

IMPACTS OF A HOME-BASED LIFESTYLE INTEGRATED FUNCTIONAL EXERCISE FOR PEOPLE WITH DEMENTIA ON BALANCE

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1. Objectives

Balance impairment is a common risk factor for falls in people with dementia. This study explored the impact of the Lifestyle Integrated Functional Exercise for People with Dementia programme (LiFE4D) on balance.

2. Methods

An exploratory study was conducted with 6 participants with dementia living at home (5(83.3%) female, 82.5 [71-93] years old, Addenbrooke's Cognitive Examination-III 14.5 [0-79] points). Participants received an individualised home-based programme to promote the engagement of physical activity in their everyday tasks. Face-to-face contact with the health professional was progressively reduced at the second month onwards and was gradually, replaced by the caregivers' involvement. Balance was assessed at baseline, during (1 and 2 months) and after (3 months) the programme with the Brief Balance Evaluation System Test (Brief-BESTest). Friedman test with post hoc test were performed ($p \leq 0.05$).

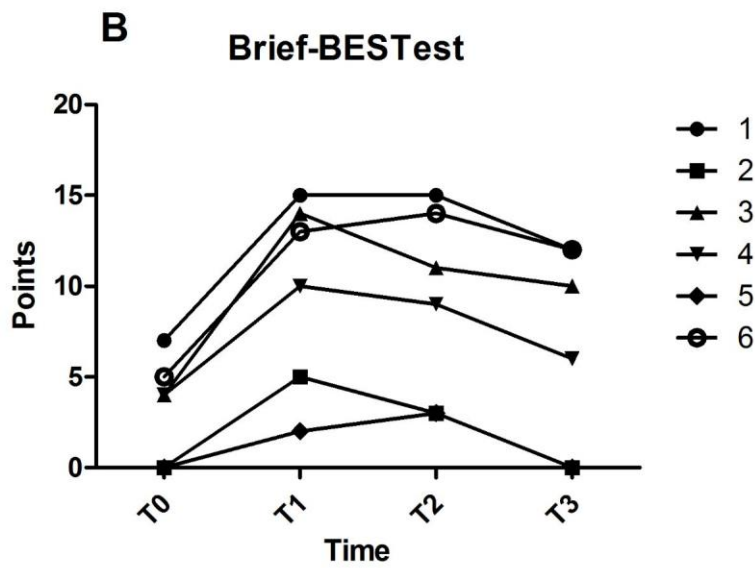
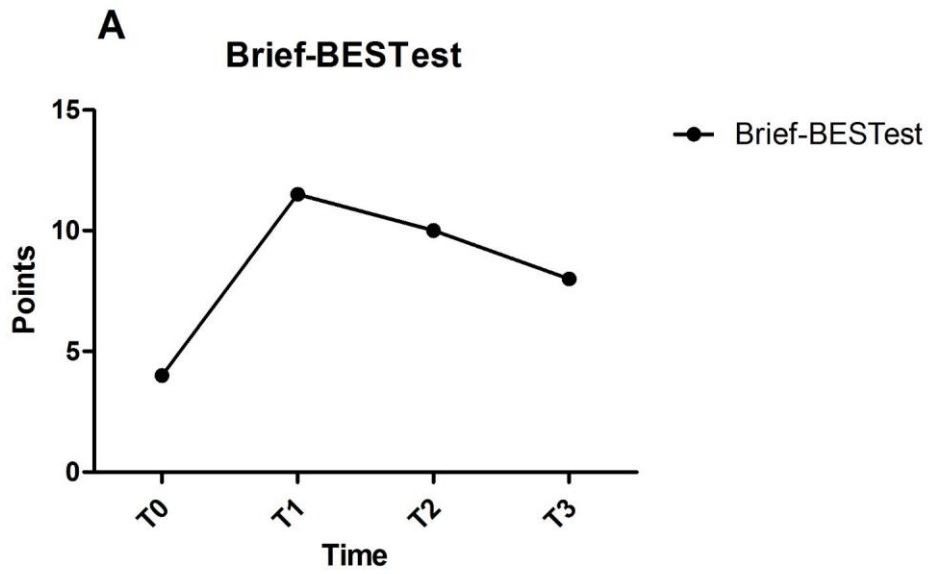
3. Results

No statistically significant results were found however, analysing each participant results, a trend for balance improvement was observed. Most participants seemed to improve balance after the first month but maintained or declined that result after the second and third months (Figure 1).

4. Conclusion

The LiFE4D seems to improve balance of people with dementia but the maintenance or improvement of these results is likely to be dependent of a close supervision of a health professional. A larger study is needed to further explore these results.

Figure 1 - Overall (A) and per participant (B) results of balance at baseline, 1 month, 2 months and 3 months after the LiFE4D programme.



Legend: Brief-BESTest, Brief Balance Evaluation System Test; T₀, baseline; T₁, 1 month; T₂, 2 months; T₃, 3 months.