



OPIOIDS AND CHRONIC PAIN: CULTURAL MYOPIA AND THE BIG PICTURE

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Associate Professor Anesthesiology and Pain Medicine
Vanderbilt University

SIMILARITY OF INTEREST

- CEO, Relief Retreats
- Founder, camPAIN.org
- One of y' all




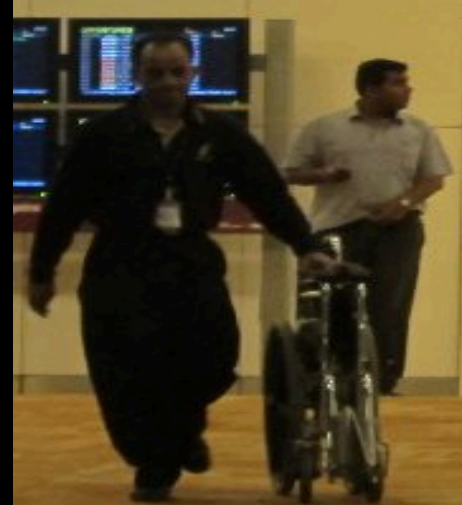




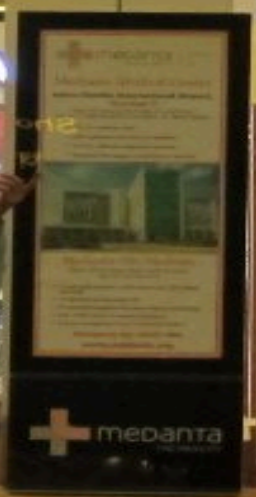


↑  Smoking Room
धूम्रपान कक्ष

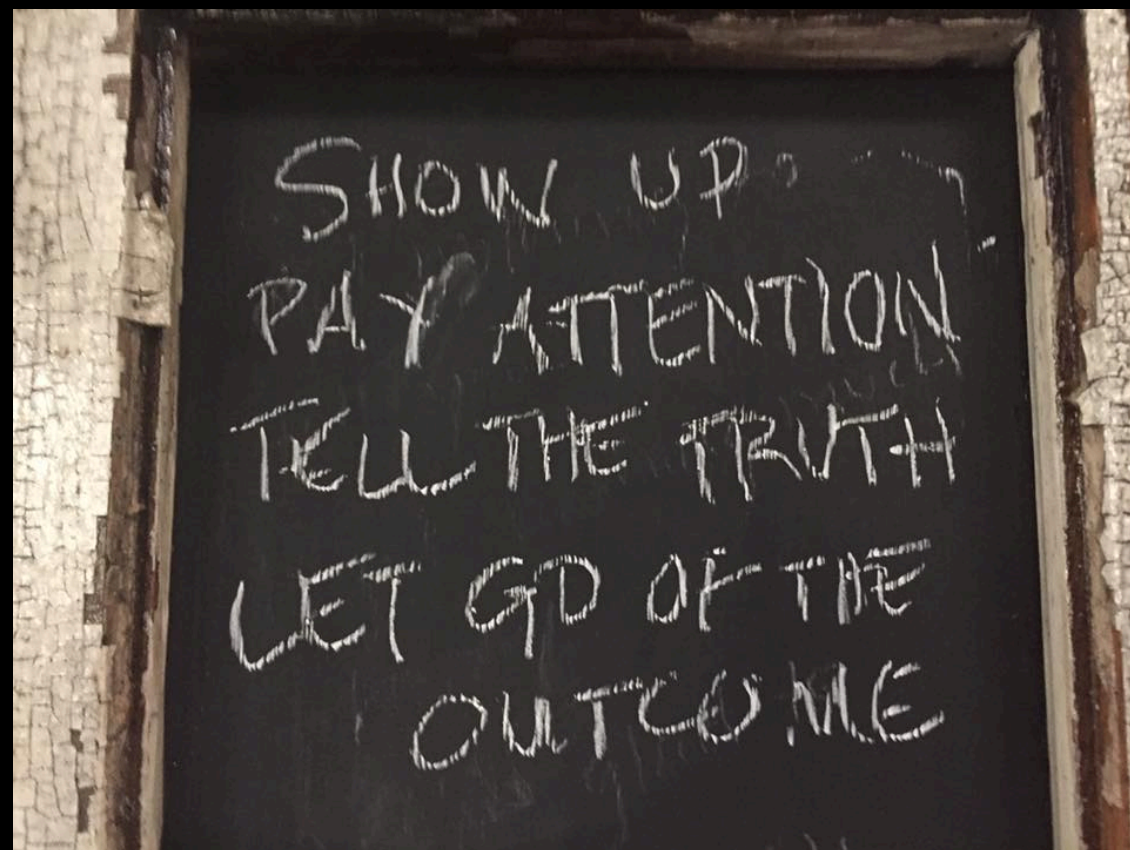
↖  Prayer Room
प्रार्थना कक्ष



Smoking Room
धूम्रपान कक्ष



A photograph of a chalkboard with handwritten text in white chalk. The text is arranged in four lines. The background of the image is black, with a colorful, curved, abstract shape at the top. The chalkboard is set within a wooden frame, and the surrounding wall is made of light-colored, textured bricks.

SHOW UP
PAY ATTENTION
TELL THE TRUTH
LET GOD OF THE
OUTCOME



ADDICTION IS ADDICTION IS ADDICTION

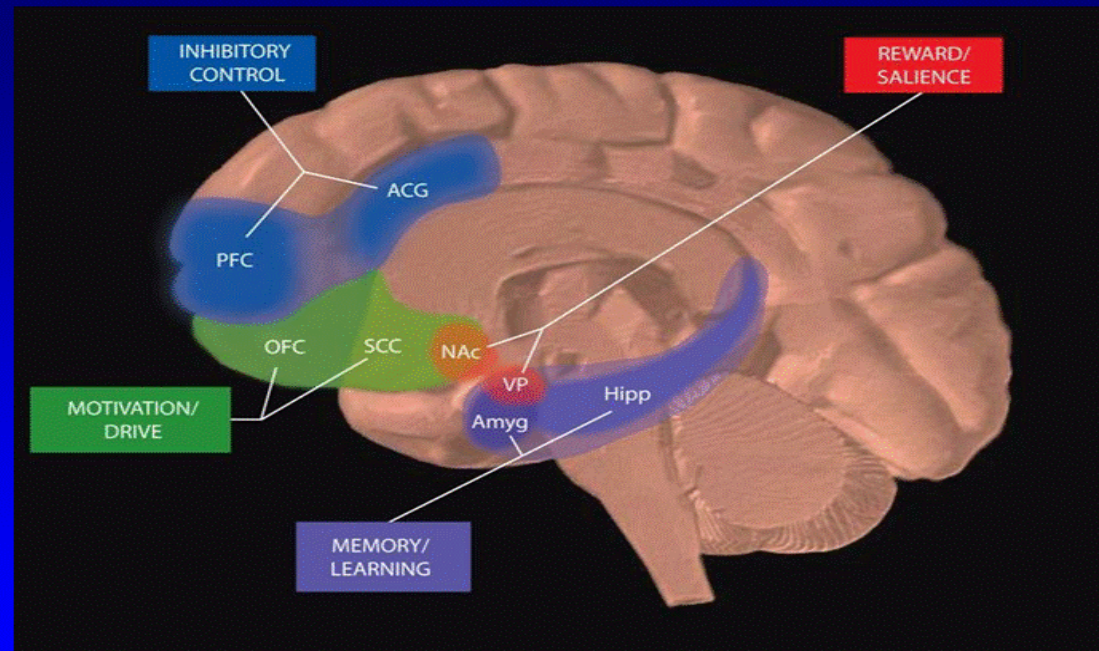


You are a
human being,
not
a human doing.



PAIN IS DIABETES IS HEART DISEASE IS ANXIETY IS
INSOMNIA IS DEPRESSION IS ADDICTION

Circuits Involved In Drug Abuse and Addiction



All of these brain regions must be considered in developing strategies to effectively treat addiction

