



# Study Protocol: An evidence-based physical exercise for people living with a dementia in nursing homes

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# Where I come from





# Introduction

- An estimated **35.6 million** individuals live with a dementia
- 7.7 million ***new cases*** each year
- Incidence/prevalence of dementia projected to ***double*** every 20 years
- 30% of individuals with a dementia live in nursing homes
- Dementia remains a “***totally neglected issue***” compared to other health issue





# Background

- Treatment focus:
  - **Optimisation** of cognition, physical health and well-being
  - **Identify and treat** behavioural and psychological symptoms
- Non-pharmacological therapies:
  - Recommended **first approach** in best practice guidelines
  - Help **manage** and **possibly delay** the progression of dementia





# Physical Exercise

Systematic review: Effect of physical exercise on health and well being of individuals living with a dementia in nursing homes

- **Positive** effect on cognition, agitation, mood, mobility and functional ability
- **Multimodal** approach most beneficial
- Further **high quality** studies required
- Optimum parameters **not** determined yet





# Aim and Objectives

## Aim

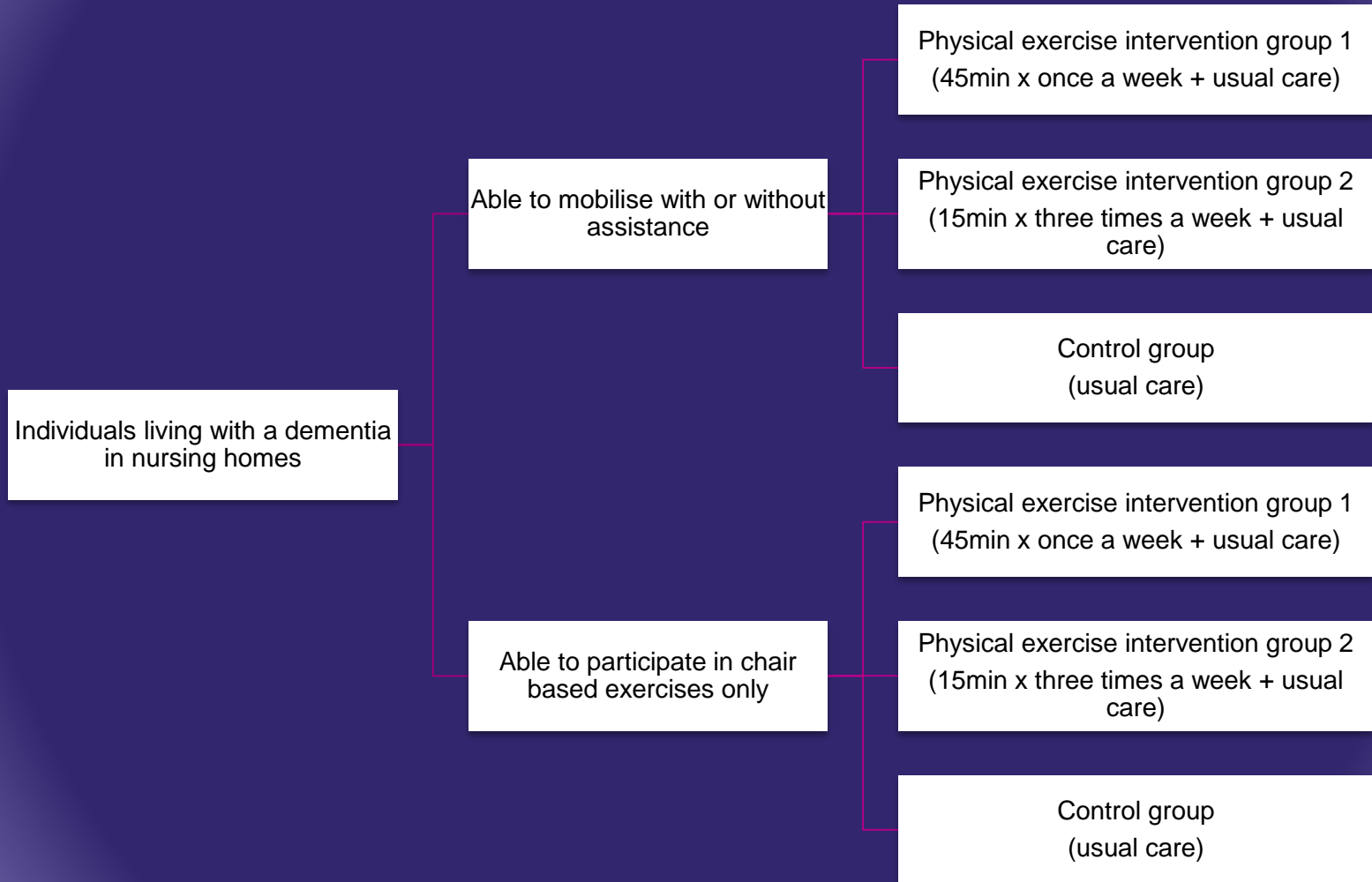
- Provide a ***detailed*** account of a physical exercise protocol for individuals living with a dementia in nursing homes

