

Non-Pharmacological Approaches to Chronic Pain

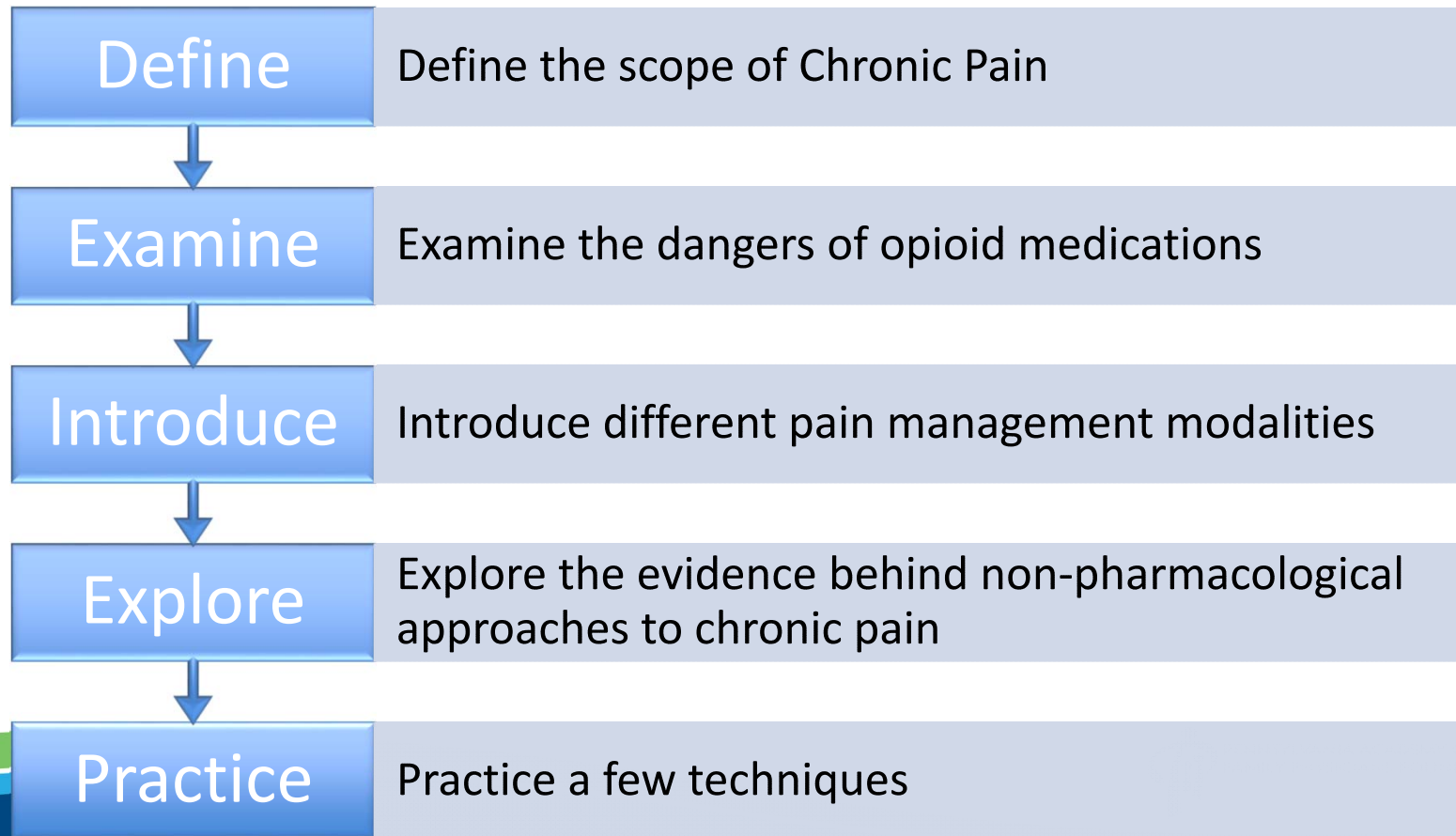
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March 8, 2020

Disclosures

- Grant Funding from SAMHSA

Learning Objectives.



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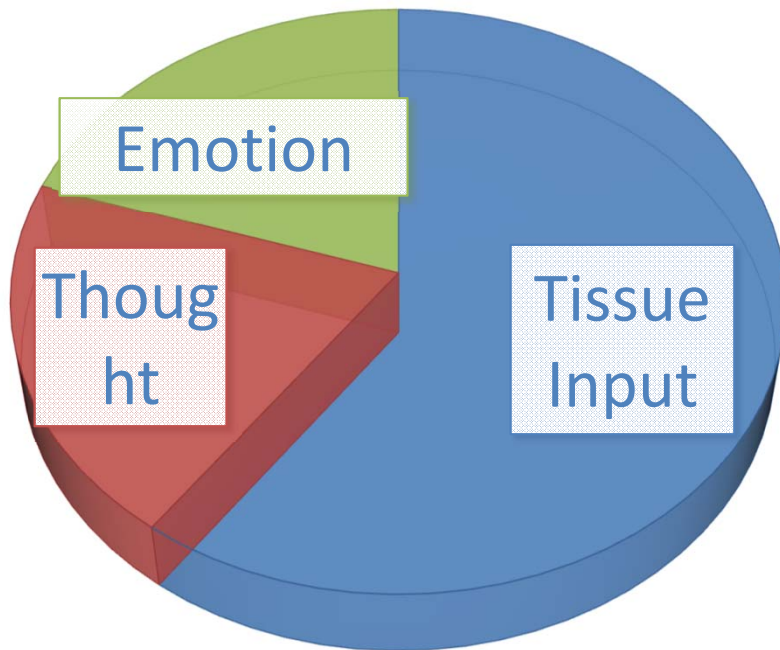
20% of Adults in
America have
Chronic Pain

What Is Chronic Pain?

