Chronic Pain

Dawn M. Ehde, Ph.D.
Professor
Dept. of Rehabilitation Medicine

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Thank You to…

The study participants and patients from whom I've learned a lot about living life with chronic pain after disability

Mark R. Collen, the *Pain Exhibit*, for use of art PainExhibit.com

Overview

- Key concepts for understanding chronic pain
- Assessment
- Pain self-management
  - Why
  - Setting the stage
- Overview of current treatments & challenges
- Resources

Pain

Pain: an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

International Association for the Study of Pain, 1994

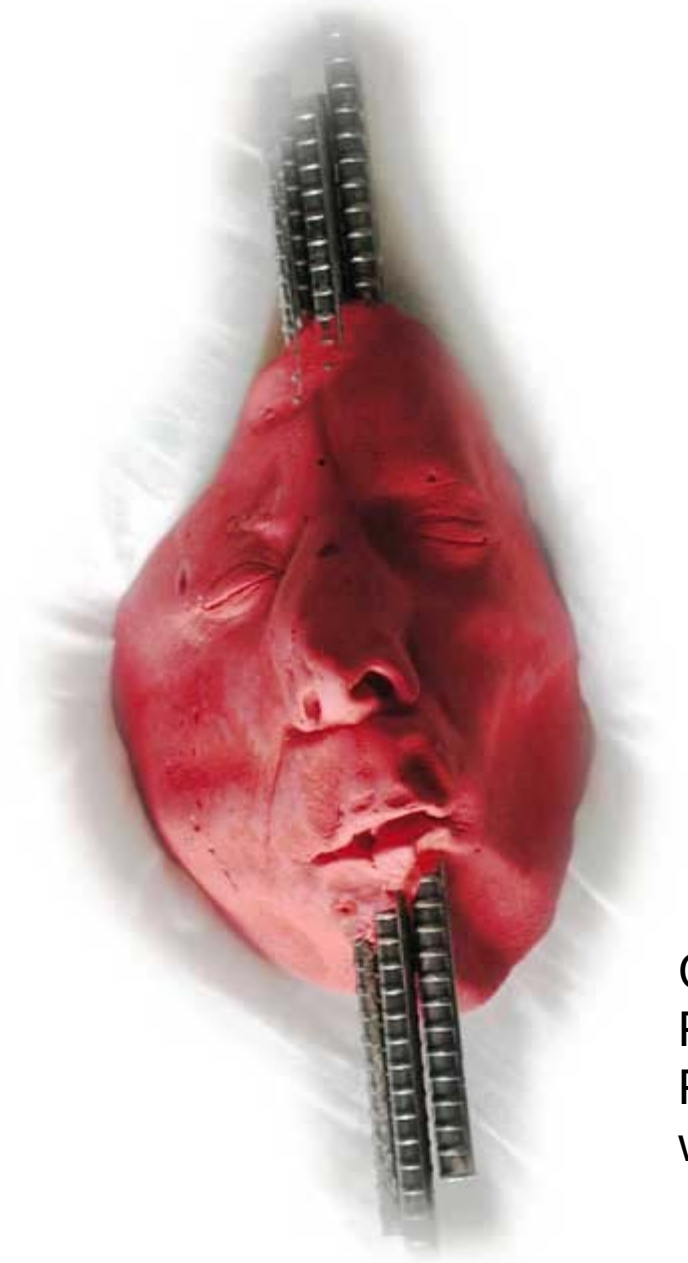
"Pain is whatever the experiencing person says it is and exists whenever he/she says it does." *Margo McCaffery*

Chronic Pain

Chronic pain (nonmalignant)

Generally considered to be pain that lasts more than 6 months, is ongoing, is due to non-life-threatening causes, has not responded to current available treatment methods, and may continue for the remainder of the person's life.

Wall & Melzack, 1999



Activity: List 5 challenges to living with chronic pain

CP III - Trapped in Hell (Mark Collen)
Plaster with rebar.

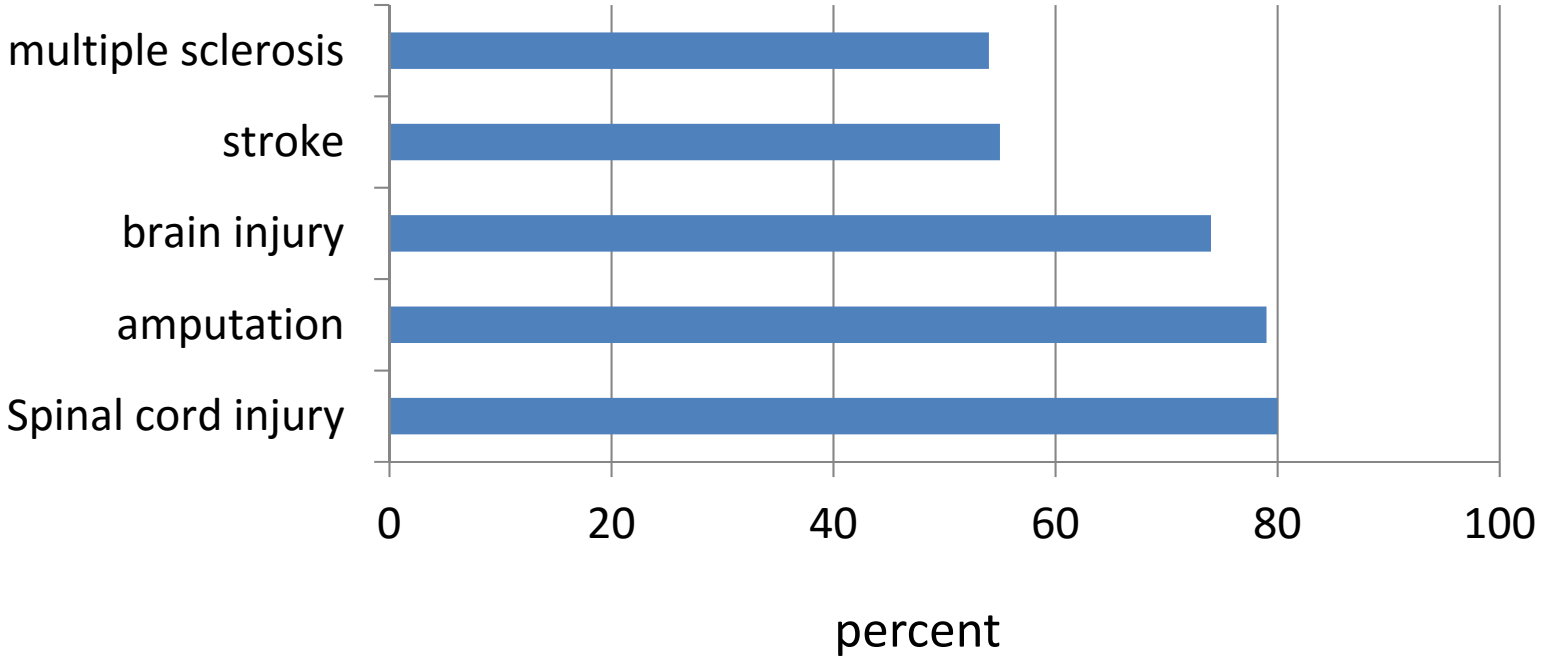
www.PainExhibit.com

Why care about chronic pain?

