Holistic Opioid Addiction Prevention: treating chronic pain

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Disclosures

None of the planners of presenters for this educational activity have relevant financial relationships to disclose with ineligible companies or any persons involved in the planning of this activity.



Recognition

- Blake Novoa, DPT: Providence Medical Group
- Claire Horn, DPT: St Peter's Family Medicine
- Steven Stanos, DO: Swedish
- Diane Flynn, MD: Department of Defense
- Michael Nicholas, PhD: University of Syndey
- Ashley Reynolds, RN, DNP student

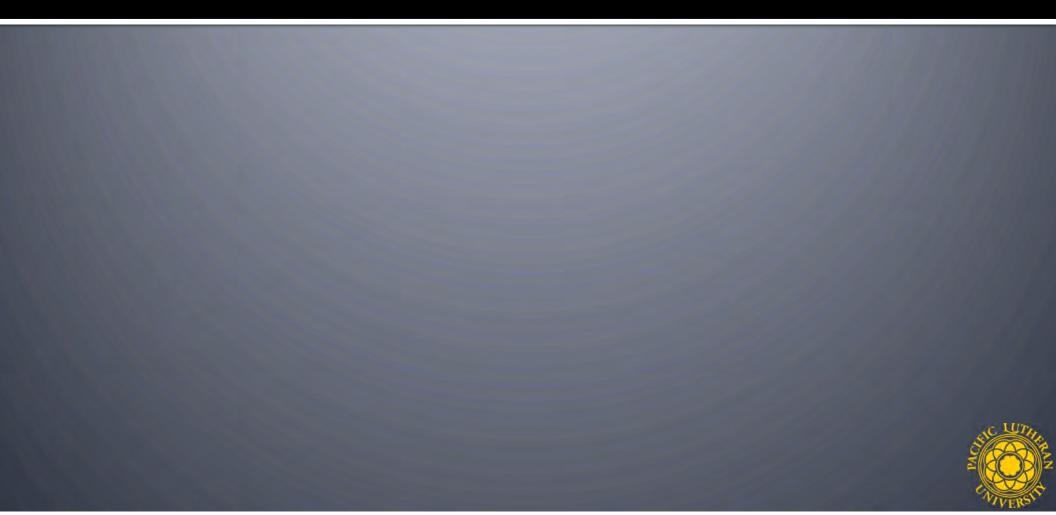


Objectives

- Understand chronic pain and the role of opioids
- Identify two ways to help avoid opioid use disorder: cause and prevention
- Understand the classification of pain: how to assess
- Understand the rationale of the biopsychosocial approach
- Discuss 5 treatment options for patients with chronic pain

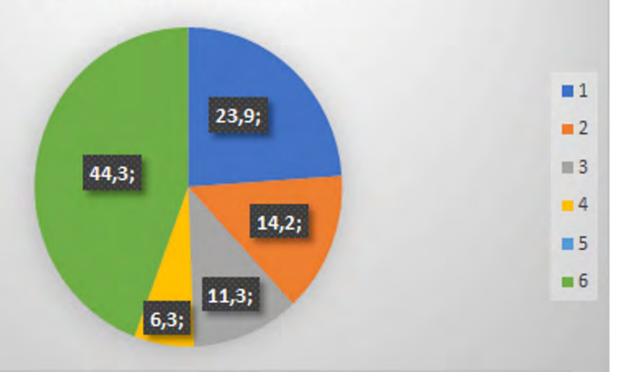


Introduction to chronic pain and opioids



Vital Statistics Chronic Pain USA

Estimates of Pain Prevalence and Severity in Adults 2012



- 126.1 million adults in the USA had some pain over the last 3 months (5)
- 25.3 million adults are suffering from chronic pain (6)

Estimates of Pain Prevalence and Severity in Adults: United States, 2012 Richard L. Nahin. Journal of Pain, Vol (16): 8 2015: 769-780

A Clinical perspective on a pain neuroscience education approach to manual therapy. LouwA, NijsJ, PuenteduraEJ. Journal of Manual and Manipulative Therapy. 2017;1:160-168.



IASP current definition and propsed new

- "An unpleasant sensory and emotional experience associated with actual or POTENTIAL tissue damage, or described in terms of such damage" (IASP-pain.org)
- "an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage, or described in terms of such damage"
- The IASP added six salient points
- Pain in personal and influenced by biopsychosocial factors.
- Pain differs from nociception and does not always arise from sensory neurons.
- Pain is learned through life experiences. Reports of pain should be respected.
- While intended to adaptive in function, pain may have adverse effects on function and psychosocial well-being.
- Pain can be communicated verbally or through behaviors



The Opioid Crisis

- Mortality related to commonly prescribed opioids has more than tripled between 2000 and 2015 and increased 6 fold btwn 2000 and 2018(CDC, 2016a)
- PCPs prescribe approximately 50% of dispensed opioids (Daubresse, 2013)
- Despite being at the forefront, PCPs are ill equipped to treat CNCP (Cheatle & Barker, 2014)
- Patients are unlikely to be successful in tapering opioids without alternative coping mechanisms for pain control (Berna et al., 2015)





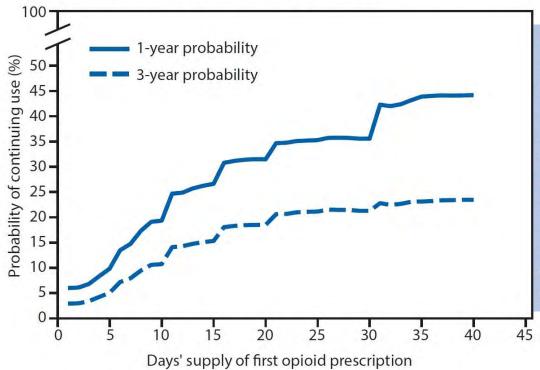
Morbidity and Mortality Weekly Report

March 17, 2017

Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015

Anuj Shah¹; Corey J. Hayes, PharmD^{1,2}; Bradley C. Martin, PharmD, PhD¹

FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription — United States, 2006–2015



What is added by this report?

In a representative sample of opioid naïve, cancer-free adults who received a prescription for opioid pain relievers, the likelihood of chronic opioid use increased with each additional day of medication supplied starting with the third day, with the sharpest increases in chronic opioid use observed after the fifth and thirty-first day on therapy, a second prescription or refill, 700 morphine milligram equivalents cumulative dose, and an initial 10- or 30-day supply. The highest probability of continued opioid use at 1 and 3 years was observed among patients who started on a long-acting opioid followed by patients who started on tramadol.



