When pain gets in the way: Overcoming barriers to physical activity

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Disclosures

- Julie Keysor—None
- Lori Schrodt--None
Objectives

- Identify key evidence-based principles of physical activity among people with arthritis and complex comorbidity conditions
- Apply evidence-based principles of physical activity behavior change to begin and sustain the “let’s move” conversation.
- Develop strategies that could be used within individual areas of practice that apply the evidence-based motivational strategies.

Presentations

1) Pain: conditions, types, considerations
2) Exercise barriers and tools for behavior Change
3) Pain and comorbidities: Considerations and evidence-based and evidence-informed approaches
Pain: conditions, types, considerations

Julie Keysor, PT, PhD

XXX,000,000 million older adults reporting chronic (persistent) pain

All ages; both genders; all ethnicities
Prevalent pain conditions in aging

Pain symptoms and meaning
Pain and exercise

What is Arthritis?

The term arthritis is used to describe more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue.

Pain, activity limitation, and participation restriction are common.
Types of Arthritis or Rheumatic Conditions

**Most Common Conditions**
- Osteoarthritis
- Rheumatoid Arthritis
- Fibromyalgia
- Lupus
- Gout

**Others...**
- Psoriatic arthritis
- Ankylosing spondylitis
- Juvenile arthritis
- Myositis

44% older adults with arthritis are inactive vs. 36% older adults without arthritis (consider focusing on pain stats)

13% of older adults with arthritis do resistive exercise

*Shih et al., Am J Prev Med 2006;30(5):385-93*
Got Pain? Goal: Get Moving

- Start low impact activity (5-15 minutes)
- Progress activity: duration and intensity
- Posture and alignment are important!
- Monitor pain with activity
- Pain during or after activity MAY require modification of activity (May be okay if pain is not long lasting)

Aerobic Conditioning

- American College of Sports Medicine Guidelines for Older Adults
  - 30 to 60 minutes per session
  - 50-70% of heart rate reserve (HRR)
    - Low impact activity
  - Short bouts of 10 minutes okay, particularly initially
  - MOVE!
Treatment—Strength Training

• Progressive resistance training
  • American College of Sports Medicine Recommendations for Older Adults
    • 60-80% 1 RM, 8-12 reps, 1-3 sets, with 1-3 min rest between sets.
    • For endurance training, use lighter loads (50-60%) with higher reps (10-15 or more)
  • Need to achieve enough resistance to improve strength and need to progress to optimal strength

Overall Treatment Considerations

• Posture and positioning
• Strengthen tissues without overloading joint
• Pace activities (24-7 approach)
• Respect joint pain
• Teach people how to modify activity if pain is present
Goals for People with Arthritis?

- Engage in gentle range of motion exercise, gentle pool activity, NO strengthening

- Most people with arthritis (that is medically controlled) can engage in some sort of strengthening and aerobic exercise (may need to accommodate)

What are these treatment approaches based on?
Systematic Reviews
Osteoarthritis and Rheumatoid Arthritis

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<thead>
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<th>Outcomes</th>
<th>Effect</th>
<th>Level of Evidence</th>
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<tr>
<td><strong>Aerobic training</strong></td>
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<tr>
<td>Pain</td>
<td>Small-Moderate</td>
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Clinical Practice Guidelines
Knee Osteoarthritis

- Strongly recommended: (ACR 2012 Practice Guidelines; EULAR 2013 Practice Guidelines; OARSI 2014 Practice Guidelines)
  - Aerobic and/or aquatic exercise
  - Resistance exercises
Other approaches—limited evidence of benefit

• Knee bracing
• Orthotics
• Shoes
• Manual therapy

Caution: Red Flags

- Uncontrolled disease activity
- Current Severe Pain
  - Pain non-arthritis joints and tissues
- Balance/functional impairments
- Patient not responding to exercise
RED FLAGS...who could help?

- Primary care
- Rheumatologist
- Physical therapist
- Gerontologist
- Occupational therapist

But what I hear is “I’m in too much pain,” “it’s too hard to exercise.” “It doesn’t help.” “I don’t know how to get started?”

How do I start the conversation to Get Moving!
Tools other than hiding the remote!

The doctor said he needed more activity. So I hide his T.V. remote three times a week.

Exercise barriers and tools for behavior Change
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12 miles north of Boston...44 inches of snow so far...12 more inches on the way