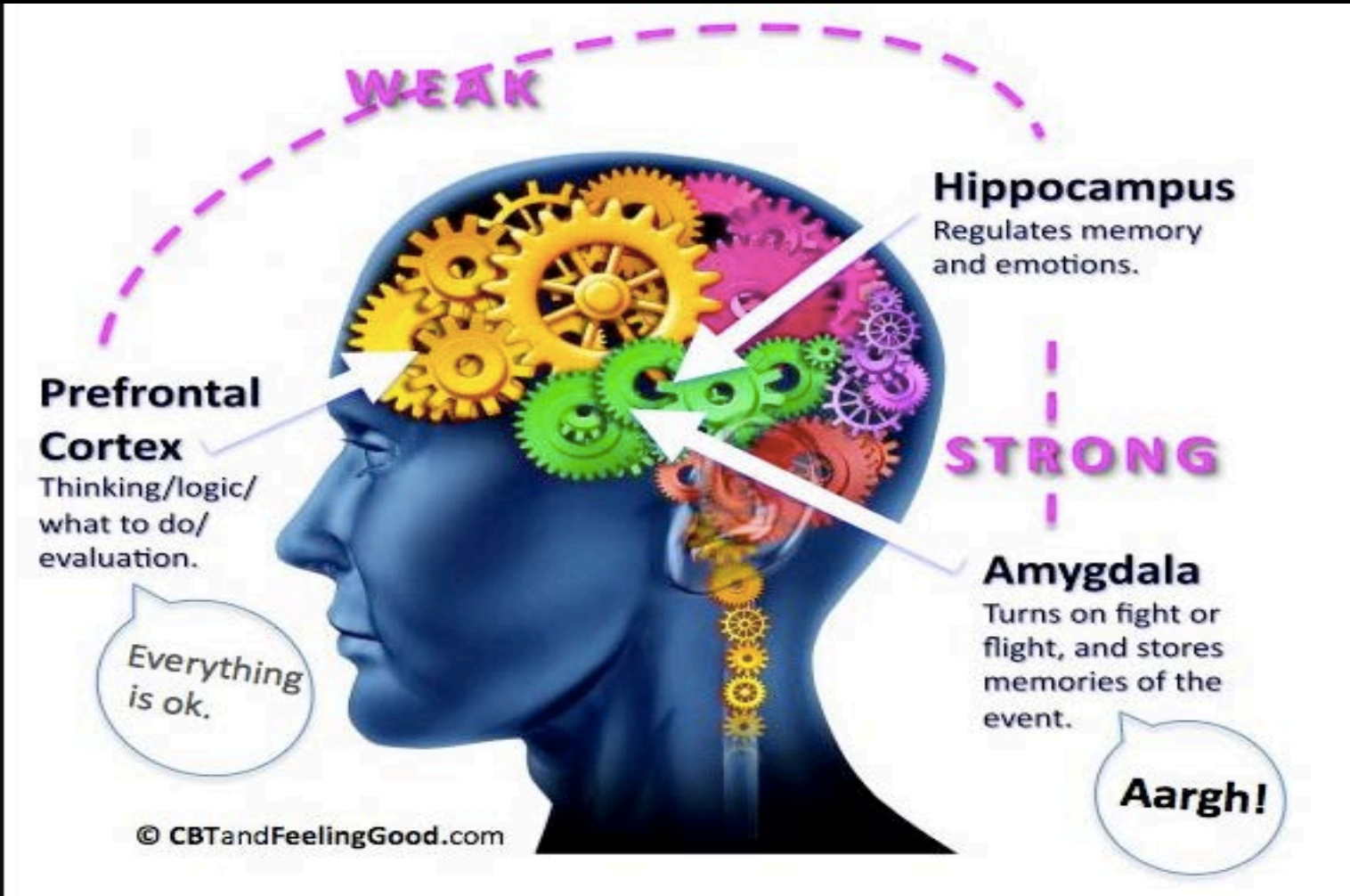
**THE BIG
PICTURE**

NEXT EXIT

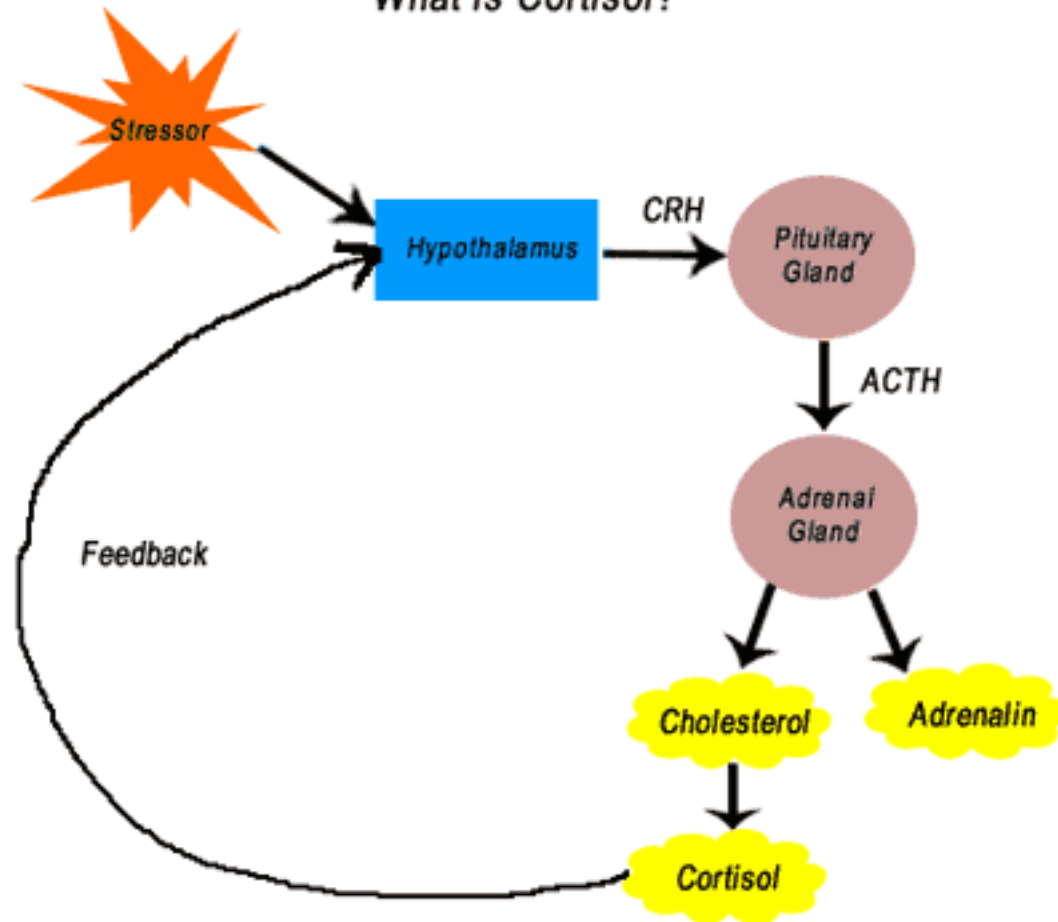




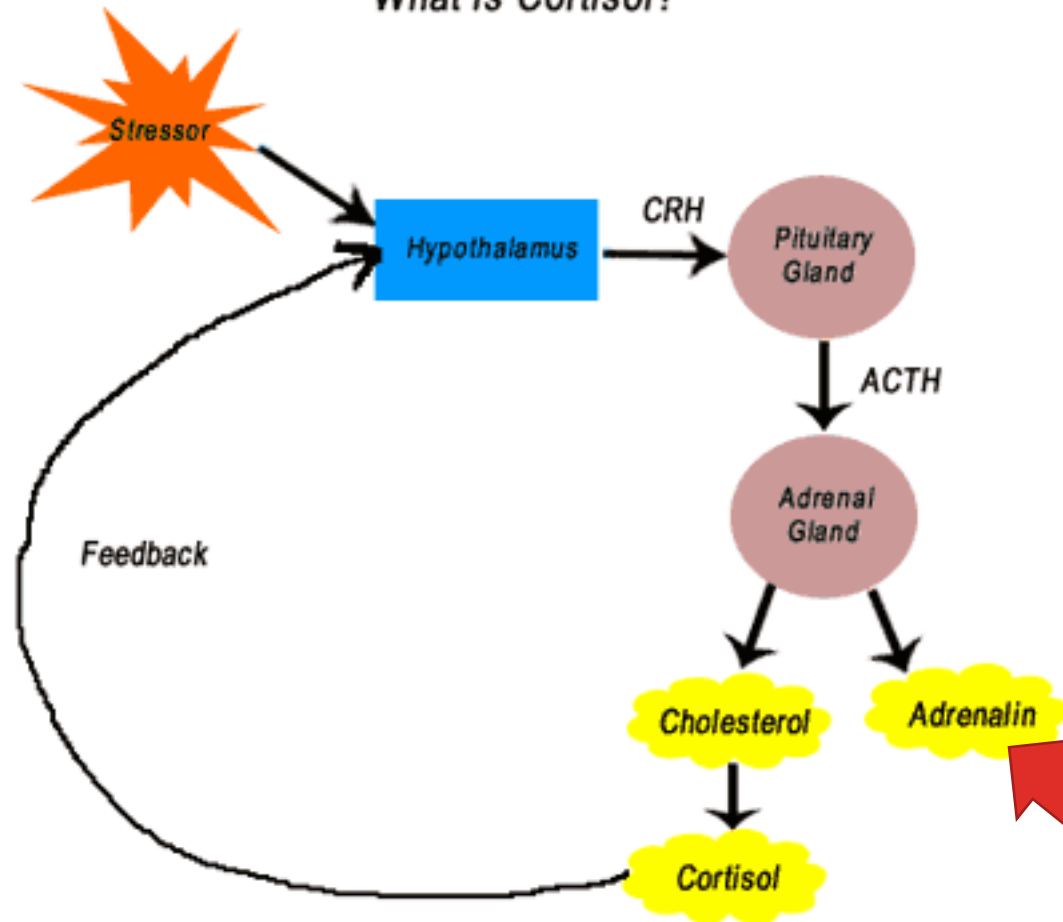
AM I SAFE???



What is Cortisol?

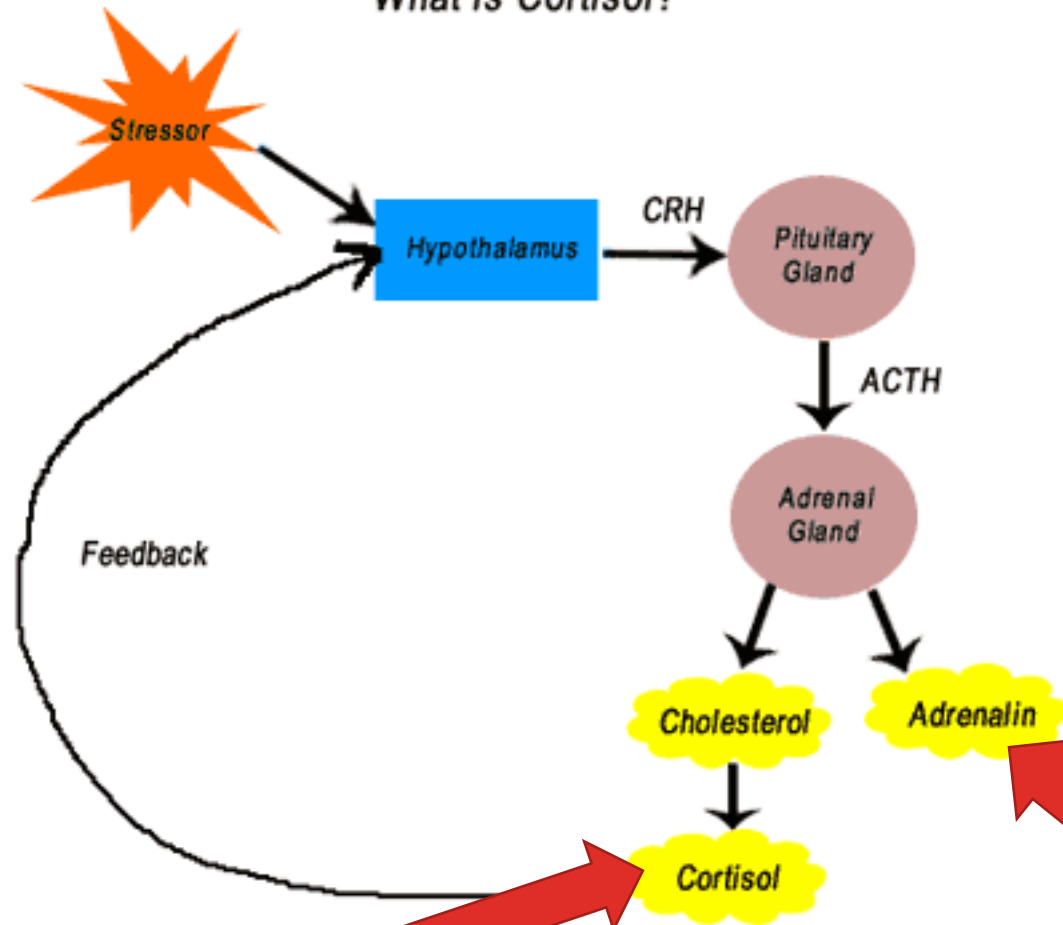


What is Cortisol?



OPIOIDS

What is Cortisol?



STEROIDS

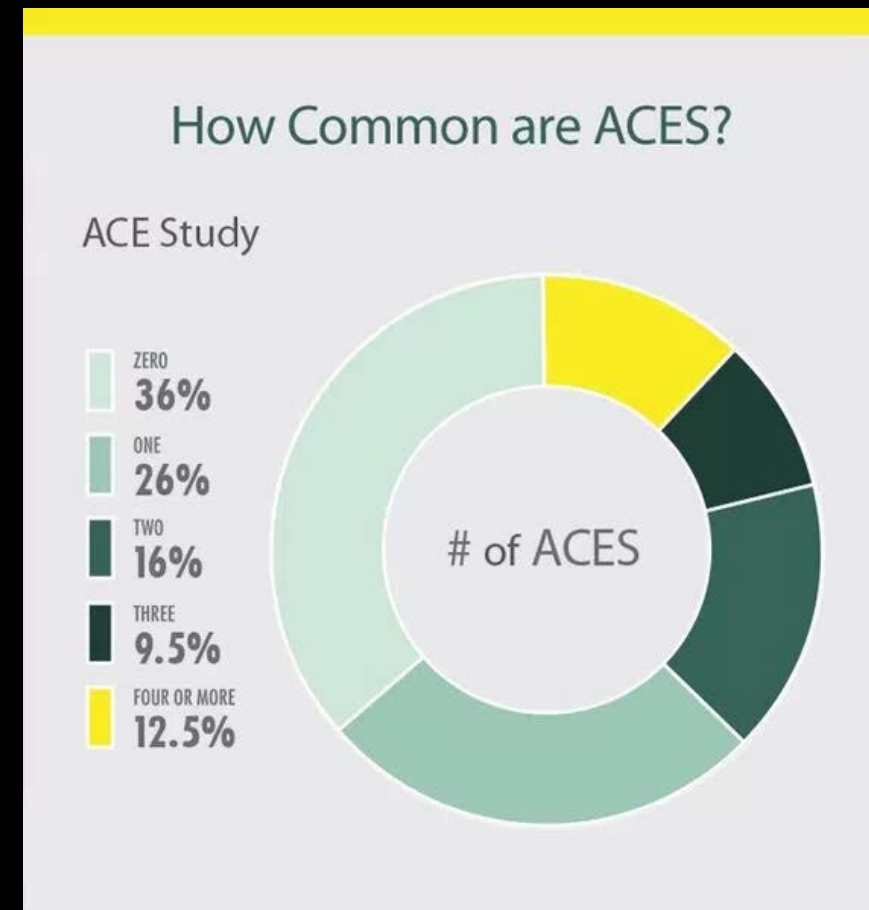
OPIOIDS

A young boy with brown hair, wearing a blue button-down shirt and dark pants, is shown from the waist up. He has a pained expression, with his mouth open and eyes squinted. He is holding his right hand to his stomach, indicating discomfort. The background is a light gray wall with a dark gray diagonal shape on the right side. The text "MY TUMMY HURTS!" is overlaid in the center in a bold, black, sans-serif font, framed by a thin black border.

MY TUMMY HURTS!

ADVERSE CHILDHOOD EXPERIENCES (ACE)

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Mother treated violently
- Substance misuse within household
- Household mental illness
- Parental separation or divorce
- Incarcerated household member







PAIN IS IN THE **BRAIN**



BRAIN IS NOT BROKEN, IT IS **RESILIENT**



THERE IS NO QUICK FIX



CHRONIC PAIN IS **NOT** AN OPIOID DEFICIENCY

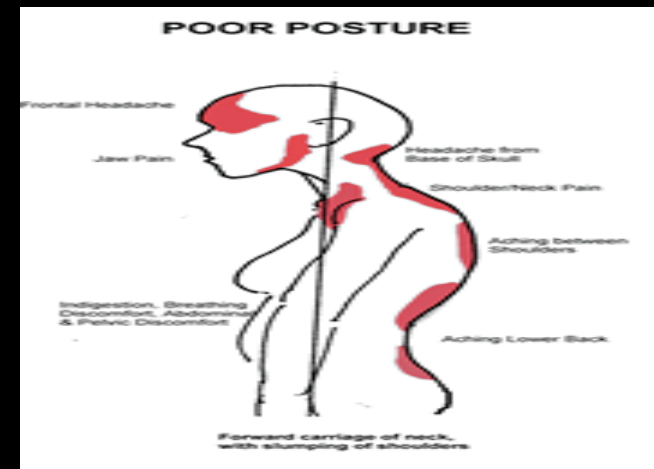
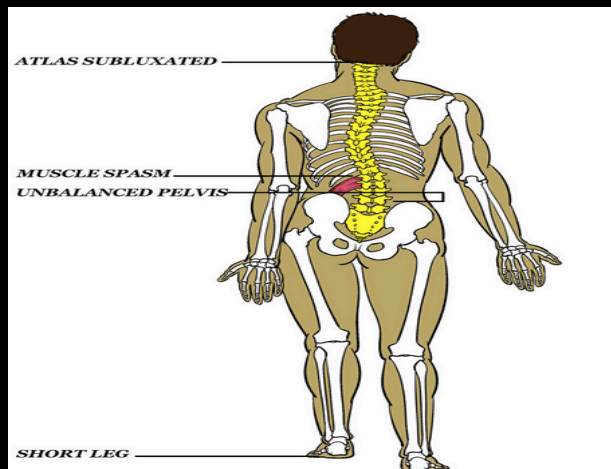