Opioids Use Disorder:

Cause and prevention



Prevention

- Involve mental health including psychiatry Volkow ND, Jones EB, Einstein EB, Wargo EM 2019
- Screening Vashishtha, D., Mittal, M.L. & Werb, D 2017
 - High, medium, and low risk categories
 - Monitoring
 - UDS
 - PMP
 - Pill counts
 - Dose limitations
- Low tolerance for MAT therapy Vashishtha, D., Mittal, M.L. & Werb, D 2017
- Tobacco use: nearly 1/3 of opioid users were smokers first Rajabi A, Dehghani M, Shojaei A, Farjam M, Motevalian SA 2019
- Smokers under age 14 are much more likely to use opioids



Risk Factors for Opiate Use Disorder

- Male sex
- Opioid Use
- Poverty
- Mental Illness
- Family History
- History of physical/emotional abuse
- Age 25-64
- Alcohol, tobacco, or other substance abuse history
- Antisocial behavior



Assess the Risks

- PHQ-9
- GAD-7
- Pain Castrophizing Scale
- Patient Self-Efficacy Scale
- Opioid Risk Tool
- SOAPP-R
- SBIRT



Post Traumatic Stress Disorder (PTSD)

PTSD is diagnosed when there is a traumatic event and/or persistent:

- Intrusion Symptoms
 - Flashbacks, nightmares
- Avoidance of thoughts, activities that trigger traumatic memories
- Negative changes in thoughts and mood
- Changes in arousal and reactivity
 - Hypervigilance, exaggerated startle response



Screening for PTSD

Screening tools

- PC- PTSD: Primary Care PTSD Screen
- PCL: PTSD Checklist
- PTSD Brief Screen
- Short Screening Scale for DSM IV PTSD

Guidelines (2020)





Webster LR. Webster RM. Pair Med. 2005 6 432-42.

25 | @ CO*RE 2013

Opioid Risk Tool (ORT)

lark each box that applies	Female	Male	
. Family Hx of substance abuse			Administer
Alcohol			
Illegal drugs			On initial visit
Prescription drugs		□ 4	
. Personal Hx of substance abuse			Prior to opioid
Alcohol			therapy
Illegal drugs		□ 4	
Prescription drugs	□ 5	□ ⁵	Scoring (risk)
. Age between 16 & 45 yrs		□ ¹	0.2.1
. Hx of preadolescent sexual abuse	□ 3	□ °	0-3: low
. Psychologic disease	-		4-7: moderate
ADD, OCD, bipolar, schizophrenia	□ ²	□ ²	
			≥8: high



Collaborative for REMS Education

Discusson

What screening tools do you use?



Defining Chronic Pain and Catastrophizing

- Pain is "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" (ASP, 2012)
- Psychological issues cause many people to report pain despite no tissue damage (ASP, 2012)
- Pain lasting more than three months, during which time normal healing usually occurs, is considered to be chronic pain (Dowell, Haegerich & Chou, 2016; IASP, 1994)
- Catastrophizing is "a cognitive process whereby a person exhibits an exaggerated notion of negativity, assuming the worst outcomes and interpreting even minor problems as major calamities" (Okifuji and Turk, 2012, p. 186)



Opioid Efficacy in CNCP

- There are limited long-term studies looking at >1 year for pain, function, or quality of life
 - All extended-release opioids approved for chronic pain based on 12-week efficacy studies
- There is no good evidence that opioids are helpful longterm for chronic low back pain
 - No evidence of significant functional improvement (at best 20% of patients may show functional improvement), some evidence of worsening function despite dose titration



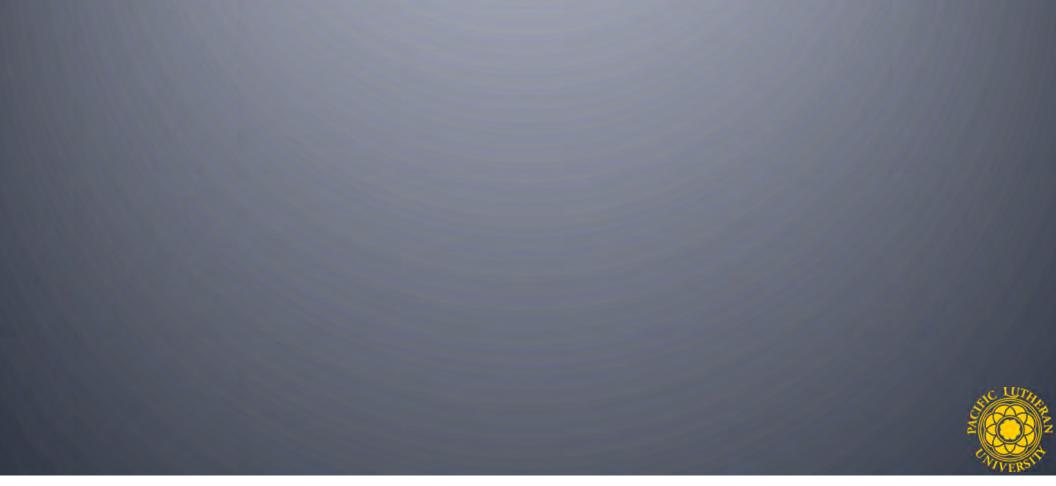
Opioid Efficacy in CNCP

- Arthritis
 - Short-term flares/exacerbations
 - Unwilling to undergo hip arthroplasty
- Migraines/Tension Headaches
 - Increased frequency of migraines
 - Harms > Benefits
- Fibromyalgia
 - No long-term studies
 - Stronger opioids probably do more harm than good
 - Tramadol shows some efficacy



Classification of pain

How to assess



PEG Tool (Pain, Enjoyment of Life, General Activity)

- Useful for tracking patient pain levels over time
- Three questions on a 1-10 scale with the average of the 3 individual scores making up the final score
 - What number bests describes your pain on average in the past week?
 - What number best describes how, during the past week, pain has interfered with your employment of life?
 - What number best describes how, during the past week, pain has interfered with your general activity?



Pain Classification₁

Predominantly **Neuropathic**

- Postherpetic neuralgia
- Painful diabetic peripheral neuror
- Lumbar or cervical radiculopathy
- Stenosis

- Tumor-related neuropathy
- Chemotherapy-induced neuropa
- Small fiber neuropathy
- Persistent postoperative pain
- Multiple sclerosis pain
- Post-stroke pain

Fibromyalgia

syndrome

Tension-type pain

 Pain associated with spinal cord injury

Predominantly Nociplastic₂

Irritable bowel syndrome

Interstitial cystitis/pelvic pain

 Chronic fatigue syndrome Restless leg syndrome

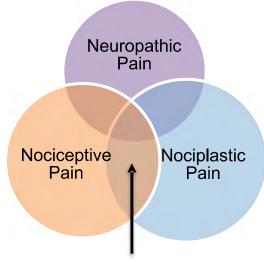
Neck and back pain without

structural pathology

Tempo-mandibular join disorder

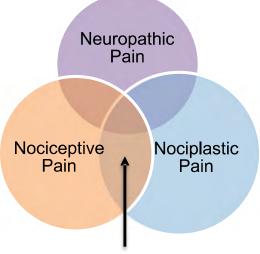
Predominantly **Nociceptive**

- Osteoarthritis
- Rheumatoid arthritis
- Ankylosing spondylitis
- Neck and back pain with structural
- Sickle-cell disease



Mixed pain conditions are frequently associated with multiple pain pathophysiologies once pain becomes chronic

- 1. Adapted from Stanos S, et al. *Postgrad Med* 2016;128(5):502-515.
- 2. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=6862



- WEDISH Extraordinary care. Extraordinary caring."



