



PAIN: Living Through It, Living Around It

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Objectives and Disclosures

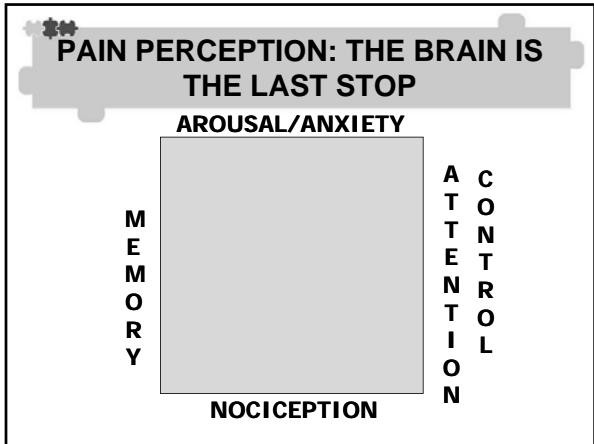
- What is pain?
- The relationship between pain and emotion
- What is a mind-body approach to pain management
- Treatments for pediatric pain
- Complementary and alternative medicine (CAM)
- No disclosures

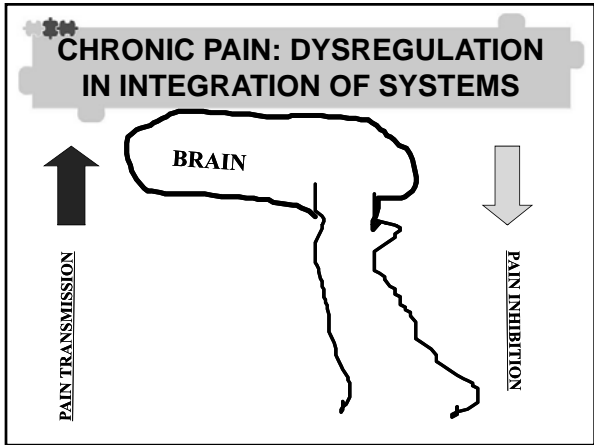


WHAT IS PAIN?

A PROCESS THAT INVOLVES:

- Neural signals from pain to brain (called "pain transmission")
- Neural signals from brain down to pain (called "pain inhibition" or "pain control")
- Many factors can increase or decrease the pain signals
- Pain perception: the experience of pain as the messages reach consciousness





IS CHRONIC PAIN PHYSICAL OR PSYCHOLOGICAL?



ANSWER

- ALL PAIN IS PHYSICAL
- ALL PAIN IS INFLUENCED BY BIOLOGY, THOUGHTS, EMOTIONS, AND SOCIAL-CULTURAL CONTEXT
- DICHOTOMIZING PAIN AS EITHER PHYSICAL OR PSYCHOLOGICAL IS UNHELPFUL AND DOES NOT LEAD TO GOOD TREATMENT



FACTORS AFFECTING PAIN PERCEPTION and EXPRESSION

- SEX
- AGE
- ATTENTIONAL FOCUS
- AROUSAL/ANXIETY
- COGNITIVE LEVEL
- EXPOSURE TO OTHERS' PAIN
- PAST PAIN EXPERIENCE




FACTORS AFFECTING PAIN PERCEPTION and EXPRESSION

- CULTURAL NORMS
- EXPECTATIONS
- CONSEQUENCES
- PERCEPTION OF CONTROL
- RELEVANCE OF PAIN
- COPING ABILITY AND STYLE

***** Pain-Associated Disability Syndrome (PADS)**

DOWNWARD SPIRAL OF INCREASING SYMPTOMS AND DISABILITY



***** Clinical Evaluation**

PAIN

***** DOMAINS OF ASSESSMENT**

- PAIN & PAIN HISTORY
- OTHER PHYSICAL SYMPTOMS
- PHYSICAL FUNCTIONING
- SOCIAL FUNCTIONING
- ACADEMIC/WORK FUNCTIONING
- FAMILY FUNCTIONING

DOMAINS OF ASSESSMENT

- EMOTIONAL & COGNITIVE FUNCTIONING
- COPING STYLE & PROBLEM-SOLVING CAPACITY
- PERCEIVED STRESSORS
- MAJOR LIFE EVENTS
- PAIN CONSEQUENCES

EDUCATION

- Pain is real and biological
- Pain is caused by a sensory system out of balance
- Medical tests are negative because nerve signaling was not examined
- There are reasons for why your child was at risk for pain; there are treatable factors that keep pain signals going
- Mind & body work together to cause pain; mind-body treatment is best way to get rid of pain and increase function

DISTRACTION

- Reduces focus on sensory self
- Can increase self-efficacy
- Can reduce pain behaviors, and pain *cues* to self and others
- Can prevent further disability





Controlled Breathing and Muscle Relaxation

- Increases somatic awareness
- Reduces muscle tension
- Enhances somatic self-efficacy
- Reduces neural arousal





Behavioral Interventions

- To increase independent functioning
- To facilitate effective problem solving
- To decrease “pain habits”: behaviors in the child and family
- To increase restorative sleep & non-impact aerobic exercise
- To meet rehab goals incrementally



