INTEGRATIVE APPROACHES TO REHABILITATION OF CHRONIC PAIN

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LEARNING OBJECTIVES

- Understand the treatment model used by Arrigan Center pain management programs
- Identify the benefits of using a biopsychosocial model within a interdisciplinary approach to treating pain
- Identify treatment approaches that support the improved function of a patient with chronic pain
- Identify strategies for making a comprehensive pain management program referral
**COMPREHENSIVE PAIN MANAGEMENT PROGRAM**

- **Pathway:** Through a court order or treating physician
- **Purpose:** To assist injured workers who have exhausted all appropriate medical treatment options and are unable to return to their functional baseline despite their pain
- **Services include:**
  - PT/OT
  - Psychological counseling
  - Vocational services (when needed)
INTERDISCIPLINARY CHRONIC PAIN MANAGEMENT PROGRAM

- **Pathway:** through a court order
- **Distinction:** the treatment team can make recommendations to integrate outside providers as part of the treatment approach
- **Services that can be integrated:**
  - Massage therapy
  - Acupuncture
  - Chiropractic care
  - Addiction specialists
An unpleasant **sensory and emotional** experience associated with actual or potential tissue damage, or described in terms of such damage…

Pain is always subjective

The International Association for the Study of Pain (1994)
Application of the Biopsychosocial Model and Pain Management
<table>
<thead>
<tr>
<th>Biological Factors</th>
<th>Nature of injury</th>
<th>Socio-demographic factors</th>
<th>Social-contextual factors</th>
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</thead>
<tbody>
<tr>
<td>• Tissues affected</td>
<td>• Type</td>
<td>• Socio-economic status</td>
<td>• Situational and</td>
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<tr>
<td>• Immune response</td>
<td>• Location</td>
<td>• Age</td>
<td>environmental</td>
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<td>• Sleep</td>
<td>• Severity</td>
<td>• Gender</td>
<td>characteristics</td>
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<td>• Nutritional</td>
<td>• History/course</td>
<td>• Race</td>
<td>• Stressors</td>
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<tr>
<td>status</td>
<td>of injury</td>
<td>• Ethnicity</td>
<td>• Support and</td>
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<td>resources</td>
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COPING WITH THE EXPERIENCE OF PAIN

- Need to Belong
- Need for Autonomy
- Need for Justice

PAIN AND SOCIAL STRESS SHARE OVERLAPPING NEURAL PATHWAYS
<table>
<thead>
<tr>
<th>Need to Belong</th>
<th>Need for Autonomy</th>
<th>Need for Justice</th>
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<tbody>
<tr>
<td>exclusion/isolation</td>
<td>helplessness</td>
<td>perceptions of injustice</td>
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<td>stigmatization</td>
<td>dependence</td>
<td>blame</td>
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<td>discrimination</td>
<td>uncontrollability</td>
<td>hostility</td>
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<tr>
<td>invalidation</td>
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PSYCHOLOGICAL APPROACHES AND INTERVENTIONS

GOAL: decrease maladaptive behaviors, beliefs, thought patterns regarding pain

- **Cognitive Behavioral Therapy:**
  - activity pacing
  - problem solving
  - cognitive restructuring
  - behavioral activation

- **Pain Education:** educate on the physiology and modulation of pain

- **Mindfulness:** to react more reflectively than impulsively

- **Relaxation Training**
  - diaphragmatic breathing
  - progressive muscle relaxation
  - guided meditation
  - visualization

**Alternative treatments:**

- EFT – Emotional Freedom Technique
- EMDR – Eye Movement Desensitization and Reprocessing Therapy
SOCIAL INTERVENTIONS AND APPROACHES

- **Pain Behaviors**
  - verbalizations
  - postures
  - gait
  - facial expressions
  - clenching/bracing/guarding
  - wincing
  - use of medical aides (crutches, cane, splint, sling)
- **Socialization**
  - problem solve barriers that lead to lack of socializing through pre-planning
PHYSICAL INTERVENTIONS AND APPROACHES

- Body Mechanics
- Postural Awareness
- Physical Activity Training
  - Work hardening tasks
  - Encouraging home tasks and home programs
- Pacing
  - Education and implement
- Modalities
  - Appropriateness factor
  - Examples
    - Mirror Therapy
    - Instrument Assisted Soft Tissue Mobilization (IATSM)
MIRROR THERAPY WITH CRPS