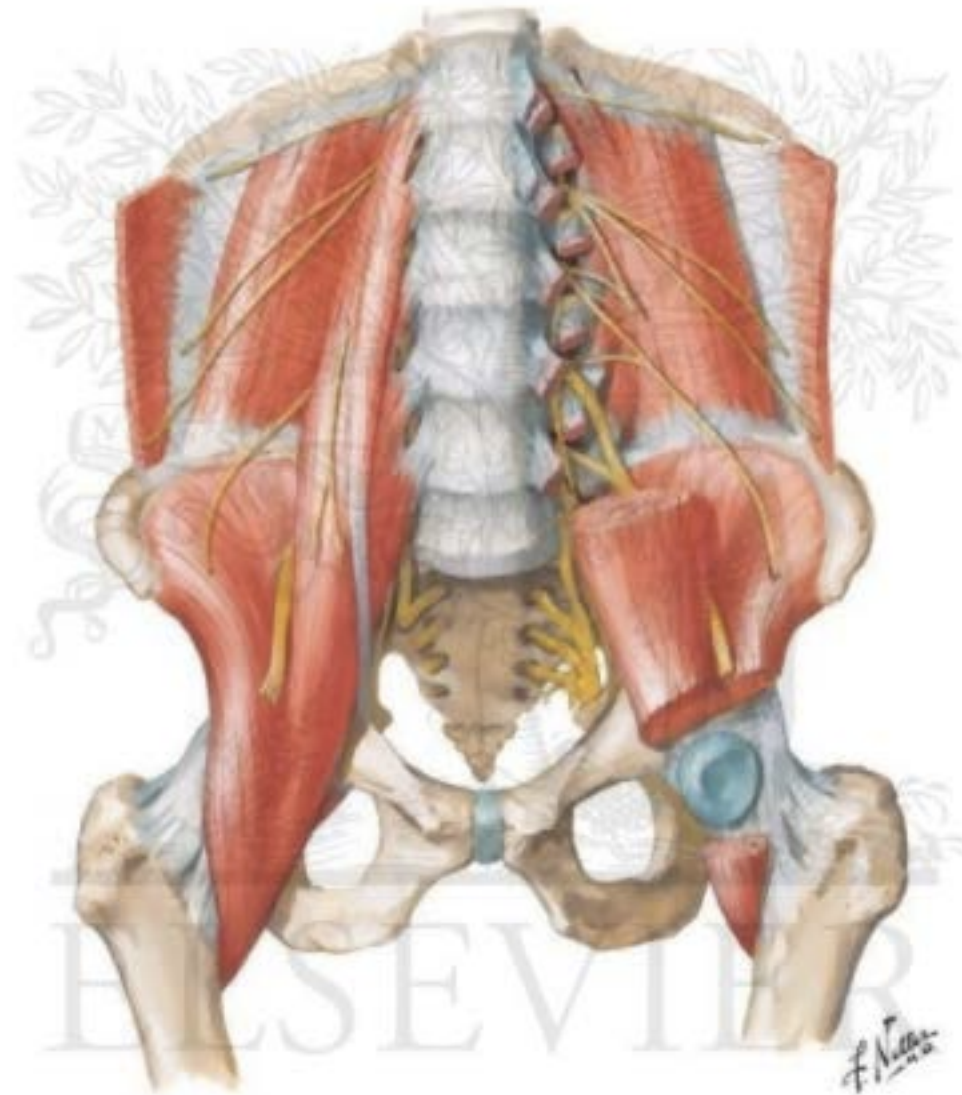
TWO OPTIONS (INSURANCE)

- Medications
- Interventions
- Rehabilitative therapies
- Cognitive therapies

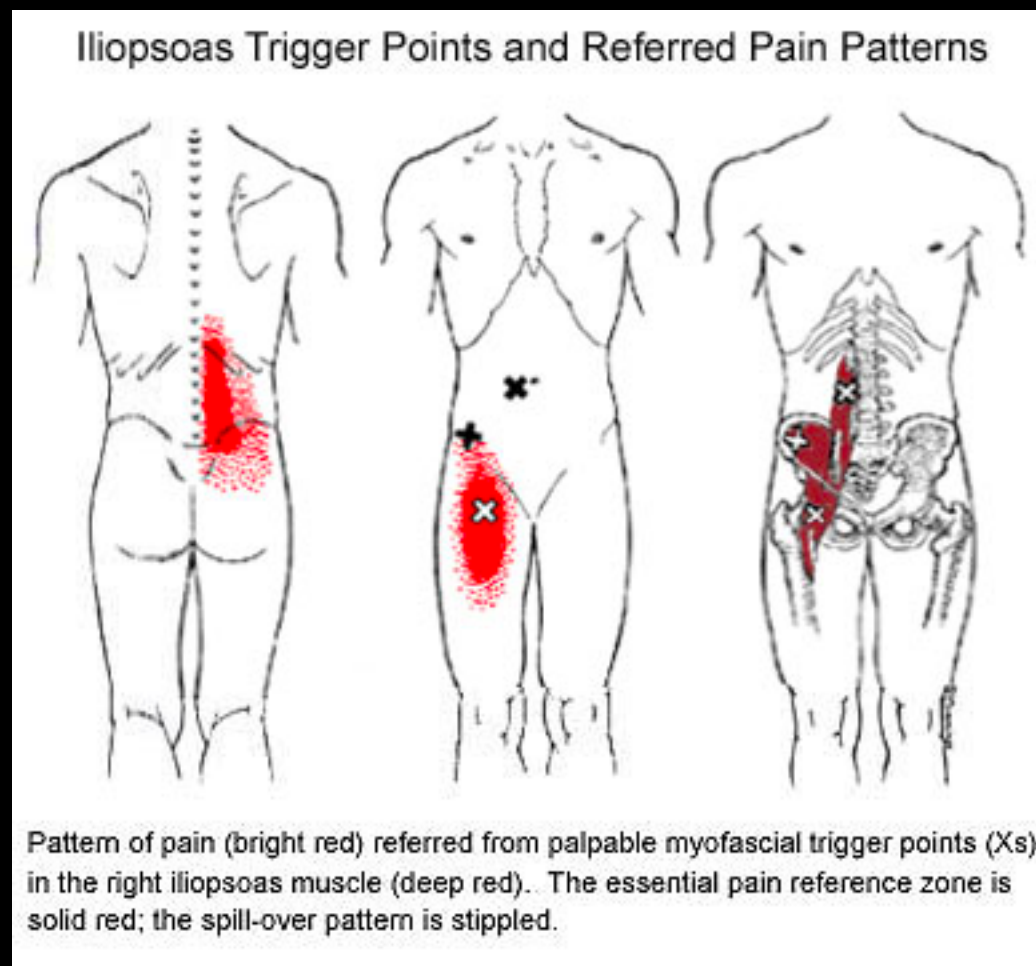
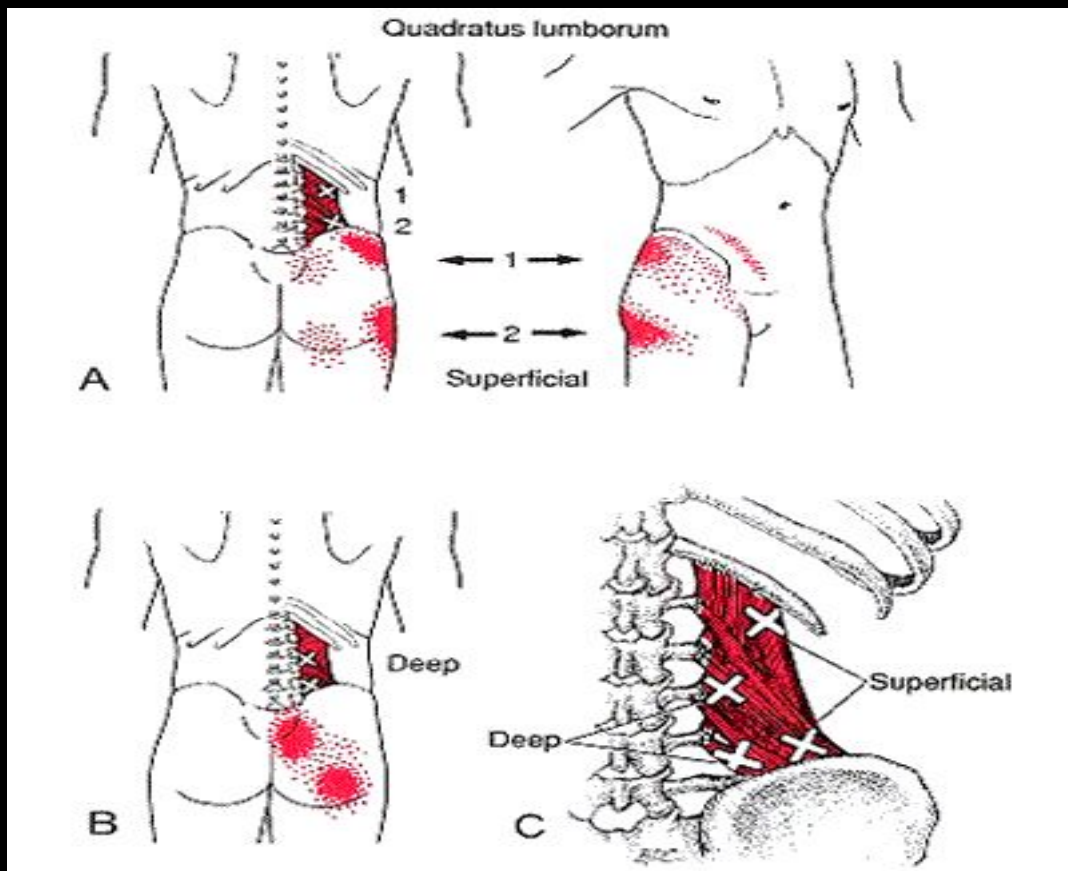


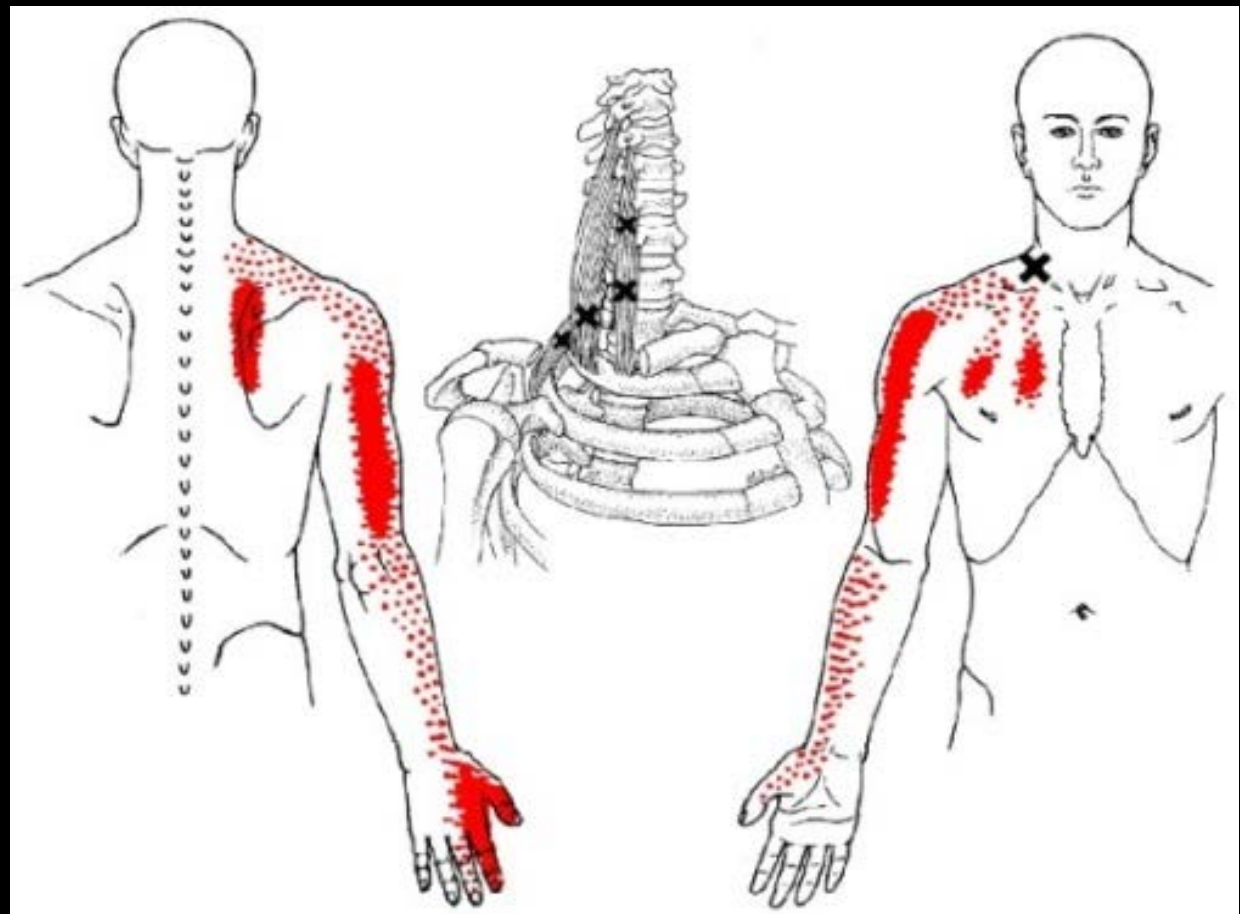
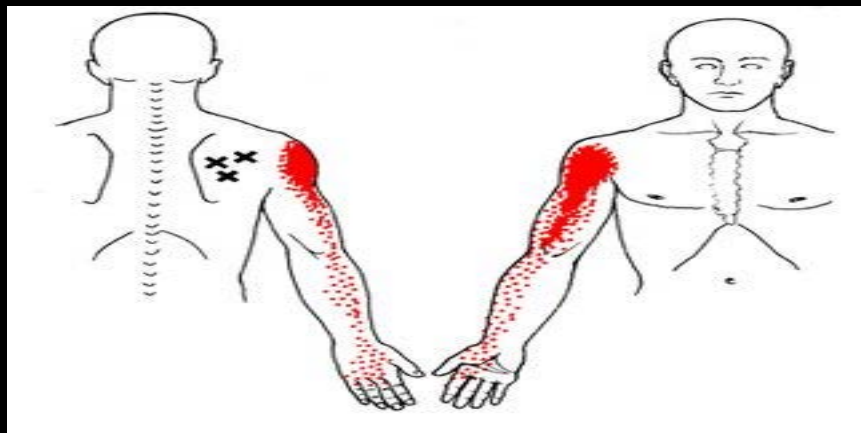
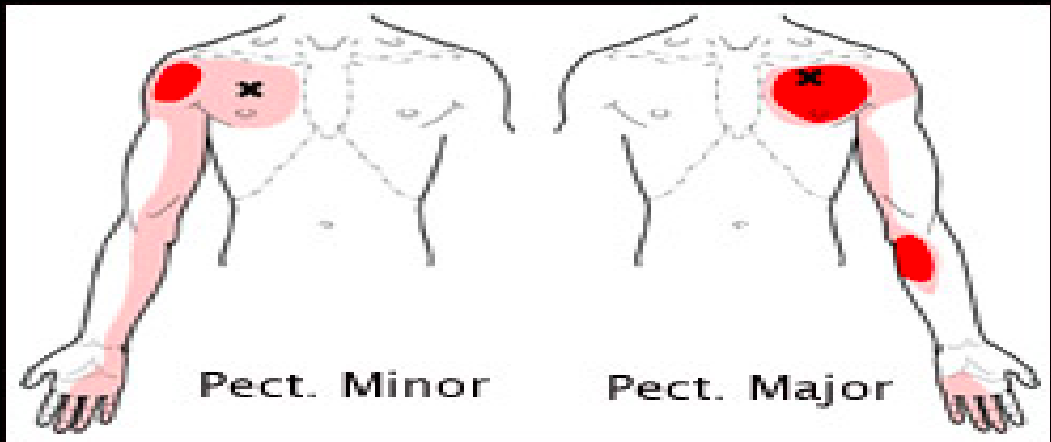
WHEN SOMETHING DOESN'T MAKE SENSE



