DEMENTIA ACTIVITIES AND CARE TOOLKIT (DEMAC) PROGRAMME
- EFFECTIVENESS AND BENEFITS OF THE PROGRAMME

MSL Tan, HJ Koh, XH Tan, SQ Cai, PL Toh, YC Kuo*
Community Psychogeriatric Programme, Changi General Hospital, Singapore
Singapore Alzheimer’s Disease Association, Singapore
Background of DemACT Programme

- DemACT Toolkit

  Inspired by “Activities for Health” in Israel

  Localized to the Singaporean culture

  A resource to facilitate activities with People with dementia (PWD) living at home
Background of DemACT Program

- DemACT programme
  - First introduced in February 2011
  - With funding support from the Singapore Health Promotion Board
  - Collaborates with Singapore Alzheimer’s Disease Association (ADA) Eldersit Respite Care Service to provide training to Eldersitters in facilitating activities with PWD using DemACT Toolkit
Cognitive Stimulation Kit
Creative Arts Kit
Creative story telling
Reminiscence kit
Background of Eldersit Respite Care Service

- Implemented in early 2011 by the Alzheimer’s Disease Association Caregiver Support Centre
- An innovative service that aims to improve the well-being of both caregivers and people with dementia
- Combining both respite care for caregivers and therapeutic, cognitively stimulating activities for people with dementia
- Trained Eldersitters (ES) engaged PWD in one-on-one activities based on their interests and abilities
Arrangement of ES and home visits by ADA

- ES and PWD are matched based on similar interests, language, and other factors
- The frequency and time: depending on the needs and preferences of the PWD and their family caregivers (CGs)
Objectives

- This study aimed to evaluate the effectiveness and benefits of the DemACT programme to ES and PWD
Methods

- The DemACT training to Eldersitters
  - From Sep 2011 to March 2012
  - Conducted by occupational therapists from Changi General Hospital (Singapore)
  - 18-hour classroom training
    - Focused on person-centred care practices, facilitating activities with PWD and the use of the DemACT toolkit
  - 3 on-the-job training sessions and 3 review sessions by occupational therapists
Methods

- Recruitment of PWD by ADA:
  - Social work assessment and intervention
  - The Individualised Care Plan
  - Barthel Index
  - Revised Memory Behavioural Problem Checklist
  - Caregiver Strain Index
  - Pool Activity Levels Checklist
Methods

- Scales were administered to examine effectiveness and benefits of the programme

<table>
<thead>
<tr>
<th>ES</th>
<th>PWD</th>
<th>CGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Attitude to Dementia Questionnaire (ADQ)</td>
<td>• Wellbeing Profiling (WBP)</td>
<td>• Eldersit Respite Care Service Feedback (collected by ADA)</td>
</tr>
<tr>
<td>• Confidence in Activities Scale (CAS)</td>
<td>• Quality of Life-AD (QOL-AD, caregiver’s version)</td>
<td></td>
</tr>
</tbody>
</table>
Methods

- Paired Sample T-Test
- Survey
Results-Eldersitters

- Out of 12 ES recruited, nine ES completed classroom and on-the-job training

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>9 Female</td>
</tr>
<tr>
<td>Age</td>
<td>55.67 (±6.71, 47-64) y/o</td>
</tr>
<tr>
<td>Education level</td>
<td>n=2 secondary : n=2 high school : n=4 above high school : n=1 missing data</td>
</tr>
<tr>
<td>Language</td>
<td>either English or Mandarin + at least one dialect</td>
</tr>
<tr>
<td>Previous occupation</td>
<td>teaching, service, administrative, healthcare professions, etc..</td>
</tr>
</tbody>
</table>
• Showed increase in Confidence in Activities Scale before and after the training

<table>
<thead>
<tr>
<th></th>
<th>Pre-training</th>
<th>Post-training</th>
<th>$P$ (1-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS (n=6)</td>
<td>26.00 (±14.00)</td>
<td>36.00 (±5.59)</td>
<td>.063</td>
</tr>
<tr>
<td>ADQ (n=5)</td>
<td>70.80 (±5.36)</td>
<td>73.80 (±3.27)</td>
<td>.190</td>
</tr>
</tbody>
</table>
# Results-PWD

- Twenty-eight PWD were enrolled (421 home visits; 782.5 hours)

<table>
<thead>
<tr>
<th>Gender</th>
<th>9 Male : 19 Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>77.54 (± 10.78, 56-93 y/o)</td>
</tr>
</tbody>
</table>
| Diagnosis           | n=14 Alzheimer’s disease  
n=8 Vascular dementia  
n=2 Frontal lobe dementia  
n=1 Lewy body dementia  
n=3 dementia (not specified) |
| Stage of dementia   | majority of mild to moderate |
| Mini Mental State Exam | n= 22  13.86 (± 5.49, 4-22 ) |
| Frequency of home visit | 1-2 times/week |
Results-PWD

- The PWD showed significant increasing signs of wellbeing after 2 months

<table>
<thead>
<tr>
<th></th>
<th>1st session</th>
<th>2nd month session</th>
<th>P (1-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBP (n=13)</td>
<td>20.85 (±4.52)</td>
<td>24.31 (±3.25)</td>
<td>0.001</td>
</tr>
</tbody>
</table>

- No significant difference in QOL-AD

<table>
<thead>
<tr>
<th></th>
<th>Start of the service</th>
<th>End of the service</th>
<th>P (1-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOL-AD (n=7)</td>
<td>28.29 (±5.47)</td>
<td>25.86 (±4.95)</td>
<td>.190</td>
</tr>
</tbody>
</table>
Results-Caregivers

- Feedback from caregivers
  - Most beneficial aspects
    - ✔ Social interaction/companionship for PWD
    - ✔ Mental stimulation for PWD
    - ✔ Respite for caregivers
  - One to two hour session would be just nice for the PWD
Results-caregivers

- “...helped my sister in maintaining her interest and social skills with others.”
- “.....my sister looks forward to it weekly does shows that she is enjoying the company and programme that is provided.”
- “The only service my 88 yr old mother in law uses is the Eldersit Respite Care Service. She has enjoyed the activities very much.”
Results-caregivers

- Caregivers expect
  - Provide regular feedbacks on progress/status of PWD
  - Consider having outing activity for PWD
  - Lower service fees
Limitations

- Small sample size
- Incomplete data
- Trainers administered the WBP: observation bias
Challenges

- Retention of Eldersitters after contract
  - Different expectations
- Profile of Eldersitters
- Profile of PWD
Future study

- Qualitative data from PWD/CGs
- A larger sample to explore the effectiveness of the DemACT programme in promoting wellbeing in PWD and how it impacts the quality of life of PWD and their CGs
Conclusions

- Findings from the study suggested that
  - The DemACT programme showed benefits in enhancing the confidence in activities of ES
  - PWD enrolled into the Eldersit Respite Care Service had increasing signs of well-being
  - PWD benefited from the social interaction and activities provided by ES with using toolkits