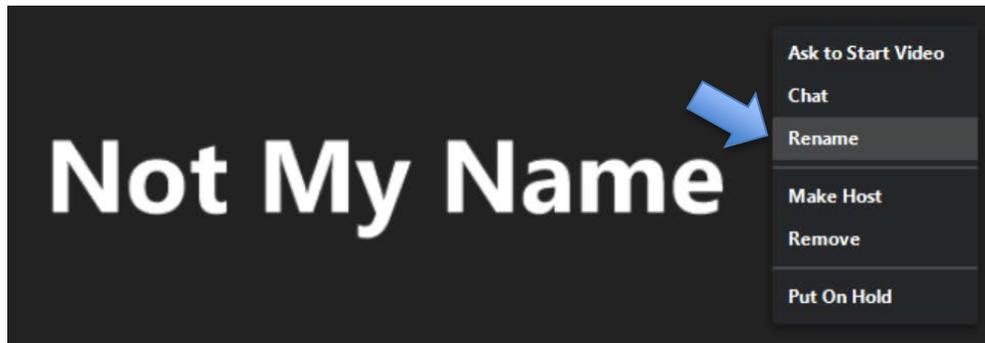




## ECHO Idaho: Opioid Addiction and Treatment Clinic

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## ECHO IDAHO: OPIOID ADDICTION AND TREATMENT

EXERCISE AND CHRONIC PAIN

1/9/2020

JACLYN COOPERRIDER, MD, CAQSM

The speaker has no relevant financial relationship(s) to disclose.

# LEARNING OBJECTIVES

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Defining chronic musculoskeletal pain (CMP)



Approaches to CMP treatment



Exercise as medicine



Writing an exercise prescription for CMP

# DEFINITIONS AND EPIDEMIOLOGY

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- Chronic Musculoskeletal Pain – pain felt in the joints, bones, or tissues of the body persisting more than 3 months
  - Often difficult to identify or reverse primary pathology
  - Secondary Pathologies include persistent pain, fear of movement, pain catastrophizing, and nervous system sensitization
- Affects up to 20% of people in Western Society
- Health economists estimate annual cost of \$635 billion (more than yearly costs for cancer, diabetes, and heart disease)

# CHRONIC PAIN TREATMENT APPROACHES

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## Manual Therapies

Chiropractic, Massage,  
Acupunctur, FDM,  
OMT



## Medications

Topicals, acetaminophen,  
NSAIDs, neuromodulators,  
opioids



## Biopsychosocial approach

Can incorporate  
exercise prescription

# EXERCISE AS MEDICINE

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**Aerobic and resistance exercise can improve function and pain in patients w/ FM, CLBP, and knee OA**

- Aerobic: floor exercises, cycling, walking, aquatic exercise
- Research into Tai Chi, Pilates, Yoga increasing
- Unclear what combination is most effective



**Improvements in function and pain have been shown despite no measurable increases in strength, endurance, or range of motion in some studies.**



**Actual exercise program often implemented by physical therapist**

# KEY COMPONENTS FOR EXERCISE PRESCRIPTION

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 Should target both improved function as well as secondary pathologies

 Initial Assessment

 Explain Pain

 Set expectations

 Choosing Exercise Type

 Determining Supervision

 Graded exposure to exercise

# INITIAL ASSESSMENT

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Initial assessment informs exercise prescription

- OPQRST
- Questionnaires (ex. DRAM, fear avoidance questionnaire, pain self-efficacy questionnaire)
- Handbook of Pain Assessment (Tuck and Melzack, 2011)



Health screening before commencing exercise

- ACSM Physical Activity Readiness Questionnaire (ACSM 1995)
- Exercise stress test indicated? (ACSM 2014)
- Red flags: acute injury/trauma, hx cancer, systemic steroids, drug misuse

# EXPLAIN PAIN

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**Pain is a protective mechanism,  
not a signal of tissue damage**

**Reassure that it is okay to  
exercise with discomfort that  
plateaus and does not increase  
significantly in severity**



**Can use numerical rating scale  
or visual analogue scale to  
assess**

**However, want to avoid  
associating pain with exercise –  
not necessary to do it at every  
session**

# SET EXPECTATIONS

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Pre-program expectations significantly influence outcomes



Focus on quality of life, improvement in function, and decreased impact of pain on ADLs



Remind patients that biological adaptations that occur as pain persists take time to reverse – this is not a quick fix!



Exercise should be TIME-based, not pain-based (use a tolerable vs. non-tolerable measure)

# CHOOSE EXERCISE TYPE

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- Establish baseline activity that does NOT cause pain symptoms
- **Activity Pacing:** Dividing patient's daily activities/exercises into manageable portions that do not exacerbate their symptoms
- Choose exercise modality that patient enjoys
  - Little evidence to support one over another
  - Aerobic: 20-60 min, >2 days/week, >6 weeks
  - Resistance: Engage both painful and non-painful body parts
  - Land-based activities likely superior to water-based activities
- Provide frequent positive reinforcement

# DETERMINE SUPERVISION

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- Supervised exercise promotes adherence
  - Options: one-on-one, group supervision, home exercise program w/ review
- Encourage patients to keep daily/weekly records of exercise
- Ex: Fear avoidant, inactive patient with low pain self-efficacy → higher supervision, graded exposure to fearful activities
- Ex: Active patient w/o fear avoidance or low pain self-efficacy → self-managed aerobic and resistance exercise program

# GRADED EXPOSURE

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**People with CMP respond to lower exercise dosage (as opposed to ACSM guidelines)**

Low to moderate intensity for both aerobic and resistance



**Monitor intensity with Borg 6-20 scale rating of perceived exertion +/- HR**

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## KEY POINTS



Explain pain → protective mechanism (both at commencement and during pain flare-ups)



Individualize type, timing, and supervision



Use lower exercise dosages than general population



Encourage exercise diaries



Frequent reassurance and positive reinforcement

# REFERENCES

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