- It is a highly prevalent chronic condition:
  - International survey: 12-mo prevalence was 37% in developed and 41% in developing countries (Tsang et al., 2008, *J of Pain*)
  - 100 million US adults
  - > than diabetes, heart disease, & cancer combined
  - 9% of the US population has moderate to severe chronic pain (any type)
  - 60-75% of adults > 65 years report persistent pain

www.ampainsoc.org; Institute of Medicine, 2011

Chronic Pain is a Significant Problem for Many People with Neurologic Conditions



Living With Chronic Illness & Pain
Judith Mary Rose
Pain Exhibit © 2011, All rights reserved.

Pain causes suffering

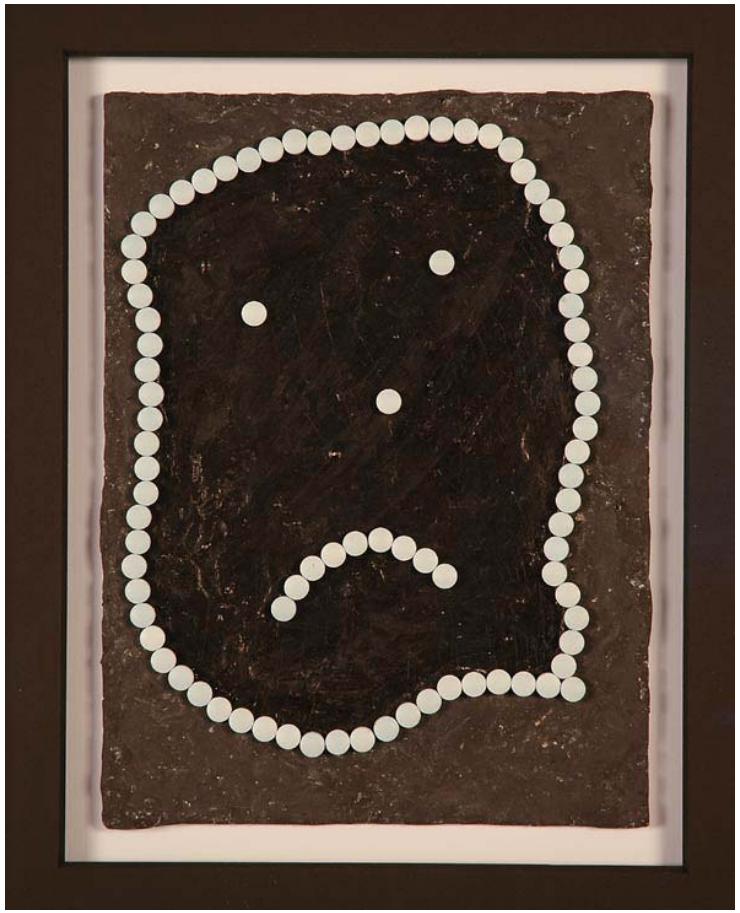
It commonly co-occurs with psychological disorders such as depression (e.g., 30-50% co-occurrence of pain and depression)

"A Moral Imperative"

Chronic pain is inadequately treated

Pain self-management interventions are particularly under-utilized

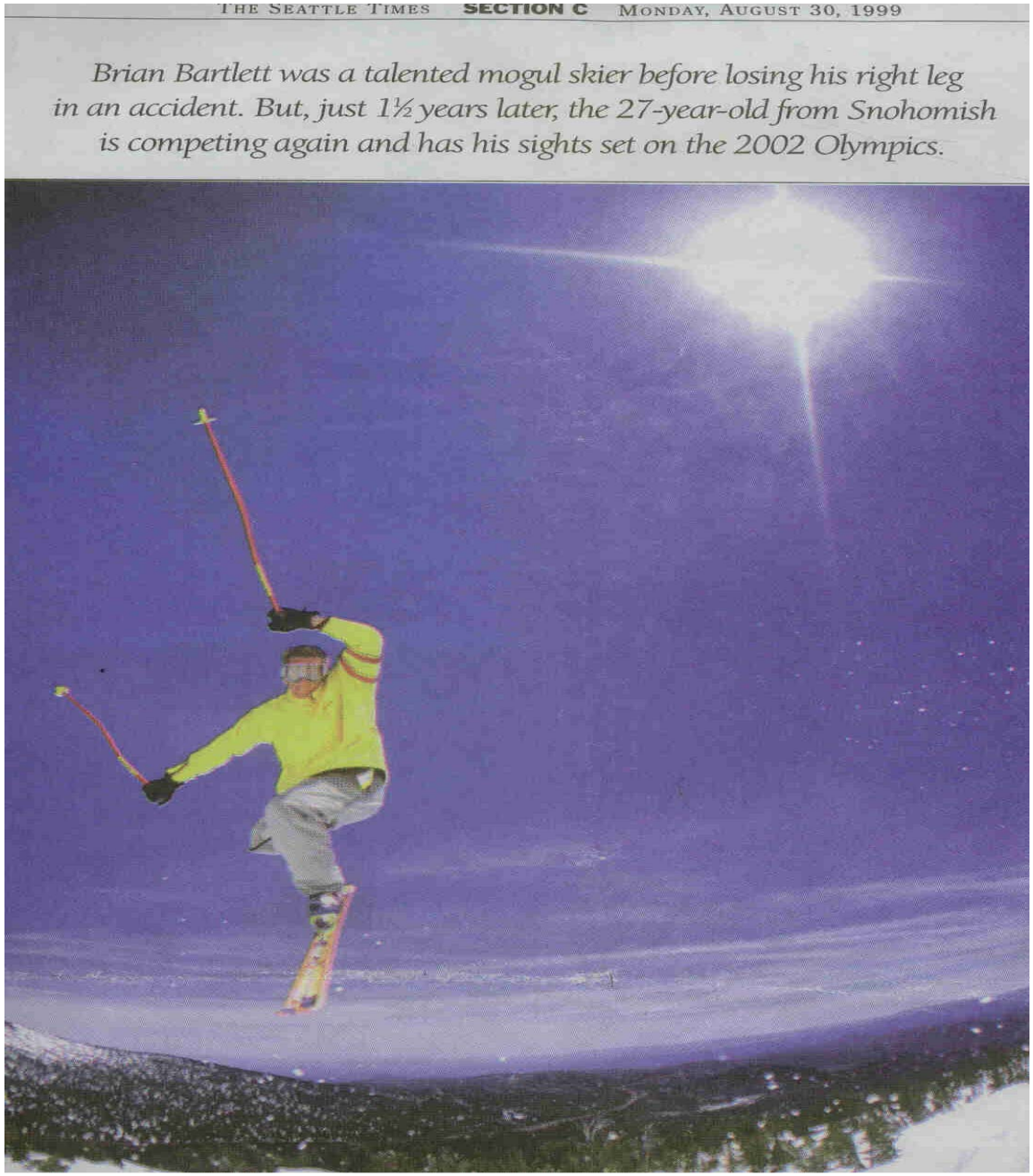
Institute of Medicine 2011 report, *Relieving Pain in America,* calls for developing strategies for reducing barriers to pain care, including psychosocial care



