Exercise Interventions to Improve Joint Protection for Individuals with Osteoarthritis

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Osteoarthritis (OA) is a non-systemic musculoskeletal condition that includes the progressive deterioration of articular cartilage and its underlying bone.

Before the age of 50 the prevalence of OA is higher in men than women, however, after the age of 50, it is higher in women.
What are Risk Factors of Osteoarthritis?

- Decreased joint proprioception
- Joint instability
- Obesity
- History of knee pain
- Genetics
- Gender
- Age
<table>
<thead>
<tr>
<th>Effects of Osteoarthritis</th>
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<tbody>
<tr>
<td>Physical disability</td>
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<tr>
<td>Need for assistance while walking</td>
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<tr>
<td>Chronic pain</td>
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<tr>
<td>Fatigue</td>
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<tr>
<td>Need for assistive equipment</td>
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<tr>
<td>Swelling of cartilage</td>
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<tr>
<td>Stiffness</td>
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<td>Decreased ROM</td>
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Interventions for OA

- Exercise program
- Joint protection
- Cognitive-behavioral therapy (CBT)
- Educate the client on what OA is
- Energy conservation
- Diet management
How can CBT Improve OA?

- Cognitive-behavioral therapy (CBT) is an evidence-based psychological approach to self-management that can help people with chronic pain improve psychological and physical functioning and prevent disability.

- It involves not only education but also practice and monitoring of health behaviors, with a focus on physical activity, relaxation, and activity pacing.
Exercising Can Improve OA

Choosing an exercise that is easy on the joints can improve your OA pain, function, mood, and quality of life.

Activities include:

- Biking
- Walking
- Swimming
Other Professions

- **Physical Therapist**: They use various treatments to prevent or reduce joint stiffness and restore muscle strength.

- **Personal Trainer**: Someone that can assist in exercises to prevent joint pain in the patient.

- **Rheumatologist**: Doctors who focus on conditions that affect the joints, muscles, and tissues.

- **Yoga Instructor**: Yoga can help stretch out the joints if they are too tight.
How Can the Interventions Improve Occupational Engagement?

Reducing the pain in the patient can encourage them to participate in daily activities such as exercising, seeing friends and family, and cook.

The interventions I listed can also improve the patients’ quality of life by changing their mood positively as well and decreasing the stress on their body.
Resources

Arthritis Society: https://arthritis.ca/support-education/online-learning

Arthritis Foundation Program: http://www.apta.org/uploadedFiles/APTAorg/Practice_and_Patient_Care/Patient_Care/Arthritis/ArthritisFoundationExerciseProgram.pdf?utm_APTA

Walk With Ease Program: http://www.apta.org/uploadedFiles/APTAorg/Practice_and_Patient_Care/Patient_Care/Arthritis/WalkWithEase.pdf?utm_APTA
References

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- Occupational Therapist–Delivered Cognitive–Behavioral Therapy for Knee Osteoarthritis: A Randomized Pilot Study By: Murphy, Susan L; Janevic, Mary R; Lee, Pearl; Williams, David A. The American Journal of Occupational Therapy; Bethesda Vol. 72, Iss. 5,
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