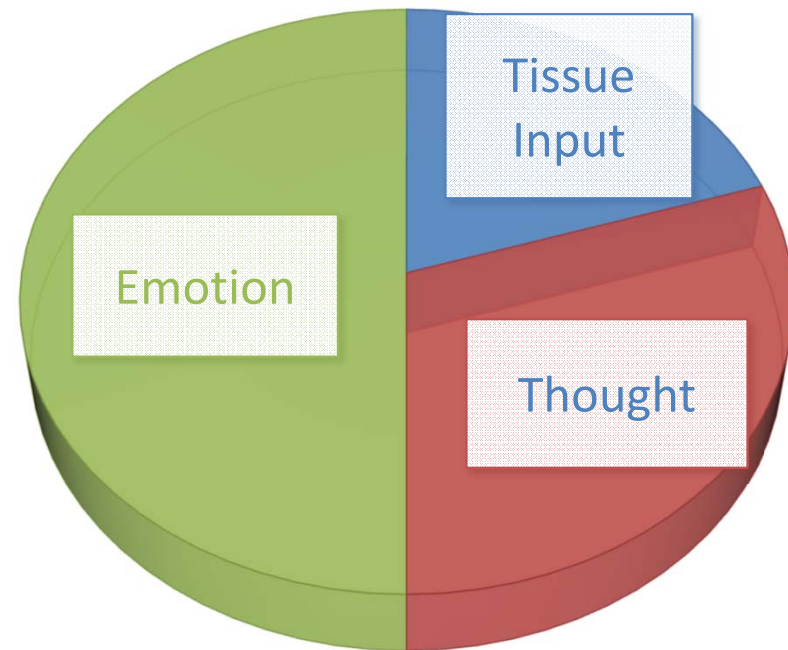
Pain that lasts
more than 3
months

Pain that last
longer than the
etiology suggests

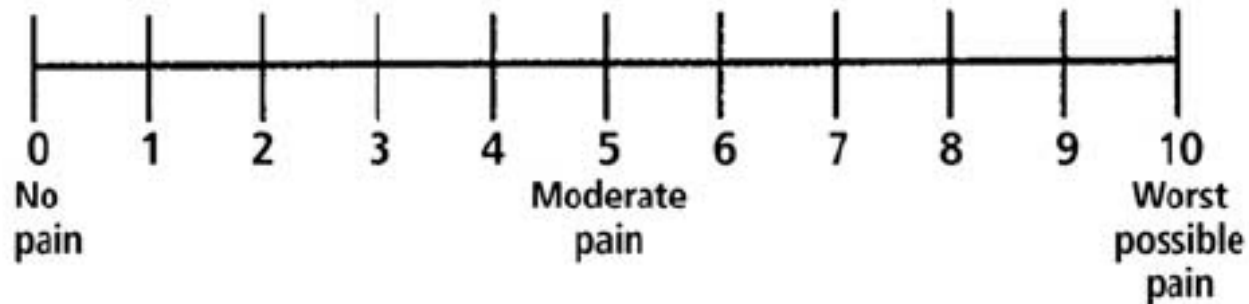
ACUTE PAIN



CHRONIC PAIN



Numeric Pain Rating Scale



Wong-Baker FACES Pain Rating Scale



How does your pain affect your life?



Does your pain stop you from doing anything?



Does your pain affect your sleep?



Does your pain affect your relationships?



Does your pain affect your work life?



Does your pain affect your moods?



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Don't worry, there are a ton of options!

Unfortunately, the evidence is mostly from small studies

What can we offer our patients?