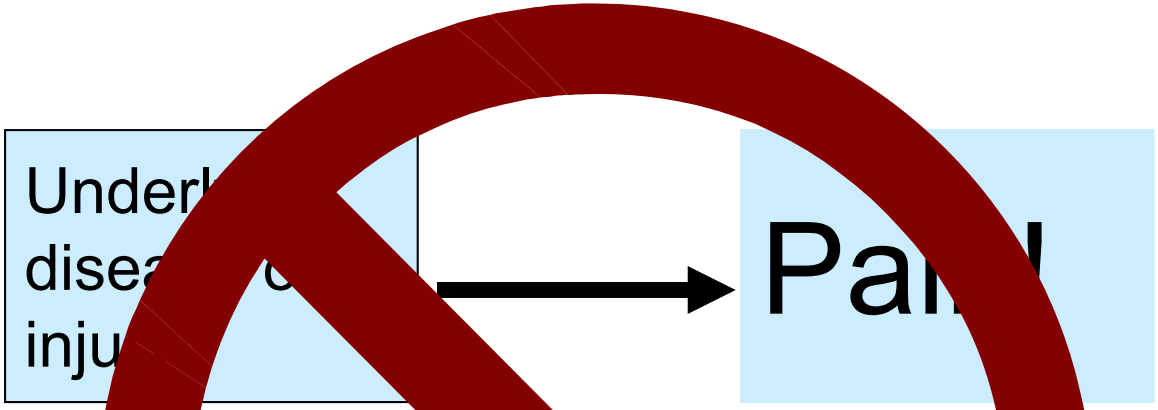
Happy Pills Ain't So Happy (Mark Collen) Crushed & whole Welbutrin, acrylic media, & charcoal. Pain Exhibit © 201.

Individuals with chronic pain differ in terms of their pain reports and functioning…

Why?

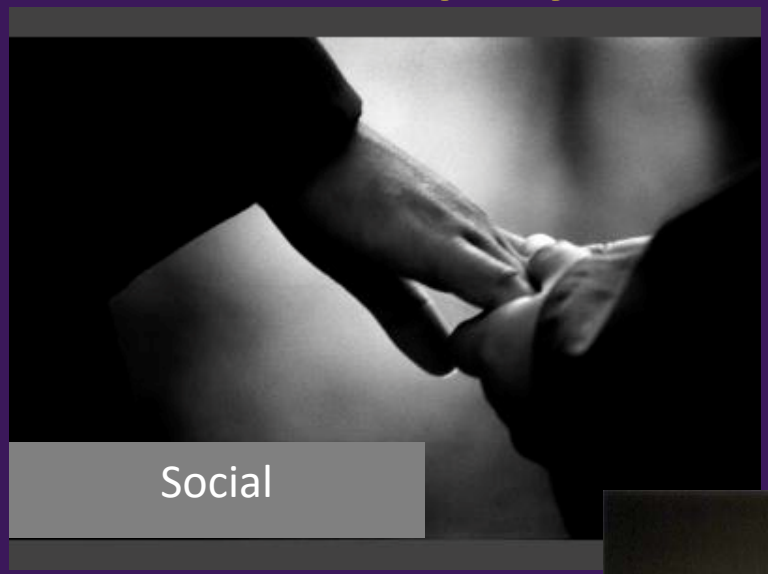


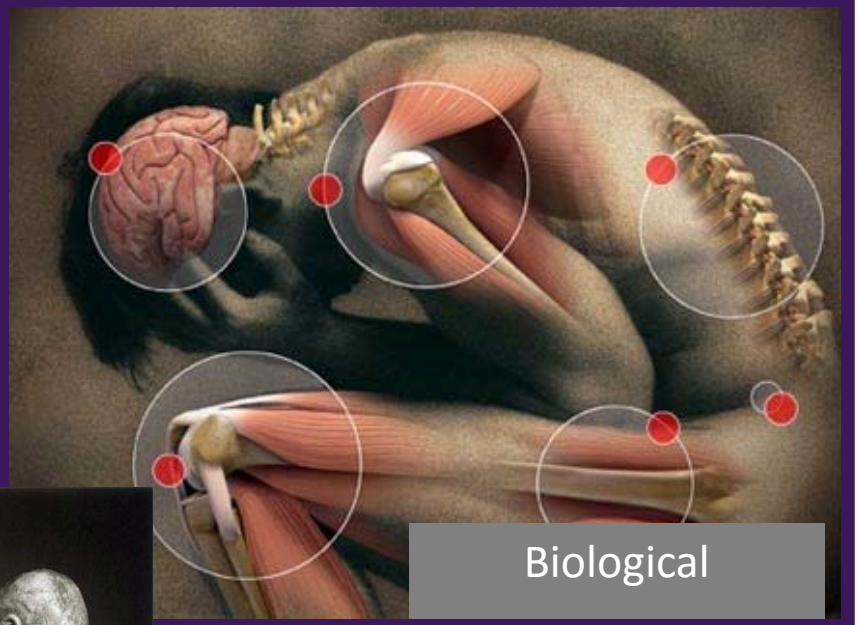
Biomedical Model of Pain

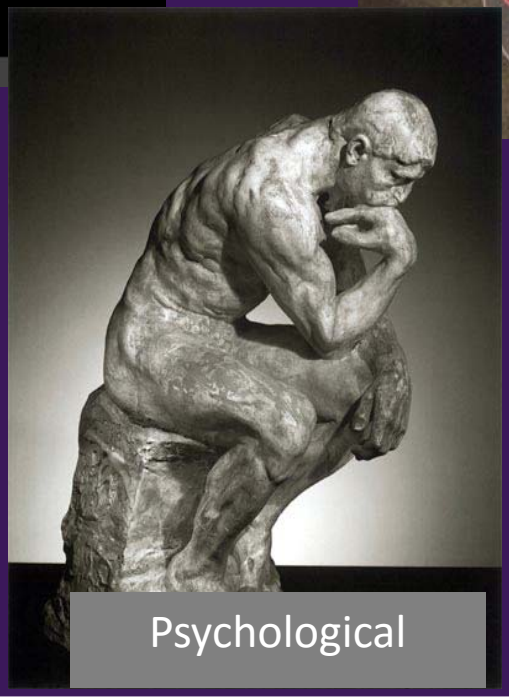


1. Pa is caused disease o njury.
2. Sy tom leads to arch fo
   path gy; treatment ea towards
   sympt reduction.
3. Model wo pain; fails for
   chronic pain.