Chronic Pain Presentations

Predominantly Neuropathic

- Postherpetic neuralgia
- Painful diabetic peripheral neuropathy
- Lumbar or cervical radiculopathy
- Stenosis

- •Tumor-related neuropathy
- Chemotherapyinduced neuropathy
- Small fiber neuropathy
- Persistent postoperative pain

- Multiple sclerosis pain
- Post-stroke pain
- Pain associated with spinal cord injury





Chronic Pain Presentations

Predominantly Nociceptive

- Osteoarthritis
- Rheumatoid arthritis
- Tendonitis, bursitis
- Ankylosing spondylitis
- Gout
- Neck and back pain with structural pathology
- Tumor-related nociceptive pain
- Sickle-cell disease
- Inflammatory bowel disease





Chronic Pain Presentations

Predominantly Nociplastic

- Fibromyalgia
- Irritable bowel syndrome
- Tension-type pain
- Interstitial cystitis/pelvic pain syndrome
- Tempo-mandibular joint disorder
- Chronic fatigue syndrome
- Restless leg syndrome
- Neck and back pain without structural pathology

International Association for the Study of Pain. Available at https://www.iasppain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=6862. Accessed March 13, 2020.



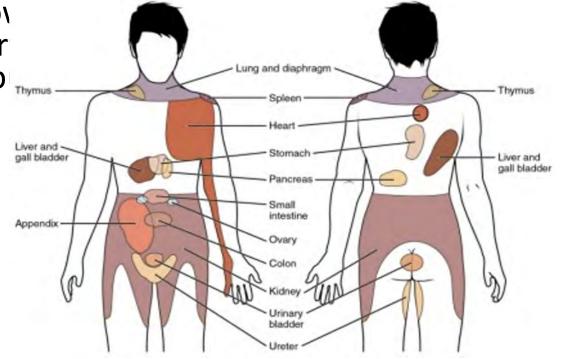
Don't underestimate the benefit of a good history and thorough physical exam



Understanding Pain Definitions...

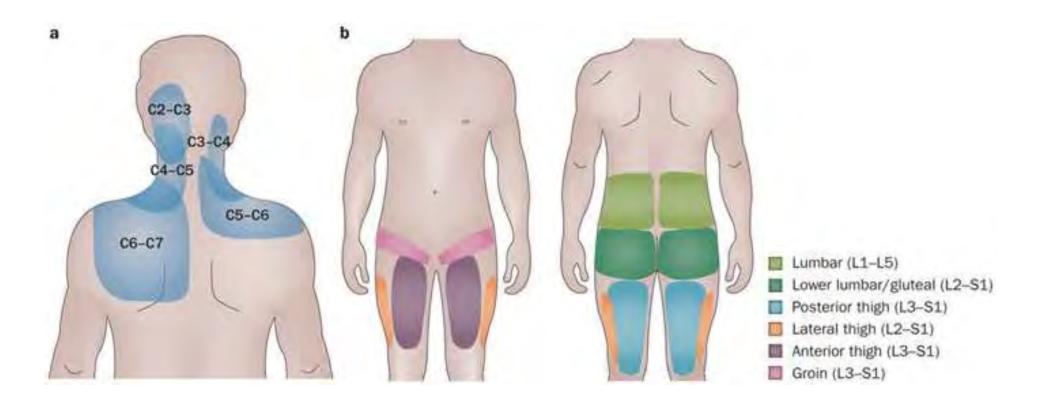
Autoimmune Pain
 from a disease that
 attacks and degrades our over
 tissues-especially joints/car
 (ex. Gout, RA, psoriasis, lupidiabetes

- Visceral Pain referred from an organ
- Cancer-Related Pain
 A special case...





Somatic and Referred Pain





Somatic and Referred Pain

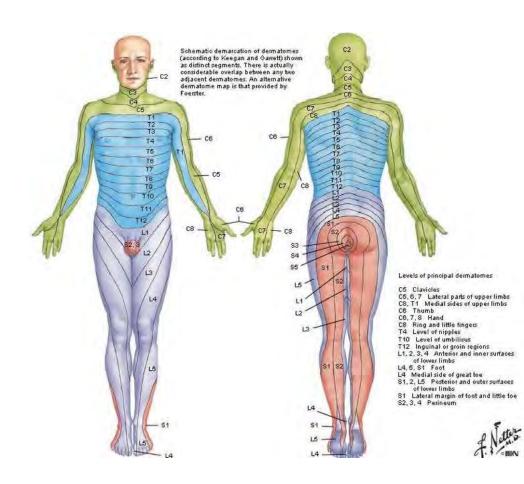
- Usually dull, achy and non-specific but can be very localized when acute
- Usually related to muscle, tendon, ligaments or joints
- Usually related to movements/postures or positions

Pay attention to what you are feeling and when-this can help to better understand your pain!



Radicular Pain/Radiculopathy/Neuropathy

- Electric-like, shooting pain in a specific pattern
- May be present with numbness/tingling or weakness.
- A nerve can be involved even though there is no pain!
- Usually related to stretch or compression of a nerve
- May be related to a degenerative condition involving a nerve
 - Ex: diabetic peripheral neuropathy





Motor Strength: Root Level

Lower Limb

Hip Flexors L2-L3

Knee Extension L3-L4

Knee Flexion L5-S1

Ankle Dorsiflex L4-L5

Gr Toe Exten L5

Plantar Flex S1S2

Hip Extension L5-S1

Upper Limb

Elbow Flex C5-C6

Wrist Extension C6-C7

Elbow Extension C7-C8

Finger Flexion C8-T1

Hand Intrinsics T1





LBP: Radiculopathy Screen

Nerve	L4	L5	S1
Pain			
Numbness			
Motor weakness	Knee extension	Dorsiflexion of great toe and foot	Plantarflexion of great toe and foot
Screening exam	Squat and rise	Heel walking	Walking on toes
Reflexes	Patella	Medial Hamstring	Achilles





Clinical Features of Fibromyalgia

WIDESPREAD PAIN

- Chronic, widespread pain is the defining feature of FM
- Patient descriptors of pain include: aching, exhausting, nagging, and hurting

SLEEP DISTURBANCES

- Characterized by nonrestorative sleep and increased awakenings
- Abnormalities in the continuity of sleep and sleep architecture
- Reduced slow-wave sleep
- Abnormal alpha wave intrusion in non-REM sleep

TENDERNESS

- Presence of tender points
- Most patients also have tenderness to pressure, heat, cold, electrical pain

