

## OSTEOARTHRITIS: PHYSIOTHERAPY

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Osteoarthritis (OA) can be a very debilitating condition. It is often characterized by joint pain, swelling, weakness around the affected joint, and a lack of flexibility and balance. These impairments may lead to weight gain, reduced mobility and poor quality of life. A number of avenues can be taken to combat the effects of OA. The purpose of this handout is to address the beneficial effects of physiotherapy in treating OA.

Physiotherapists are trained to treat injuries and diseases that affect the muscles, joints and bones of the body. They have knowledge about how the joints, tendons, muscles and other associated structures relate to one another and how they function within the body. Physiotherapists understand why the body can become injured and how to train the muscles, bones and joints to function more effectively. OA can affect each individual differently, and it is important to ask the physiotherapist many questions about the specific joint(s) that may be affected by OA.

A physiotherapist will discuss your medical history and perform a thorough physical examination. He/she will assess joint mobility, flexibility, strength, functional strength and pain, swelling and functional limitations and disabilities (i.e., unable to climb stairs, unable to run/walk) associated with the condition. With the physiotherapist's understanding of OA and your specific history, he/she is then equipped to design the appropriate treatment program for you.

Some of the goals of physiotherapy in treating OA are:

- Educate the client regarding the OA process
- Educate the client regarding the dos and don'ts of exercise and appropriate modifications of daily activities
- Prevent and minimize joint impairments (pain, swelling, decreased strength and flexibility)
- Prevent and minimize functional limitations (squatting and stair climbing)

- Provide an appropriate strengthening and aerobic exercise program (walking/swimming etc.)

The physiotherapist has a number of tools at his/her disposal to combat the effects of OA. Some of these tools are:

- Joint mobilizations/manipulations – to improve lubrication and mobility at the affected joint
- Knowledge of appropriate strengthening and flexibility exercises
- Knowledge of appropriate functional strengthening exercises
- Education regarding the application of ice and heat
- Thermal and electrical agents to treat pain and swelling (ultrasound, interferential therapy)
- Acupuncture to reduce pain and swelling
- Education regarding exercises/activities to avoid which will aggravate joints affected by OA (**Note:** some exercises can actually worsen OA. It is important to review your program with a registered health professional)

Studies have shown that physiotherapy, either as an individually delivered treatment or in a small group format, is an effective intervention for patients with knee OA.

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**Michelle Bogias, BPE, BHSc(PT)**, is a registered physiotherapist and certified pilates instructor who has developed her interest in sports physiotherapy through her work as a physiotherapist in KW and Cambridge since 1996. Since 1996 she has gained extensive post graduate training in orthopaedics and also practices acupuncture. Michelle is a certified pilates instructor (*Stott Pilates*) and teaches pilates at GRSM and in the community.