

Chronic Pain, Reconsidered

The role of neural circuits in the brain

Howard Schubiner, MD

Director, Mind Body Medicine Program, Department of Internal Medicine,
Ascension Providence Hospital, Southfield, MI

Clinical Professor, Michigan State University College of Human Medicine

hschubiner@gmail.com

unlearnyourpain.com

Disclosures

Book sales

- Unlearn Your Pain
- Unlearn Your Anxiety and Depression
- Hidden From View

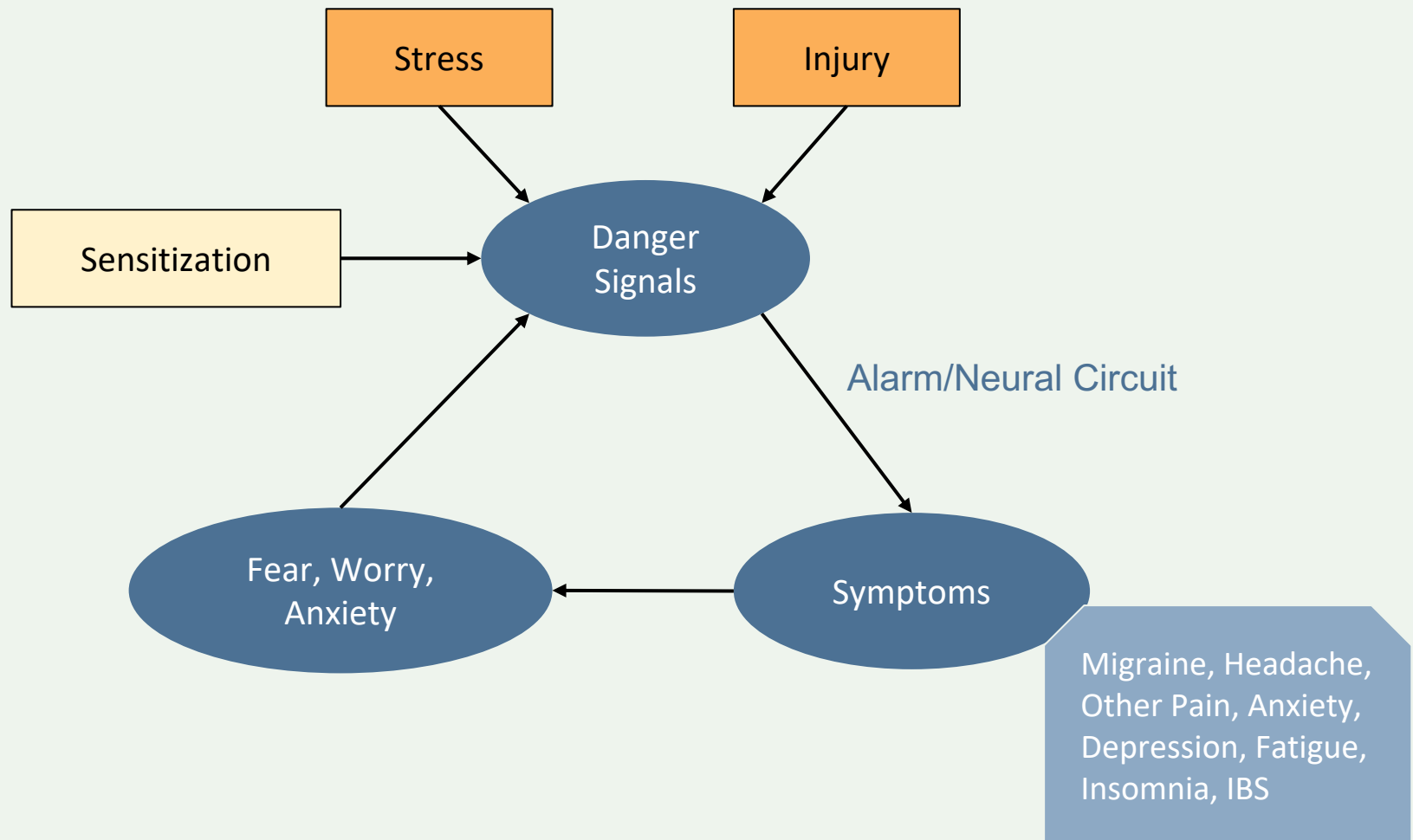
Consultant

- Curable app
- Freedom From Chronic Pain program (Australia)
- United Health Group
- Karuna labs

