Pain Science for Patients with Chronic Pain

- Psychology is built into the definition of pain (IASP definition of pain is that it is a negative sensory *and* emotional experience).
- Pain is a product of the nervous system, regardless of where it is felt in the body.
- The regions of the brain that process pain also process anxiety, fear, and emotions related to depression (e.g., sadness). Pain, anxiety and depression frequently co-occur. Treatment for one factor helps reduce the other factors, as well.
- Pain triggers "hard-wired" physiological and psychological responses that, over time, lead to lasting changes in the brain and body-- changes that prime you to have more pain.
- Everyday thoughts and feelings can impact pain. Negative thoughts and feeling serve to amplify pain whereas calming thoughts keep pain better controlled.
- Pain isn't something that just happens to you. Everyday experiences will contribute to pain intensity (e.g., stress, sleep quality, activity, worrying about pain).
- Through use of active skills (learned in pain psychology or behavioral medicine treatment) you can begin reducing these lasting negative changes in brain and body caused by chronic pain.
- The relaxation response triggers a physiological cascade that actually counteracts pain responses. These skills should be used daily to retrain mind and body away from pain.
- Avoiding activity out of fear of pain can actually lead to greater pain over time. You can partner with a therapist or physical therapy specialist to slowly begin restoring a degree of movement and function.
- By learning and using pain psychology skills, you will improve your response to medical treatments, including medications, procedures and surgery.

When to Refer to a Pain Psychology Specialist

The use of pain psychology is often helpful when the **patient seems stuck in a passive role**, relying on doctors to "fix" or cure their pain, without fully appreciating the factors that impact pain and what they can do to improve their own experience.

Refer to your behavioral medicine colleagues when one or more of the following is noted in the patient's presentation:

- **Focus on medications and procedures, often to the exclusion of partnering in self-management**
- **Imbalanced activity levels** (e.g., doing too little, too much, having difficulty prioritizing self-care within the context of pain and competing life demands)
- **Unsure how to move forward and improve quality of life**
- **Lack of pain education and understanding about the relationship between mind and body**
- **Fear of pain** or injury preventing movement/activity
- **Opioid tapering** is indicated, being imposed, or desired.
- **Fear of opioid tapering**
- **Lack of pain and stress management skills**
- **Feelings of helplessness and despair about pain**
- **Observation of psychological distress and/or anger**
- **Social isolation**
- **Pain-related anxiety and/or depression**
- **Excessive health care utilization without obvious benefit (red flags may include "doctor shopping" or frequent visits to the emergency department**
- **Suicidal ideation or other high risk behaviors in the context of chronic pain**
- **An interest in self-management approaches to pain is expressed**

Pain Psychology

WEBSITES and VIDEOS

The Pain Toolkit

https://www.paintoolkit.org/

The Pain Toolkit website offers a wealth of pain self-management resources for free or for nominal print cost. Website includes resources for patients and specific resources for medical clinicians.

About **50 different videos on pain self-management** at this link, with separate categories for patients and medical providers:
https://www.paintoolkit.org/resources/useful-videos

American Chronic Pain Association (ACPA)

http://theacpa.org

The ACPA is dedicated to peer support and education for individuals with chronic pain and their families so that these individuals may live more fully in spite of their pain. The ACPA website includes free pain management tools (print and electronic), local support group information, helpful videos, and a free resource guide to help patients and families understand various chronic pain treatments.

Opioid Tapering Resources

VIDEOS

Effective Management of Pain and Opioid-Free Ways to Enhance Relief: The EMPOWER Study
The EMPOWER study is a 4-state study on voluntary, patient-centered prescription opioid tapering. The EMPOWER website includes video vignettes of patients with successful lived experience with opioid reduction. These videos provide patients with powerful peer testimonials. Visit the "patient stories" tab at https://empower.stanford.edu/

- Watch the videos with patients and discuss their questions and responses.
- Encourage patients to view the videos and information on opioid reduction with loved ones.

PATIENT BOOKS

Darnall, B. *Less pain, fewer pills: Avoid the dangers of prescription opioids and gain control over chronic pain ©2014.* Bull Publishing Company: Boulder, CO. This CBT-based book comes with a binaural relaxation response audiofile. College reading level.