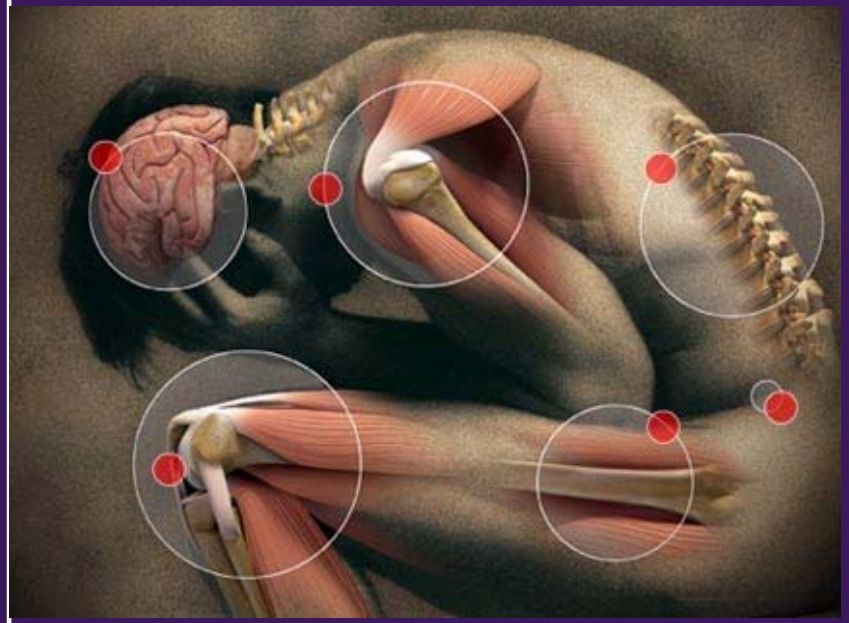
The Biopsychosocial Model of Pain







Biological Aspects of Pain



- Disease processes
- Extent of injury & pain during acute phase
- Inflammation
- Age
- Activity level

Pain Physiology

- Elliot Krane: “The Mystery of Chronic Pain” on TED

- http://www.ted.com/talks/lang/en/elliot_krane_the_mystery_of_chronic_pain.html

Pain Matrix (brain regions in pain processing)

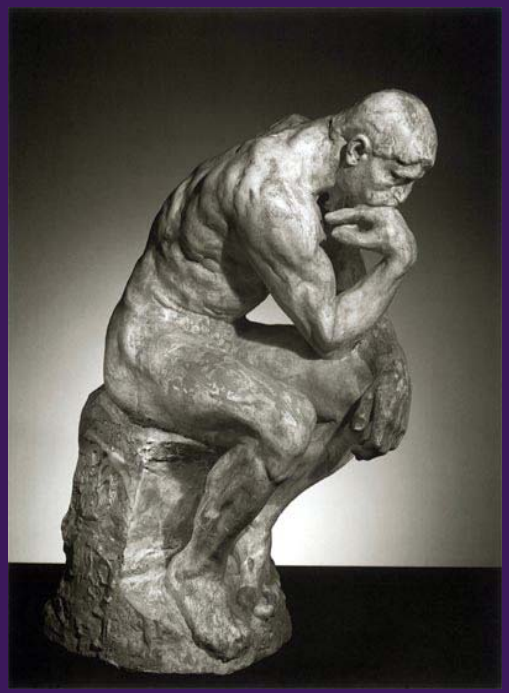
- Primary & secondary somatosensory cortices
- Prefrontal cortex
- Anterior cingulate cortex
- Insular cortex
- Hippocampus
- Amygdala
- Thalamic nuclei

*those in red are also associated with depression

Other factors

- Chronic pain has been associated with gray matter volume loss relative to age matched controls (5-11%)
- Severity & duration of chronic pain associated with brain changes
- Pain, stress, & depression also linked to:
  - dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis
  - Activation of inflammatory cytokines
- Also, sleep disturbance has been shown to cause hyperalgesia

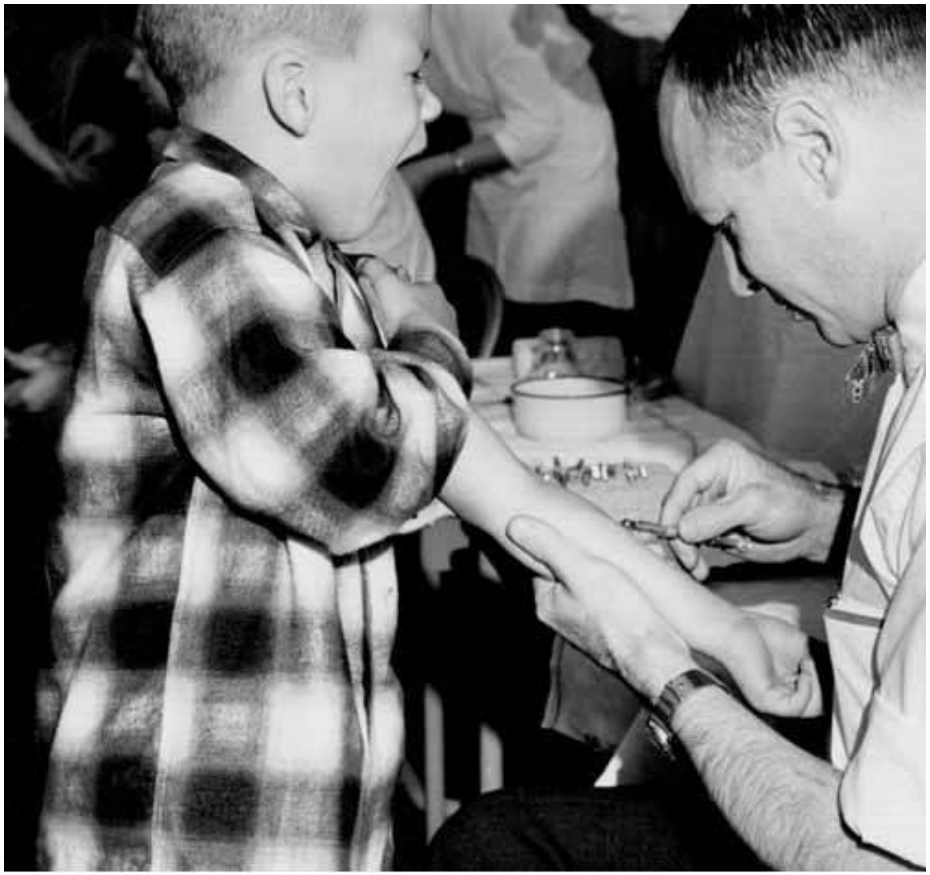
Psychological Aspects of Pain



- Psychiatric comorbidities
  - Depression
  - Anxiety & Fear
- Self-management behaviors
  - Pacing & activity
  - Coping behaviors
- Cognitions (thoughts about pain)
  - Pain catastrophizing
  - Pain beliefs (e.g., control)
  - Self-efficacy