Treatment Overview

1. Make an accurate diagnosis
2. Educate on the nature of pain
3. Reduce fear of pain to rewire neural circuits—Pain Reprocessing Therapy
4. Graded exposure
5. Emotional interventions to process stressful life events—Emotional Awareness and Expression Therapy
6. Make changes in one's life

Pain Circuitry



Pain Reprocessing Therapy:

Make the pain less dangerous, reduce fear

Demonstrate inconsistencies in pain to increase confidence in diagnosis and give hope

Give experiences that lower fear and show effects on pain

Outcome independence and graded exposure

Make a diagnosis with certainty if you can

Communicate that certainty

Take the “quiz”: What’s wrong with you?

Address qualms and doubts, and can do this over time as well

Create evidence sheets and reinforce them over time

Demonstrate events as they reinforce the model

Ask how do the patient feels towards the pain?

Pain is a protector and may have a message

Viewing it as fearful and using an analogy of a scared child changes the response from anger to calm and compassion

Soothing the brain reverses the cycle of pain/fear/pain

Mindful awareness/somatic tracking:

Practice in noting discomfort, anxiety/tension, emotions without fear; Tolerating sensations and making them not dangerous

Desensitizing neural circuits by small doses of imaginary or experience with anxiety, discomfort or emotions,

Graded exposure to Sx and to triggers

Enhance mood, decrease unpleasantness of Sx

Empowerment when ready

Graded exposure:

Increase stimulus gradually based upon how much fear there is, not how severe the symptoms are

Too quick, too soon can lead to re-traumatization: Too much for the brain, not too much for the body

Be persistent and patient

UC Boulder back pain study

- Three arm randomized study
- Pain Reprocessing Therapy: 50 randomized; 45 treated; 44 completers
- Placebo injection: 51 randomized; 44 treated; 44 completers
- Wait List: 50 randomized; none treated; 47 completers

UC Boulder back pain study

- Mean age: 41 years
- Mean duration of back pain: 10 years
- High educational level
- Diagnostic evaluation: 43/45 were non-structural in nature