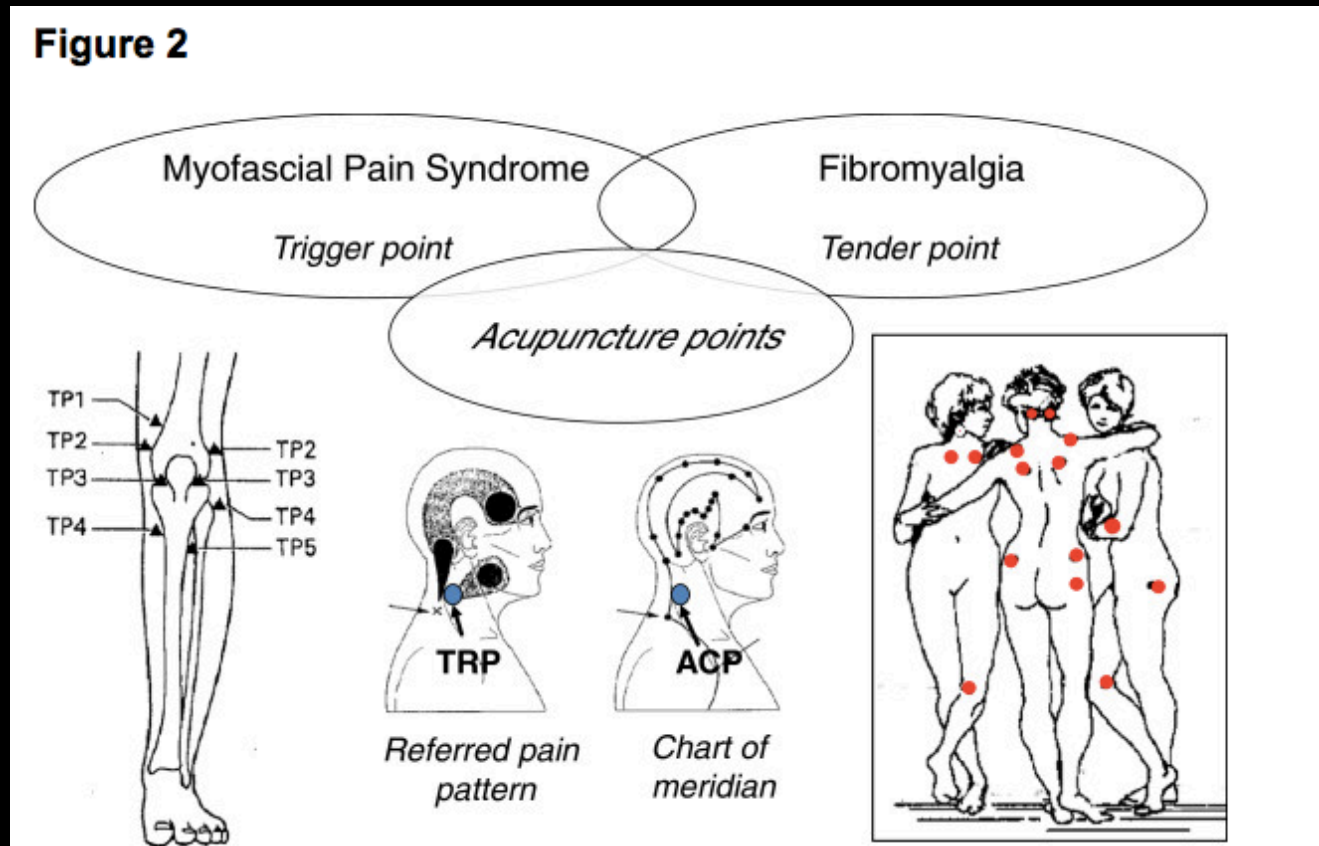


Travell and Simons





OVERLAP

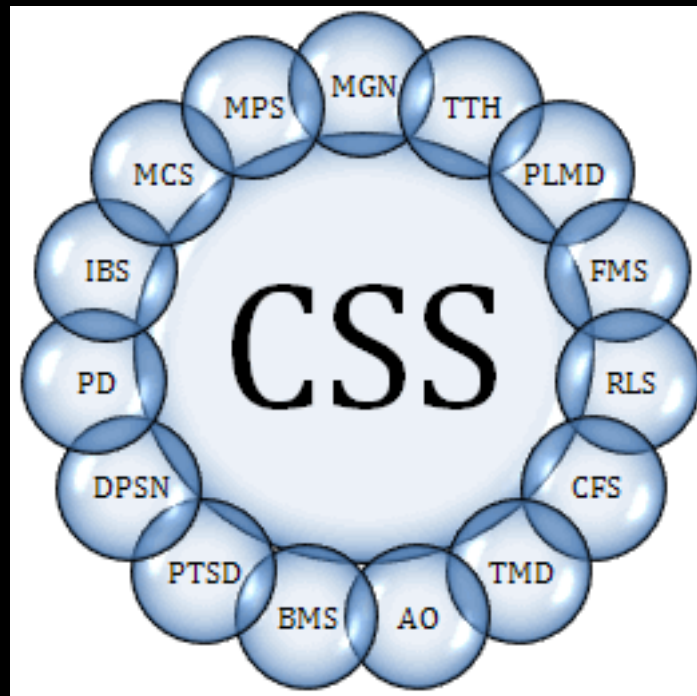


Kawakita K, Okada K. Acupuncture therapy: mechanism of action, efficacy, and safety: a potential intervention for psychogenic disorders? *Biopsychosocial Medicine*. 2014;8:4. doi:10.1186/1751-0759-8-4.

WE ALL HAVE CHOICE



WHEN SOMETHING DOESN'T MAKE SENSE





THE PEARL

Virtually all pain that doesn't make sense is central sensitization.

PERIOD.

GLOBAL BURDEN OF DISABILITY

	1	2	3	4	5	6	7	8	9	10
Global	Back pain	MDD	Iron	Neck pain	Hearing	Migraine	Diabetes	COPD	Anxiety	Other MSK
Developed countries	Back pain	MDD	Neck pain	Other MSK	Hearing	Diabetes	Migraine	Falls	Anxiety	COPD
Developing countries	Back pain	MDD	Iron	Neck pain	Hearing	Migraine	Diabetes	COPD	Anxiety	Other MSK



A Systematic Review and Meta-Analysis of the Global Burden of Chronic Pain Without Clear Etiology in Low- and Middle-Income Countries: Trends in Heterogeneous Data and a Proposal for New Assessment Methods

Tracy Jackson, MD, Sarah Thomas, BS, Victoria Stabile, BA, Matthew Shotwell, PhD, Xue Han, MPH, and Kelly McQueen, MD, MPH

REVIEW ARTICLE

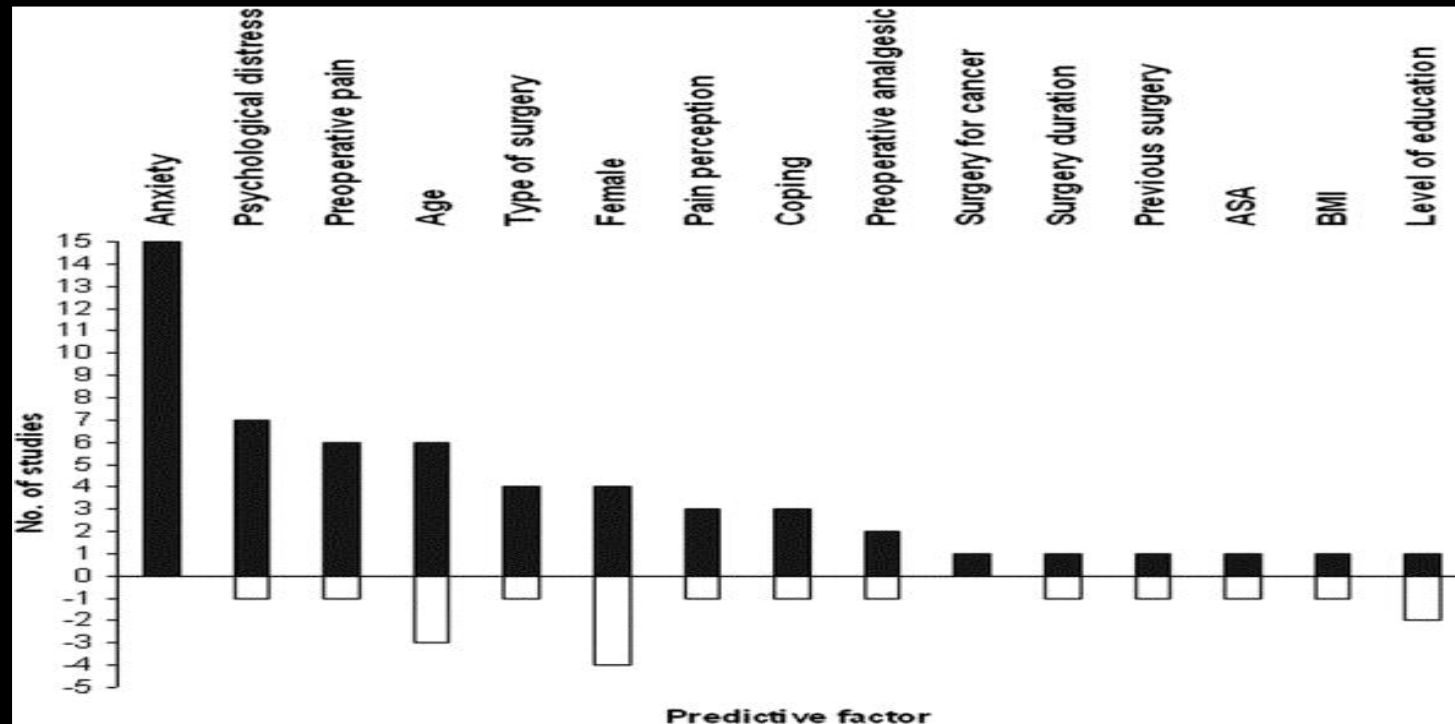
Chronic Pain Without Clear Etiology in Low- and Middle-Income Countries: A Narrative Review

Tracy Jackson, MD,* Sarah Thomas, BS,† Victoria Stabile, BA,‡ Xue Han, MPH,§ Matthew Shotwell, PhD,|| and K. A. Kelly McQueen, MD, MPH¶

The Global Burden of Pain: The Tip of the Iceberg?

Enright, Angela MB, FRCPC; Goucke, Roger MB, ChB, FFPM, ANZCA

POST-SURGICAL PAIN



Ip H, Abrishimi A, Peng P, et al. Predictors of Postoperative Pain and Analgesic Consumption: A Qualitative Systematic Review. *Anesthesiology* 2009; 111(3):657-677.