## Objectives

- Implement a ***Physiotherapist-led*** physical exercise intervention
- Measure ***agitation*** and ***physical performance*** levels



# Randomised Controlled Trial



# Study Participants



- **Individuals living with a dementia in nursing homes**
- **Family members of an individual living with a dementia in nursing homes**
- **Nursing homes staff members**

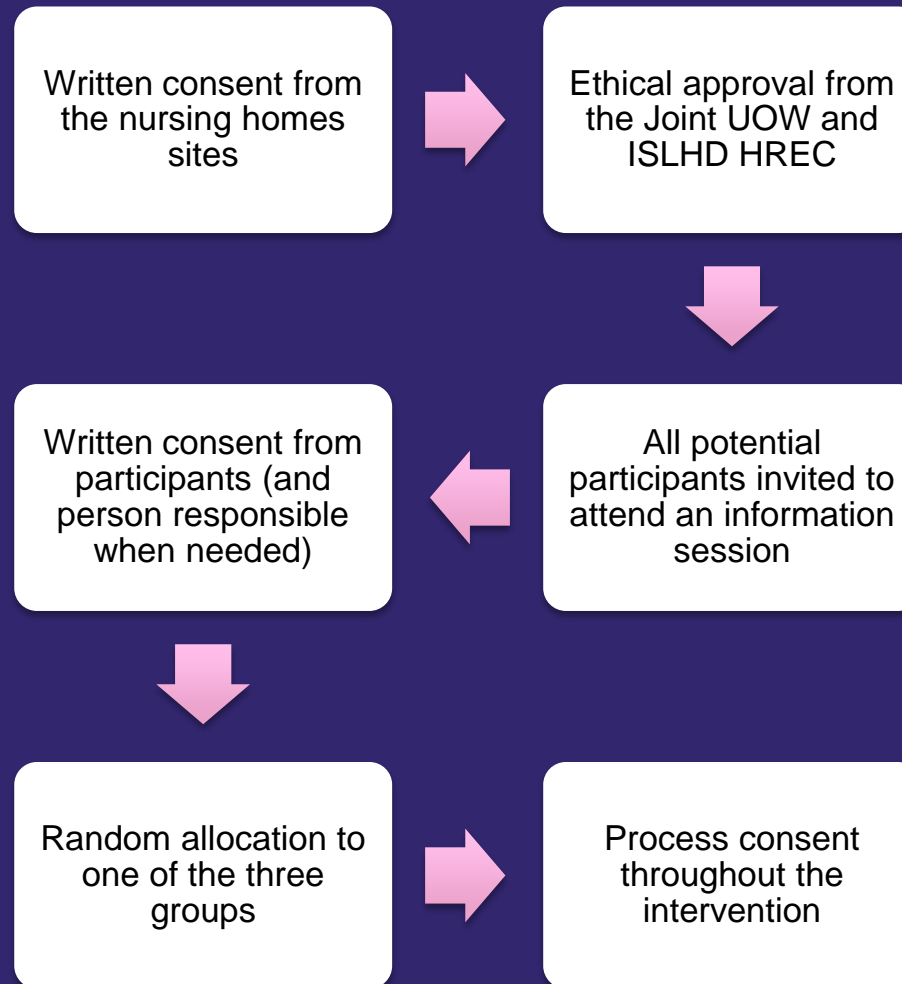




# Study Setting



# Recruitment Procedure



# Study Intervention



## Physical exercise intervention

- Two groups:
  - 45 minutes, 1x week
  - 15 minutes, 3x week
- Conducted by Physiotherapist
- Exercises that targeted:
  - Strength
  - Balance
  - Endurance
  - Flexibility
- + usual care

## Control group

- Usual care and activities provided at each site
- Conducted by Lifestyle and recreation officers, care staff and volunteers
- Activities such as:
  - Seated exercise class
  - Carpet bowls
  - ‘Armchair’ activities



# Data Collection



## Primary outcome measure

- Cohen-Mansfield Agitation Inventory
- Measures level of agitation
- Collected by nursing home staff

## Secondary outcome measures

- Physical performance outcome measures
- Interviews with nursing home staff and family of individuals living with a dementia
- Demographic details of all participants





# Data Analysis

- Descriptive and inferential statistics
  - Chi-square test, Fisher's exact test, logistic regression, t-test and ANOVA
- Content analysis
- ITT analysis = strengthen results





# Discussion

- Considered the effect of a ***physical exercise*** intervention on ***agitation*** and ***physical performance***
- Compared altered ***duration*** and ***frequency***
- ***Strengths***
  - Evidence-based
  - Feasible
  - Used a multimodal approach





# Conclusion

- Implementation of *specific* activities suitable for individuals living with a dementia in nursing homes
- *Evidence-based*
- Easily *replicable* in similar settings
- Can help improve *quality of life*



# Funding & References



- SMAH Research provided funding to attend this conference.
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# Thank you for listening



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