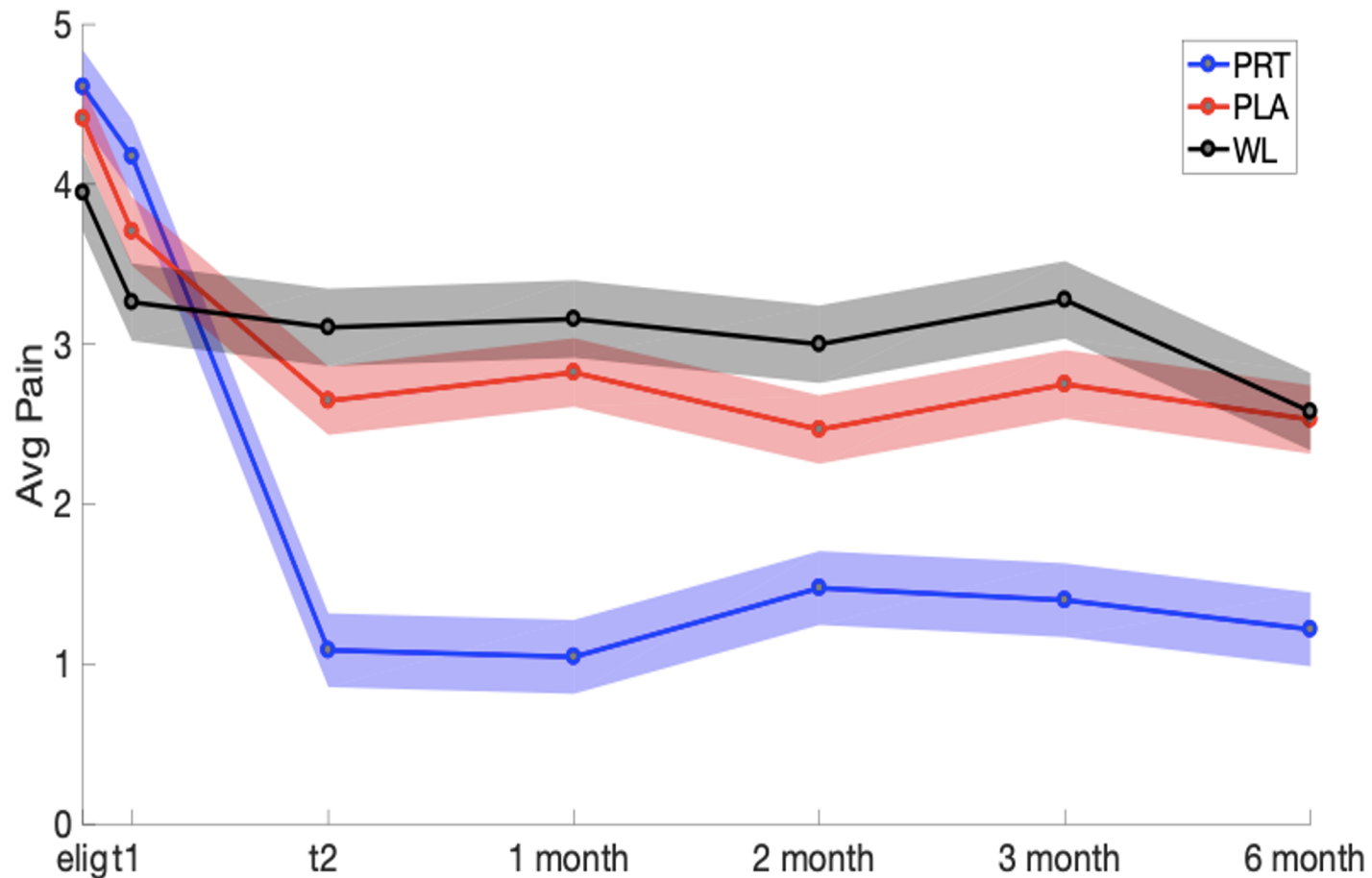
Pain Reprocessing Therapy

- Confirm diagnosis, explore evidence to support the diagnosis, change the meaning of the pain
- Use somatic tracking to alter the relationship to the pain, observe with interest, indifference, and curiosity
- Create positive mood and instill expectation of relief
- Graded exposure to triggers, such as bending, sitting, standing, walking

UC Boulder back pain study—Pain Reprocessing Therapy

- Outcome: 33 of 44 treated were pain-free or virtually pain-free at one month (8 individual counseling sessions)
- 66% of the 50; 75% of the 44 had BPI scores of 0-1

Boulder Back Pain Study, N=150, TAU, PRT, PLC



Video demonstration:

PRT:

Jody—pain with sitting

Emotional processing therapy: ISTDP and EAET

Meta-analysis: ISTDP for somatoform disorders

14 randomized, controlled studies, primarily European, 2 in the US

Effect sizes for psychological variables and somatic symptoms were moderate, 0.58-0.78

Studies which emphasized emotional experiencing and processing had higher effect sizes: 0.6-1.1 short term, 0.8-1.3 longer term (~0.3-0.5 for CBT, ACT)

Outcome data on ISTDP

Table II. COST-BASED MEASURES AT PRE- AND POST-ISTDP

Outcome Measure ^a	Pre-therapy	Post-therapy	Normal Reference
Aggregate Medication Cost/year	\$32 808	\$11 018	—
Aggregate Disability Costs/year ^b	595 140	113 360	—
Aggregate Hospital Cost	35 394	5 309	23 569 ^c
Aggregate Physician Service Fees/year	54 335	36 036	36 256 ^d
Total Cost of Medication, Medical Care and Disabilities	\$717 677	\$165 723	—

^aPre-therapy data based on 12-month period 2 years before therapy, post-therapy data based on 12-month period post-therapy.