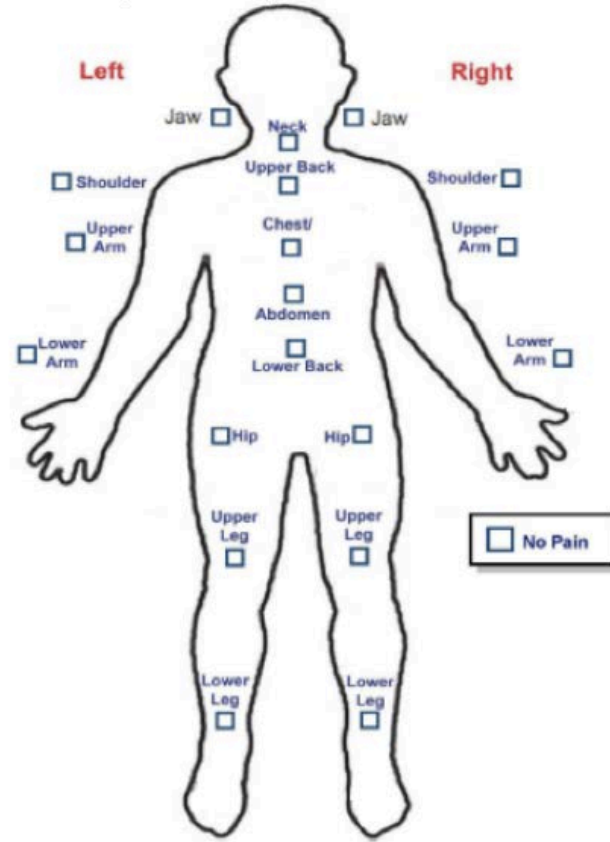
PERSISTENT PAIN AFTER TKR/THR

- 15% of TKR and 6% of THR patients had severe persistent pain
- Major depression and number of pain locations elsewhere were significant and independent determinants of persistent pain

WIDESPREAD PAIN

- Survey of 582 patients taking opioids for chronic pain
- 49% of patients taking opioids continued to report severe pain ($\geq 7/10$)
 - 40.8% met FM criteria despite only 3.2% with dx.

Check each area where you have had pain for at least 3 months.



Section E: Physical Pathology

Using the following scale, indicate for each item your severity over the past week by checking the appropriate box.

0: No problem

1: Slight or mild problems; generally mild or intermittent

2: Moderate; considerable problems; often present and/or at a moderate level

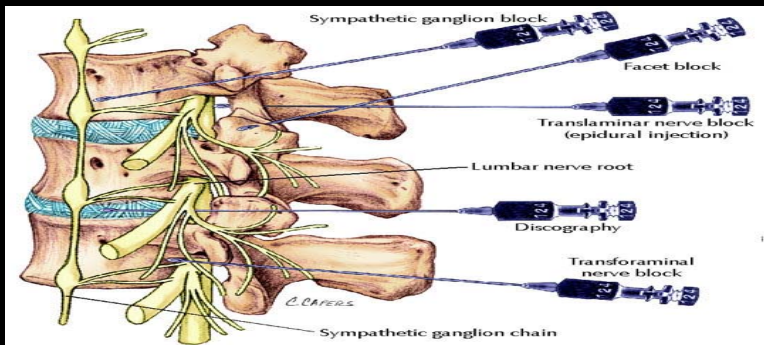
3: Severe; continuous, life-disturbing problems

Fatigue	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Trouble thinking or remembering	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Waking up tired (unrefreshed)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

During the past 6 months have you had any of the following symptoms?

Pain or cramps in lower abdomen:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Depression:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Headache:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

WHAT THEY GET



WHAT THEY NEED

- Harm reduction AND
 - Cognitive restructuring
 - Coping skills training
 - Movement
 - Mindfulness
 - Trauma counseling
 - Functional rehabilitation
 - Community
 - COMPASSION/SENSE OF SAFETY

LET'S DO THIS!



memegenerator.net

CSMD Impacts Prescription Opioid Challenges in Tennessee

Wednesday, August 24, 2016 | 12:30pm

Among the significant benefits recorded during the last three years of CSMD usage in Tennessee are:

One third of the state's clinicians report they are now more likely to refer a patient for substance abuse treatment after checking the CSMD.

The number of "doctor shoppers" – those who go to multiple healthcare providers seeking a prescription for certain narcotics – has decreased more than 50 percent.

The average amount of opioid pain relievers prescribed to those receiving them has decreased by 28 percent.

In the last three years, there has been a reduction of more than two billion morphine milligram equivalents prescribed across the state – and every county in the state has recorded a decrease from the 2013 prescribed amounts.

SIGH.....

Table 4. Mitigation Strategies against Opioid Diversion and Misuse.

Several mitigation strategies for risk assessment of opioid misuse have been proposed.⁷⁴ These include the following:

Screening tools to identify patients with a substance-use disorder. Such tools include the Opioid Risk Tool; the Screener and Opioid Assessment for Patients with Pain (SOAPP), version 1.0; SOAPP-Revised; and the Brief Risk Interview; or the use of a simple question such as "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?" since patients who score above a certain threshold (e.g., ≥ 1 to the sample question) may be at increased risk for opioid abuse.⁷⁵

Use of data from the Prescription Drug Monitoring Program. Such data can be used to identify doctor shopping, which is frequently an indication of drug misuse or diversion.

Use of urine drug screening. Such screening, which can be performed before prescription of opioids and periodically as part of regular follow-up, can provide information on drug use not reported by patients and may help in identifying patients who are not taking their prescribed opioids and might be diverting them.

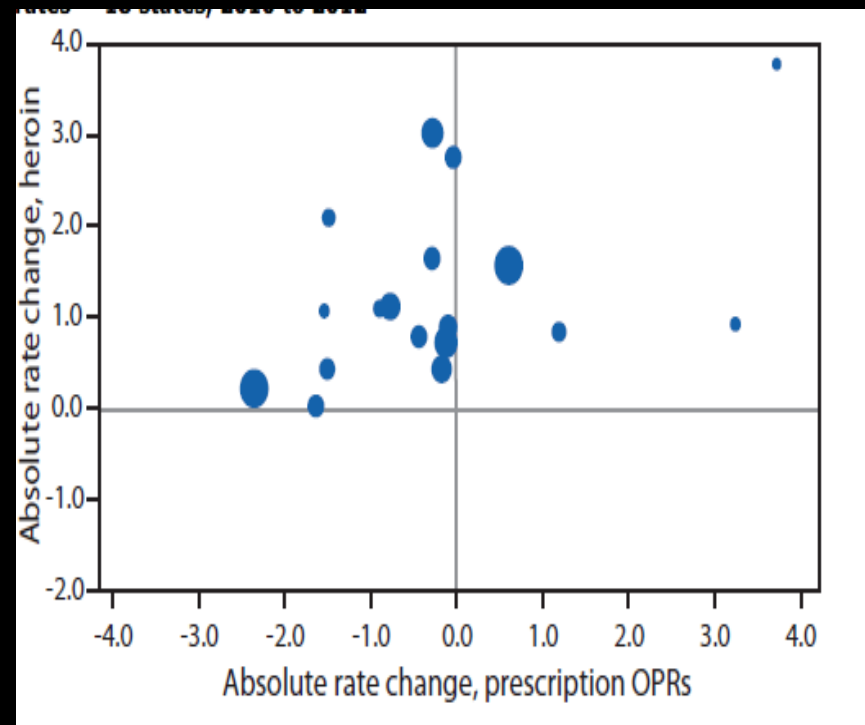
Doctor-patient agreement on adherence. Such personal contracts can help doctors in monitoring a patient's adherence to prescribed opioid medications.

However, a recent review of the evidence showed that only limited data are available regarding the efficacy of any of these strategies.⁷⁶



WHACK-A-MOLE

- 2 million with OUD; 12 million NMU
 - 8-26% iatrogenic
 - ACE cycle
- Overdose deaths still rising (CDC 2015, TDH 2016)
- 50% of those with OUD have no access to treatment



OVERDOSE RISK

- APPROXIMATELY ONE IN FIVE WITH CHRONIC PAIN ON PRESCRIBED OPIOIDS HAD LIFETIME OVERDOSE

- Dunn et al Pain Med 2016 (500 patients at Hopkins)

HARM REDUCTION

- Consider naloxone
- Doses <100MME
- Duration <8 weeks
- LESS long-acting opioids
- No benzos
- **SUBOXONE**

Table 3. Factors Associated with the Risk of Opioid Overdose or Addiction.

Factor	Risk
Medication-related	
Daily dose >100 MME*	Overdose, ⁸ addiction ⁸
Long-acting or extended-release formulation (e.g., methadone, fentanyl patch)	Overdose ^{14,41}
Combination of opioids with benzodiazepines	Overdose ⁴²
Long-term opioid use (>3 mo)†	Overdose, ⁴³ addiction ⁴⁴
Period shortly after initiation of long-acting or extended-release formulation (<2 wk)	Overdose ⁴⁵
Patient-related	
Age >65 yr	Overdose ⁴⁶
Sleep-disordered breathing‡	Overdose ⁴⁷
Renal or hepatic impairment§	Overdose ⁴⁸
Depression	Overdose, addiction ⁴⁹
Substance-use disorder (including alcohol)	Overdose, ⁵⁰ addiction ⁴⁹
History of overdose	Overdose ⁵¹
Adolescence	Addiction ⁵²

* The risk of opioid overdose increases in a dose–response manner at opioid doses of more than 20 morphine milligram equivalents (MME).

† Although addiction is associated with long-term but not short-term opioid use, the prescription of a higher quantity of opioids than is needed for acute pain contributes substantially to the availability of opioids for diversion and abuse.

‡ Sleep-disordered breathing refers to conditions that manifest as abnormal breathing patterns during sleep and includes obstructive sleep apnea and central sleep apnea.⁵³

§ Patients with these disorders are at increased risk because the disposition of various opioid drugs is affected by hepatic and renal impairments, which reduce drug clearance and increase bioavailability.^{54,56}

FROM AIDS TO OPIOIDS: HOW TO COMBAT AN EPIDEMIC

WILLIAMS & BASAGA, NEJM SEPT 2016

- “Despite behavioral treatments based on a generation of research, most [OUD] treatment programs do not offer evidence-based care and have minimum physician involvement.”
 - MAT /Naloxone
 - Expense
 - Access:
 - 30 million in US counties with NO access to MD w DATA waiver (3% rural PCPs, 16% urban psychiatrists)
 - Rosenblatt 2015 Annals Int Medicine

NPR 2013

<http://apps.npr.org/unfit-for-work/>



"INFECTIONS AND INEQUALITIES"



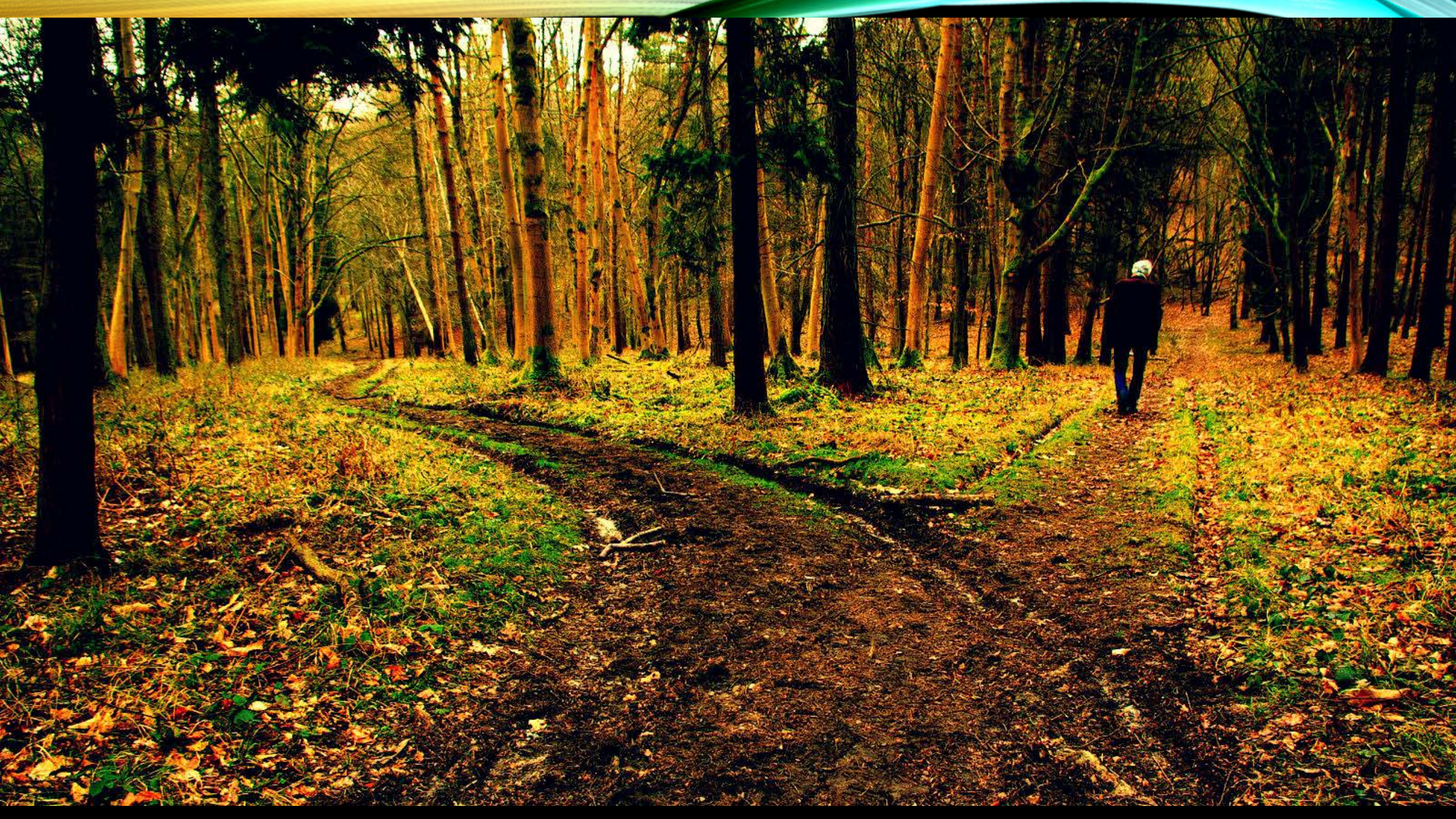


OUR CULTURE IS TERRIBLE AT MANAGING CHRONIC
STRESS

OUR SYSTEM IS TERRIBLE AT MANAGING CHRONIC
ILLNESS

ASSESSMENT AND PLAN

- CENTRAL SENSITIZATION WITH CHRONIC BIOMECHANICAL DYSFUNCTION
- OPIOIDS ARE NOT INDICATED!





