

Physiotherapy + Knee Osteoarthritis

Facts on how physiotherapists help Albertans be healthy + stay healthy

Osteoarthritis affects 1 in 10 Albertans.¹ The economic burden of arthritis in Canada, including both direct medical and indirect disability costs was an estimated \$6.4 billion in 2008.² In 2005-2006, an average of two physician visits per person in Canada was made for osteoarthritis. Seventy-nine percent of these visits were to primary health care physicians.³



Osteoarthritis facts:

- Osteoarthritis (OA) is a painful condition that can affect many joints, most commonly the hip and knee. Nearly 70% of OA patients report some limitation in mobility, self-care, domestic life, work, or leisure activities.⁴
- Optimal non-surgical care for knee osteoarthritis includes both pharmacological and non-pharmacological treatments.⁵⁻⁷ Non-pharmacological interventions include strengthening, aerobic exercise, activity modification, weight-reduction, education, and use of adaptive mobility devices (e.g. canes, walkers).
- Non-pharmacological treatments are as effective as pharmacological interventions,^{5,6} for improving pain and self-reported outcomes.⁸⁻¹³
- Guidelines recommend patients with knee OA work on muscle strengthening, range of motion, and aerobic exercise.⁶ If performed appropriately, these methods have not been found to cause harm or accelerate progression of OA.⁵
- Despite this, a 2007 study found that fewer than 50% of Canadian physicians recommend their patients try non-pharmacological interventions.¹⁴

How physiotherapists help:

- **Teach specific, appropriate strengthening and aerobic exercises** to reduce pain and increase mobility. Beginning with a generic fitness program may be too vigorous for those with co-morbid chronic conditions including: back pain, high blood pressure, heart disease, mood disorders, anxiety, and asthma.⁵ Physiotherapists can design and adapt suitable exercise programs for the individual's specific needs. Exercise adherence is improved if exercises are individualized, supervised, taught face-to-face, and involve booster follow-up visits.^{13,15}
- **Assess for adaptive mobility devices to reduce joint stress and improve mobility.** Sometimes use of a mobility aid is needed to manage arthritis.⁷
- **Provide education on activity modification and self-management.** Patients with arthritis often avoid exercise or cut out activities.⁶ Patients need reassurance that appropriate exercise and activity is beneficial and will not lead to accelerated degeneration.⁶
- **Provide advice on orthotics or braces.** Braces or orthotics may alter joint-loading but the evidence to support the use of orthotics and braces for knee OA is weak.¹⁰ Physiotherapists can assess for knee laxity or altered biomechanics and, after taking into account the patient's activity level, determine if bracing or orthotics is a worthwhile option.
- **Communicate with the primary health care physician** to ensure better coordination of care, and alignment of goals for pharmacological and non-pharmacological interventions.



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Key References

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