mortal Wkly Rep* 2018;67:1001–1006. DOI: <http://dx.doi.org/10.15585/mmwr.mm6736a2external icon>
- Institute of Medicine. *Relieving pain in America: a blueprint for transforming prevention, care, education, and research*. Washington, DC: National Academies Press; 2011
- Pangarkar, S. S., Kang, D. G., Sandbrink, F., Bevevino, A., Tillisch, K., Konitzer, L., & Sall, J. (2019). VA/DoD Clinical Practice Guideline: Diagnosis and Treatment of Low Back Pain. *Journal of general internal medicine*, 34(11), 2620–2629. <https://doi.org/10.1007/s11606-019-05086-4>
- Chou, R., Fanciullo, G. J., Fine, P. G., Adler, J. A., Ballantyne, J. C., Davies, P., Donovan, M. I., Fishbain, D. A., Foley, K. M., Fudin, J., Gilson, A. M., Kelter, A., Mauskop, A., O'Connor, P. G., Passik, S. D., Pasternak, G. W., Portenoy, R. K., Rich, B. A., Roberts, R. G., Todd, K. H., ... American Pain Society-American Academy of Pain Medicine Opioids Guidelines Panel (2009). Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. *The journal of pain*, 10(2), 113–130. <https://doi.org/10.1016/j.jpain.2008.10.008>
- Tait, R. C., & Chibnall, J. T. (2014). Racial/ethnic disparities in the assessment and treatment of pain: Psychosocial perspectives. *American Psychologist*, 69(2), 131.
- Jimenez N, Garroutte E, Kundu A, Morales L, Buchwald D. A review of the experience, epidemiology, and management of pain among American Indian, Alaska Native, and Aboriginal Canadian peoples. *J Pain*. 2011;12(5):511–522.
- Campbell, C. M., & Edwards, R. R. (2012). Ethnic differences in pain and pain management. *Pain management*, 2(3), 219–230. <https://doi.org/10.2217/pmt.12.7>
- Fillingim, R. B., King, C. D., Ribeiro-Dasilva, M. C., Rahim-Williams, B., & Riley III, J. L. (2009). Sex, gender, and pain: a review of recent clinical and experimental findings. *The journal of pain*, 10(5), 447-485.
- Joynt, M., et al., The impact of neighborhood socioeconomic status and race on the prescribing of opioids in emergency departments throughout the United States. *J Gen Intern Med*, 2013. 28(12): p. 1604-10.
- Bekanich, S.J ., et al., A multifaceted initiative to improve clinician awareness of pain management disparities. *Am J Med Qual*, 2014. 29(5): p. 388-96.
- Center for Behavioral Health Statistics and Quality. (2021). Racial/ethnic differences in substance use, substance use disorders, and substance use treatment utilization among people aged 12 or older (2015-2019) (Publication No. PEP21-07-01-001). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- NIDA. 2024, June 3. LGBTQI+ People and Substance Use. Retrieved from <https://nida.nih.gov/research-topics/lgbtqi-people-and-substance-use> on 2024, October 30
- NIDA. 2024, August 30. Older Black men are disproportionately affected by the overdose crisis. Retrieved from <https://nida.nih.gov/about-nida/noras-blog/2024/08/older-black-men-are-disproportionately-affected-by-overdose-crisis> on 2024, October 30
- Chiauzzi, E., et al., Health care provider perceptions of pain treatment in Hispanic patients. *Pain Pract*, 2011. 11(3): p. 267-77.
- Umeda, M., & Kim, Y. (2019). Gender Differences in the Prevalence of Chronic Pain and Leisure Time Physical Activity Among US Adults: A NHANES Study. *International journal of environmental research and public health*, 16(6), 988. <https://doi.org/10.3390/ijerph16060988>
- Zelaya CE, Dahlhamer JM, Lucas JW, Connor EM. Chronic pain and high-impact chronic pain among U.S. adults, 2019. NCHS Data Brief, no 390. Hyattsville, MD: National Center for Health Statistics. 2020
- Williams AC de C, Fisher E, Hearn L, Eccleston C. Psychological therapies for the management of chronic pain (excluding headache) in adults. *Cochrane Database of Systematic Reviews* 2020, Issue 8. Art. No.: CD007407. DOI: 10.1002/14651858.CD007407.pub4.
- Hoffman, B. M., Papas, R. K., Chatkoff, D. K., & Kerns, R. D. (2007). Meta-analysis of psychological interventions for chronic low back pain. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 26(1), 1–9. <https://doi.org/10.1037/0278-6133.26.1.1>
- Smeets, R. J., Vlaeyen, J. W., Hidding, A., Kester, A. D., van der Heijden, G. J., van Geel, A. C., & Knottnerus, J. A. (2006). Active rehabilitation for chronic low back pain: cognitive-behavioral, physical, or both? First direct post-treatment results from a randomized controlled trial [ISRCTN22714229]. *BMC musculoskeletal disorders*, 7, 5. <https://doi.org/10.1186/1471-2474-7-5>
- Lamb, S. E., Hansen, Z., Lall, R., Castelnuovo, E., Withers, E. J., Nichols, V., Potter, R., Underwood, M. R., & Back Skills Training Trial investigators (2010). Group cognitive behavioural treatment for low-back pain in primary care: a randomised controlled trial and cost-effectiveness analysis. *Lancet (London, England)*, 375(9718), 916–923. [https://doi.org/10.1016/S0140-6736\(09\)62164-4](https://doi.org/10.1016/S0140-6736(09)62164-4)
- Turner, J. A., Holtzman, S., & Mancl, L. (2007). Mediators, moderators, and predictors of therapeutic change in cognitive-behavioral therapy for chronic pain. *Pain*, 127, 276–286. <https://doi.org/10.1016/j.pain.2006.09.005>