PHARMACOLOGICAL



INTERVENTIONAL



PSYCHOLOGICAL

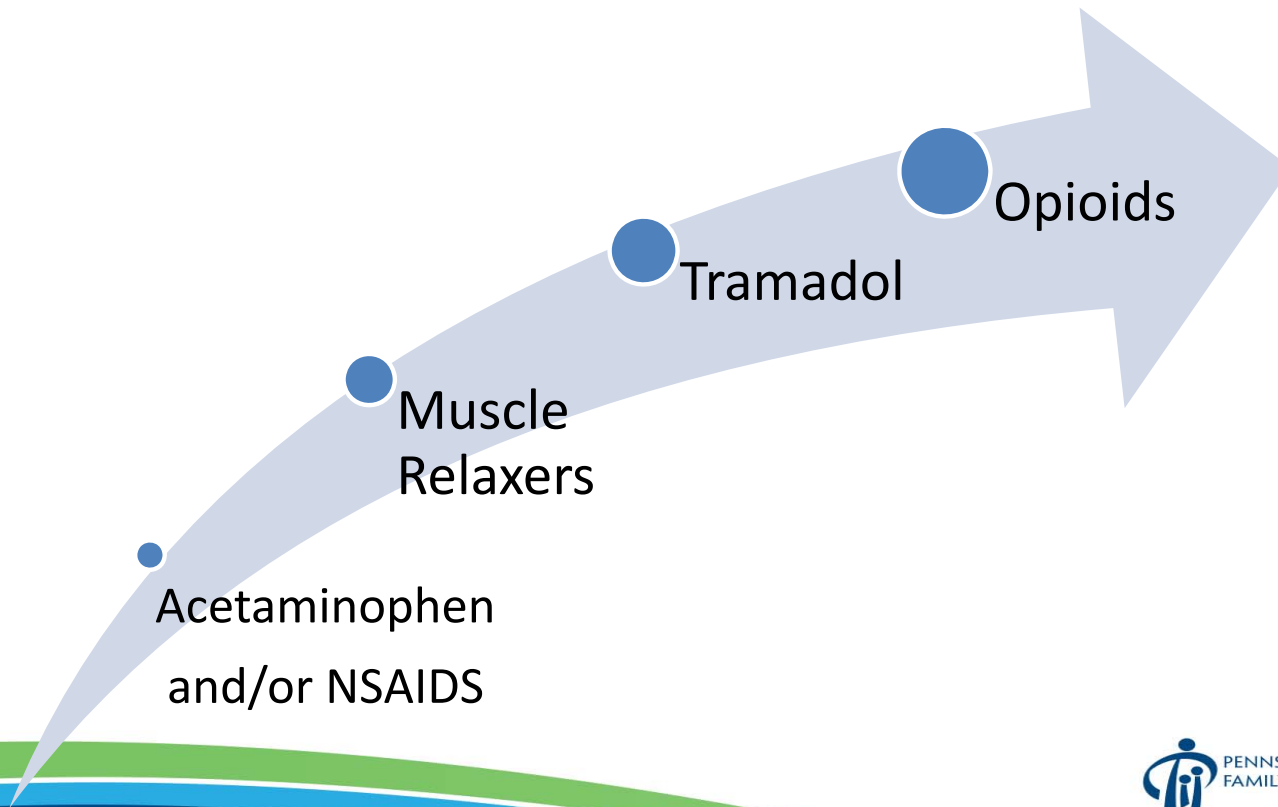


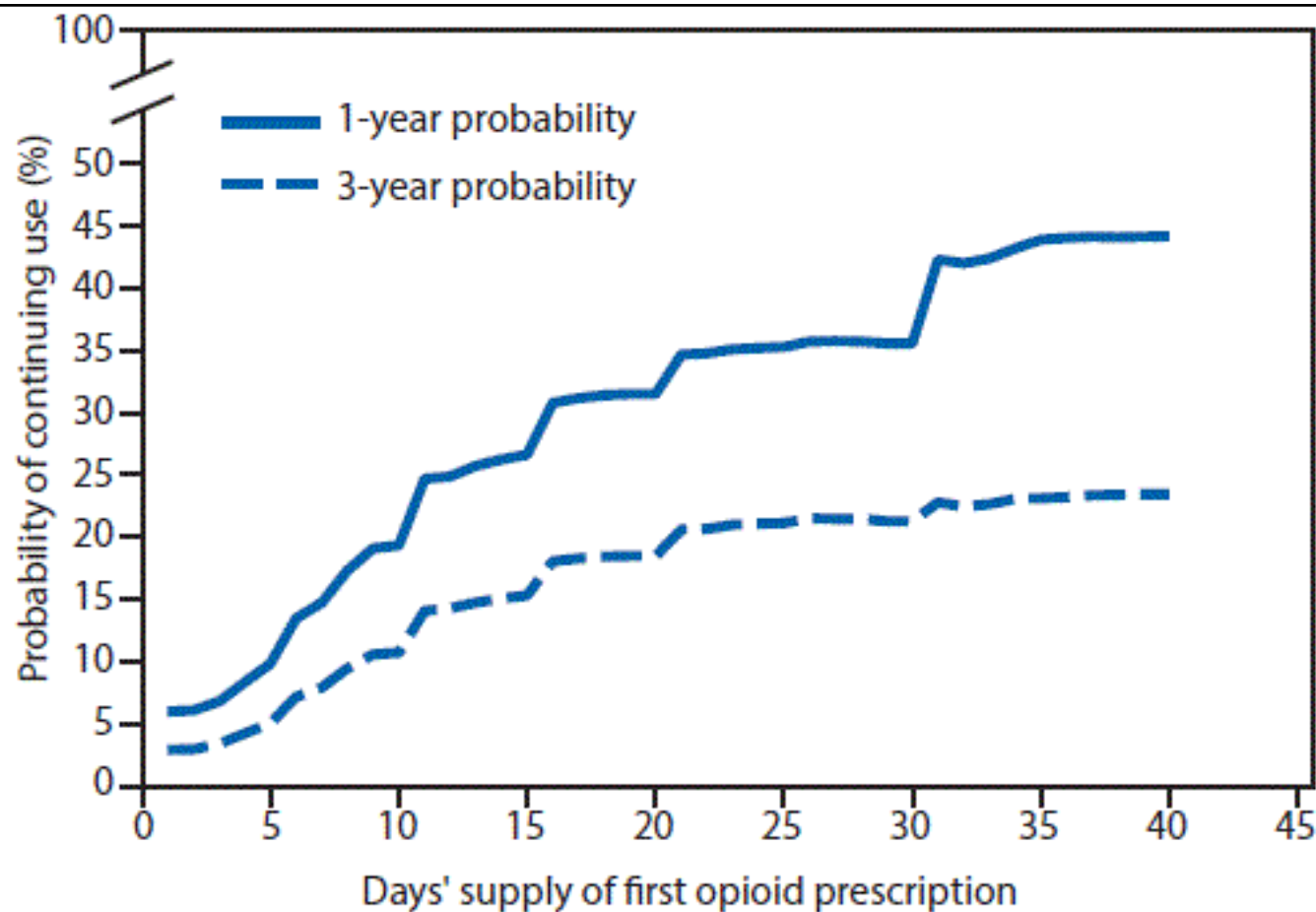
PHYSICAL



INTEGRATIVE

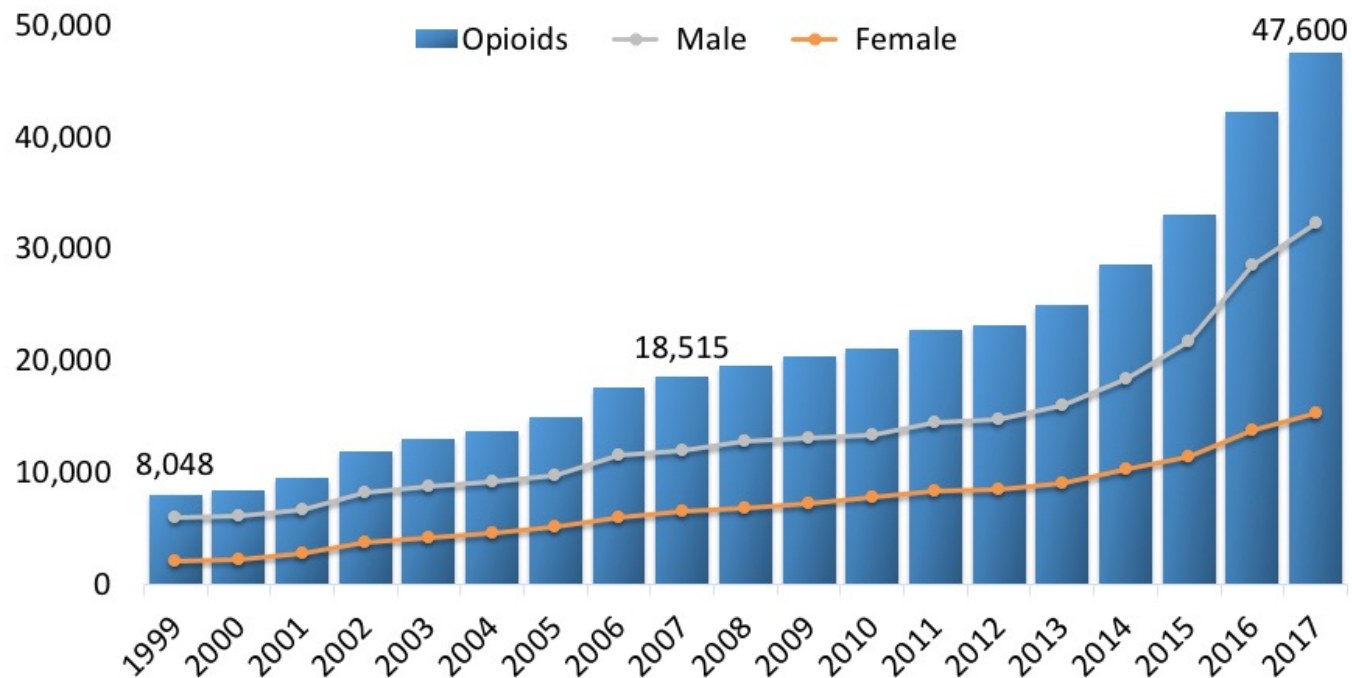
Pharmacological





Shah A, Hayes CJ, Martin BC. Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. MMWR Morb Mortal Wkly Rep 2017;66:265–269. DOI: <http://dx.doi.org/10.15585/mmwr.mm6610a1external icon>.

Figure 3. National Drug Overdose Deaths Involving Any Opioid, Number Among All Ages, by Gender, 1999-2017