Darnall, B. *The opioid-free pain relief kit: 10 simple steps to ease your pain (c)2016.* Bull Publishing Company: Boulder, CO.
This CBT-based book comes with a binaural relaxation response audiofile. Content is presented in an easy-to-apply workbook format; 8th grade reading level.

CLINICIAN BOOK

Darnall, BD (2018). *Psychological Treatment for Patients with Chronic Pain ©2018*. American Psychological Association Press: Washington DC. This book provides an overview of evidence-based psychological treatments for pain and recommendations for clinicians. Case studies and practical resources for patients and clinicians included. This book includes content on prescription opioids and opioid reduction.

PRACTICAL RESOURCES: RELAXATION / MINDFULNESS / MEDITATION

(1) FREE Mobile Relaxation App: Breathe2Relax (from the Department of Defense)
http://t2health.dcoe.mil/mediakit/breath2relax-mobile-application

(2) "Enhanced Pain Management" Audio CD and MP3 file (20min)
(Binaural audiofile by Beth Darnall, PhD includes diaphragmatic breathing, progressive muscle relaxation, and autogenic training)

Mindfulness Meditation is evidence-based treatment for chronic pain. It involves helping calming mind and body, and learning to release the mental focus on pain that happens automatically. Research shows that mindfulness and meditation techniques work by changing how your brain responds to pain, thereby reducing pain intensity. Learning mindfulness and meditation can help you reduce your pain. Here are some resources to help you get started:

(3) Free Online Mindfulness-Based Stress Reduction (MBSR)
8 week course http://palousemindfulness.com/

(4) Free Mindfulness App and Guided Meditations:
http://counselingcenter.utah.edu/services/mindfulness.php

(5) Free Guided Meditations (English and Spanish)
http://marc.ucla.edu/body.cfm?id=22

LOCATING SKILLED THERAPISTS / COMMUNITY TREATMENTS

Acceptance and Commitment Therapy (ACT)
Locating a skilled ACT therapist:
https://contextualscience.org/civicrm/profile?gid=17&reset=1&force=1

Particularly useful for helping patients transcend the negative impacts of injustice and victimhood.

Certified Biofeedback Therapists
https://Bcia.org
Go to "Find a Practitioner" tab. Conduct a radius search based on the client's zip code.

Self-Management Courses

Chronic Disease Self-Management (CDSM) and Chronic Pain Self-Management Program (CPSMP) are 8-week evidence-based group treatments that are led by a therapist or 2 certified peer co-leaders. Courses are not typically covered by insurance

but may be embedded into closed-payer networks (e.g., Intermountain Healthcare or the VA Healthcare System). Additionally, many municipalities may offer self-management wellness courses through senior centers or other community services; the courses may be offered free of charge or fees may apply; be sure to check costs (if any). Self-management resources vary by region and community. To determine if self-management courses exist in your area:

- Check first with your healthcare system or insurance carrier.
- Google "Chronic Pain Self-Management" and your city to see if courses exist.

PATIENT BOOKS

Cognitive–Behavioral Therapy Based

Turk, D., & Winter, F. (2005). *The pain survival guide.* Washington, DC: American Psychological Association.
Lewandowski, M. (2006). *The chronic pain care workbook.* Reno, NV: Lucky Bat Books.

Darnall, B. (2014). *Less pain, fewer pills: Avoid the dangers of prescription opioids and gain control over chronic pain.* Boulder, CO: Bull Publishing Company.

Darnall B. (2016). *The opioid-free pain relief kit: 10 simple steps to ease your pain.* Boulder, CO: Bull Publishing Company.

Other Recommended Books

Dahl, J., Hayes, S. C., Lundgren, T. (2006). *Living beyond your pain: Using acceptance and commitment therapy to ease chronic pain.* Oakland, CA: New Harbinger.

Pain Science (Pain Education)
Butler, D., & Moseley, G. L. (2003). *Explain pain.* Adelaide, Australia: Noigroup.