FATIGUE/STIFFNESS

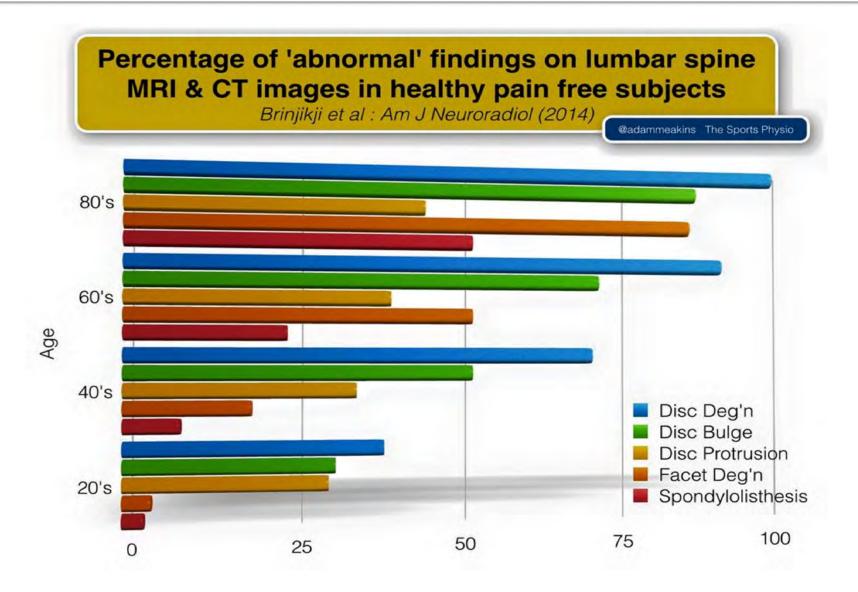
 Morning stiffness and fatigue are common characteristics of FM

Wolfe et al. Arthritis Rheum. 1995;38:19-28; Leavitt et al. Arthritis Rheum. 1986;29:775-781; Wolfe et al. Arthritis Rheum. 1990:33:160-172; Roizenblatt et al. Arthritis Rheum. 2001;44:222-230; Harding. Am J Med Sci. 1998;315:367-376.



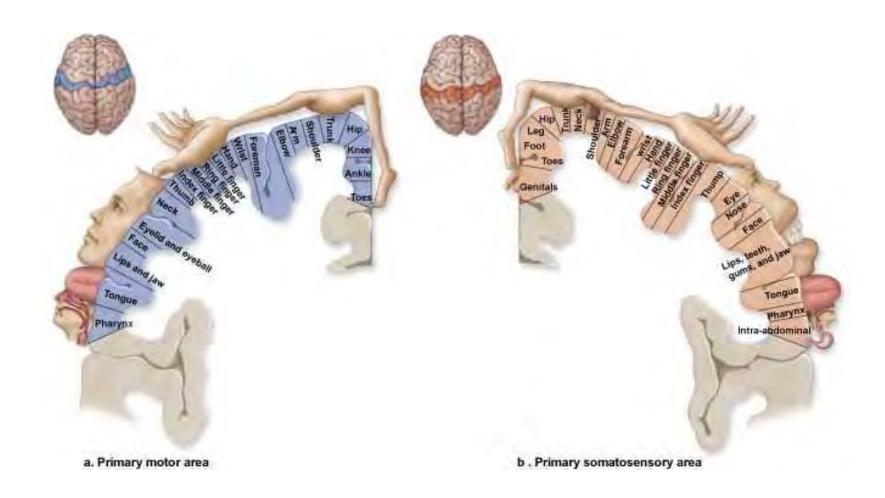


Understanding - Tissue damage does NOT always mean Pain



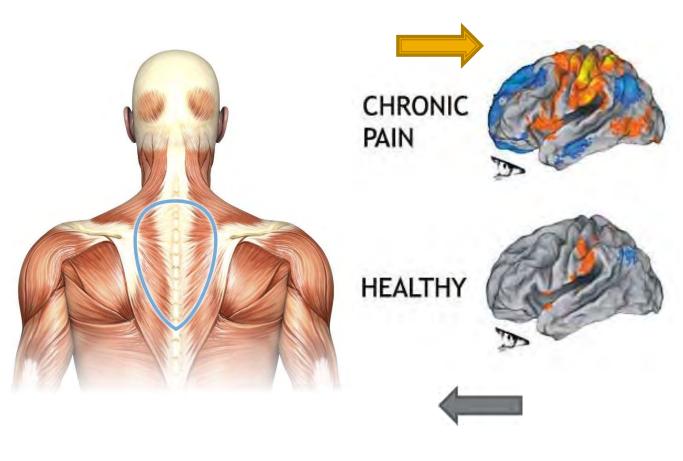


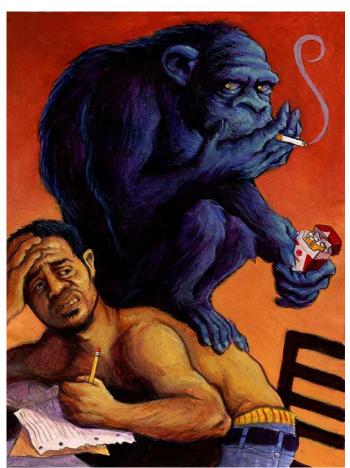
The Homunculus: Smudging OUR Mental Map





Central Sensitization







Discussion

What information in history and physical exam do you find most helpful?

How do you fit a good history and do a through physical exam into your schedule?



Treatment Options

Physical

Daily physical activity and pacing

Cold and heat

Massage

Physiotherapy and/or
occupational therapy

Psychological

Mindfulness
Medical hypnosis
Changing teen's thoughts
and behaviours related
to their pain
Effective parental
responses to pain

Pharmacological

Pain relievers for mild, moderate or severe pain Adjuvant medications for nerve pain Antidepressants for anxiety and/or depression





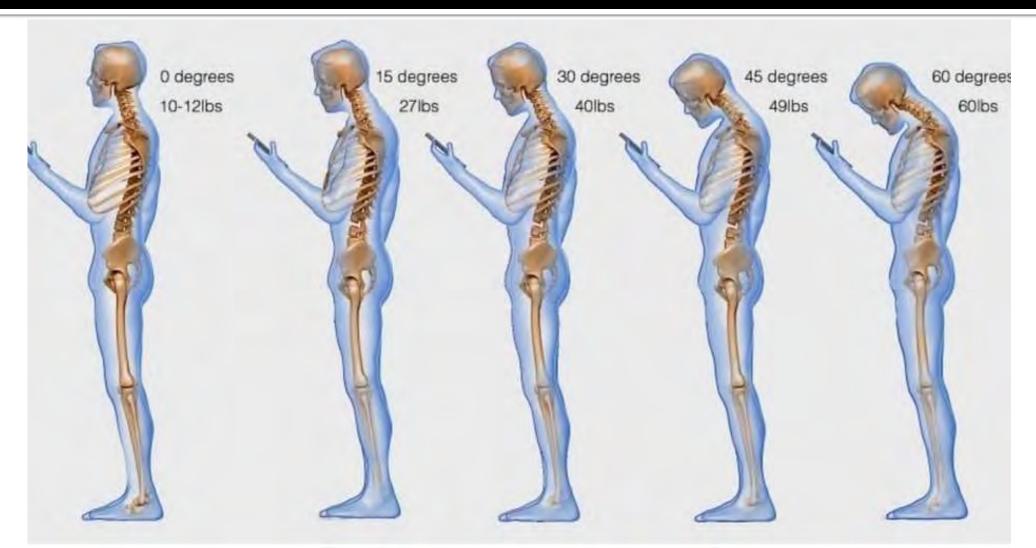
We must consider the Risk Factors...