Pain-Related Anxiety & Fear

- Anxiety or fear of pain, re-injury, or movement may lead to avoidance behaviors & hyper-vigilance to pain
- Pain anxiety is strongly associated with disability & pain intensity (e.g., Roelofs et al., 2004; Turk et al., 2004)



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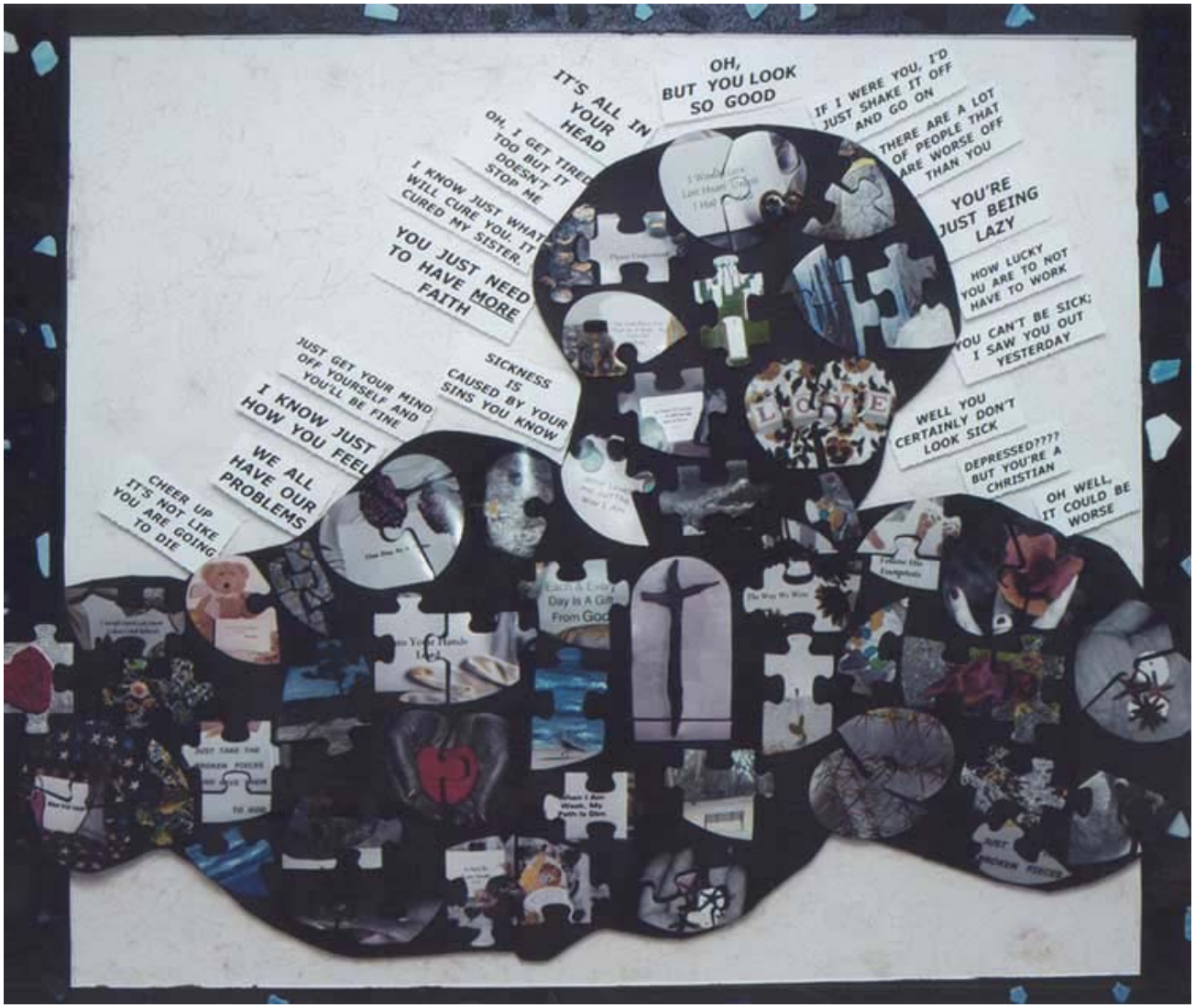
Social Aspects of Pain

- Social Support
- Solicitous Support
- Patient/Provider Relationship

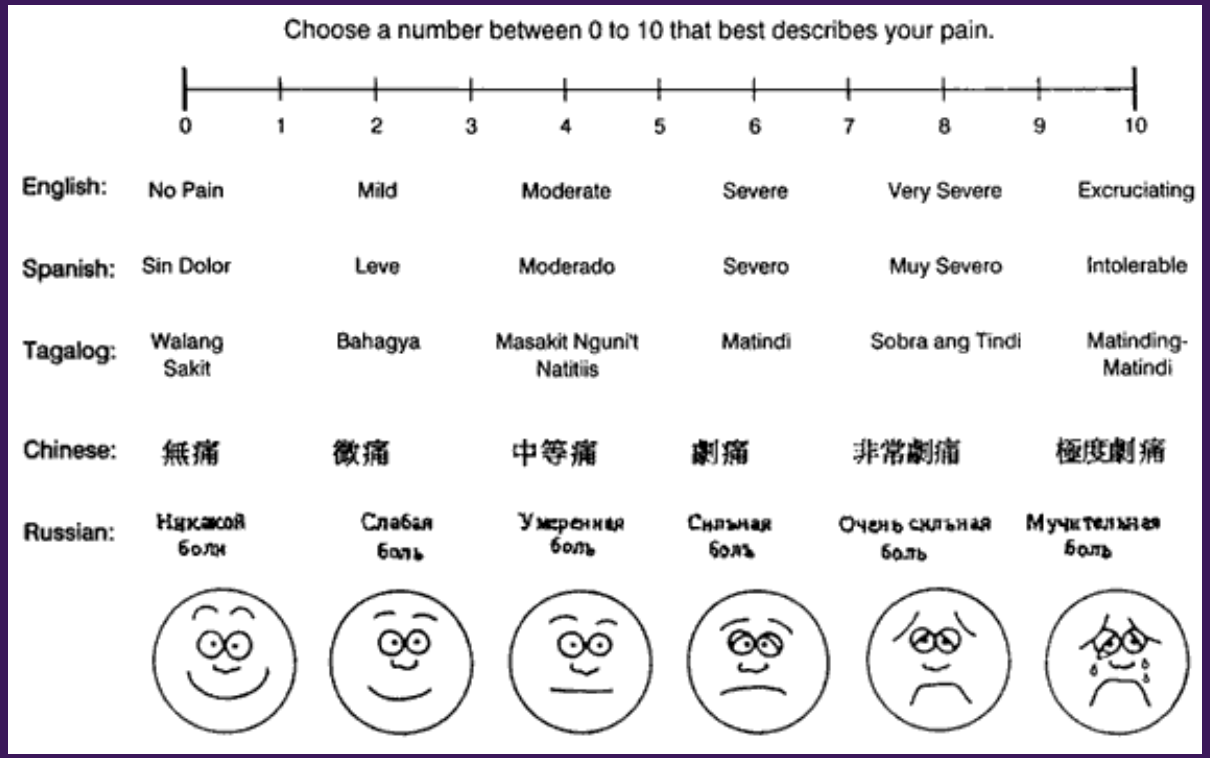


Pieces of Me

Remember:

Presence of reinforcement does not mean patients are making up (malingering) or exaggerating their pain!

