FOSTERING UNDERSTANDING & OPTIMIZING MANAGEMENT
OF CHRONIC MUSCULOSKELETAL PAIN
IN MARGINALIZED PATIENT POPULATIONS
NCPTA 2019
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OBJECTIVES
• Understand the systems involved in chronic musculoskeletal pain is more than the tissue injured.
• Understand how social determinants of health are related to CMP development and progression.
• Describe how cultural, historical, and political events may factor in the CMP experience, particularly in populations at risk for marginalization.
• Integrate appropriate screening techniques for social determinants of health and biopsychosocial factors.
• Devise communication techniques to optimize the clinical conversation of pain.

CHRONIC LOW BACK PAIN
A 45-YEAR-OLD UNEMPLOYED CAR MECHANIC REPORTS 7/10 LUMBAR PAIN X 2 YEARS
• Sitting more than 20 minutes increases his pain to 8/10.
• This will improve if he stands and stretches.
• When he tries to lift anything from the floor, he will have immediate low back pain that radiates into his posterior right thigh.
• This pain will not resolve for 20 minutes.
• Sleeping is difficult for him.
• Morning and evenings are the most painful times.

PROFESSIONAL BURNOUT
Physical Therapy Burnout is Destroying Our Profession
• Less time with patients due to productivity constraints
• Leads to ineffective or not fully formed conversations
• Perhaps leads to frustration with complex patients when outcomes are not optimal
HOW WE CAN IMPROVE OUR EFFECTIVENESS OF MANAGING CHRONIC MUSCULOSKELETAL PAIN?

1. CHANGE PERSPECTIVE OF WHAT PAIN IS
2. CHANGE OUR OUTCOMES IN THE CLINIC
3. CHANGE OUR CONVERSATION

CHRONIC PAIN

1. COMPLEX INTERACTION OF PHYSIOLOGICAL, BIOLOGICAL, AND PSYCHOLOGICAL PROCESSES

$560-635 billion healthcare per year

More than 100 million Americans suffering from chronic pain.

CHRONIC PAIN CRISIS

INCREASE IN SICKNESS AND EARLY DEATH

COMORBIDITIES

- Increased risk for current comorbidities (Lamerato 2016)
- Increased risk for future comorbidities (Kadam 2005)

MORTALITY

- Increased suicide risk (Tang 2006)
CHRONIC PAIN IS NOT TIED TO TISSUE HEALING

1) Peripheral nociceptor excitation & sensitization
2) Sensitization of the ipsilateral dorsal horns
3) Sensitization of the contralateral dorsal horns
4) Extra segmental sensitization
5) Supraspinal changes


• Chronic pain increases your chances of developing CV disease, respiratory illness & cancer

Effective increase in age is 6 years

Courtesy Michael O’Hearn

Daly

Courtesy Michael O’Hearn

Pain

Hypertensive prevalence and diastolic blood pressure-related hypoglycemia in individuals reporting chronic pain in a general population. The Tromsø study has reported that the "hypertension lowers the threshold for hypertension" (Journal of Hypertension). The "non-hypertensive" group was divided into those with hypertension and those without hypertension. Chronic pain association with a 22% increased risk of comorbid hypertension even after adjustment for other risk factors. Individuals with chronic pain had higher baseline HR/mean arterial pressure ratios compared to pain-free controls (South et al 2014)

Courtesy Michael O’Hearn
1 in 4 PTs monitor cardiovascular indices

• Most PTs: Monitoring cardiovascular indices was “not their job” and “did not add value” to their treatment plan

• 20% of PTs reported that patients experienced a cardiovascular event with exercise

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**SOCIAL DETERMINANTS OF HEALTH**

PREDICT CHRONIC PAIN DEVELOPMENT
CORRELATED WITH CHRONIC PAIN DEVELOPMENT
WHAT ARE SOCIAL DETERMINANTS OF HEALTH AND HOW DO THEY IMPACT MORTALITY & MORBIDITY?