**INTEGRATIVE/HOLISTIC MEDICINE
AND
FUNCTIONAL REHABILITATION**

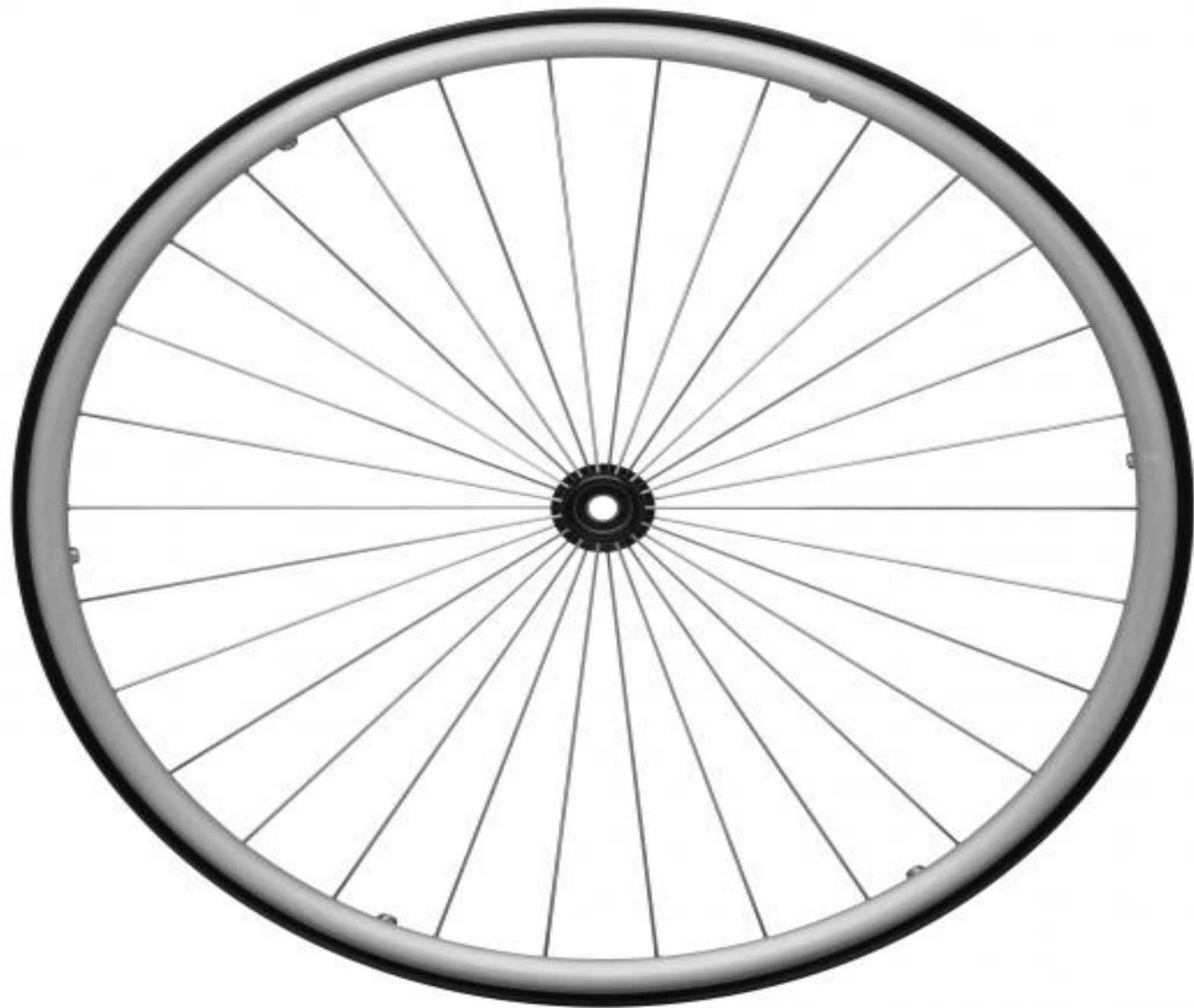


▶ ⏪ 🔊 2:45 / 18:44



The Hardest Pill to Swallow | Tracy Jackson | TEDxNashville

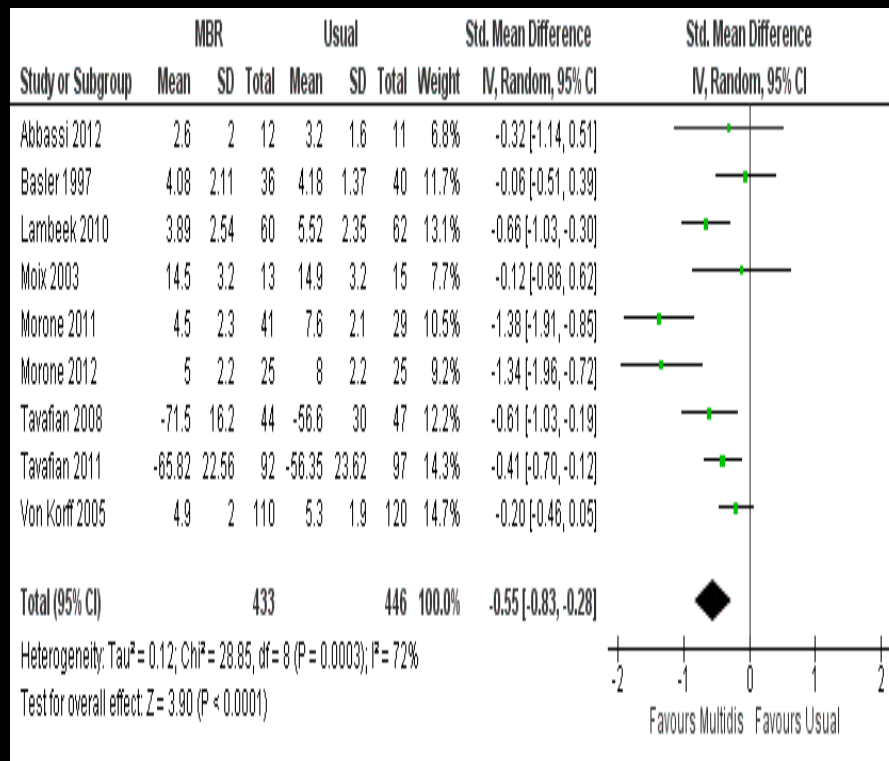
TEDx Talks







INTERDISCIPLINARY FUNCTIONAL REHABILITATION PROGRAMS FOR CHRONIC PAIN AND OPIOID USE DISORDER



- Triage center for chronic pain
 - Hub and spoke model
- Programming for at-risk adolescents and families
- Outpatient MAT
- Inpatient "detox" for opioids/chronic pain that specifically incorporates education and treatment for BOTH
- Telemedicine



2/3 OF PARTICIPANTS RETURN TO WORK

FUNCTIONAL REHABILITATION

HEALTH CARE COSTS ARE REDUCED 66%

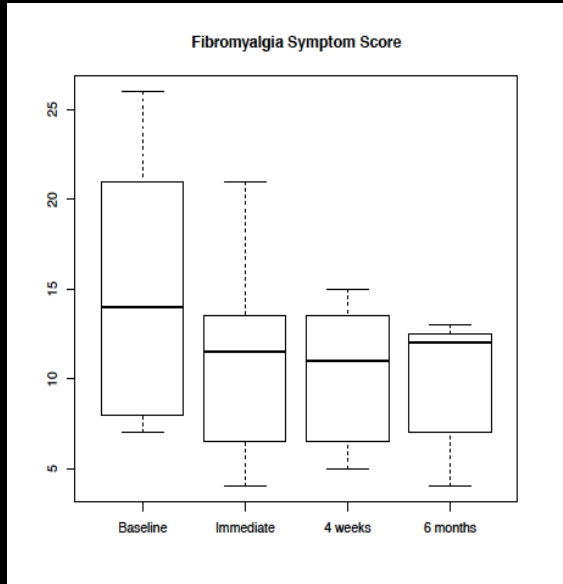
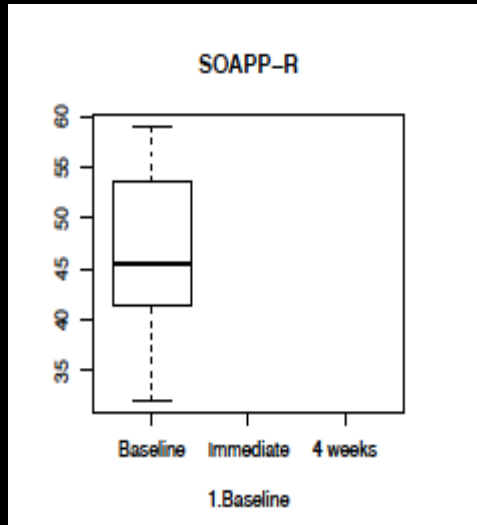
From: Gatchel and Okifuji. *J Pain* 2006; 11: 779-793