# References

- Melzack R. (1999). From the gate to the neuromatrix. *Pain, Suppl 6*, S121–S126. [https://doi.org/10.1016/S0304-3959\(99\)00145-1](https://doi.org/10.1016/S0304-3959(99)00145-1)
- Fordyce, W.E., Fowler, R.S., & DeLateur, B. (1968). An application of behavior modification technique to a problem of chronic pain, *Behaviour Research and Therapy*, Volume 6, Issue 1, Pages 105-107, [https://doi.org/10.1016/0005-7967\(68\)90048-X](https://doi.org/10.1016/0005-7967(68)90048-X).
- E.B. Blanchard, G.C. McCoy, A. Musso, M.A. Gerardi, T.P. Pallmeyer, R.J. Garardi, P.A. Cotch, K. Siracusa, F. Andrasik (1986). A controlled comparison of thermal biofeed-back and relaxation training in the treatment of essential hypertension: I. Short-term and long-term outcome. *Behavior Therapy*, 17, pp. 563-579
- Holroyd, K. A., Penzien, D. B., Hursey, K. G., Tobin, D. L., Rogers, 1\_, Holm, J. R, Marcille, P. J., Hall, J. R., & Chila, A. G. (1984). Change mechanisms in EMG biofeedback training: Cognitive changes underlying improvements in tension headache. *Journal of Consulting and Clinical Psychology*, 52. 1039-1053.
- Jensen MP, Barber J, Romano JM, et al. A comparison of self-hypnosis versus progressive muscle relaxation in patients with multiple sclerosis and chronic pain. *Int J Clin Exp Hypn*. 2009;57(2):198–221.
- Thorsell J., Finnes A., Dahl J., Lundgren T., Gybrant M., Gordh T., Buhrman M. A comparative study of 2 manual-based self-help interventions, acceptance and commitment therapy and applied relaxation, for persons with chronic pain. *Clin. J. Pain*. 2011;27(8):716–723.
- Lethem, J., Slade, P. D., Troup, J. D., & Bentley, G. (1983). Outline of a Fear-Avoidance Model of exaggerated pain perception--I. *Behaviour research and therapy*, 21(4), 401–408. [https://doi.org/10.1016/0005-7967\(83\)90009-8](https://doi.org/10.1016/0005-7967(83)90009-8)
- Vlaeyen, J. W., & Crombez, G. (1999). Fear of movement/(re)injury, avoidance and pain disability in chronic low back pain patients. *Manual therapy*, 4(4), 187–195. <https://doi.org/10.1054/math.1999.0199>
- Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: scientific advances and future directions. *Psychological bulletin*, 133(4), 581–624. <https://doi.org/10.1037/0033-2909.133.4.581>
- Sullivan MJL, Bishop SR, Pivik J. The Pain Catastrophizing Scale: Development and validation. *Psychol Assess*. 1995;7:524–32. PubMed PMID: 1996007788
- Sullivan, M. J., & Neish, N. (1999). The effects of disclosure on pain during dental hygiene treatment: the moderating role of catastrophizing. *Pain*, 79(2-3), 155–163. [https://doi.org/10.1016/s0304-3959\(98\)00163-8](https://doi.org/10.1016/s0304-3959(98)00163-8)
- Keefe, F.J., Brown, G.K., Wallston, K.A. and Caldwell, D.S., Coping with rheumatoid arthritis pain: catastrophizing as a maladaptive strategy, *Pain*, 37 (1989) 51-56.
- Spanos N P, Radtke-Bodorik H L, Ferguson J D, Jones B. The effects of hypnotic susceptibility, suggestions for analgesia, and utilization of cognitive strategies on the reduction of pain. *J Abnorm Psychol* 1979, 88: 282 - 292.