Free online book: Kopf, A., & Patel, N. B. (Eds.). (2010). *Guide to pain management in low-resource settings.*Seattle, WA: International Association for the Treatment of Pain. https://s3.amazonaws.com/rdcms-iasp/files/production/public/Content/ContentFolders/Publications2/FreeBooks/Guide_to_Pain_Management_in_Low-Resource_Settings.pdf

CLINICIAN BOOKS ON TREATING CHRONIC PAIN

Darnall, BD (2018). *Psychological Treatment for Patients with Chronic Pain ©2018*. American Psychological Association Press: Washington DC.
This book provides an overview of evidence-based psychological treatments for pain and recommendations for clinicians. Case studies and practical resources for patients and clinicians included. This book includes content on prescription opioids and opioid reduction.

Thorn, B.E. (2004). *Cognitive Therapy for Chronic Pain: A Step-by-Step Guide*, New York: Guilford Publications.

FREE CLINICIAN PAIN-CBT TREATMENT MANUALS

Low-Literacy 8-Session Group CBT

Thorn, B.E. et al (2010). Literacy-Adapted Cognitive-Behavioral Treatment Manual and Patient Workbook for Patients with Chronic Pain. This free treatment manual is meant to accompany Dr. Thorn's 2004 book: *Cognitive Therapy for Chronic Pain: A Step-by-Step Guide*, New York: Guilford Publications.
Email author Dr. Thorn for a free copy of the low-literacy manual: Bthorn@ua.edu

Individual 8-Session CBT Treatment

Murphy, J.L., McKellar, J.D., Raffa, S.D., Clark, M.E., Kerns, R.D., & Karlin, B.E. (2014). *Cognitive Behavioral Therapy for Chronic Pain Among Veterans: Therapist Manual*. Washington, DC: U.S. Department of Veterans Affairs.
https://www.va.gov/PAINMANAGEMENT/docs/CBT-CP_Therapist_Manual.pdf

Single-Session Behavioral Medicine Treatment

Developed at Stanford University, "Empowered Relief" is a 2-hour skills-based behavioral pain medicine treatment class that efficiently and effectively equips individuals with pain education and pain self-management CBT-based skills. Due to its didactic format, up to 80 patients may be treated in a single class. To learn more or become a certified "Empowered Relief" instructor, visit: https://empoweredrelief.com

Patient-Centered Opioid Tapering

- Recognize that most patients are fearful about opioid reduction.
- While some patients are interested in opioid reduction, for others it is a process that may take time.
- Anxiety about reducing medications undermines patient engagement and patient response to the taper. Help to allay patient concerns as this is paramount to success.
- Explain the health benefits of reducing medications. Patients need to know why reducing opioids can be beneficial vs. likely to cause increased pain. (provide print information)
- Share the data on opioid tapering results: pain does not typically increase when done *the right way*; for many, pain improves.
- Avoid discussions about "getting off opioids" or tapering to zero. Patients are more willing to try opioid reduction if they are guided to just focus on making one small change. Pitch: "Let's help you get to your lowest comfortable dose over a period of many months."
- Highlight why reducing medications will specifically help *them.* Tailor a personalized, conversation for each individual patient.
- Patient-centered is critical for opioid reduction.
- Explain how you will partner with them (follow-up schedule, micro-dose decrements to start, very slow taper over months to allow for psychological and physiological adaptation)
- Forced tapers yield suboptimal results relative to voluntary tapers. USE CAUTION.
- Careful and close monitoring of patient response during opioid tapering is critical. Monitor for pain and mood changes, suicidality.
- Connect. Validate patients' concerns. Feeling heard is the foundation for patients to trust you.
- Explain that the goal is to help them stay comfortable through the taper.
- Help them feel in control (consider micro dose decrements to start, ability to pause the taper if needed)
- Give them support (pain psychology resources, clinic staff support)
- Provide a resource reading list for opioid tapering and a skill set to manage taper-related anxiety (e.g., *Less Pain, Fewer Pills;* or *The Opioid-Free Pain Relief Kit*).
- **Recognize that opioid tapering is not right for everyone**. Some patients do benefit from opioid therapy. Always support a patient-centered approach to pain care that respects each individual's differences in medical and personal circumstances.

