



Promoting Activity, Independence and Stability in Early Dementia (PrAISED): Feasibility study

Harwood RH^{1,3}, van der Wardt V², Goldberg SE¹, Masud T³, Logan P², Booth V², Burgon C¹, Bajwa R².

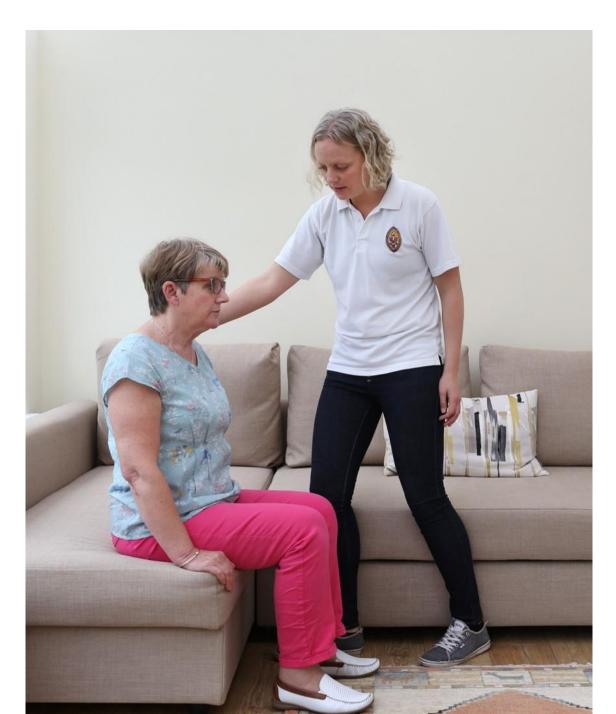
¹Health Sciences, ²Rehabilitation and Ageing, University of Nottingham; ³Nottingham University Hospitals NHS Trust.

Introduction

People with mild dementia and Mild Cognitive Impairment are at high risk functional deterioration. We developed an exercise-based therapy intervention aiming to promote safe activity and reduce risk of falling.

Method

We conducted a randomised feasibility trial, to test intervention delivery in practice and to prepare for a definitive trial. Sixty participants were recruited from Memory Clinics across two sites. Three randomisation arms compared intervention with high level supervision (50 professional visits), moderate supervision (nine visits), and control. We collected health status data at baseline and follow-up by interview with participants and family carers, and ascertained falls by diary.







Photographs funded by the Alzheimer's Society, UK (grant number 206) on behalf of the Healthcare Management Trust. Consent for display granted.

Intervention Core Principles 1. Physical activity for 150 minutes per work

- 1. Physical activity for 150 minutes per week
- 2. Activities are functional and active
- 3. Intervention promotes independence
- 4. Encourage positive risk-taking
- 5. Enable community or environmental access See our Poster P-609

Results

- Recruited to schedule
- Median age 76y (range 65-91)
- Median sMMSE 26/30 (range 15-30)
- 49 (82%) followed-up (1 died later)
- 9 withdrew (1 died), 2 lost
- 3 moved to care homes
- 81% scheduled therapy sessions delivered
- 88% falls and activity calendars returned
- 19 reported adverse events, none related to intervention
- 80% researcher unintentionally unblinded.

Health status outcomes

DAD Score Control 14 76 58 -18 Deterioration Disability in activities of daily living Moderate 15 83 66 -17 Deterioration Berg Balance Scale Control 11 49 43 -6.8 Deterioration Assessed balance Moderate 13 52 52 -0.5 Deterioration High 13 50 50 0.1 Improvement Timed Up and Go Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQoL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement	Measure	Group	N	Baseline	Follow-up	Difference	Interpretation
Disability in activities of daily living Moderate 15 83 66 -17 Deterioration Berg Balance Scale Assessed balance Control 11 49 43 -6.8 Deterioration Assessed balance Moderate 13 52 52 -0.5 Deterioration High 13 50 50 0.1 Improvement Timed Up and Go Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQoL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement				Mean	Mean		
of daily living High 15 76 68 -8 Deterioration Berg Balance Scale Assessed balance Control 11 49 43 -6.8 Deterioration Assessed balance Moderate 13 52 52 -0.5 Deterioration High 13 50 50 0.1 Improvement Timed Up and Go Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQOL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement DEMQOL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	DAD Score	Control	14	76	58	-18	Deterioration
Berg Balance Scale Control 11 49 43 -6.8 Deterioration Assessed balance Moderate 13 52 52 -0.5 Deterioration High 13 50 50 0.1 Improvement Timed Up and Go Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQOL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement DEMQOL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	Disability in activities	Moderate	15	83	66	-17	Deterioration
Assessed balance Moderate High 13 52 52 -0.5 Deterioration Timed Up and Go Test of mobility Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQoL Quality of life Moderate 14 88 91 2.9 Improvement High 17 86 86 0.2 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	of daily living	High	15	76	68	-8	Deterioration
High 13 50 50 0.1 Improvement	Berg Balance Scale	Control	11	49	43	-6.8	Deterioration
Timed Up and Go Control 14 18.7s 25.3 6.6 Deterioration Test of mobility Moderate 13 12.2s 13.2 1.1 Deterioration High 15 16.5s 15.2 -1.3 Improvement DEMQoL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	Assessed balance	Moderate	13	52	52	-0.5	Deterioration
Test of mobility Moderate High 13 12.2s 13.2 1.1 Deterioration Improvement DEMQoL Quality of life Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement High 17 86 86 0.2 Improvement DEMQoL Proxy Quality of life Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement		High	13	50	50	0.1	Improvement
DEMQoL Control 13 85 86 0.8 Improvement Quality of life Moderate 14 88 91 2.9 Improvement High 17 86 86 0.2 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	Timed Up and Go	Control	14	18.7s	25.3	6.6	Deterioration
DEMQoL Quality of life Control 13 85 86 0.8 Improvement High 14 88 91 2.9 Improvement High 17 86 86 0.2 Improvement DEMQoL Proxy Quality of life Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	Test of mobility	Moderate	13	12.2s	13.2	1.1	Deterioration
Quality of lifeModerate1488912.9ImprovementHigh1786860.2ImprovementDEMQoL Proxy Quality of lifeControl1591920.9ImprovementQuality of lifeModerate15981012.5Improvement		High	15	16.5s	15.2	-1.3	Improvement
High 17 86 86 0.2 Improvement DEMQoL Proxy Control 15 91 92 0.9 Improvement Quality of life Moderate 15 98 101 2.5 Improvement	DEMQoL	Control	13	85	86	0.8	Improvement
DEMQoL Proxy Quality of lifeControl Moderate1591920.9Improvement20.91012.5101	Quality of life	Moderate	14	88	91	2.9	Improvement
Quality of lifeModerate15981012.5Improvement		High	17	86	86	0.2	Improvement
	DEMQoL Proxy	Control	15	91	92	0.9	Improvement
High 16 91 94 2.2 Improvement	Quality of life	Moderate	15	98	101	2.5	Improvement
		High	16	91	94	2.2	Improvement

Discussion

We successfully recruited participants, delivered the intervention and collected data. The intervention resulted in improved balance, activities of daily living and physical activity, in underpowered comparisons, with greater benefits associated with higher levels of supervision. A full-scale multi-centred randomised controlled trial commenced in September 2018.

This poster presents independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research Programme (Reference Number RP-PG-0614-20007). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

Email: rowan.harwood@nottingham.ac.uk