relief retreats
living beyond pain

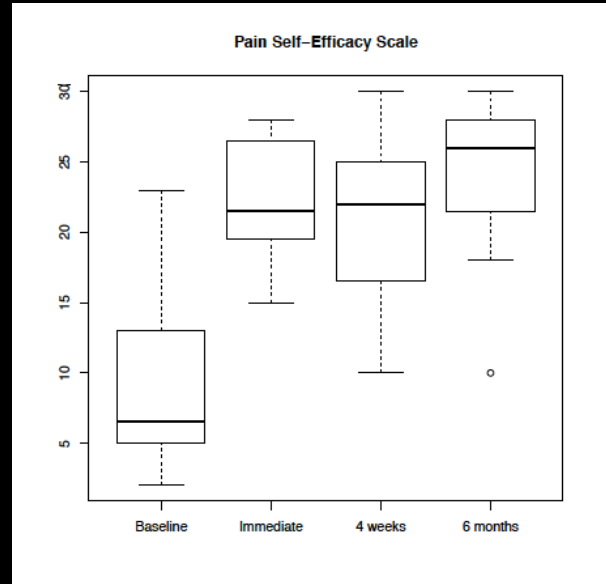




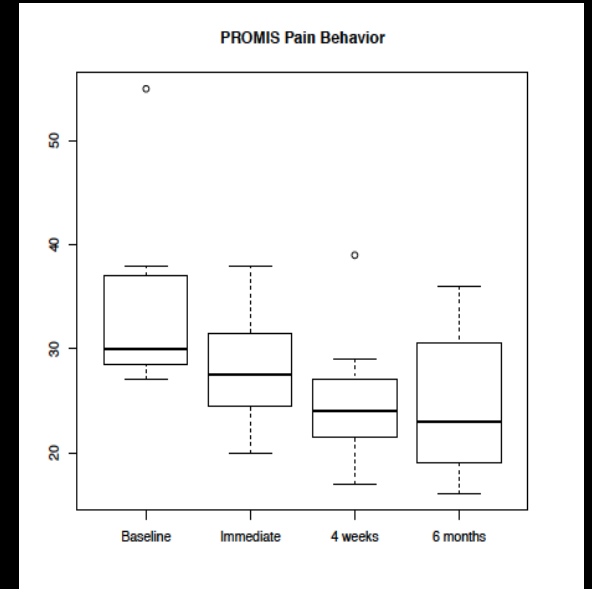




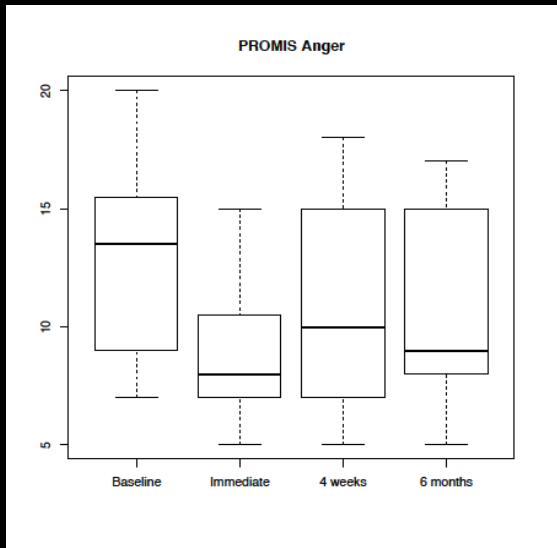
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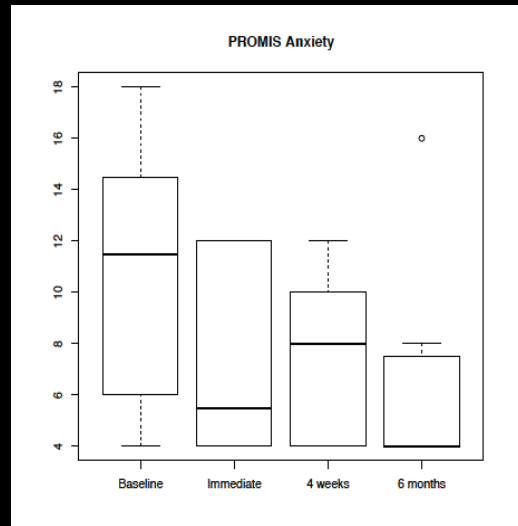
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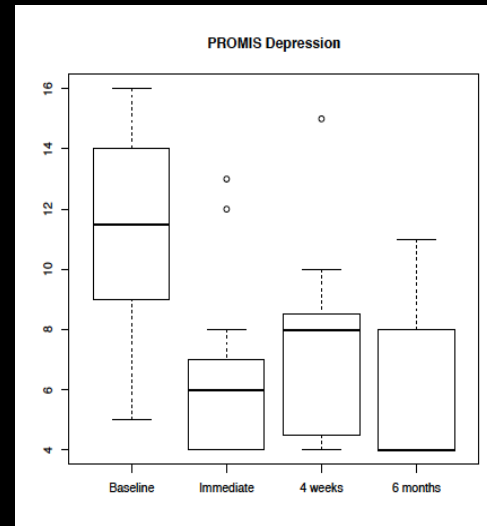
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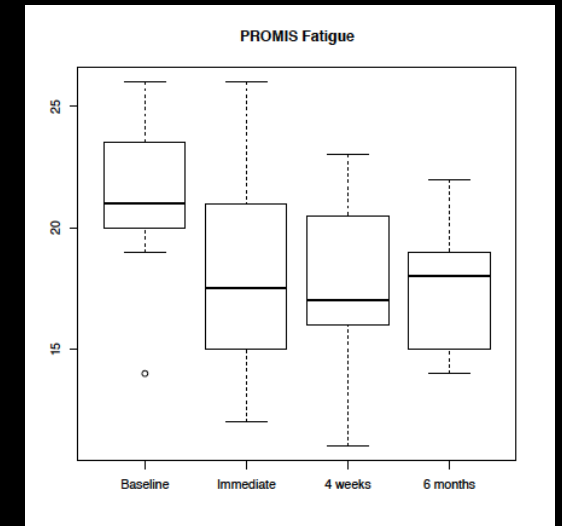
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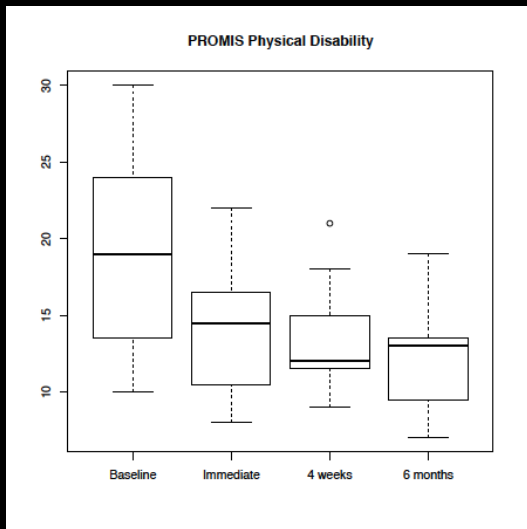
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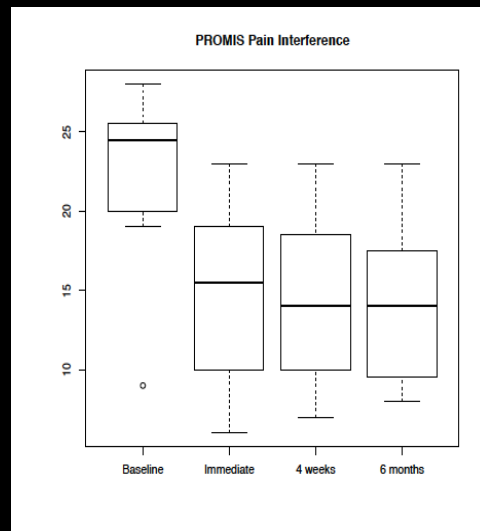
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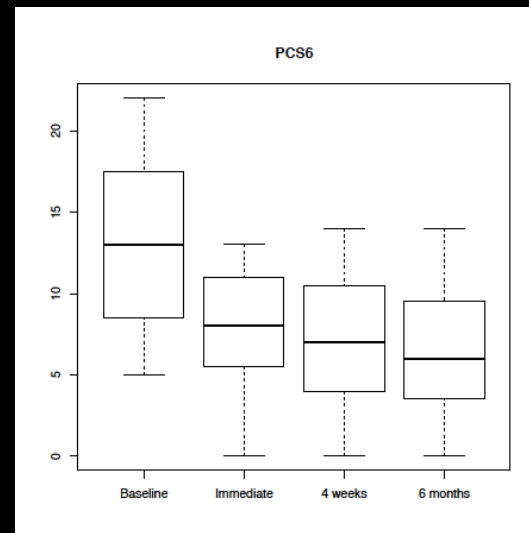
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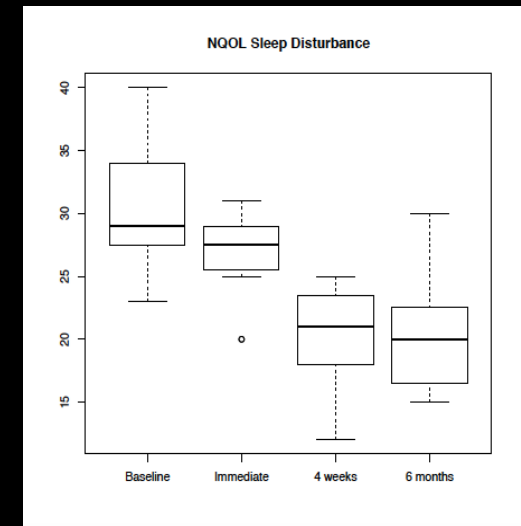
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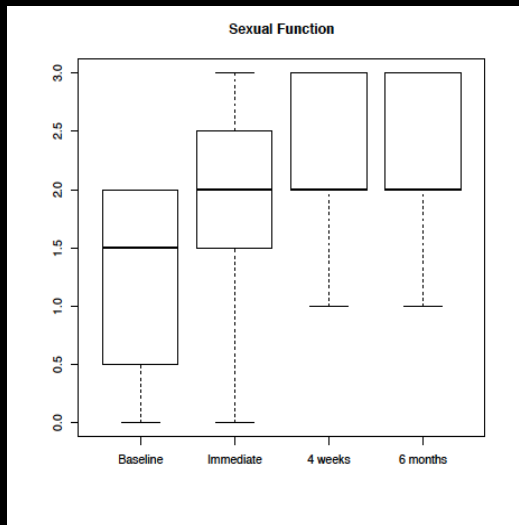
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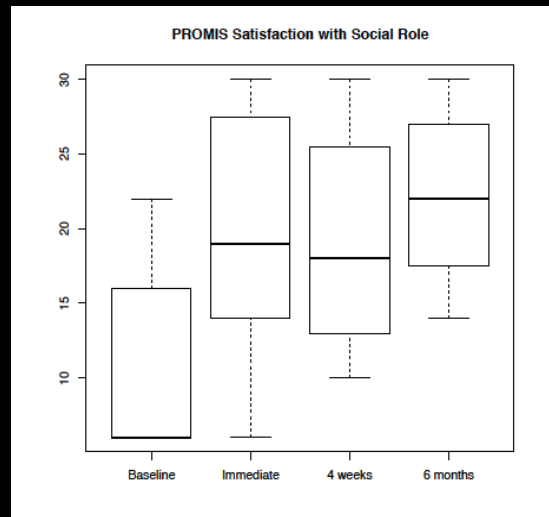
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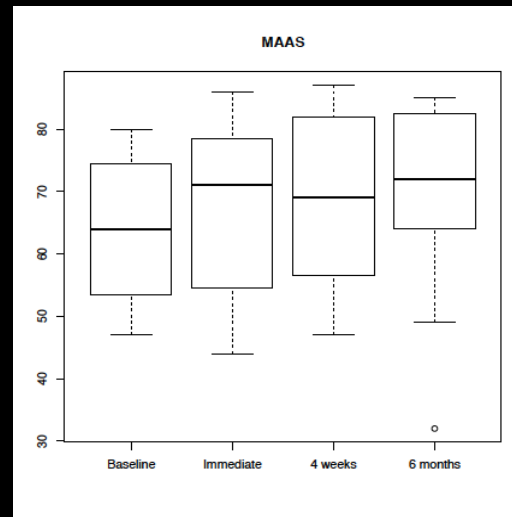
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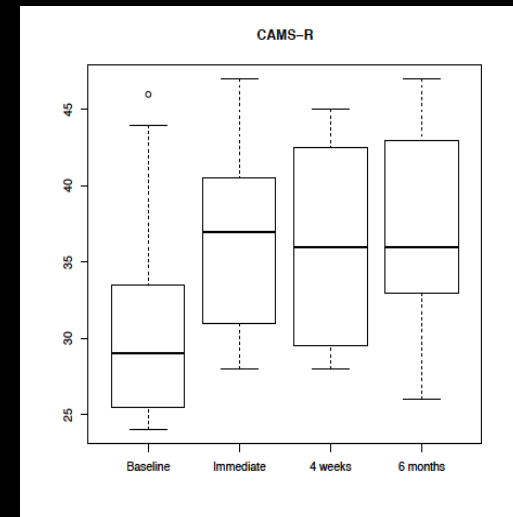
p 0.049



p 0.002



p 0.63



p 0.099

OTHER OUTCOMES

- Opioids
 - 7/12 on opioids pre-RR
 - Average MME >250 and >5 years duration
 - 4 completely off by 1 mo post retreat
 - >75% reduction in another at 6months
 - 2 maintained suboxone
- Cost
 - 8/12 with reduction in encounters and payments/encounter
 - (Outliers explained by planned pre-retreat operations, f/u of MI, GI bleed, gas embolism after laparoscopy)
 - Less specialty services

KEY ELEMENTS

- CALMING THE LIZARD BRAIN
 - MOVEMENT AND BREATHING TOGETHER
 - AVOID PTSD OF HEALTH CARE WHEEL
 - SHAME, ISOLATION → SAFETY, COMMUNITY
 - TRIGGER, BODY AWARENESS, SOOTHE: WASH, RINSE, REPEAT
 - EDUCATE, EMPOWER, INVOLVE FAMILY
 - FREQUENT TOUCHES/AFTERCARE



STUCK ON SEMANTICS:
IS HEALING TECHNIQUE AGNOSTIC?

MOVE AND MEDITATE.
CONNECT W COMMUNITY.
COMPASSION NOT CRIMINALIZATION.

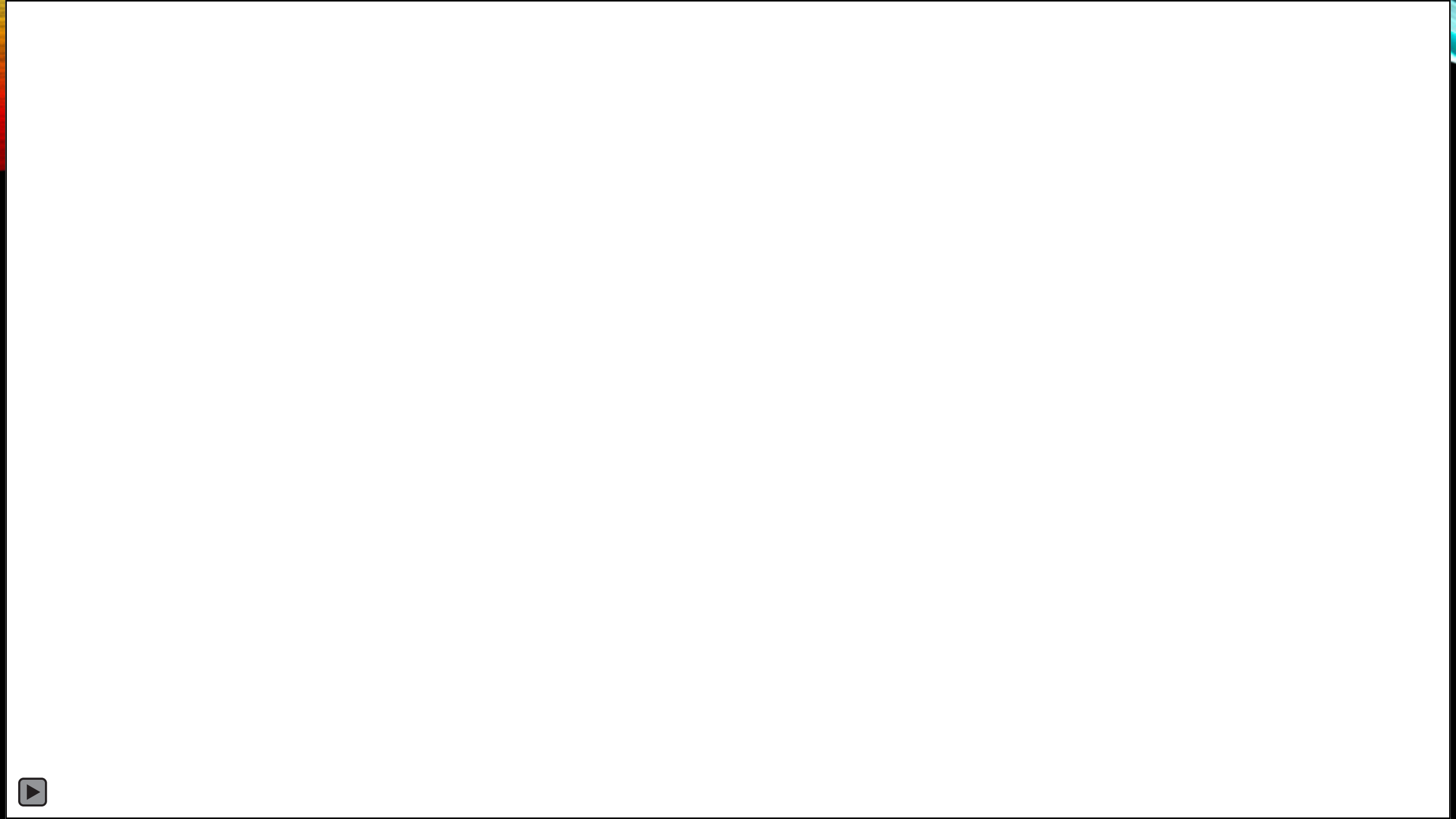
PERIOD.