Addressing Opioids

When opioid reduction is the goal:

- **Assess motivation** and readiness to reduce opioids.
- **Assess any/all negative impacts** from opioid use (e.g., cognitive effects, fatigue, poor sleep, effort to obtain scripts, stigma, etc).
- **Individuals with moderate and severe Opioid Use Disorder** require a different care pathway; consider referral to addiction medicine vs. opioid taper.
- **Shift paternalistic dialog**. Help patients understand the long term risks of opioids and why using less medication is in their best interests. Doing so will minimize perceptions of injustice and blame.
- **Ask**: What are your concerns about reducing your opioids?
- **Focus on a small goal**. Focus on less opioids, not *no opioids*. No opioids is often too high of mental hurdle.
- **Set positive expectations**. The biggest patient fear is greater pain. Review the data that when opioids are reduced slowly and sensibly, pain intensity tends to remain constant or improve. Sleep improves with opioid reduction and that facilitates reduced pain.
- **Assess and provide education** for how psychobehavioral factors can maintain greater use of opioids

  poor pacing → greater pain → opioids

  anxiety → greater pain → opioids

- **Provide specific resources** (e.g., books on opioid reduction).
- **Declare your philosophy:** Opioids may be *one part* of an overall care plan--not the whole story. And for many, long term opioids are contraindicated.
- **Emphasize self-management**. Partner with patients in reducing their opioids risks by emphasizing behavioral medicine. Doing so yields the best outcomes.

If possible, provide ongoing support. Self-management groups, support groups.

Tips & Scripts for Communicating About Opioid Reduction with Patients

- "It's not about taking something away from you. It's about treating your pain better, with lower risks."
- Understand their concerns. Ask them if they are interested in reducing opioids. If not, why.
- Assess history of withdrawal symptoms. Patients often believe that they will experience withdrawals and increased pain if medications are reduced. "Have you ever missed a dose of medication, or had withdrawal symptoms before?"
- Educate patients about the distinction between withdrawal symptoms, "baseline pain", and what they can expect from a very slow opioid taper.
- "We can partner together and reduce your medications so slowly your body doesn't notice it. This keeps you comfortable and prevents withdrawal symptoms."
- "When done right, most people who reduce opioids do not have increased pain. In fact, pain actually improves for many people." Describe the 2018 *JAMA Internal Medicine* paper on this topic (Darnall et al)
- Patient videos can be a valuable tool. Visit www.empower.stanford.edu for several video vignettes of patients with successful lived experience with tapering opioids.
- "When opioids are tapered THE WRONG WAY (e.g., too aggressively), increased pain and withdrawals results. The data show that when opioids are tapered THE RIGHT WAY we can prevent both of these bad outcomes and help you lower your opioid dose without increasing your pain."

Communication Examples for Opioid Reduction

- **PATIENT: "I tried stopping once and my pain was terrible."**
  YOU: "That's a common experience that usually happens when medications are reduced too quickly and it triggers withdrawals. Our goal will be to prevent you from having negative symptoms. To address this, we begin with such a slow reduction that your body will not notice the difference and will not react to it. This sets you up for success."

- **PATIENT: "I don't want to reduce my opioids because if my pain is worse I will want them back and you won't give them to me."**
  YOU: "When done very, very slowly most people do not have more pain – and studies show that many find their pain actually gets *better*. Reducing opioids can be an effective way to actually reduce your pain; it's just got to be done the right way.
  Would you be willing to partner on a very, very slow reduction to see if we can get you reductions in your pain? For instance, we might try reducing (by 5%) over the course of a month or more. Meanwhile, we will focus on giving you other tools that will help all areas of your life that are impacted by pain."

- **PATIENT: "What if I find my pain gets worse. Then what?"**
  YOU: "Our goal is to prevent this scenario. We can prevent it by going super slow. But, chronic pain does flare from time to time, even with opioids. We will stay in close communication so in the unlikely event your pain increases we can learn from it and understand why it's happening. We can also pause the taper and work with your body."

- **PATIENT: "I'm really scared about this."**
  YOU: "You are not alone. It is common for patients to fear opioid reduction, even though most say that they would like to take less opioid medication. Our plan will set you up for success. We will go slow, communicate with each other, and I will help address your needs. Your job will be to help yourself be calm because that will help our plan work better. Let me connect you with some resources and tools to help you feel less anxious about this."