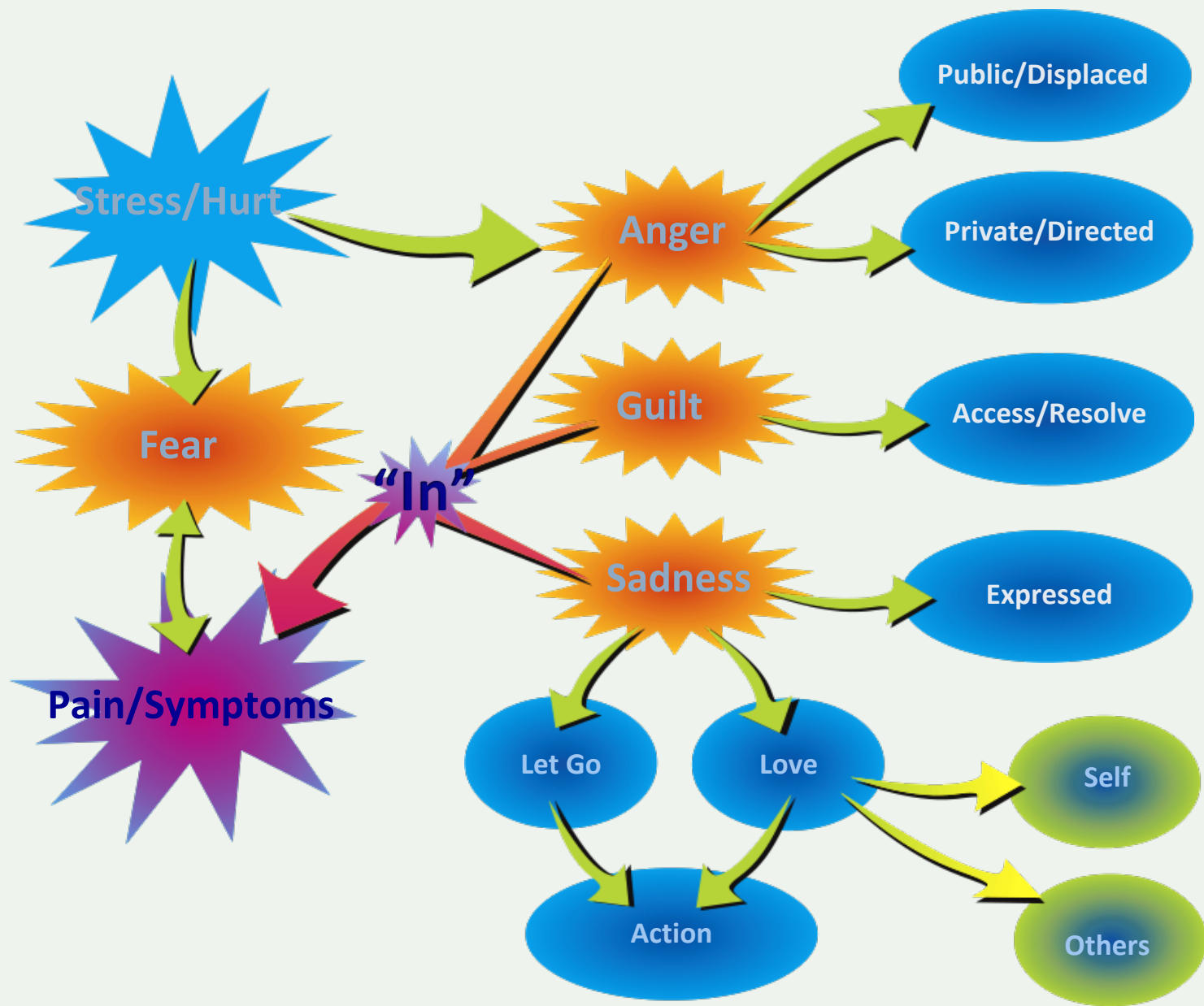
^bStatistics Canada Welfare Costs and Workers Compensation Board Cost Data, 1999.