THINGS WE ALL CAN DO

- Must ask about pain at every location when querying pain at any location (SCREENING)
- Must address – even if can't fix - disabling psychosocial dysfunction and widespread pain: **Informed consent**
- **Education and empowerment**
- Do **not** promise quick fix
- Do **not** sanction disability
- Patients must participate in own care – BOUNDARIES
- Be or find an advocate for patients – and **for yourself as well.**

BE A PART OF THE SOLUTION!

- Naloxone and MAT
- Telemedicine
- Coaching – ALL chronic illness
- Educational videos while patients wait
- Database of online resources/movement/coping skills
 - Food/self-care as medicine
 - Apps for mindfulness/restorative yoga/sleep
- True triage centers/risk assessments/screening tools
 - Functional rehab programs
- Community/company outreach
 - Contingency management
 - Legislative involvement
 - Insurance reform
 - KIDS/SCHOOLS





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- [http://www.mayoclinicproceedings.org/article/S0025-6196\(16\)30317-2/pdf](http://www.mayoclinicproceedings.org/article/S0025-6196(16)30317-2/pdf)

SYMPOSIUM ON PAIN MEDICINE



Evidence-Based Evaluation of Complementary Health Approaches for Pain Management in the United States

Richard L. Nahin, PhD, MPH; Robin Boineau, MD, MA; Partap S. Khalsa, DC, PhD; Barbara J. Stussman, BA; and Wendy J. Weber, ND, PhD, MPH


A Systematic Review of the Literature on Health and Wellness Coaching: Defining a Key Behavioral intervention in Healthcare

Ruth Q. Wolever, PhD, [✉] Leigh Ann Simmons, PhD, Gary A. Sforzo, PhD, Diana Dill, EdD, Miranda Kaye, PhD, Elizabeth M. Bechard, BA, Mary Elaine Southard, RN, MSN, Mary Kennedy, MS, Justine Vosloo, PhD, and Nancy Yang, BA

<http://www.aha.org/content/17/opioid-toolkit.pdf>

Stem the Tide:

Addressing the Opioid Epidemic



The graphic features a 3x3 grid of icons. The top row includes a red square with 'Rx', a blue square with a lotus flower, and a light blue square with a network diagram. The middle row includes a dark blue square with 'DX', a dark red square with a lightbulb, and a grey square with a flowchart. The bottom row includes a red square with a padlock and a blue square with a group of people. The American Hospital Association logo is in the bottom right corner.

American Hospital Association
Advancing Health in America



RESOURCES

RESOURCES

- Academic Consortium for Integrative Medicine and Health

<https://www.imconsortium.org/>

- <http://www.beaumont.edu/>
- <http://www.med.umich.edu/umim>

- Department of Defense:

<http://www.dvcipm.org/clinical-resources/joint-pain-education-project-jpep/>

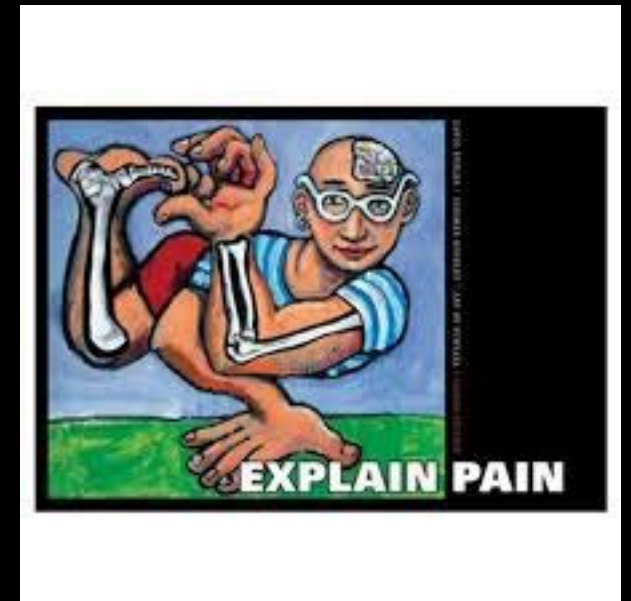
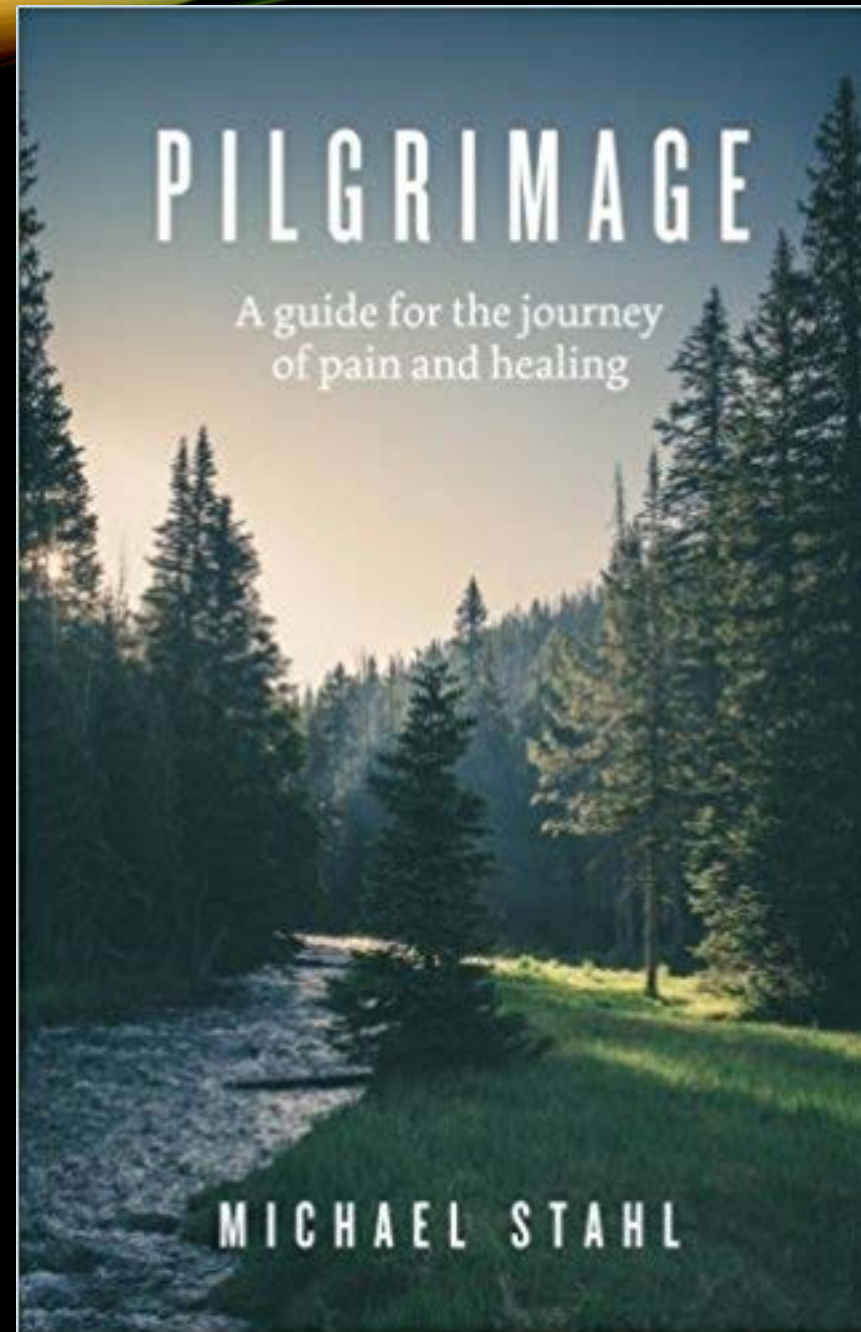
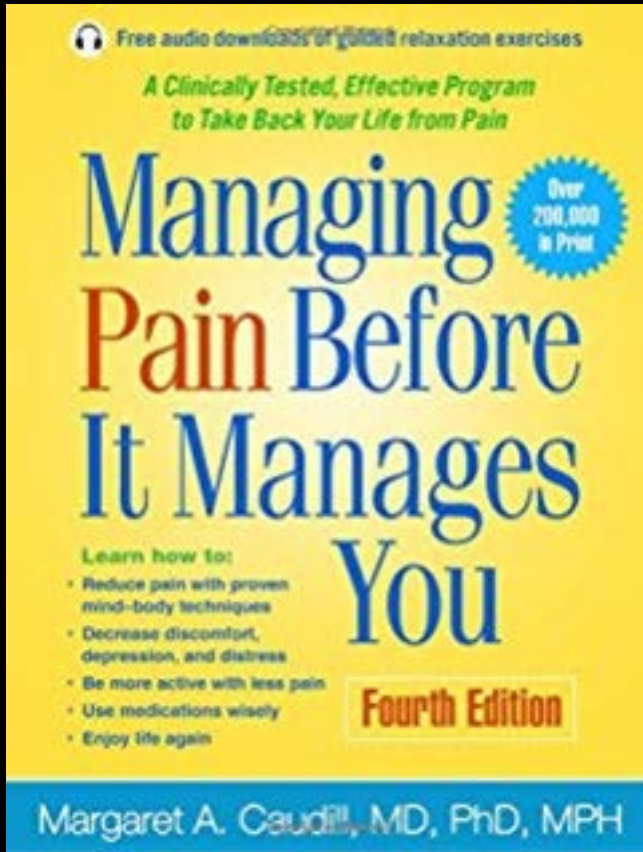
- Institute for Chronic Pain:

<http://www.instituteforchronicpain.org/resources/educational-links>

- Community forums:

Painoutloud.com

BOOKS



YOGA

- Youtube
 - YIN yoga
 - Restorative yoga
 - Yoga for specific pain type
 - Yoga nidra (sleep)
- Yogadownload.com
- Doyogawithme.com
- Apps:
 - yogAMAZING
 - Yoga Studio
- Check for "donation" or "community yoga" in your area – community is best
- Consider private lesson (\$80)

MEDITATION/MINDFULNESS

- All yoga class websites have guided meditation classes
- Breatheaware.com (“westernized”)
- Apps
 - Headspace
 - Insight timer
 - Mindfulness
 - Stop, Breathe, and Think
 - Calm
 - 10% happier
 - OMG! I can meditate (teens)
 - iBeatPain (teens)
 - Smiling mind (children)
 - eMTCP (music therapy)
 - Acupressure: Heal Yourself

ADDICTION

- Turnthetiderx.org
- Suboxone
 - Providers with DATA waiver <https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator>
 - Board certification <https://www.asam.org/membership/paths-to-certification>
 - Required CME: <https://elearning.asam.org/buprenorphine-waiver-course>
 - X number app: <https://www.samhsa.gov/medication-assisted-treatment/buprenorphine-waiver-management>
- Recovery2point0.com
- CDC prescribing guidelines:
 - <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>
 - Know your state guidelines – If federal vs state differ, the more restrictive applies
 - Be careful: LEGISLATION OF HEALTH CARE IS OCCURRING ALL THE TIME

NALOXONE

- **Evzio for \$0 (Autoinjector like epi-pen)**
 - Through Kaléo's *\$0 Access Program*, **commercially** insured patients can get Evzio free. **(NO MEDICARE)**
 - Uninsured AND income < \$36K: Free via Kaleo's *Patient Assistance Program*
 - Uninsured AND income > \$36K: Two pack of injectors for \$250.
- **Narcan nasal spray for \$30 to \$40.**
 - Medicare
 - Uninsured: CVS Pharmacy offers a discount coupon for two-pack for \$110.
- **Naloxone + syringes and vials for \$4.**
 - \$4 co-pay most commercial insurers/Medicare
 - Uninsured: \$25 to \$60 for two syringes and one vial at most pharmacies.