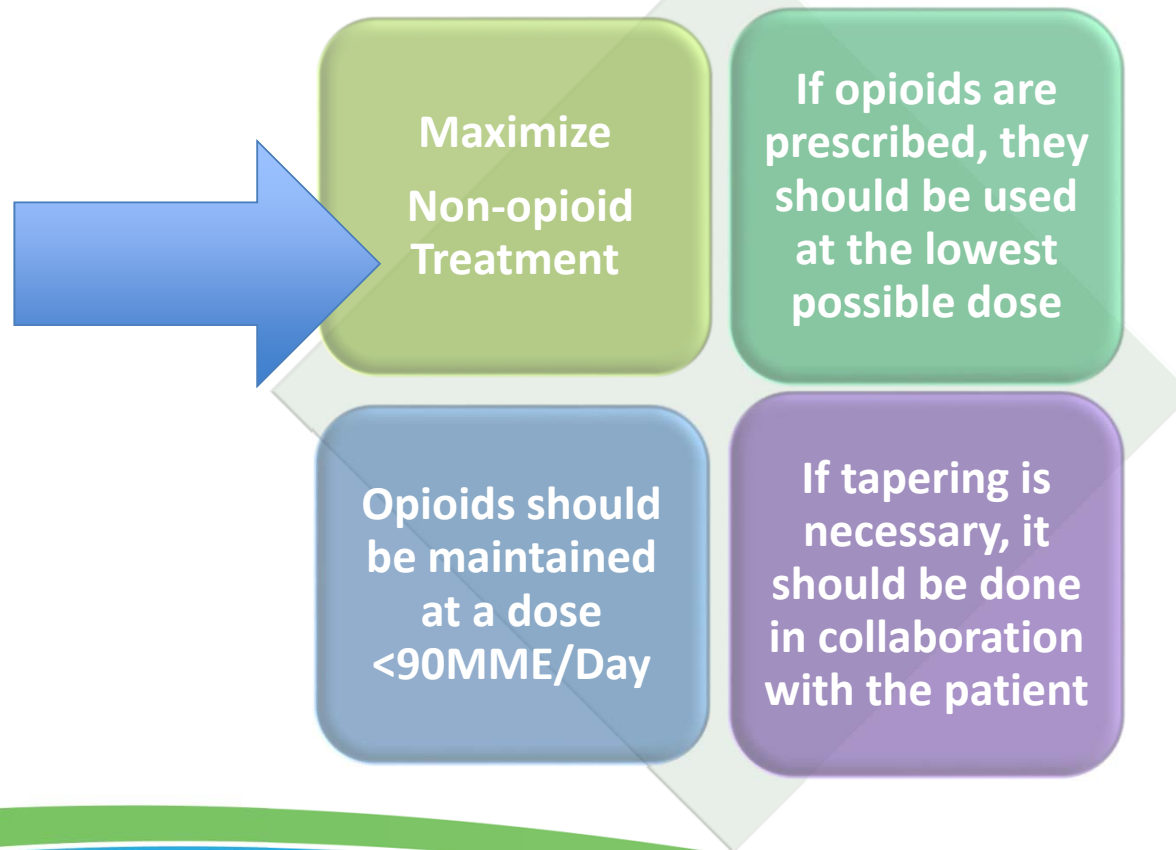
Source: : Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018

Y OF
NDATION



Larochelle, et al. Opioid Prescribing After Nonfatal Overdose and Association With Repeated Overdose: A Cohort Study. Ann Intern Med. 2016;164:1–9

CDC Recommendations



What can we offer our patients?



PHARMACOLOGICAL



INTERVENTIONAL



PSYCHOLOGICAL



PHYSICAL



INTEGRATIVE

Pharmacological

SSRIS/SNRIS

TYLENOL

NSAIDS

Interventional

Injections

Implantable
devices

Surgical options

What can we offer our patients?