^cAcute Care Hospital Costs by Area of Residence 1998/1999.

^dAge, Area of Residence, and Gender Specific Data 1993–94.

ISTDP-style intervention: EAET

1. Going to the hurtful experience
2. Getting in touch with anger
3. Expressing anger
4. Accessing any guilt
5. Expressing sadness, grief
6. Moving to love and letting go



One cannot change the past;

How one knows their past is their memories of it;

Memories are constantly changing;

Reliving the past through painful memories can exacerbate painful feelings and symptoms of PPD;

Memory reconsolidation and rescripting is a way to change the emotional memories

Emotional awareness and expression therapy, cognitive behavioral therapy, and education for fibromyalgia: a cluster-randomized controlled trial

Mark A. Lumley^{a,*}, Howard Schubiner^b, Nancy A. Lockhart^a, Kelley M. Kidwell^c, Steven E. Harte^{d,e},
Daniel J. Clauw^{d,e,f}, David A. Williams^{d,e,f,g}

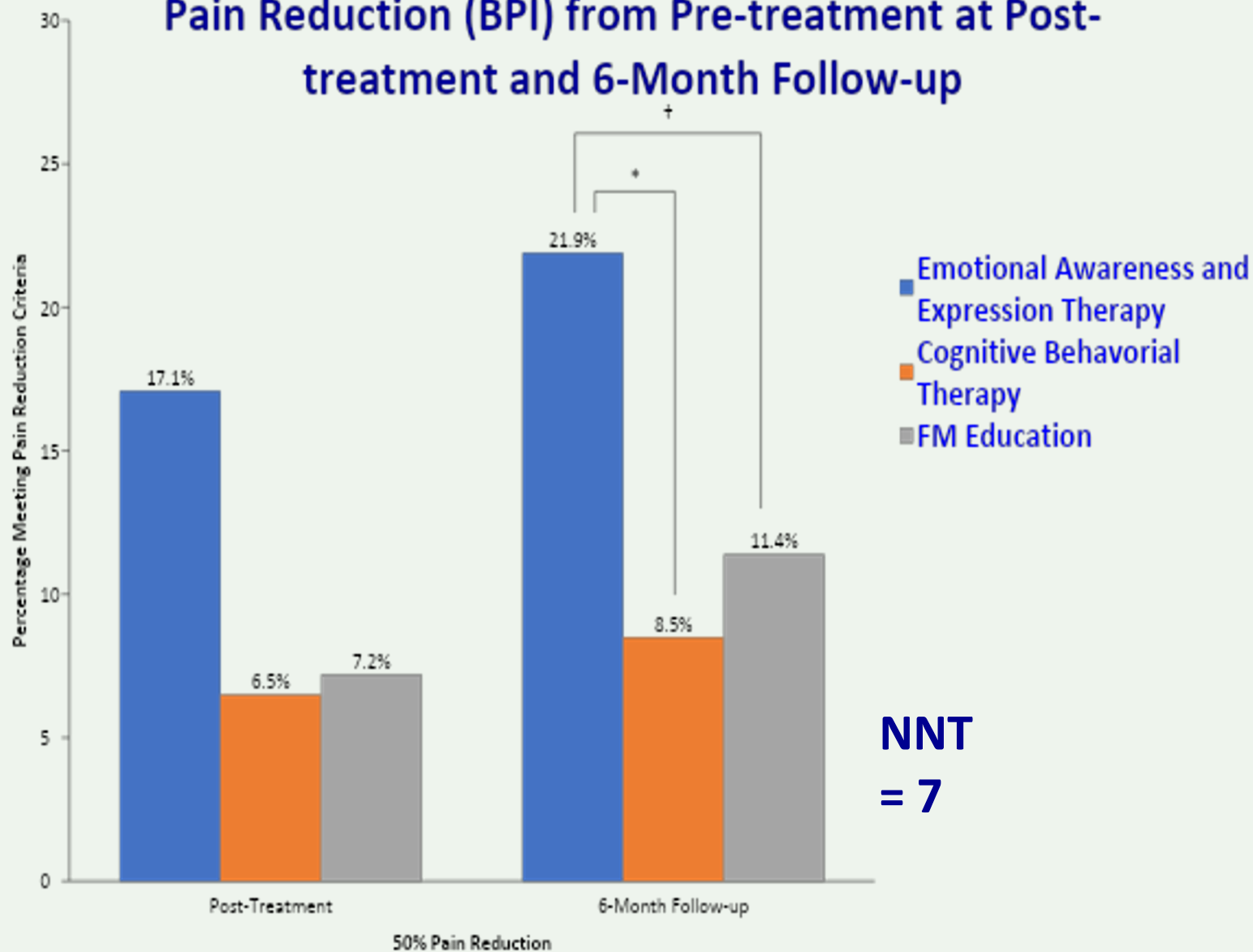
Multi-site RCT for Fibromyalgia

- NIH-funded, 2-site, 3-arm, allegiance-controlled RCT
 - Wayne State University; University of Michigan, Providence Hosp.
- Patients
 - n = 230 (94% female, M = 49 years old)
 - 8 small group sessions, 90-min, once per week
- Assessments
 - Baseline, post-treatment, and 6-month follow-up

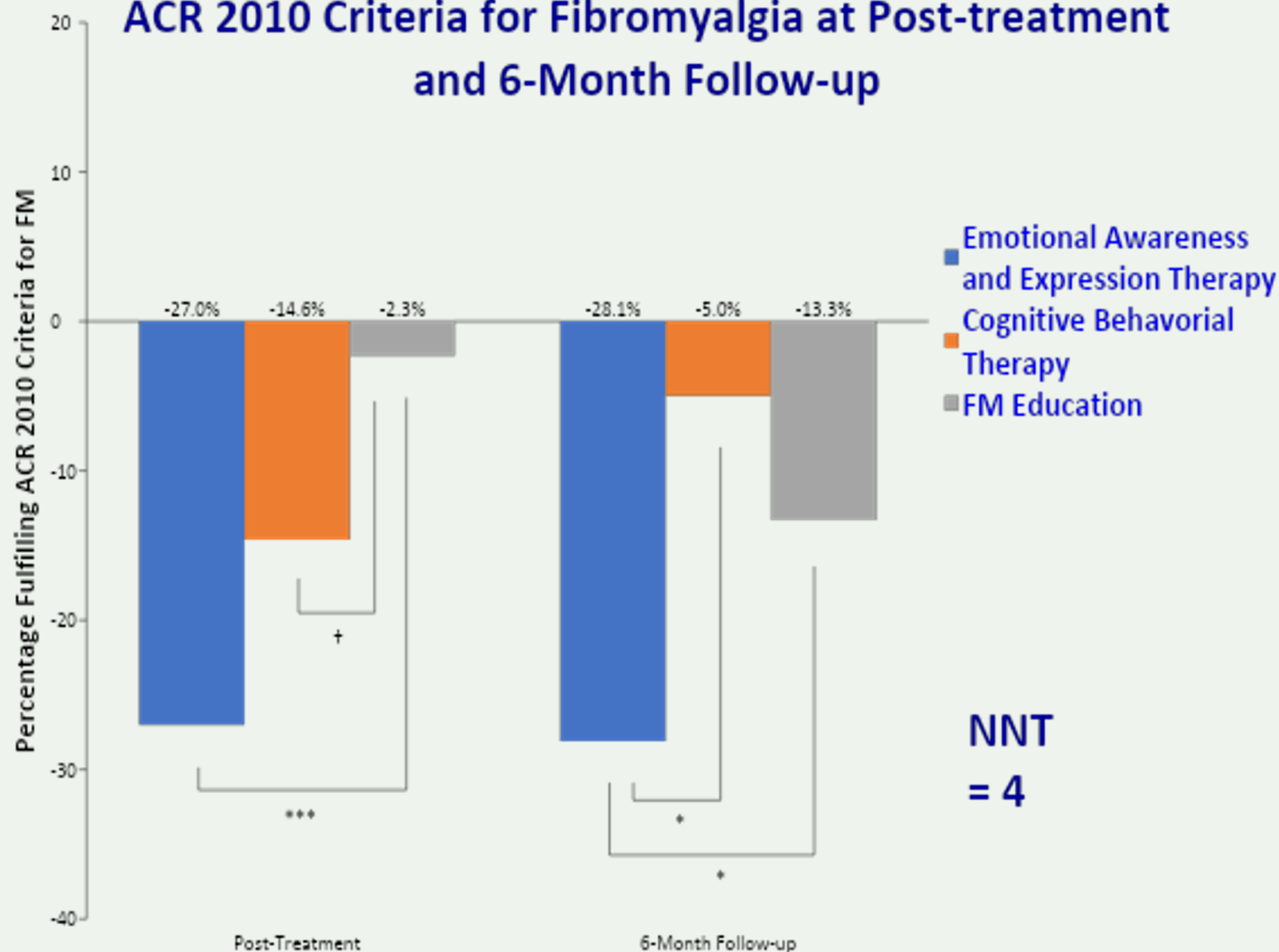
Emotional Awareness and Expression Therapy

