Exercise for Osteoarthritis of the Knees

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Patient Education: 
Exercise for Osteoarthritis of the Knees

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FAMILY MEDICINE CLERKSHIP: MILTON FAMILY PRACTICE (MILTON, VT)
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PROJECT MENTORS:
DR. DAVID LITTLE & DR. KIM HAGEMAN, MILTON FAMILY PRACTICE
Problem

A family physician spends much of her or his day educating patients about managing chronic disease. Motivational interviewing about diet and exercise is challenging and takes time, but weight loss may be the single most effective treatment for a number of chronic diseases, so it is time well spent. During my month at Milton Family Practice, I encountered several patients who needed to lose weight for various reasons, but their joint pain was a major barrier to exercise. Many patients view arthritis as inevitable, or damage that has already been done. Too often, patients remain sedentary because they fear that exercise will increase their joint pain. Education about the effectiveness of weight loss and exercise in the treatment of arthritis may be a key factor in a patient’s decision to start exercising.
Public health costs of arthritis

• Arthritis is the leading cause of disability in the U.S.

• In 2003, the total direct (i.e., medical) cost of arthritis and other rheumatic conditions in the U.S. was $80.8 billion. The total indirect (i.e., lost wages) cost was $47 billion. The combined cost of arthritis in that year amounted to 1.3% of the total U.S. GDP.

• Arthritis and other rheumatic conditions affect 46 million adults in the U.S. That number is expected to reach 67 million by 2030, which includes 25 million adults who will be affected by arthritis-attributable activity limitations.

• In terms of median age, Vermont is the second oldest state in the country. In 2013, 28% of adult Vermonters reported having arthritis. That is higher than the national average of 25%.


Community Perspectives

**Kym Duchesneau** is the Recreation Coordinator for the Town of Milton Recreation Department. The department offers fitness programming at reasonable rates for Milton residents. A weekly Zumba class is offered several times per year in 6-week sessions. A 6-week “Ladies Learn to Golf” course was offered this year for $35. During summer months, however, programming is focused more on kids. Kym notes that there are few year-round, regular fitness offerings through the rec department, and states that, “a pool would be wonderful.”

**Joe Rutherford** is a Physical Therapist at Long Trail PT in Milton. He is well-known for being patient and upbeat with older, more sedentary patients who may need extra motivation and coaching. He likes to remain available to his patients after their course of treatment is over to help them maintain a wellness routine. He notes that exercising with joint pain will “look like an ideal stock market. Sometimes the exercise will temporarily increase pain and sometimes it will feel good, but the overall trend will be a positive one.”
Intervention and Methodology

• I created a brief, easy-to-read article entitled “Frequently Asked Questions about Chronic Knee Pain due to Osteoarthritis.”

• I published this article both as a PDF and as a SmartPhrase in the UVM Medical Center PRISM system under the code .ARTHRITISANDEXERCISE.

• I emailed the providers at Milton Family Practice informing them about the project and the SmartPhrase. I cited some evidence about the effectiveness of patient education on the topics of arthritis and weight loss and encouraged them to use the article as an educational tool with their patients.
Results

My proposal for measuring results would be to survey Milton Family Practice providers in six months and ask them how often they used the SmartPhrase and whether it led to more patient education on arthritis and weight loss than they otherwise would have done. I would also ask how many of these patients began a regular exercise practice.
Limitations

1) My intervention relies on other providers to implement exercise and weight loss education with arthritis patients. The patient-provider conversation that accompanies the use of the SmartPhrase will play a significant role in whether or not patients decide to start exercising. For that reason, it is not a standardized intervention.

2) Swimming and biking, the two most highly recommended forms of aerobic exercise for arthritis patients, are not easily accessible to Milton patients. Biking requires equipment, and for some, it will require a gym membership. Swimming requires a pool, and preferably one that is indoor and available year-round. The nearest indoor pool is located a 15-minute drive from Milton. Neither option is available without financial cost to the patient.
Future interventions

I would like to lower barriers to regular joint-friendly exercise for patients. This could include arranging low-cost or free access to local pools or gyms. It could also involve arranging organized exercise activities specifically for Milton Family Practice patients through the Community Health Team.