PHARMACOLOGICAL



INTERVENTIONAL



PSYCHOLOGICAL



PHYSICAL



INTEGRATIVE

Psychological

Cognitive Behavioral Therapy (CBT)

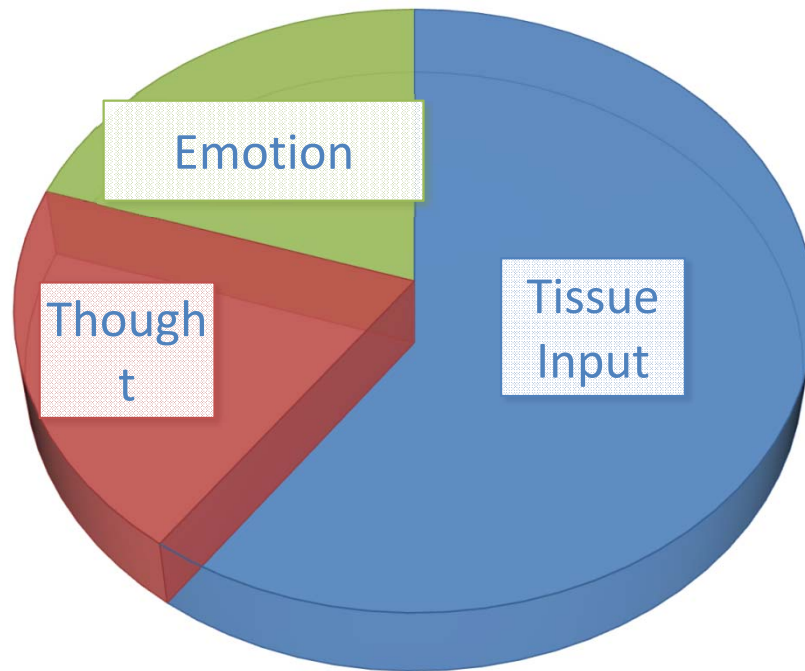
Acceptance Commitment Therapy (ACT)

Mindfulness

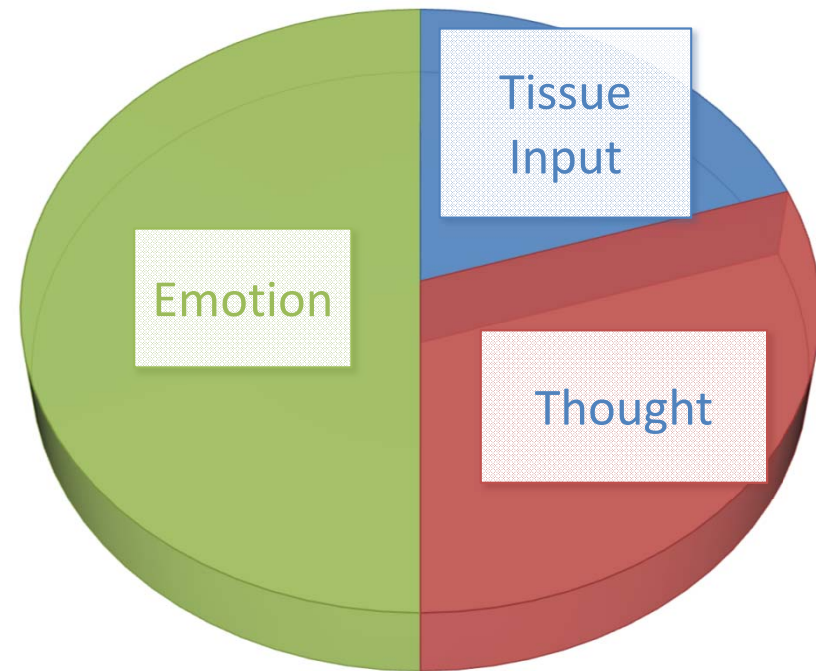
WHY DO PSYCHOLOGICAL TECHNIQUES WORK?



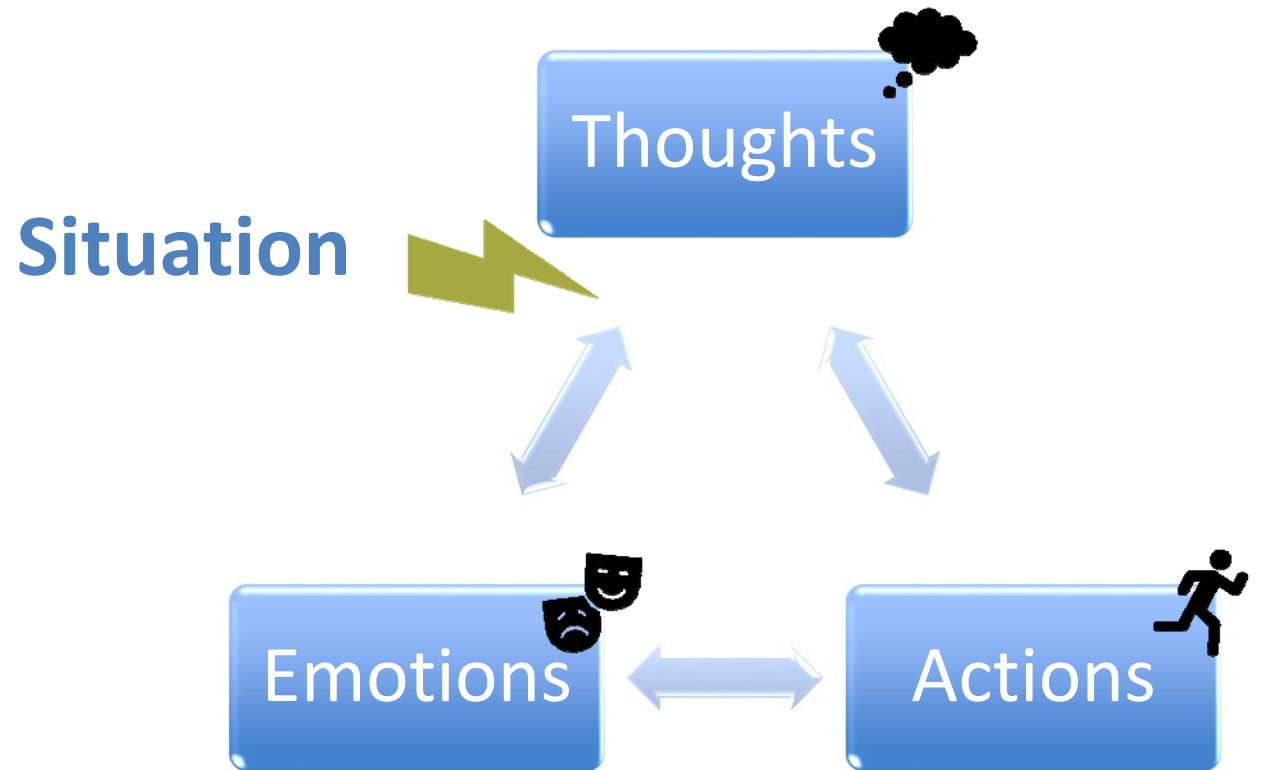
ACUTE PAIN



CHRONIC PAIN



CBT





Have you ever
woken up at
3am?