- Repetitive Motions
- Forceful exertions
- Awkward Positions
- Heavy Lifting
- **Sustained Positions/postures
- **General weakness
- **Deconditioning





Life=Posture





Non-Opioid Analgesics

- Acetaminophen (APAP)
 - More favorable safety profile than NSAIDS
 - Risk of LFT elevation- clinical significance?
- NSAIDS
 - More effective for pain relief than APAP
 - GI and Cardiovascular adverse effects
 - More drug interactions than APAP

Both proven to be **opioid sparing**



Upper GI Bleed Risk

NSAID	Relative Risk (95% CI)	P Value
Coxibs	2.22 (1.64-4.23)	0.0014
Diclofenac	2.2 (1.06-4.54)	0.0051
Ibuprofen	3.63 (1.09-12.12)	0.0059
Naproxen	5.49 (2.74-10.99)	< 0.0001

Prevention

- Change NSAID
 - Use NSAID with lower GI risk
 - COX-2 Selective Inhibitor
 - Celecoxib
- Use acid suppression therapies
 - PPI or High-dose H₂RA
- Test/Treat H pylori infection
- Counseling/Education

Eur J Clin Pharmacol 2014; 70:1159-1172.



NSAID-Induced CV Disease

- COX-2 Inhibitors
 - Endothelial cells → COX-2 suppresses prostacyclin production → thrombosis
- Osteoarthritis is a risk factor for developing CV disease
 - 41% of this risk is attributed to NSAID use
- 42% relative risk increase in serious vascular events for people on COX-2 inhibitors
- Risk Factors:
 - Prior CV events
 - Comorbid conditions: Hypertension, Diabetes, CKD
 - Nicotine abuse



Renal Outcomes

Reduced prostaglandin production → vasocontriction of afferent arterioles → reduced blood supply to nephron

Triple Whammy

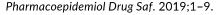
ACEi/ARB + NSAID + Diuretic

Increased risk of acute kidney injury

Long-Term Care Facilities

16.7% of patients on NSAIDs were on triple therapy







Adjuvant Therapies

- Skeletal muscle relaxants (SMR)
- Antiepileptics and alpha-2 agonists
- Antidepressants
- Topical agents
- Benzodiazepines and insomnia agents



Skeletal Muscle Relaxants

	MOA	Unique Adverse Effect
Baclofen	Inhibits spinal reflexes; structural analog to GABA	Withdrawal syndrome- hallucinations, psychosis, seizures
Carisoprodol (Soma)	Unknown, possibly sedative	Hypomania, Withdrawal, Idiosyncratic- weakness, visual or motor disturbances, confusion, euphoria, Abuse potential
Cyclobenzaprine (Flexeril)	Acts in brain stem and spinal cord; structurally related to amitriptyline	Anticholinergic SE Long t ½
Diazepam (Valium)	Neuronal inhibition through GABA receptors	Only benzodiazepine approved as a muscle relaxant



Skeletal Muscle Relaxants

	MOA	Unique Adverse Effect
Metaxalone (Skelaxin)	Unknown, possibly sedative	Relatively low risk of drowsiness or cognitive effects Paradoxical muscle cramps
Methocarbamol (Robaxin)	Unknown, possibly sedative	Urine discoloration- brown, black, green
Tizanidine (Zanaflex)	Inhibits motor neurons by stimulating alpha-2 receptors; structurally related to clonidine	Hypotension (20% ↓) Hepatotoxicity Hallucinations/Delusions Drug interactions Withdrawal HTN QT prolongation



Skeletal Muscle Relaxants

	MOA	Unique Adverse Effect
Gabapentin (Neurontin)	Unknown, blocks voltage-dependent calcium channels at alpha-2-delta subunit, decreasing excitatory neurotransmitter release	Withdrawal seizures or symptoms if abrupt discontinuation Dizziness and sedation (dose-dependent)
Pregabalin (Lyrica)	Unknown, blocks voltage-dependent calcium channels at alpha-2-delta subunit, decreasing excitatory neurotransmitter release	Dizziness and sedation (dose-dependent) Scheduled V (Euphoria)



Tricyclic Antidepressants (TCA)

- Works through serotonin agonism, norepinephrine reuptake inhibition, and sodium channel blockade
- Uses:
 - Neuropathic pain (NNT 3.6)
 - More efficacy than opioids in low back pain
 - Others: IBS, migraine, cystitis, fibromyalgia
- Amitriptyline vs nortriptyline
- Consider adverse effect profiles and interactions
 - > Antihistaminergic, anticholinergic, and adrenergic



Serotonin Norepinephrine Reuptake Inhibitors (SNRI)

- Works by increasing serotonin and norepinephrine activity
- Uses:
 - Neuropathic Pain (NNT 6.4)
 - Fibromyalgia
- Side Effects:
 - Headache, nausea, minimal anticholinergic effects
- Duloxetine (Cymbalta)
 - Weak evidence in low back pain
- Venlafaxine (Effexor)
 - Dose related hypertension
- Milnacipran (Savella)
 - > Moderate evidence for use in back pain
 - No evidence for use in nerve pain



Selective Serotonin Reuptake Inhibitors (SSRI)

- No proven efficacy for pain
- Consider due to high risk of comorbid depression



Benzodiazepines

	Half-Life (hours)	Active Metabolites	
Alprazolam (Xanax)	11	No	 Abuse Pote None are FDA appain Mixed results in contract
Chlordiazepoxide (Librium)	24-48 (>100)	Yes	
Clonazepam (Klonipin)	30-40	No	
Diazepam (Valium)	24-48 (>100)	Yes	
Lorazepam (Ativan)	12-14	No	
Temazepam (Restoril)	~ 9	No	

- tential
- pproved for
- clinical trials



Topical Analgesics

- Lidocaine
 - Gel
 - Patches (4% OTC, 5% Rx)
- Diclofenac
 - Gel or Solution 1%
 - Patch 1.3%
- Ketoprofen 10% in PLO gel (compounded)
- Gabapentin 8% in PLO gel (compounded)
- Capsaicin 0.025%, 0.075%
- CBD