- The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries.

WHAT ARE SOCIAL DETERMINANTS?
- Poverty; socioeconomic
- Education
- Hunger / Diet
- Race / ethnicity
- Occupation: exposures and experience; unemployment; quality of work
- Aging
- Transportation
- Isolation or marginalization
- Gender relations
- Marital status
- Addictions and health related to food, alcohol, tobacco, and physical activity
- Stress
- Early life adverse childhood events
- Accumulated deficits
- Mental health inequities

PSYCHOLOGICAL WELL BEING & HEALTH BEHAVIORS

PREVENT CHRONIC PAIN DEVELOPMENT

CHRONIC LOW BACK PAIN

A 45 year old unemployed car mechanic reports 7/10 lumbar pain x 2 years. Sitting more than 20 minutes increases his pain to 8/10. This will improve his pain x 10. When he tries to lift anything from the floor, he will have immediate low back pain that radiates into his posterior right thigh. This pain will not resolve for 20 minutes. Sleeping is difficult for him.

His PSFS is 3/10.
- Sitting: 3/10
- Lifting from floor: 3/10
- Sleeping: 3/10
- His goal is to be able to return to work.
HOW MIGHT THIS CHANGE YOUR CONVERSATION?

• He has a waist-to-height of 0.59
• His resting blood pressure is 125/85
• His HR is 75 bpm

HOW MIGHT THIS CHANGE YOUR INTERVENTIONS?

• Pain Self-Efficacy is 2/12. (LOW)
• General Self-Efficacy is 18/24. (HIGH)
• Perceived Stress is 12/16. (HIGH)
• PHQ-4: 4/6 for anxiety and 5/6 for depression.
• Insomnia Severity Index is 22/28 (POOR SLEEP)

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HOW DOES IMPROVED COMMUNICATION SUPPORT THE APTA CODE OF ETHICS?

BEGAN OUR COMMUNICATION WITH COMMUNITY

UNDERSTAND MARGINALIZED POPULATIONS
UNIVERSAL LANGUAGE?  

https://www.samwoolfe.com/2013/06/max-tegmark-universe-is-made-of.html

UNIVERSAL PHENOMENON  
but … an individual experience

PROVIDERS’ BIASES

• Impact prescription decision (Burgess 2008, Burgess 2014, Burgess 2014)
• Influence referral to multi-disciplinary or physical therapy (Hammerstrom 2013)
• Influence patient satisfaction and perceptions of clinicians (Chen 2005, Harding 2005)

HOW WELL DO WE UNDERSTAND OUR PATIENTS’ PAIN?

WHAT ABOUT PHYSICAL THERAPISTS’ PERCEPTIONS?

POOR COMMUNICATION

SOCIAL COMMUNICATION MODEL OF PAIN

WHAT ABOUT PHYSICAL THERAPISTS’ PERCEPTIONS?

Physical therapists’ perception of patients’ pain and its affect on management.

POOR COMMUNICATION

COSTS BUSINESSES $37 BILLION (PER YEAR)

MEDICAL MISTAKES IN POOR COMMUNICATION

Communication failures linked to 1,744 deaths in five years, US malpractice study finds.
COMMON DISTRACTORS IN A CONVERSATION

- Communication narcissism
- Lack of attention
- Short duration between people talking
- Interrupting
- Lack of empathy
- But rely on “Understanding” (or trying to be compassionate)

DIFFERENT COMMUNICATION STRATEGIES

SEVERAL DIFFERENT STYLES

- Cognitive behavior therapy (Brunner 2013, Mariona 2018, Rundell 2010)
- Motivational interviewing (McCrane 2015, Fignatoni 2015)
- Coaching

OVERLAPPING TENANTS

- Rapport
- Active Listening
- Empathy
- Emphasizes patient making decisions based on their values or ideas
**EMPATHY**
- The feeling you understand another’s feelings
- Feel one with their distress