ACT

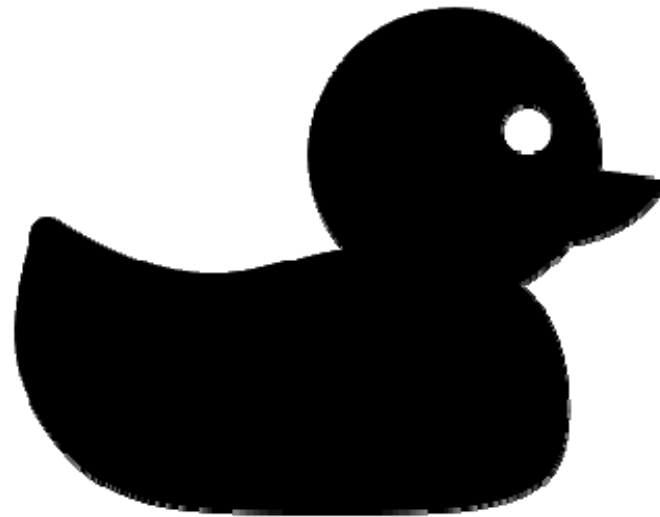
Acceptance of
unwanted private
experiences which
are out of personal
control.

Letting go, showing
up for life, and
focusing on living in
line with personal
values

The Unwanted Guest



Don't think about the word **DUCK**



The Evidence



Improved pain and
functionality



Long term effects
with improvement
at 12 months



Treats
comorbidities

Hughes, L. S., Clark, J., Colclough, J. A., Dale, E., & Mcmillan, D. (2017). Acceptance and Commitment Therapy (ACT) for Chronic Pain. *The Clinical Journal of Pain*, 33(6),

Mindfulness



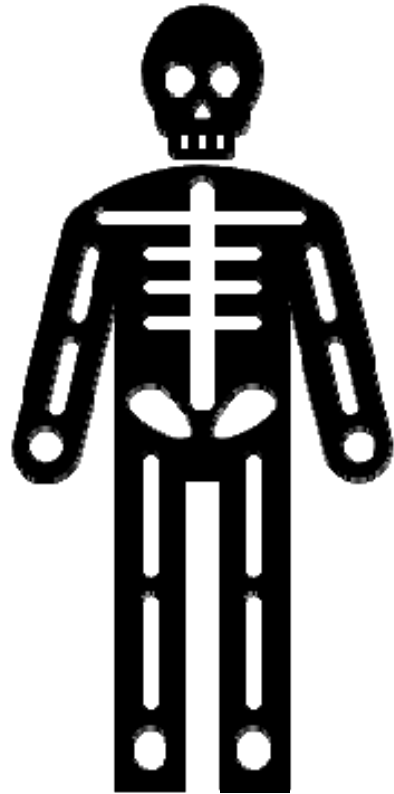


Mindfulness-Based Stress Reduction

An 8-Week Online Training Course

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Let's Try It!



Brief Body Scan Meditation

Psychological



COGNITIVE BEHAVIORAL
THERAPY (CBT)