Psychotherapy for

- Maladaptive coping
- Anxiety disorders
- Depression
- Social skills deficits
- Social problem-solving impairments
- Communication problems
- Unresolved grief or trauma
- Learning skills: cognitive-behavioral therapy (CBT)



Family Therapy

- To observe and alter family contributors to pain perception
- To participate in development & implementation of behavioral plan
- To address family stress & problems
- To improve family communication
- To provide support & improve family coping



School Interventions

- Assessment
 - Learning disorders
 - Speech/language
 - Social skills/problem solving
- Interventions
 - Vocational rehab
 - Individualized Educational Plan (IEP)
 - Speech/language therapy
 - Social skills/problem-solving training





Physical Therapy

- Especially for:
 - Chronic musculoskeletal pain
 - Complex regional pain syndrome
 - Deconditioning due to inactivity
- Requires specific expertise by PT

Exercise has benefits related to muscle strengthening and functioning and posture, and generalized benefits related to improved body image, body mechanics, somatic self-efficacy, sleep, and mood

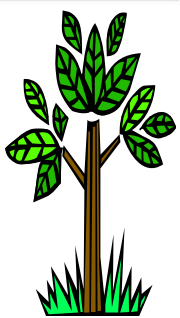
CAM and OTHER PAIN TREATMENTS

- Reiki/Energy Healing
- Muscle Relaxation/Breathing
- Meditation
- Hypnotherapy
- Acupuncture
- Iyengar Yoga
- Physical Therapy
- Biofeedback
- Massage Therapy
- Art Therapy
- Music Therapy



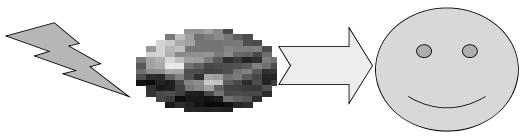
Meditation

- Learning how to be still and present
- Focus on breathing
- Notice thoughts, feelings, and sensations
- Develop a sense of equanimity
- Develop a sense of connectedness with others



ACUPUNCTURE Qi

• USE OF NEEDLES, HEAT, PRESSURE, OR OTHER STIMULATION AT POINTS ALONG THE MERIDIAN TO ACHIEVE FLOW OF ENERGY OR QI





MASSAGE

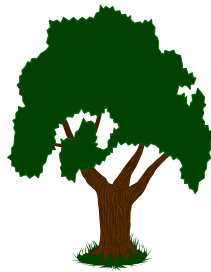


- LIGHT BODY STROKING OR DEEP-TISSUE STROKING
- BODY WORK THAT INCREASES SEROTONIN AND REDUCES CORTISOL
- INCREASES NIGHT-TIME QUIET SLEEP



IYENGAR YOGA

BASED ON METHOD AND PHILOSOPHY OF B.K.S. IYENGAR
 USE OF BODY POSES,
 BREATHING TECHNIQUES,
 AND ATTENTIONAL FOCUS
 TO INCREASE BODY
 AWARENESS AND
 ACHIEVE INNER
 BALANCE





Biofeedback



- Use of computer or other feedback device to assist patient in altering muscle tension, skin temperature or other body states
- Increases body awareness, symptom control, somatic self-efficacy using concrete data

RELAX



RELAXATION METHODS

- PROGRESSIVE MUSCLE RELAXATION
- CONTRACTION OF MUSCLES THEN RELAXATION
- BIOFEEDBACK TO HELP LEARN HOW TO RELAX MUSCLES



BREATHING METHODS

- INHALATION: ENERGIZING ROLE
- EXHALATION: RELAXATION ROLE
- YOGIC BREATHING



HYPNOTHERAPY

WHAT IS HYPNOTHERAPY?

IMAGINATIVE INVOLVEMENT TO....

HYPNOTHERAPY

- Capture attentional focus
- Reduce distress
- Alter sensory experiences
- Change sense of time
- Reframe situation
- Dissociate from the pain
- Increase somatic self-efficacy

HYPNOTHERAPY

Components

- Induction (help dissociate from environment)
- Deepening (enhance the dissociation)
- Dissociation for relaxation or for “symbolic work”
- Post-hypnotic suggestion

HYPNOTHERAPY

Ways of using hypnotherapy

- Favorite place (safe, fun, in control, interesting)
- Central sensory control station (control of sensory signals from body)
- Focal hypnoanesthesia (dissociated body part)
- Enhance sense of mastery and feelings of control



Key Points

- All pain is biological and is influenced by emotions, thoughts and social and cultural factors
- The most effective treatments are mind/body and are aimed at
 - Restoring balance in pain neural systems
 - Increasing physical functioning
 - Increasing quality sleep
 - Reducing pain-related anxiety/arousal



...AND, PAIN HURTS



REFERENCES

- Zeltzer LK, Schlank CB. Conquering your child's chronic pain: a pediatrician's guide to reclaiming a normal childhood. (HarperCollins, 2005).



ChildrensMusicFund.org