Topical analgesics: Compounded Agents

PAIN COMPOUNDS **Topical Anti-Inflammatory** KETOPROFEN 10% or 20% QTY: _____ Refill: _____ In Lipoderm topical cream to help with inflammation 60g (\$35) KETOPROFEN 20%/ DMSO 10% QTY: Refill: In Lipoderm topical cream with DMSO 60g (\$95) Neuropathic Pain BACLOFEN 2%/ AMITRIPTYLINE 2%/ GABAPENTIN 6%/ LIDOCAINE 5% QTY: Refill: In Lipoderm topical cream 60g (\$85) (GABAP ____% +/- AMITRIP ____% +/- KETOPROF ___ % +/- ______) \$40-\$90 depending on dosing, ingredients (often ins pays QTY: Refill: for some or all ingred) Combination Anti-Inflammatory/ Neuropathic Pain DICLOFENAC 5%/ BACLOFEN 2%/ BUPIVICAINE 1%/ GABAPENTIN 6% QTY: Refill: In Lipoderm topical cream 60g (\$105) MELOXCIAM 0.09%/ TOPIRMATE 2.5%/ PRILOCAINE 2% QTY: Refill: In Lipoderm topical cream 60g (\$85) **GABAPENTIN 10%/LIDOCAINE 5% TOPICAL CREAM** QTY: _____ Refill: For more severe vulvar pain 30g (\$45)



Annals of Internal Medicine

ORIGINAL RESEARCH

Compounded Topical Pain Creams to Treat Localized Chronic Pain A Randomized Controlled Trial

Robert E. Brutcher, PharmD, PhD; Connie Kurihara, RN; Mark C. Bicket, MD; Parvaneh Moussavian-Yousefi, PharmD; David E. Reece, MD; Lisa M. Solomon, BS; Scott R. Griffith, MD; David E. Jamison, MD; and Steven P. Cohen, MD

- Military treatment facility
- 399 veterans with localized pain (neuropathic, nociceptive, and mixed)
- 4 treatment arms with each type of pain compared to placebo
 - Compounds included some combination of ketamine, gabapentin, clonidine, lidocaine, ketoprofen, baclofen, cyclobenzaprince, and diclofenac.
- Outcome: numerically improved pain scores that was not statistically significant
- Conclusion: "Compounded pain creams were not better than placebo creams, and their higher costs compared with approved compounds should curtail routine use."

Study criticism: pain ratings were at the discretion of the providers



Goals of Opioid Therapy

- Goal of opioid therapy for chronic pain is to minimize pain, yet maximize function
 - 100% free is not an appropriate goal
- **Potential Goals:**
 - Reduce missed work days
 - Improved self-care
 - Increased level of activity
 - Decreased use of health care system
- Poor pain management:
 - Under Medicating: greatly inadequate pain relief where patient is unable to move or function and remains very stressed/depressed/angry
- Over Medicating: when opioid therapy prevents patients from engaging in activities because they are too sedated/lethargic/checked-out
 AMDG. Interagency Guideline on Prescribing Opioids for Pain. 3rd Ed. June 2015



Risks of Opioid Therapy

- Lethargy, sedation, decreased cognition, nausea/vomiting
- Constipation
- Allergic Reactions
- Respiratory suppression
- Hormone dysregulation
- Dependence/addiction risks



Establish Expectations

- Duration of therapy
 - Time limited trial
- Next steps in therapy
- Definition of failed therapy
- Goals of therapy
 - Amount of relief
 - Functional status
- Pain agreement

Function is the primary goal, NOT pain relief

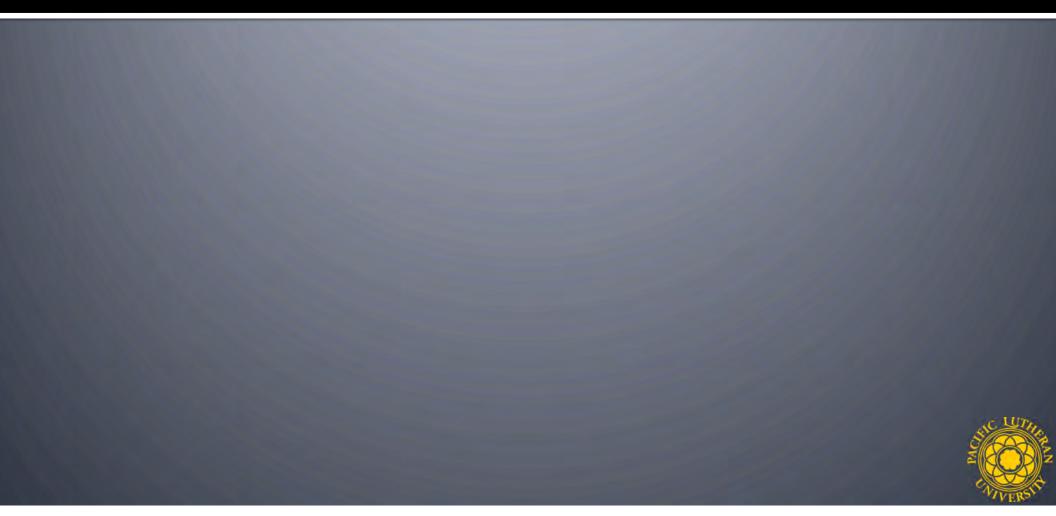
30% reduction in pain relief considered success

Discussion

What has worked best in your clinical setting?



A Biopsychosocial Approach



Does educating patients about pain work?

Many RCTs, systematic review and meta-analysis: Clarke et al (2011); Louw et al (2011); Moseley & Butler (2015); Louw et al (2016)

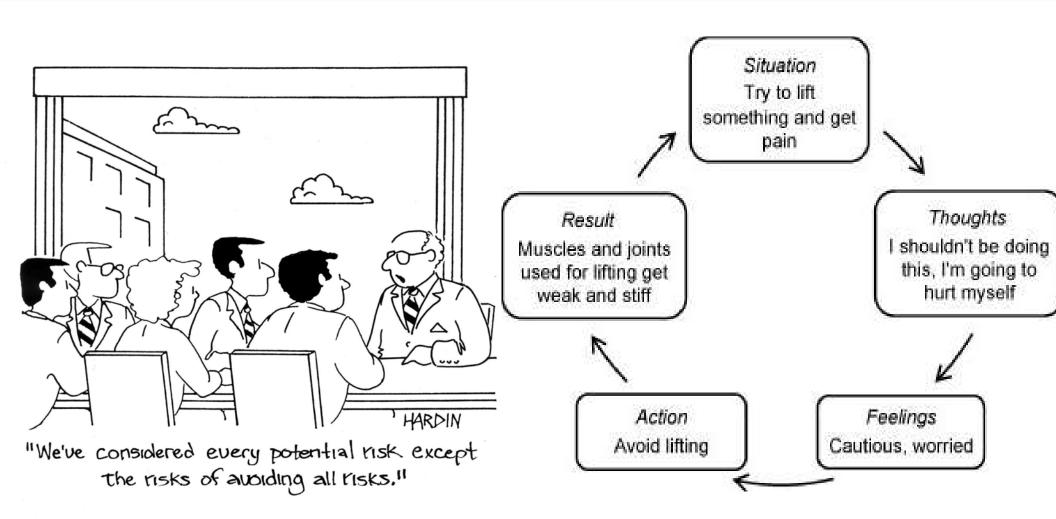
Level 1 evidence- the strongest level of evidence suggests that a treatment is good and should be incorporated into practice