Clinical Pain Assessment



Assessment Considerations

- Currently no single agreed-upon method for clinically evaluating patients with chronic pain
  - Turk DC, Melzack R, eds. *Handbook of pain assessment.* 3rd ed. New York: Guilford Press; 2011.
- Consensus statement regarding pain assessment in the context of pain research
  - Dworkin et al. Core outcome measures for chronic pain clinical trials: IMMPACT recommendations. *Pain.* Jan 2005;113:9-19.

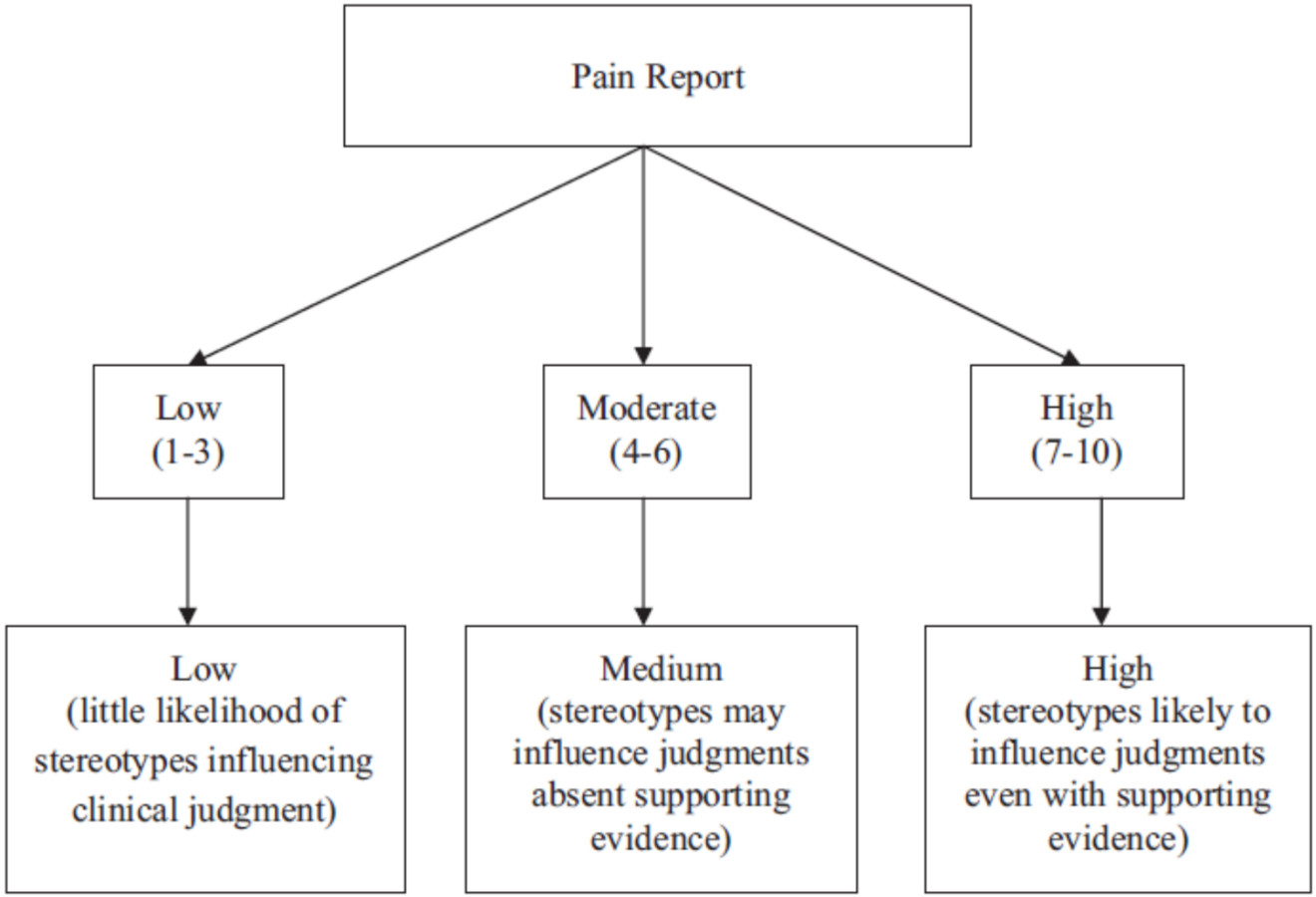
Assessment Challenge

"The assessment of chronic pain is complicated primarily because pain is an inherently subjective experience that resists direct observation."

Tait & Chibnall (2014). *American Psychologist, 2*, 131-141.

What problems might this cause?

Figure 2
Pain Severity: Stereotype Activation Potential



Tait & Chibnall, 2014

Assess Pain Self-Management

- What do you do to manage your pain, if anything?
- Besides medications, do you use other strategies for managing or coping with your pain? What?
- What do you do that eases or relieves your pain?

Assess Strengths

- What are your strengths?
- How have you dealt with difficulties before?
- What has gone well for you in managing your pain?
- What are you proud of?
- What is the worst thing that has happened to you, and how did you deal with it?

Interventions

Setting the Stage

Self-Management Interventions

Cognitive Behavioral Therapy (CBT)

- Prevailing type of pain self-management
- Based on cognitive behavioral theory of pain, in which thoughts and behavioral responses to pain influence adjustment and functioning
- Common ingredients include:
  - Relaxation training
  - Cognitive therapy
  - Behavioral strategies, including adaptive coping strategies & activation

Cognitive Behavioral Therapy (CBT)

- Multiple meta-analytic reviews have shown that CBT interventions are efficacious in adults and children with chronic pain [Ehde et al., (2014). *Am Psychol,* 69 (2); Williams et al. (2012). *Cochrane Database Syst Rev*(11), CD007407; Palermo et al. (2010). *Pain, 148*, 387-397.]
- CBT is superior to no treatment (effect size estimates ranging from *d* = 0.2 to 0.5)

  Morley (2011). *Pain, 152*(3 Suppl), S99-106.

