Novel training for patients with osteoporosis

RECRUITMENT BOOKLET

by Eléa Thuilier, Dr. Attracta Brennan, Prof. John Carey, Dr. Bryan Whelan, Dr. John Dingliana, and Ms. Mary Dempsey

RECRUITMENT CHECKLIST

- ☐ The patient meets the recruitment criteria
- ☐ The patient gets information on the study
- ☐ The patient is interested in taking part in the study
- ☐ The patient is asked if they are available to come back for a baseline assessment either that week or the following week

If the patient knows that they want and can participate in the study over the summer, then

- ☐ The patient signs the consent form

If the patient is interested but needs more time (1-2 days) to make a decision, then

- ☐ Ask the patient to come back with the signed consent form for the baseline assessment

CHECKLIST

RECRUITMENT CRITERIA

- Patients aged ≥60 years
- T-score ≤-2.5 at the hip or spine
- DXA scan within the past 24 months
- No fractures in the past 24 months
- Generally healthy/well otherwise
- Not already engaging in a regular exercise programme
- Able to commute to Galway University Hospital for assessment and training
- Able to commit to a half hour/week, twice a week for six continuous weeks

THE STUDY

"Improve balance, muscle strength and confidence using a novel technological rehabilitation approach for patients with Osteoporosis: a pilot study"

1

What is the study about ?

Our study proposes a novel technological exercise programme for patients with osteoporosis. We want to see whether this approach improves; balance, muscle strength, and flexibility while reducing risk of falls.

2

Who worked on it?

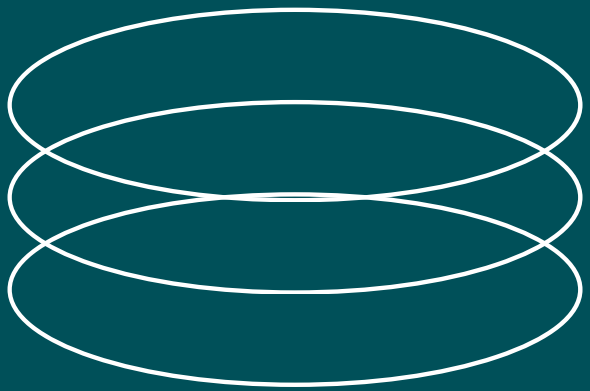
The exercises have been approved by a chartered physiotherapist (Mr. Shane Biggins) and two Rheumatologists (Prof. John J. Carey and Dr. Bryan Whelan). Additionally, these exercises are in compliance with HSE guidelines regarding physical therapy for patients with Osteoporosis.

3

When?

The study will take place mid July to mid September 2024.

Participants will be asked to engage with the exercises for 30 minutes, twice a week, over a 6 week period.



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Where?

The study will take place at the Clinical Trials Institute, UCHG.

Participants will have access to a room for each session.

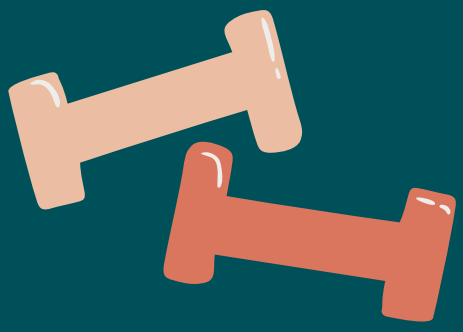
WHAT WILL THE PARTICIPANTS HAVE TO DO?

The participant will have to participate in :

- Multiple assessments of bone, balance, flexibility and muscle strength.
- An intense 7-weeks programme of exercise where they attend for two 30minutes sessions/week for 6 weeks.
- A 6-month reassessment.

The 7-week programme of exercise includes exercises such as:

- Sit to stand
- Squat
- Arm raise
- Step up
- Opposite arm and leg lift



WHY PARTICIPATE?

This study aims to evaluate the effect of our innovative training in comparison to traditional training. As such, this study might have an impact on the participants' physical abilities (i.e., balance, flexibility, muscle strength) and engagement with physical training.

THE FIVE TRADITIONAL EXERCISES

1. **Squat**

Muscle strength & Flexibility

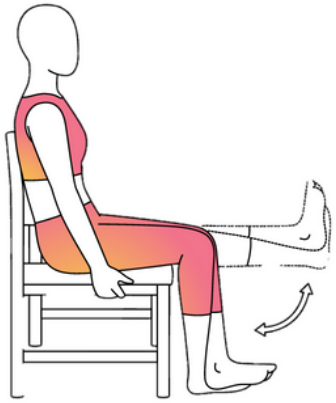
2. Sit to stand

Muscle strength & Balance

3. Arm raises

Flexibility

4. Opposite arm and leg lift



Muscle strength & Flexibility

5. Step Up

Muscle strength & Balance

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