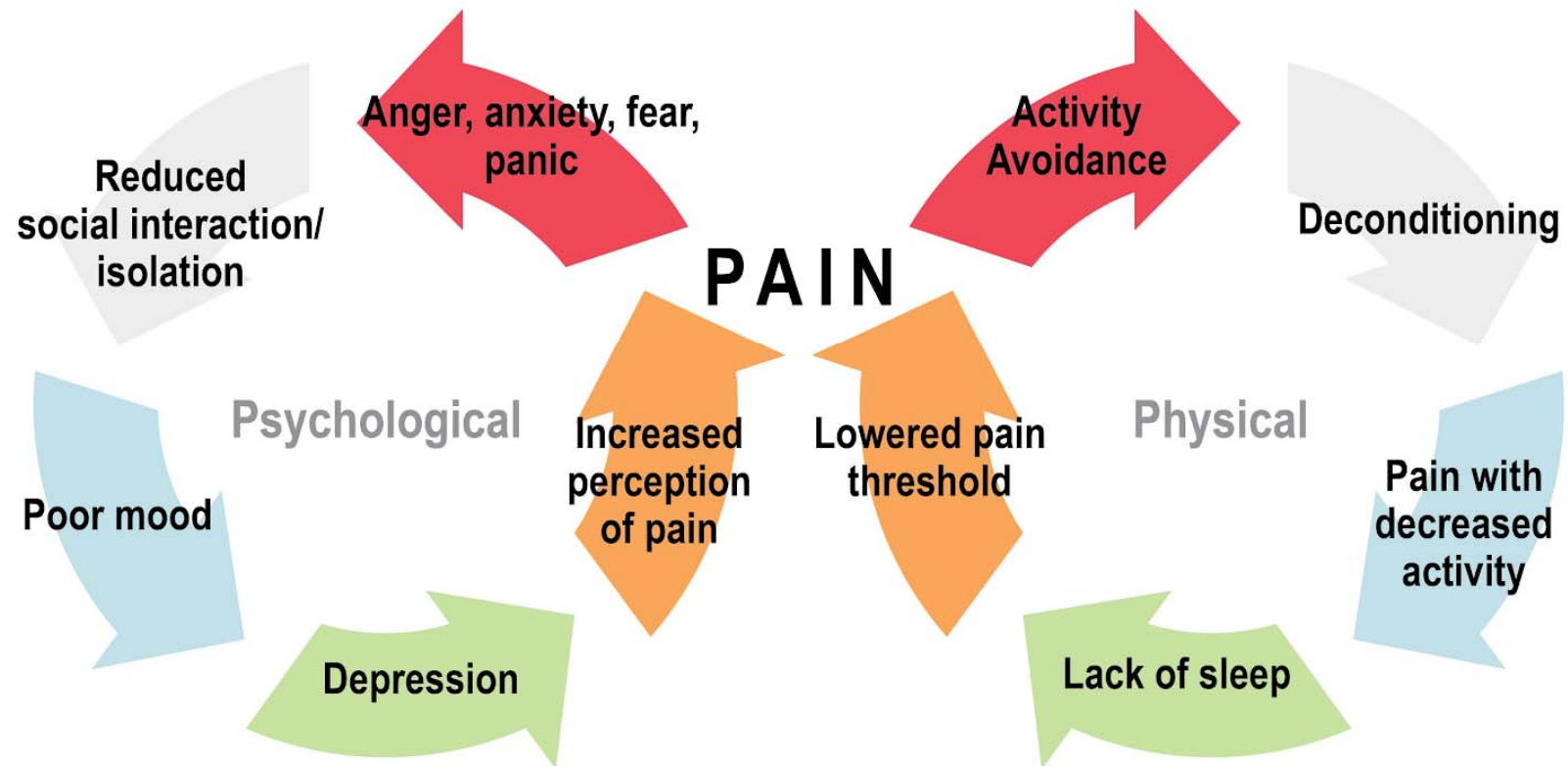


ACCEPTANCE COMMITMENT
THERAPY (ACT)

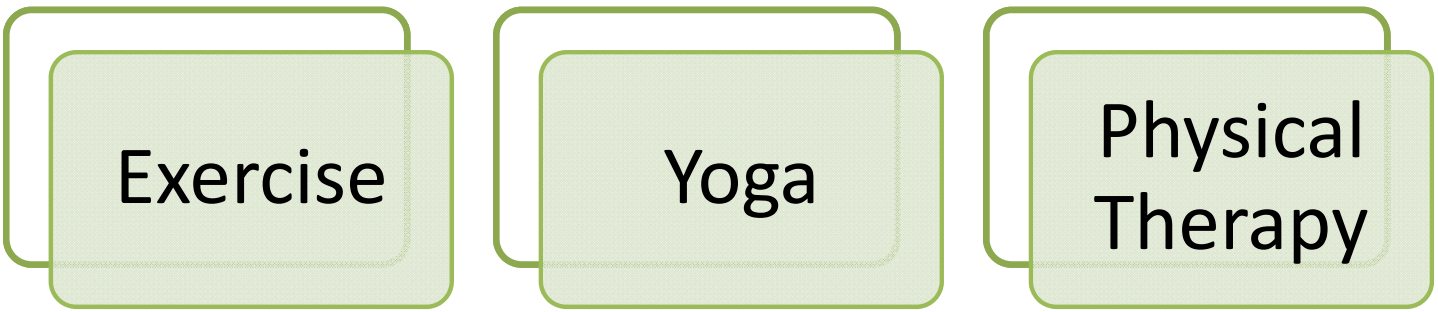


MINDFULNESS

CYCLE OF PAIN



Physical Modalities



Exercise

Yoga

Physical
Therapy

Exercise

- A Cochrane reviewed found that exercise therapy using individualized regimens, supervision, stretching, and strengthening was associated with the best outcomes

Yoga

- Less high-quality data
- RCTs showed improvement in function

Physical Therapy

- has good quality data showing improvement in pain and function
- Improvement was greatest in Chronic Back and Knee Pain

Let's Try It!



