Physical Activity and Community Care Clients
What do they like to do?

Dr Elissa Burton  30.05.2017
Physical activity and community care clients

- Almost a million older people living in Australia receive community care services every year.
- To receive community care a person should have difficulty in performing ADLs or IADLs or be at risk of premature admission to residential care.
Community care services

- Many services available to older people

- Home and community care service (HACC)
  - Ongoing
  - Wellness approach
  - Personal care, domestic assistance etc

- Restorative care services
  - Short-term services (6-12 weeks)
  - Allied-health delivered (Physios, OTs, RNs)
  - Aim to maximise a person’s ability to live independently
Physical activity levels

- Questionnaire: 745 HACC clients and 745 restorative care
- Average age 82.2 years (SD: 5.94), 79% female
- 82% all respondents had trouble walking
- Motivators to being active: health/fitness, wellbeing, enjoyment and family
- Barriers to being active: ongoing injury or illness, feeling too old, temporary injury or illness

Most likely to be physically active

- Restorative care clients were significantly more physically active than HACC clients

- Overall
  - Younger
  - Better physical health
  - Little trouble walking
  - No diagnosis of depression

Physical activity preferences

- Interviews: 20 home care clients
- 10 HACC - 10 restorative care
- 10 active - 10 not physically active
- Age M: 84.2 years (SD: 7.18), range 71-102 years
- Activities of choice: walking, housework, gardening
- Understand importance of being active
- Do not enjoy structured exercise

Pilot Study

- Lifestyle and Functional Exercise Program (LiFE)
- Originally developed to decrease falls
- Home-based, lifestyle-integrated balance and strengthening program

Aim of pilot:
- to determine whether LiFE could be delivered within a restorative home care service

Pilot Results

- Four Care Managers (one day LiFE training)
- LiFE intervention 8 weeks
- 9 Restorative home care clients (7 female, 2 males)
- 1 withdrawal, mean age: 80.75 years
- LiFE could be delivered within a restorative home care service
- Decrease in paperwork for clients and Care Managers
- Withdraw the accelerometers due to pain and incorrect use

RCT

Aim: To examine the effectiveness of the lifestyle exercise program (LiFE) compared to the current structured exercise program being used in restorative home care services:

- In the short term (8 week intervention period)
- Over the longer term (6 month follow-up, maintenance period)

Results

- 80 clients completed baseline data collection
- 76 completed 8-week follow-up
- 73 completed 6-month follow-up
- 91.25% retention rate overall
- No significant differences between groups for any baseline measures

## Results Intention-To-Treat Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>LiFE</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td><strong>Age Mean (SD)</strong></td>
<td>80.20 (6.4)</td>
<td>79.58 (6.2)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (%)</td>
<td>75</td>
<td>90</td>
</tr>
<tr>
<td>Male (%)</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td><strong>Country of Birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (%)</td>
<td>47.5</td>
<td>67.5</td>
</tr>
<tr>
<td>England (%)</td>
<td>27.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Other (%)</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td><strong>Carer Availability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a Carer (%)</td>
<td>27.5</td>
<td>20</td>
</tr>
<tr>
<td>Has no Carer (%)</td>
<td>72.5</td>
<td>80</td>
</tr>
<tr>
<td><strong>Living Arrangements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives Alone (%)</td>
<td>60</td>
<td>67.5</td>
</tr>
<tr>
<td>Lives with Family/Others (%)</td>
<td>40</td>
<td>32.5</td>
</tr>
</tbody>
</table>

Overall Results

- **Intervention** period 40% of outcome measures were significantly better for LiFE group compared to current exercise group

- **Maintenance** period 25% of outcome measures were still significantly better for LiFE group than current exercise group

- LiFE group showed greater improvement than current exercise group in 85.7% (18 of 21) measures

- LiFE group completed exercises 4.05/week compared to current exercise group 3.66/week

Results – Tandem Walk

\((F(1.431, 94.460), = 4.491, p = .024^*)\)

Results – ABC Scale

\[(F(1.618, 114.911) = 4.136, \ p = .026^*)\]

Results – LLFDI Lower Extremity Scale

(F(1.722, 122.259) = 6.680, p = .003**)

Conclusions

- Both exercise programs improved client function, strength and balance compared to when they commenced restorative care service.

- LiFE exercise program was more effective during both the intervention and maintenance periods of the trial.
Lessons learnt

- Don’t presume home care clients like structured exercise
- Many believe walking is enough
- Falls rate for home care clients: 48%
- Motivation and support important
- Support workers untapped resource
- Mental health growing issue
Questions

Thank you to the community care staff and clients

Dr Elissa Burton
Research Fellow, Curtin University
E.Burton@curtin.edu.au