- Most effective in early stages of Complex Regional Pain Syndrome
- Easily carried over to a home program
- Traditionally used to treat phantom limb pain
- Brain has been shown to prioritize visual input over proprioceptive input
- Theories:
  - Increased attention to the limb
  - Improved ownership of the limb
  - Activation of the mirror neurons system
  - Reduction of sensorimotor incongruence
INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION

- Based of Gua Sha
- analgesia
- neuromuscular facilitation/inhibition
- enhanced tissue healing
- Research shows:
  - Improved nerve conduction (Burke et al 2007)
  - Improved proprioception (Schaefer & Sandry 2012)
THERAPEUTIC USE OF SELF

- “Planned use of his or her personality, insights, perceptions, and judgments as part of the therapeutic process” (Punwar & Peloquin, 2000, p. 285)
- Conscious effort made by every member of the treatment team to optimize their relationship with the patient both as individuals, but as a team as well
- Drives a client-centered approach that allows for interpersonal connection between therapist and patient
  - Ultimately allows for patient to engage
  - Decreases aberrant behaviors
  - Willingness to consider the acceptance of the model being presented
And injured worker is a 54 year old, Spanish speaking, female with a hand injury from operating a machine that crushed her hand. She is shown to be holding her hand in a guarded position. She is rounded forward, body turned away from the therapist. She is speaking very softly, tearful and making minimal eye contact. She states that she feels “useless” that she is unable to provide for her family since her injury. She is using an interpreter but seems to be answering my question before the interpreter has finished interpreting my question.

- Easing anxiety with empathy
- Validating the pain
- Using space and body language
- Self-deprecating humor
63 year old male. Worked as a meat cutter for 22 years. 8 months post injury resulting in left L3/L4 disc protrusion, Grade 1 spondylolisthesis of L4/L5 and L5/S1. Had 12 weeks of physical therapy at another facility and 8 weeks of chiropractic care without pain relief. Had L5/S1 facet injections with minimal benefit. Reported being unable to sit for stand for longer than 30 minutes. At the time of the evaluation, he did not believe that he could perform any aspect of his job. Questionnaires showed catastrophizing of pain and fear of the anticipation of pain. Presented to be moderately anxious about a self-pain management approach. Viewed himself as “severely disabled.”

- Seen for 19 OT sessions and 14 rehabilitation psychology sessions
- CBT for managing stress and anxiety surrounding pain and the progression of function
- Significant use of the “therapeutic use of self” by treatment team
- Postural and core stability training with progression to functional activity training with at home carryover

**Outcome:** Returned to work at the full duty level.
MAKING THE REFERRAL

- When is the right time?
  - when all appropriate medical interventions and testing have been completed and has no afforded pain relief or management to allow for increased function back to baseline.
  - Cost : Benefit
  - They do **NOT** have to be chronic!

- All providers using the same “language”
  - working towards pain management vs pain relief

- Avoiding the “if this doesn’t work then…” conversation

- Important to present the physician as part of the “treatment team”
What would you like to have known about the pain management program before your initial visit for the that would have made the transition to this approach easier?

“I would have like to have had a better understanding of what services the Arrigan Center was capable of providing prior to arriving at my first day of treatment. My only understanding was that I was going to receive physical/occupational therapy treatment. Instead the center provides an inter-disciplinary approach to treatment and a broad range of services available, such as the comprehensive pain management program…Having a better indication of the available programs and services would have allowed me to set goals and expectations prior to the first visit. In the end, the Arrigan Center far exceeded my initial expectations.”

What would you tell a prospective patient for the pain program?

“I would tell prospective patients to prepare themselves by recommending that the understand more about Arrigan Center, specifically the pain program and their approach. Ask questions before your first visit, as it is critical that they understand the full range of services available as a treatment provider. Understanding the services available will allow the patient to maximize their time spent while in treatment at the center. Further advice would be to prepare discussion points in advance of the first visit, such as medication questions, treatment options or other concerns. Additionally, I would let the patient know to be prepared to maximize the therapy by being ready to do the work. Both mentally and physically. They will push you, but in a supportive way….be ready to openly talk to various staff in order to achieve the very best possible.”
Thank you for your time.

QUESTIONS?