- Symptom-stress life review
- Experiential expression exercises of anger, guilt, sadness
- Developing compassion and forgiveness
- Learning to honestly confront troubled relationships

Percentage of Patients in Each Treatment with 50% Pain Reduction (BPI) from Pre-treatment at Post-treatment and 6-Month Follow-up

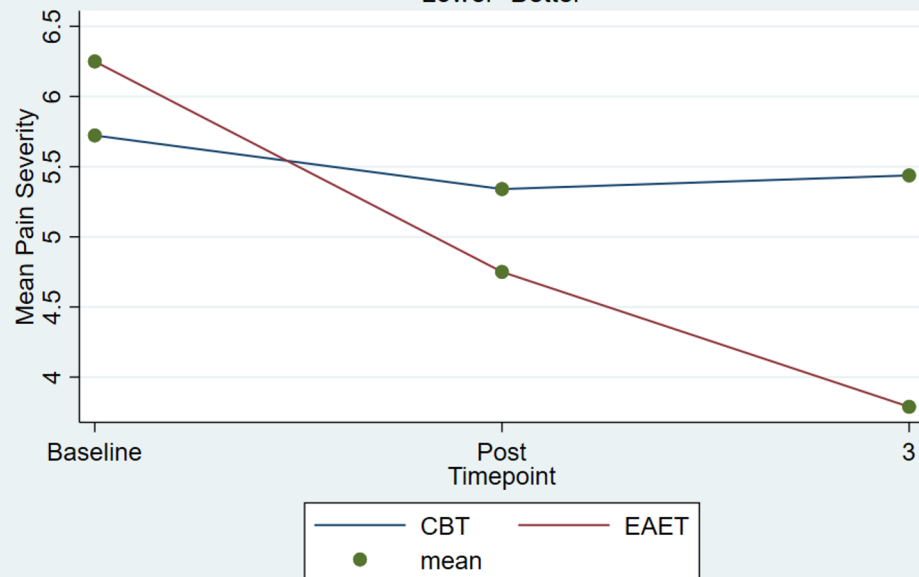


Percentage of Patients in Each Treatment Fulfilling ACR 2010 Criteria for Fibromyalgia at Post-treatment and 6-Month Follow-up