Data from >1000 patients show improvements in pain knowledge initially with improvements in pain and disability at 1 year (Lee et al, 2015)

Not only does pain improve but **flare-ups reduce in recurrence and severity**

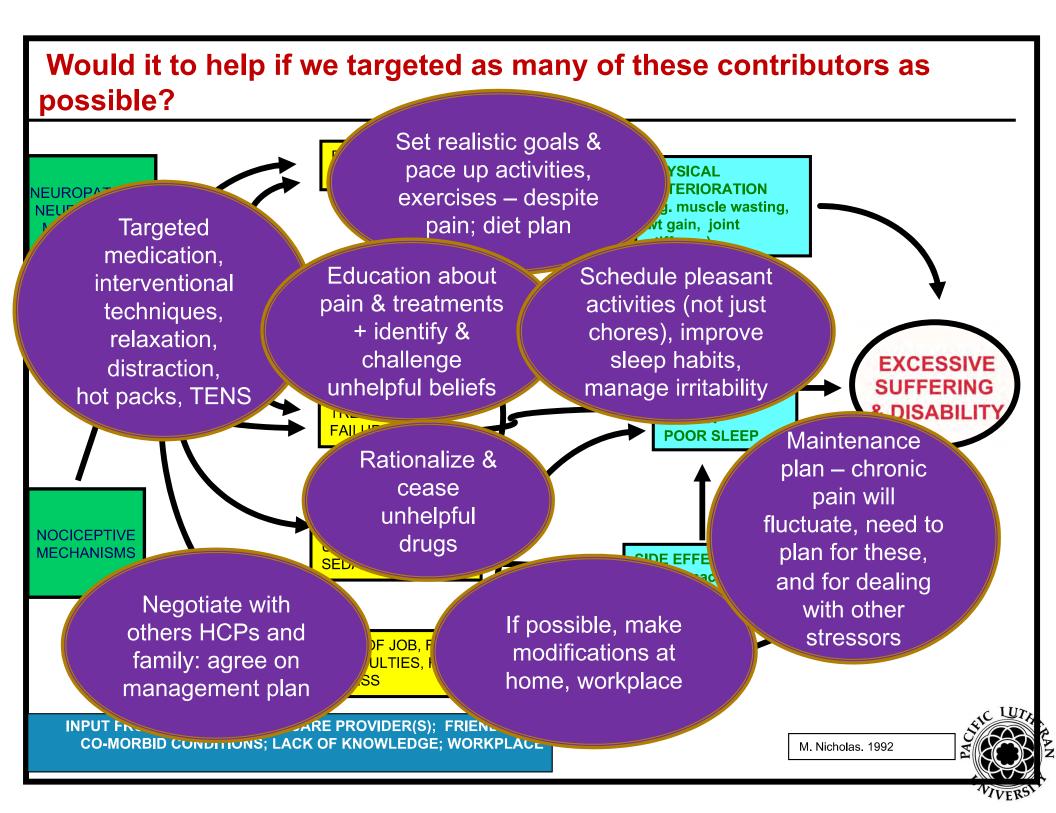


Fear Avoidance





Explaining the Interacting Contributors and Effects A biopsychosocial perspective REDUCED **PHYSICAL ACTIVITY Changes** in central **DETERIORATION** nervous system (eg. muscle wasting, (Neuropathic or put on weight, joint **Neuroplastic** stiffness) mechanisms, eg. sensitization) UNHELPFUL **BELIEFS & THOUGHTS CHRONIC EXCESSIVE DEPRESSION**, HELPLESSNESS. SUFFERING **PAIN** REPEATED **FRUSTRATION** & DISABILITY TREATMENT **ANGER FAILURES POOR SLEEP** Injury; Tissue LONG-TERM USE OF ANALGESIC. Damage SIDE EFFECTS (Nociceptive **SEDATIVE DRUGS:** (eg. stomach mechanisms) **INTERACTIONS** problems, lethargy, WITH OTHER constipation) **DRUGS** LOSS OF ROLES/INDEPENDENCE. **FAMILY STRESS. MORE DEPENDENT** ON OTHERS INPUT FROM: FAMILY; HEALTHCARE PROVIDER(S); CARERS; CO-MORBID CONDITIONS: LACK OF KNOWLEDGE: LIVING ENVIRONMENT M. Nicholas 1992



Common effects of mental health comorbidities

- Higher pain intensity and functional impairment.
- Higher healthcare costs through increased utilization.
- Increased negative thoughts about pain.
- More chronic and treatment-resistant symptoms.
- Poorer treatment adherence and perceived benefits.
- Increased risk of self-directed violence, including suicide.

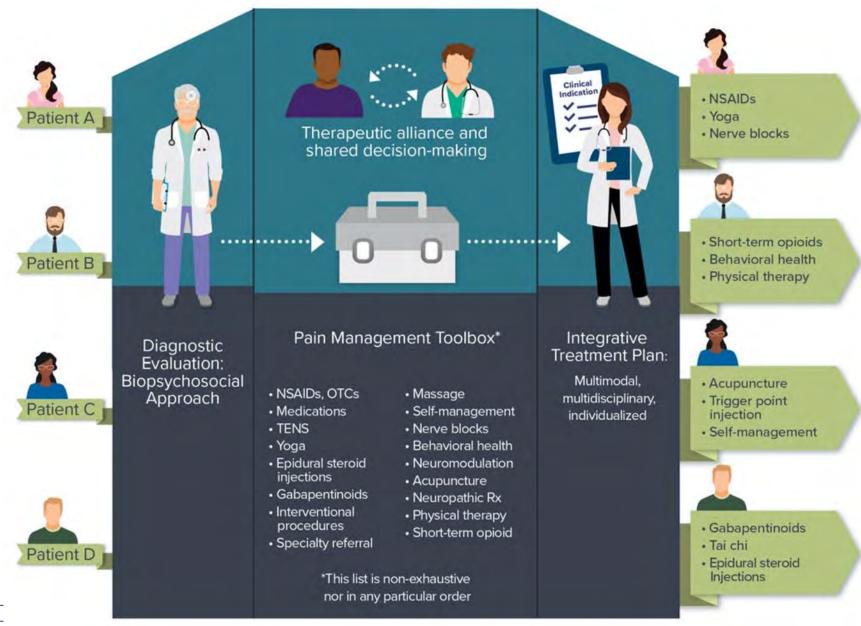


Depression

- Depression or depressive mood is present in up to 75% of patients with chronic pain
- People with more severe depression feel more intense pain.
- Chronic pain can worsen depression symptoms.
- Like depression, chronic pain can cause problems with sleep and daily activities, reducing quality of life.
- Chronic pain and is a risk factor for suicide in people who are depressed.