**COMPASSION**
- Feel for another living being
- Sympathetic consciousness

**EMERGING EVIDENCE SUPPORTS EMPATHY TO IMPROVED CLINICAL OUTCOMES**

**EMPATHY VERSUS SYMPATHY**
- [https://www.youtube.com/watch?v=1Evwgs36g9w](https://www.youtube.com/watch?v=1Evwgs36g9w)

**SHARED DECISION-MAKING CAN BE HELPFUL IN MANAGEMENT:**
**PATIENTS AND PROVIDERS WERE MORE ACCURATE**
Event
Pain occurs after lifting something off the ground.

Belief/Thought
"I should be able to lift this. If only I wasn't so out of shape and weak, I would've done better. I'm never going to get better."

Consequence
Emotional and Behavioral
Felt fear, disappointment, and anger.

CBT: ABC Model of Emotion

CBT: GOAL TO INCREASE AWARENESS OF AND MODIFY THOUGHTS

THOUGHT RECORD
* Need to be able to identify the thoughts regarding a situation

Good Technique When ...
* Emotional thoughts are causing maladaptive behavior
* Coping/relaxation skill deficits limit patient

CBT IN PHYSICAL THERAPY

MOTIVATIONAL INTERVIEWING
* “I know I should exercise, but I just don’t have the time.”
* “Experts’ inclination is to direct”
* Tell patient what to do
* Problem solve for the patient.

Good Technique When:
Desire to change behavior is not yet realized because of ambivalence/lack of resolve
REFLECTIVE LISTENING ACTIVITY: PART 1

- Working in pairs – discuss one habit this patient would like to change.
- The clinician tells the patient
  1) three reasons why it is important to change it
  2) how they are going to change it
  3) when they are going to change it

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TWINEL ROADBLOCKS TO LISTENING
(THOMAS GORDON, PH.D.)

1. Ordering, directing, or commanding
2. Warning or threatening
3. Giving advice, making suggestions, or providing solutions
4. Persuading with logic, arguing, or lecturing
5. Moralizing, preaching, or telling clients what they “should” do
6. Disagreeing, judging, criticizing, or blaming
7. Agreeing, approving, or praising
8. Shaming, ridiculing, or labeling
9. Interpreting or analyzing
10. Reassuring, sympathizing, or consoling
11. Questioning or probing
12. Withdrawing, distracting, humoring, or changing the subject

TWO KEY QUESTIONS PRIOR TO ENDING A SESSION

Clinical conversation: Coaching skills...

Clinical conversation: Introduction to coaching skills...

- Being present & non-judgement
- Other-focused listening
- Reflections
  - Simple
  - Complex
  - Double-sided
- Summarizing
- What/how inquiry

Duke Integrative Medicine; Moore, Tschannen-Moran, & Jackson 2015

Clinical conversation: Introduction to the coaching process...

- Establish vision and values
- Assess current health
- Choose a focus
- Explore importance and confidence using a scale
- Create a SMART goal
- Determine next best step

Duke Integrative Medicine; Moore, Tschannen-Moran, & Jackson 2015

ACTIVITY

Brief Action Planning

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Confidence = ?
- Why did you give a ___ and not a lower number?!

Summarize reasons for confidence
- Problem-solving
- Any ideas about what might raise your confidence?

Plan for reinforcement and progress checks
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Gutnick 2014

Duke Integrative Medicine; Moore, Tschannen-Moran, & Jackson 2015
TAKE HOME MESSAGES:

• 1. Change perspective of what pain is
• 2. Change our outcomes in the clinic
• 3. Change our conversation

Pain is complex and multi-system disease process

SDOH, physical measures, and psychological questionnaires are important outcomes to monitor

Clinical conversations can include CBT, motivational interviewing, or coaching to improve self-efficacy and shared decision making.

QUESTIONS?

THANK YOU!