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Effects of physical activity on health and well-being of individuals living with a dementia in residential accommodation: a systematic review

Lindsey Brett  
*University of Wollongong, lkb267@uowmail.edu.au*

Victoria Traynor  
*University of Wollongong, vtraynor@uow.edu.au*

Paul J. Stapley  
*University of Wollongong, pstapley@uow.edu.au*

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Abstract

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Effects of Physical Activity on Health and Well-being of Individuals Living with a Dementia in Residential Accommodation: A Systematic Review

Lindsey Brett¹, Associate Professor Victoria Traynor¹ & Dr Paul Stapley¹
¹ University of Wollongong
Contact for further details: lkb267@uowmail.edu.au

Search
• Several databases searched
• RCTs, English language, 2004-2014

Method
• PRISMA Statement
• Joanna Briggs Institute Critical Appraisal Tool
• (Max score of 10, cut-off score was 5 (mean minus 1 Standard Deviation))

Review
• 1371 studies retrieved
• 16 studies included
• All studies included individuals living with a dementia in residential accommodation

Physical Activity Significantly Effected:
- Cognition
- Mood
- Mobility
- Unmet Needs
- Agitation
- Depression
- Functional Ability
- Balance

Key Points
• Emerging evidence suggests that physical activity benefits individuals living with a dementia in residential accommodation.
• Studies that used multimodal approaches showed more benefit compared to walking alone.

Future Implications
• Further research, for longer periods, with larger sample sizes and of high methodological quality are required to help support the current evidence.
• There is a need to focus on determining the optimum parameters of physical activities to help guide the implementation of physical activity programmes in residential accommodation for individuals with a dementia.
• The results of this systematic review will influence a PhD study which will focus on a multimodal activity intervention for individuals living with a dementia in residential accommodation.

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Background

Physical activity has many benefits for older people but there is limited good quality evidence evaluating the benefits for individuals with a dementia, in particular those living in residential accommodation (Forbes et al. 2013).

Aim

The aim of this study was to evaluate evidence about the effect of physical activity on health outcomes for individuals living with a dementia in residential accommodation.

Method

The studies reviewed were retrieved from searching a range of academic databases and evaluated using Joanna Briggs Institute critical appraisal tools.

Findings

A total of research 20 studies were retrieved and critically reviewed. The quality of studies varied widely, including the methods, type of intervention and outcome measures used. Many studies were multi-component exercise programs, though the actual activities and parameters of each program varied greatly. Outcome measures most commonly considered were cognition (n=13), physical ability (n=8), functional ability (n=5) and/or mood (n=5). There were positive effects associated with the uptake of physical activity by individuals living with a dementia in residential accommodation, such as improvement in physical ability (6m walking speed: 0.33 to 0.65 m/sec in two studies), functional ability (Barthel Index: 34 to 42 in one study) and cognitive ability (Clock Drawing Test: 3.5 to 4.1 in one study). Limitations of the studies included small sample size, short duration and lack of detail about the study design.

Conclusion

Further research is required to improve the quality of study design and provide evidence to support and enhance the current findings to enable professionals working in this area to implement successful physical activity programs. The results from this literature review are informing the physical activity intervention implemented and evaluated as part of a PhD study undertaken by the first author for individuals with a dementia in residential accommodation.
Abstract of a poster presentation at the AAG National Conference

References: