Cognitive intervention

Cognitive therapy

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**Objective**
To examine the effectiveness of a cognitive intervention consisting of training in face-name associations, spaced retrieval, cognitive stimulation, and quality of life.

**Setting**
Community, intervention in clinic and in-home attention exercises

**Participants**
Persons with 'probable' Alzheimer's Disease

Mean age  
E=68.7 (±3.9); C=72.6 (±7.6)

Gender  
E: 9 female, 10 male; C: 12 female, 6 male

MMSE  
E=21.8 (±4.0); C=22.8 (±4.4)

**Design**
Randomized controlled trial (training or placebo treatment with delayed intervention)

Sample size  
n_E=19, n_C=18

Follow-up  
5 weeks

**Intervention**
During the intervention participants visited the clinic and were instructed to perform in-home exercises. These exercises included a variety of attention-stimulating activities. At the first clinic visit an interest inventory was completed and seven personal information items were provided by the caregiver (name, street, address, city and state, zip code, age, date of birth, and telephone number). The intervention sessions started with testing the recall of personal information (either with or without using spaced retrieval: gradually increasing the interval between correct recall of target items/objects). A second memory task was administered, where participants were confronted with number-object pairs and instructed to use the numbers as help to remember. Next the face-naming task was administered, with photographs and a verbal peg. Finally the cognitive stimulation intervention consisted of home attention exercises to stimulate five attention levels (focused, sustained, selective, alternating, and divided attention).

Frequency  
clinic: weekly; in-home exercises: 6 days/week

Duration  
clinic: 1 hour, 5 weeks; in-home exercises: 30 minutes

**Facilitator**

**Outcome measures**

<table>
<thead>
<tr>
<th>Cognition</th>
<th>Mini-Mental State Examination (MMSE; Folstein et al., 1975)</th>
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<tbody>
<tr>
<td></td>
<td>WMS-R Logical Memory (CLM; Wechsler, 1987)</td>
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<td></td>
<td>WMS-R Visual Reproduction (CVR; Wechsler, 1987)</td>
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<td>Wechsler Adult Intelligence Scale-Revised Digit Span (Wechsler, 1981)</td>
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<td>Verbal Series Attention Test (VSAT; Mahurin &amp; Cooke, 1996)</td>
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<td>Controlled Oral Word Association Test (Benton &amp; Hamsher, 1989)</td>
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Community care

<table>
<thead>
<tr>
<th>Category</th>
<th>Measurement</th>
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<tr>
<td>Fluency</td>
<td>Category Fluency (Newcombe, 1969)</td>
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<tr>
<td>Finger Tapping Test</td>
<td>Finger Tapping Test (Reitan &amp; Wolfson, 1989)</td>
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<tr>
<td>Depression</td>
<td>GDS (Yesavage et al., 1983)</td>
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<tr>
<td>Quality of Life</td>
<td>Quality of Life Assessment-Patient (QLA-P; Blau, 1977)</td>
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**Results**
The cognitive intervention group showed enhanced recall of personal information and face-name recall after 5 weeks. They also showed enhanced performance on an attention/concentration task.

Results suggest that although face-name training, spaced retrieval, and cognitive stimulation may produce small gains in learning personal information and attention, improvement does not generalize to overall neuropsychologic functioning or patient quality of life.

**Implementation**

- E = experimental group; C = control group

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