Other Behavioral Therapies for Pain

- Relaxation therapies
- Mindfulness-based therapies, including mindfulness-based stress reduction
- Behavioral activation
- Acceptance based therapies such as acceptance and commitment therapy (ACT)
- Graded exposure in vivo
- Self-hypnosis training

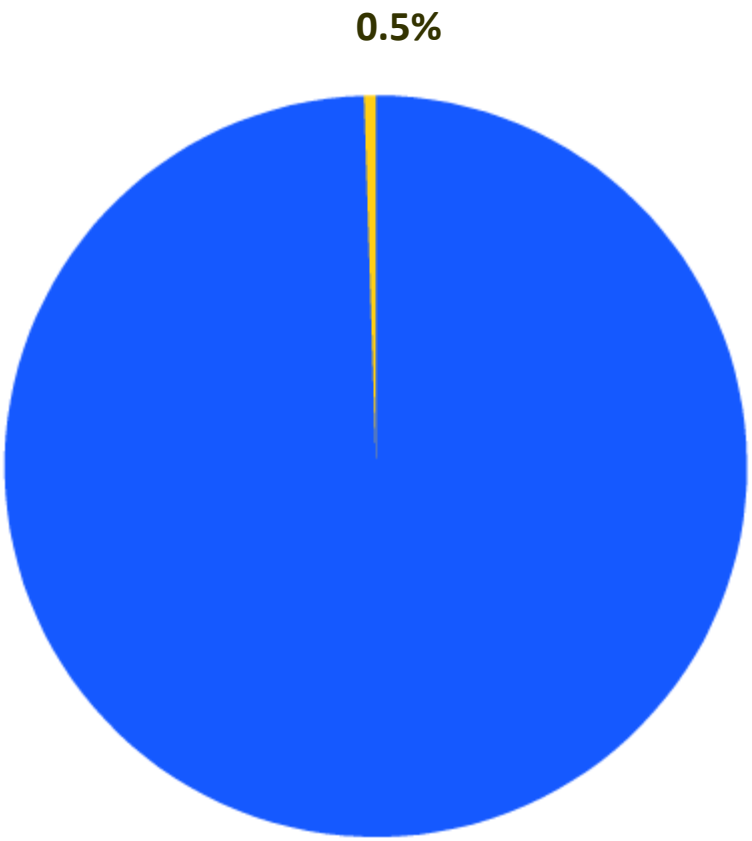
Recent Innovations

- Expansion to youth with chronic pain
- Older adults
  - Including psychological interventions delivered in home and community settings (e.g., Ersek et al., 2008)
- Rural, low-literacy adults (Thorn et al., 2011)
- Integration of behavioral health specialists into care teams

Recent Innovations

- Adults with physical disabilities (e.g., traumatic brain injury, spinal cord injury, multiple sclerosis)
- Telehealth
  - Telephone: therapeutic relationship strong
  - Web-based delivery
- Delivery by non-psychologists such as physical therapists (e.g., work of Kristin Archer, PT, PhD, at Vanderbuilt University)

Medical Versus Self-Management



= health care providers

= Individual with pain

What is Self-Management?

A Practical Definition

"…what people do on a day to day basis to feel better and pursue the life they desire."

Teresa Brady, PhD, Centers for Disease Control and Prevention, 2010

Self-Management Focuses on Participation

Walk MS, 2009, Greater Northwest Chapter.

…the main question is not, "*How or why did I get the pain?*" The critical question is, ***"What can I do to manage my pain so that I can get on with my life?"***

(Turk & Winder, 2008)

Self-Management Evidence Base

Battersby et al. (2010). Twelve evidence-based principles for implementing self-management support in primary care. *Joint Commission Journal on Quality and Patient Safety, 36*, 561-570.

Obtain "Buy-In" to a Self-Management Approach

- Set the stage: acknowledge that they do the heavy lifting in managing their pain
- Convey that pain is best treated by a biopsychosocial approach
- Provide patients with an explanatory model for their pain that is biopsychosocial
- Use a nonjudgmental, collaborative approach

Obtain "Buy-In" to a Self-Management Approach

- Elicit goals & values (besides pain relief)
- Elicit what self-management skills they already use & reinforce them
- Ask for permission to make suggestions for pain self-management
- Provide a menu of self-management options
- Encourage realistic goals to increase success (and buy-in)

Sample Self-Management Questions

- Without using the word “pain”, what change could you make that would help improve your life?
- When is your pain at its best? If you are engrossed in something (e.g. talking with friends, watching good movie, outside on a nice day, etc) what changes do you notice in your pain?
- What would life without pain look like? How would you spend your time?
- What does your pain mean to you (assess for fear of ongoing damage)?
- What does pain keep you from accomplishing?
- What would it take to get back to _____?

Encourage an Experimental Approach to Self-Management

- Explain that pain self-management entails experiments
  - Some strategies will work, others won't
  - Focus on trying out a behavior and observe what happens
  - Will learn from both successes and failures (and everything in between)
  - Including others in experiments increases likelihood of success

Encourage Goal Setting

- Provide tools (e.g., worksheets) for setting goals outside the clinic visit
- Use a written plan of goals set & progress
- Expect patients not to achieve their goals: learning how to deal with setbacks is part of self-management
- Document goals in medical record (After Visit Summary)
- Follow up about progress towards goals

Goal Setting: Example Framework

"I will _____(Specific action)

for _____(How long, How many, How far)

on _____ (Which Day or Days)

at _____ (What Time or Times/What Situation).

I feel confident that I can do this, and even though _____(Barriers) come up,

I will deal with them by _____ (Solutions)

and I will still work on my goal!"

Encourage Behavioral Activation

- One of the most important ways to treat both pain and emotional suffering is “activation”
- Behavioral activation may include:
  - Increasing physical activity
  - Increasing activities which are enjoyable, meaningful, or pleasurable
  - Increasing participation in activities consistent with values and goals

Martell, C. et al. (2010). *Behavioral activation for depression: A clinician’s guide.* Guilford Press.

Activation Is Best If Activities Are:

- "Anti-depressant" and "anti-pain" (i.e., reinforcing, valued)
- Scheduled (versus waiting until the person "feels better or like it")
- Increased gradually and systematically ("paced")
- Time-contingent (versus pain-contingent)
- Set in the context of specific, measurable,& attainable goals
- Done in an experimental approach

Pacing is Key

- Ask patient to track or identify activities they tend to overdo –can help them identify their "danger zones" or "triggers"
- Encourage them to set time limits on these activities
- Plan activity to allow rest or relaxation to be interspersed with the activity

Encourage the use of relaxation & related skills

Breathing

Imagery

Progressive muscle relaxation

Mindfulness

Self-hypnosis

Relaxation Implementation

- Provide a rationale for its use with pain
- Take a couple deep breaths with patient – 30 seconds of practice goes a long way
- Encourage regular practice so that skill becomes natural and habitual
- Discuss how to apply –such as when they have a pain flare up, are fatigued, stressed, etc.
- Encourage the use of audio recordings & other resources such as:

http://health.ucsd.edu/specialties/psych/mindfulness/mbsr/audio.htm
http://students.georgiasouthern.edu/counseling/relax/OnlineRelax07.htm
http://www.olemiss.edu/depts/stu_counseling/relaxation.html

Mobile Apps for Relaxation

http://t2health.org/apps

Mindfulness Resources Abound

The Mindfulness App: Guided & Silent Meditations to Relax

View More by This Developer

By MindApps

Open iTunes to buy and download apps.