- Chaves JF, Brown JM. Spontaneous cognitive strategies for the control of clinical pain and stress. *J Behav Med* 1987; 10: 263 - 276.
- Rosensteil AK, Keefe FJ. The use of coping strategies in chronic low back pain patients: relationship to patient characteristics and current adjustment. *Pain* 1983, 17, 33 - 44.
- Sullivan, M. J. L., Adams, A., Rhodenizer, T., et al. A psychosocial risk factor targeted intervention for the prevention of chronic pain and disability following whiplash injury. *Phys Ther* 2006, 86: 8 - 18.
- Jarvik JG, Hollingworth W, Heagerty PJ, Haynor DR, Boyko EJ, Deyo RA. Three-year incidence of low back pain in an initially asymptomatic cohort: clinical and imaging risk factors. *Spine (Phila Pa 1976)*. 2005 Jul 1;30(13):1541-8; discussion 1549. doi: 10.1097/01.brs.0000167536.60002.87. PMID: 15990670.
- Flor H, Kerns RD, Turk DC. The role of spouse reinforcement, perceived pain, and activity levels of chronic pain patients. *J Psychosom Res* 1987; 31: 251– 9.
- Murphy, J. L., Cordova, M. J., & Dedert, E. A. (2020, September 28). Cognitive Behavioral Therapy for Chronic Pain in Veterans: Evidence for Clinical Effectiveness in a Model Program. *Psychological Services*. Advance online publication. <http://dx.doi.org/10.1037/ser0000506>
- Nahin RL, Feinberg T, Kapos FP, Terman GW. Estimated Rates of Incident and Persistent Chronic Pain Among US Adults, 2019-2020. *JAMA Netw Open*. 2023. doi: [10.1001/jamanetworkopen.2023.13563](https://doi.org/10.1001/jamanetworkopen.2023.13563)

# Presenter's Contact Information

Katherine Bailey, PhD

[katherine@katherinebaileyphd.com](mailto:katherine@katherinebaileyphd.com)



# Frequently Asked Questions (FAQs)

1. Does CBT actually reduce pain?

**Answer:** CBT is associated with small changes in pain ratings and bigger changes in mood, and quality of life.

2. Is it safe to encourage physical activity for clients with chronic pain and addiction?

**Answer:** Yes, exercise is a recommended treatment for chronic pain and also helps with cravings and mood. Please consult with a medical provider or physical therapist if you are concerned about specific exercises. The vast majority of ambulatory patients are cleared for walking.

# FAQs

3. How do you address substance use in the context of CBT for chronic pain?

**Answer:** Though substance use may provide temporary pain relief, it is associated with increased mental health problems and disability, which exacerbate pain over time. Chronic and severe substance use is associated with increased vulnerability for injuries and can impede healing and recovery for chronic pain. Education, motivational interviewing along with other treatments can be incorporated with CBT to address substance use.

4. Can CBT for chronic pain be delivered in a group setting?

**Answer:** Yes! CBT for chronic pain lends itself well to both individual and group treatment. Some studies show that group treatment may even be especially effective for older adults.

# Q & A Session