AQUA STEPS: Aquatic exercise therapy for falls prevention in older adults

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INTRODUCTION

One-third of people aged ≥65 years fall at least once a year. Land exercise reduces falls and fallers. Aquatic exercise has additional benefits and may also reduce falls, but evidence is sparse. We:

1. Designed a new aquatic exercise intervention for falls prevention in older adults ('Aqua Steps')
2. Assessed intervention feasibility and explored preliminary evidence on its effectiveness

METHODS

- Non-randomised feasibility study
- Created Aqua Steps programme through research, PPI and consultations
- Two groups (N=101), aquatic (Aqua Steps) and land (Steady Steps)
- 16-week intervention (60 mins supervised exercise, education & optional home exercises)
- 6-month follow-up

Take-home messages:

1. Aqua Steps is popular, enjoyable & safe
2. Strong evidence that Aqua Steps:
   - Reduces falls & fallers
   - Improves function, strength & balance

RESULTS & CONCLUSIONS

Primary Outcomes:

- Fast recruitment (c. 1 month)
- 88% completed, with 90% average adherence
- No severe adverse events due to intervention
- Very high acceptability

Key Secondary Outcomes:

- Reduced falls (38%), fallers (36%) and frequent fallers (58%)
- Improved function, leg and grip strength, falls efficacy and balance confidence

Also, worth noting:

- Improvements were maintained or increased further at 6-month follow up
- Aqua group had more improvements and of higher magnitude compared to land group
- Findings must now be confirmed in follow-up large-scale RCT and implementation study. Contact us if interested in getting involved!

Video of project background and participant testimonials:

Aqua Steps webpages:

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