



Name of project: Building Better Bones with Exercise (B3E)

Research area: Exercise for osteoporosis

Overview of the project:

B3E is a study designed to test the feasibility of a randomized controlled trial of home exercise in women with vertebral fractures. The project is coordinated by the University of Waterloo, Canada. Frances Batchelor and Sue Williams are providing skills related to individually-tailored exercise prescription to participants recruited through Broadmeadows Health Service and Royal Melbourne Hospital. Recruitment is continuing until June 2015.

Why is this project important?:

Research on the efficacy and safety of exercise for people with osteoporotic fractures is scarce. A study to inform clinical practice for physiotherapists who prescribe exercises for people with vertebral fractures is needed to provide evidence or guidelines on the risks and benefits of exercise programs. The important question of whether exercise does more good than harm for people with vertebral fractures will be answered by this randomised controlled trial.

Key questions that the research is trying to answer:

- The feasibility and viability (including recruitment, retention and adherence to exercise) of an exercise trial in women with vertebral fractures will be evaluated.
- The effects of a home exercise program on other measures (including physical function, posture, and falls, quality of life, pain, fall self-efficacy, intervention cost, fractures, and adverse events) will also be evaluated.

Collaborating Partners:

University of Waterloo, Canada with University of Western Ontario, University Health Network, Toronto; McMaster University, University of Melbourne, University of British Columbia

Funding:

Canadian Institutes of Health Research (CIHR)

Lead NARI researcher: Frances Batchelor and Sue Williams

This multicenter randomized controlled trial (RCT) pilot study will determine whether exercise can reduce incident fractures compared with no intervention among women aged 65 years with a vertebral fracture and investigate the feasibility of recruitment, retention, and adherence to exercise for the trial.

One hundred and sixty women aged 65 years with vertebral fracture participants will be recruited at five Canadian sites (1 community hospital partnered with an academic center and 4 academic hospitals or centres affiliated with an academic center) and 2 Australian centres (1 academic hospital and 1 centre for community primary care, geriatric, and rehabilitation services).

Participants will be randomised to either an exercise or an attentional control group.

The Build Better Bones With Exercise (B3E) intervention includes exercise and behavioural counseling, delivered by a physiotherapist at 6 home visits over 8 months, and monthly phone calls; participants are to exercise 3 times weekly. Controls will receive equal attention.