Pain: Biopsychosocial Approach



gaps-inconsistencies-recommendations/index.html



HHS: Interagency Task Force





Therapy for Pain?

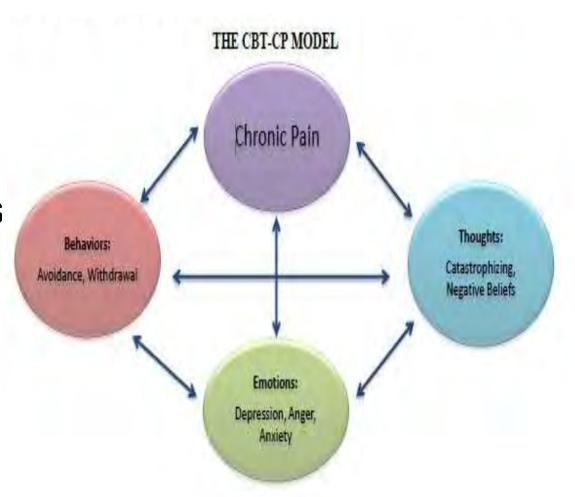
- Cognitive Behavioral Therapy (CBT)
- Acceptance and Commitment Therapy



Cognitive Behavioral Therapy (CBT)

CBT Model

- Unhelpful thoughts and behaviors cause and maintain distress and impairment
- Changing thoughts and behaviors can change emotional and physical pain



Beck and Beck (1995); Murphy et al. (2014)

Acceptance and Commitment Therapy

What is
Acceptance and
Commitment
Therapy for
chronic pain
(ACT-CP)?

- Accept: Private experiences and stay present.
 - Thoughts and feelings are accepted instead of eliminated or changed particularly the unwanted ones (e.g., pain, anxiety, guilt).
- Choose and Commit: To living with personal values.
 - Help patients choose direction by focusing on what really matters to them.
- Take Action: In areas that matter
 - Commit to action toward chosen val

How is ACT-CP practiced?



- Mindfulness practice and present-moment attention
- Values clarification
- Behavioral commitment
- Experiential exercises and metaphors



VA/DoD Mobile Apps: Relaxation/CBT

- Breathe2Relax
 - Mobile App for guided diaphragmatic breathing exercise
 - https://telehealth.org/apps/behavioral/breathe
 2relax-mobile-app
- Relax Relax
 - Web resource for guided meditation audio files for download or streaming
 - https://www.med.navy.mil/sites/nmcphc/healt h-promotion/psychological-emotionalwellbeing/relax-relax/pages/index.html







VA/DoD Mobile Apps: Mindfulness/ACT

- Mindfulness Coach
 - Stress reduction, emotional balance, self-awareness, coping with depression/ anxiety/chronic pain
 - https://mobile.va.gov/app/mindfulne ss-coach
- ACT Coach
 - ACT exercises, tools, information, and tracking logs
 - https://mobile.va.gov/app/act-coach





Patient-Centered Considerations

- "Pain"
- Threat to the biological integrity of an individual
- "Suffering"
- A threat to that person that is affecting who they are
- Anxiety, depression
- Distress, hopelessness
- Change in function



Discussion

Is it more important to treat pain or suffering?

What do you need to take into consideration?



Relaxation

Learning to relax is a powerful and effective self-care treatment for chronic pain.



Relaxation:

- Is a unique mental state of passive attention
- Turns down the "inner dialogue" and decreases sympathetic nervous system arousal
- Can include a mental focus on the breath, a phrase, imagery, or purposeful movement



Relaxation

- There are many relaxation techniques.
- Ask patients to choose those they find most helpful.

- Diaphragmatic Breathing
- Body Scan
- Progressive Muscle Relaxation
- Guided Imagery / Visualization
- Meditation / Mindfulness
- Qigong / Tai Chi
- Yoga
- Autogenic Training
- Biofeedback



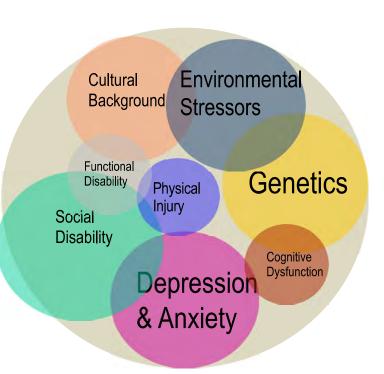


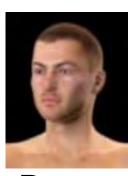
Chronic Pain: Bio-Psycho-Social Model



Pain 8/10 MED: 0







Bryan

Pain 8/10 MED: 60





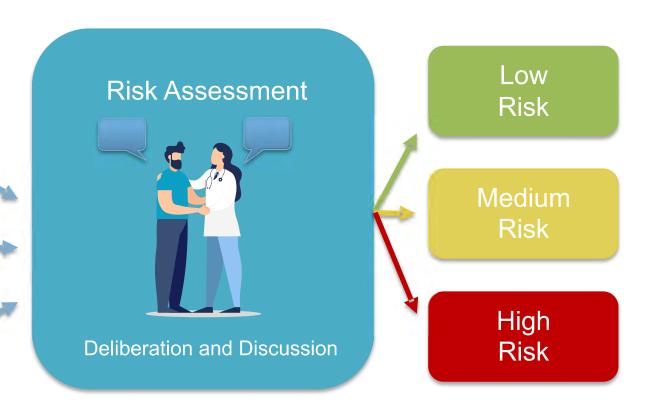
Patient-Centered Care: Risk Assessment



Patient History

Physical Examination

Diagnostic Screening
Tools and PDMP



Discussion

How can you integrate the biopsychosocial model into your practice?



Interdisciplinary Chronic Pain Program Model

Neurophysiology Biopsychosocial approach to pain Body mechanics Mindfulness
Pacing
Sleep hygiene

Opioid risks
Opioid agonists
Non-opioid pain
medications

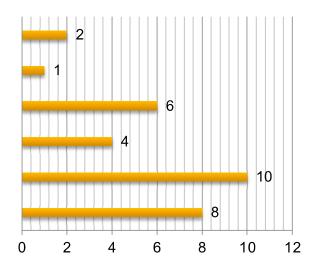
↑Knowledge **↓**Catastrophizing **↓**Pain



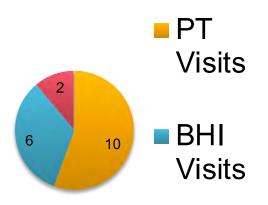
Utilization of Integrated Services

PATIENTS NEW TO IS: REFERRALS AND VISITS

Pharm visits
New Pharm Referrals
BHI Visits
New BHI Referrals
PT Visits
New PT Referrals



18 TOTAL VISITS GENERATED





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