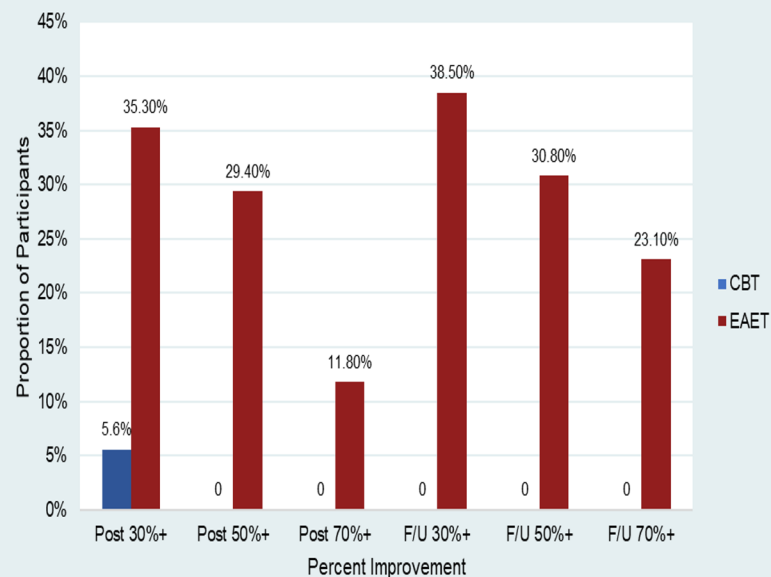


Emotional Awareness and Expression Therapy (EAET) or Cognitive Behavior Therapy (CBT) for the Treatment of Chronic Musculoskeletal Pain in Older Veterans: A Pilot Randomized Clinical Trial

Difference in Mean Pain Severity over Time
Lower=Better



Proportion of Participants in Each Condition Reporting at Least 30, 50, and 70% Improvements in Mean Pain Severity



Ali Najafian Jazi, MD, MS^{1,2}, David L. Sultzer, MD^{1,2}, Mark A. Lumley, PhD³, Sheryl Osato, PhD^{1,2}, Brandon C. Yarns, MD, MS^{1,2}

¹University of California, Los Angeles; ²VA Greater Los Angeles Healthcare System; ³Wayne State University

Video demonstration:

EAET:

Nancy—dad with dementia

Paradigm Shift

- This is a **shift in thinking about pain**, insomnia, fatigue, anxiety and depression
- It **recognizes the power of the brain** to determine our internal experiences based on emerging neuroscience
- It **challenges much of current treatments**, which are systematic and have deep roots
- It offers the **potential for low cost, patient centered treatments** for ailments which are epidemic in our society

Psychophysiological Disorders

- Stress and unresolved emotions create **real, physical pain** via neural pathways
- No disease process in the body
 - *i.e.* physiological, but not pathological changes
- **Symptoms are a message** created by subconscious processes
- Pain and other symptoms **can persist for years** due to learned neural pathways
- Reversal of mind-body symptoms can occur by cognitive, behavioral and affective interventions

Web Resources:

- TMSwiki.org—peer run website
- Curablehealth.org—mobile app
- TheDocJourney.com--mobile app
- Freedomfromchronicpain.org—online program, based in Australia
- PPDAssociation.org—professional organization
- UnlearnYourPain.com--Dr. Schubiner's website
- Pain Psychology Center—Alan Gordon's center in LA
- BackIncontrol.com—Dr. Hanscom's website
- SirpaUK.com—British website

Books for patients

- John Sarno: The Mindbody Connection, Healing Back Pain, The Divided Mind
- Howard Schubiner: Unlearn Your Pain; Unlearn Your Anxiety and Depression
- Allan Abbass and Howard Schubiner: Hidden From View (for professionals)
- David Hanscom: Back in Control, Do you need back surgery?
- David Clarke: They can't find anything wrong
- David Schechter: Think away your pain
- Georgie Oldfield: Chronic Pain: Your key to recovery
- Clarke, Abbass, Schubiner, Smith-Clark: Psychophysiologic Disorders textbook (for professionals)

Documentary Films

- All The Rage: Michael Galinsky
 - see rumur.com
- This Might Hurt: Kent Bassett, Marion Cunningham
 - see thismighthurtfilm.com
- Pain Brain: Mitch Dickman in process

“It’s time to destigmatize **mind body disorders** and provide sufferers with effective treatment.

They’re not fakers or weak individuals who are trying to get out of work.

Their brains are producing real symptoms that are treatable.”

-- Howard Schubiner, MD

Thank you!

- Trainings: see unlearnyourpain.com
- Reach me at hschubiner@gmail.com