Integrative Approaches

Massage

Acupuncture

Acupressure

Manipulation



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Massage



SOME RESEARCH
SHOWING
IMPROVEMENT



EFFECT VARIES BY
PRACTITIONER



CAN BE EXPENSIVE

Acupuncture



GOOD SHORT-TERM
EFFECT COMPARED TO
SHAM



CAN BE EXPENSIVE



LACK OF LONG-TERM
EFFECTS

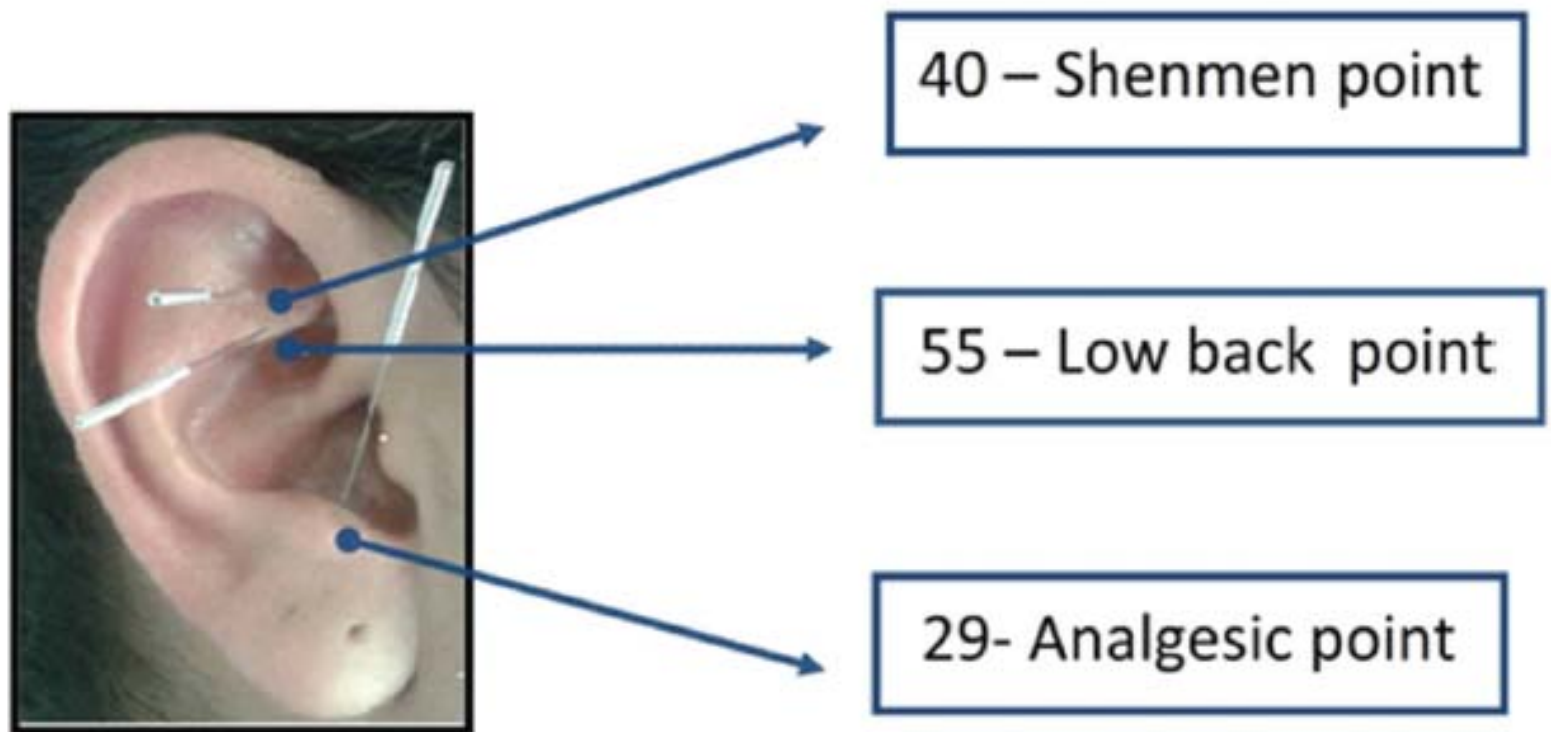


Figure 1. Points in the ear where needles were applied to reduce low back pain^{4,25}.

Ushinohama et al, 2014

Acupressure



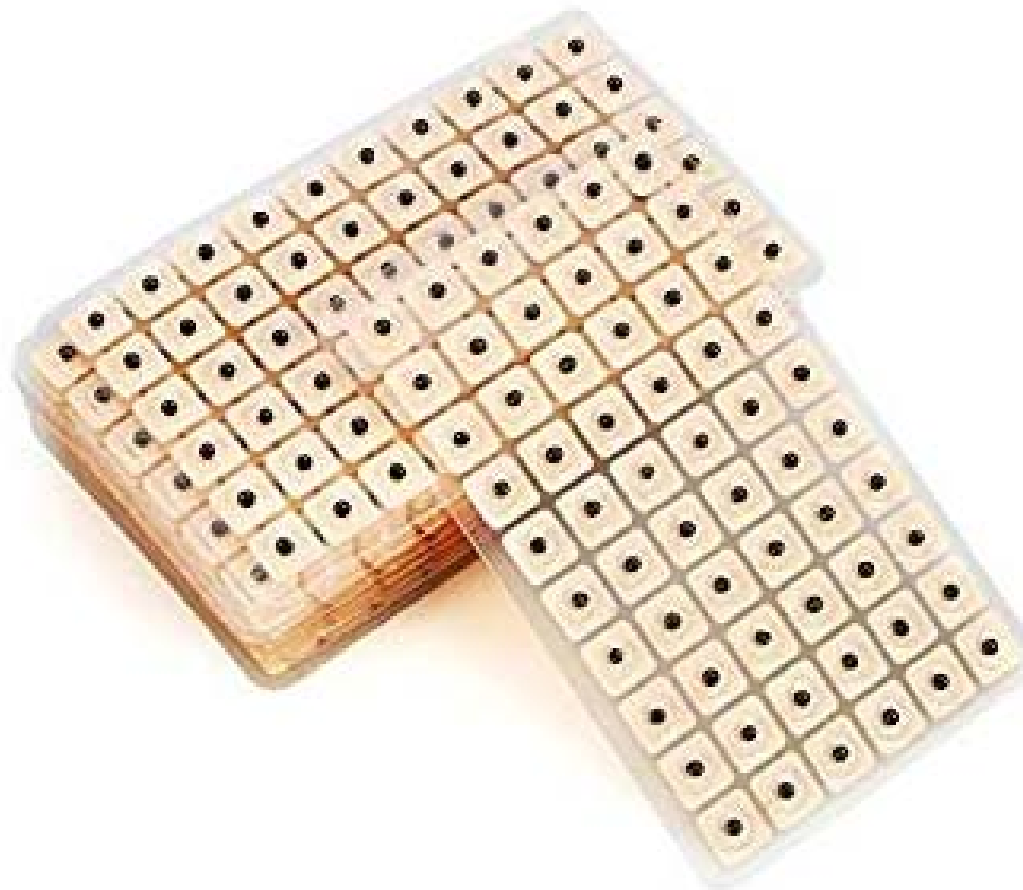
Similar affect to
acupuncture for pain



Can be self applied and
cheaper



No large trials



Manipulation



Improved Pain compared to sham



Similar outcomes to Physical Therapy
in head-to-head trial



Risk of Injury

So...What Works Best?

A COMBINATION!

Combination Programs



COST-EFFECTIVE



IMPROVED PAIN
SEVERITY



IMPROVED
FUNCTION



DECREASED ER VISITS
AND SICK DAYS



7→3



112→60



178→16mg



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To Summarize



PHARMACOLOGICAL
THE MOST USED BUT
COMES WITH RISKS
CONSIDER NON-
OPIOIDS



INTERVENTIONAL
REFER TO
ANESTHESIOLOGY
LONG TERM BENEFITS
ARE LACKING



**PSYCHOLOGY
BASED**
CBT
ACT
MINDFULNESS



**MOVEMENT
BASED**
EXERCISE
YOGA
PT



**INTEGRATIVE
BASED**
MASSAGE
MANIPULATION
ACUPUNCTURE
ACUPRESSURE



Questions?

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