View in iTunes

$1.99

Category: Health & Fitness

Updated: Mar 15, 2016

Description

Start your journey to a more relaxed and healthier state of mind with The Mindfulness App. Whether you are just starting out or experienced in meditation, The Mindfulness App will help you to become more present in your daily life.

MindApps Web Site ▸ The Mindfulness App: Guided & Silent Meditations to Relax Support ▸ ...More

What's New in Version 3.1.42

New Get Started session
Extended library including courses, challenges and more meditations
Subscription option for library

...More

SundayReview | NEWS ANALYSIS

The Hidden Price of Mindfulness Inc.

By DAVID GELLES MARCH 19, 2016

Robert Frank Hunter

The Mindfulness Backlash

By ANNA NORTH JUNE 30, 2014 5:55 PM 27 Comments

Treat Depression to Remission

- Major Depressive Disorder (MDD) is significantly more common among individuals with chronic pain
- Point prevalence:
  - 30-54% in chronic pain samples
  - 3-9% in general population
- Co-occurrence of 30-50%
- Evidence suggests that pain precedes depression more often than the reverse

When to Refer for Psychotherapy

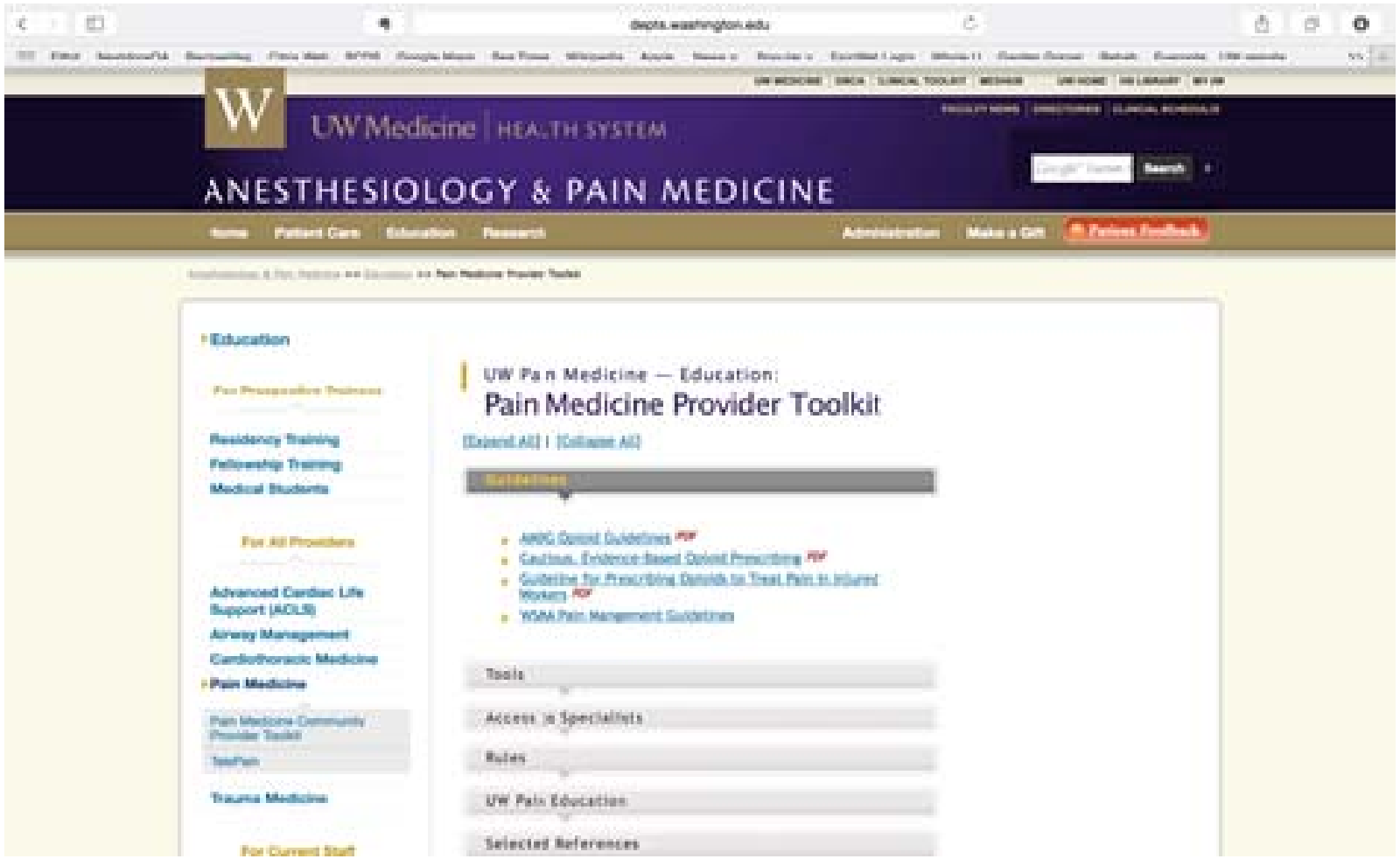
- Depression: People who are depressed are less likely to engage in self-management
- High levels of anxiety or fear of pain
- High levels of pain interference with activities, including sleep, relationships, physical activity
- High pain catastrophizing or very negative thinking about pain management
- Low self-efficacy for pain management

How to Discuss a Referral for Psychotherapy

- Provide a palatable framework
  - One more member of the treatment team
- Can discuss in terms of stress management or learning skills such as relaxation, meditation, sleep hygiene, biofeedback, etc
- Therapist should have experience with pain (look for “behavioral medicine” or “health psychology” experience); CBT orientation

Guidelines

- National Pain Strategy (published March, 2016)
- Interagency Guideline for Prescribing Opioids for Pain (WA state, 2015)



http://depts.washington.edu/anesth/education/pain/index.shtml

Provide Resources

Pain, Relaxation, & Mindfulness

- American Chronic Pain Association www.theacpa.org
- American Pain Society www.ampainsoc.org
- Center for Mindfulness in Medicine, Health Care, and Society (www.umassmed.edu/cfm)

Pain Self-Help Books

- Turk, D. C., & Winder, F. (2005). *The Pain Survival Guide: How to Reclaim your Life.* Washington D.C.: American Psychological Association.
- Caudill, M. A., & Benson, J. (2008). *Managing Pain before it Manages You (3rd Ed.).* New York: Guilford Press.
- Gardner-Nix, J., & Kabat-Zinn, J. (2009). *The Mindfulness Solution to Pain: Step-by-Step Techniques for Chronic Pain Management.* Oakland, CA: New Harbinger.
- Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness.* New York: Delta.
- Lorig, K., & Fries, J. (2006). *The Arthritis Helpbook*. Cambridge, MA: Da Capo Press.

Online Self-Management Programs

Examples

Stanford's "Better Choices, Better Health" online chronic disease self-management program (includes chronic pain) can be licensed through http://www.canaryhealth.com/solutions/

Several online self-management programs are at: http://www.painaction.com/

Thank you

ehde@uw.edu

Downtown Seattle from Lake Union. *Photo by Randi Blaisdell*