Resources for Enhancing Alzheimer's Caregiver Health II (REACH II)

Date of Review: May 2007

Resources for Enhancing Alzheimer's Caregiver Health II (REACH II) is a multicomponent psychosocial and behavioral training intervention for caregivers (21 years and older) of patients with Alzheimer's disease or dementia. The intervention is designed to reduce caregiver burden and depression, improve caregivers' ability to provide self-care, provide caregivers with social support, and help caregivers learn how to manage difficult behaviors in care recipients. REACH II participants are provided with educational information, skills to manage care recipient behaviors, social support, cognitive strategies for reframing negative emotional responses, and strategies for enhancing healthy behaviors and managing stress. Methods used in the intervention include didactic instruction, role-playing, problem-solving tasks, skills training, stress management techniques, and telephone support groups.

In the randomized controlled trial of REACH, the intervention was delivered over 6 months by certified interventionists holding at least a bachelor's degree. The protocol included 12 individual sessions (9 at home and 3 by telephone) and 5 structured support-group sessions by telephone. Participants were supplied with resource notebooks that contained educational materials and telephones with visual display screens linked to a computer-integrated telephone system to support conference calling.

Descriptive Information

### Areas of Interest
- Mental health promotion

### Outcomes
1. Caregiver quality of life
2. Prevalence of caregiver clinical depression

### Outcome Categories
- Family/relationships
- Mental health
- Quality of life

### Ages
- 26-55 (Adult)
- 55+ (Older adult)

### Genders
- Male
- Female

### Races/Ethnicities
- Black or African American
- Hispanic or Latino
- White

### Settings
- Residential
- Outpatient
- Home

### Geographic Locations
- Urban
- Suburban

### Implementation History
The intervention was implemented with 642 in-home caregivers at 5 sites in 5 cities (Birmingham, Alabama; Memphis, Tennessee; Miami, Florida; Palo Alto, California; and Philadelphia, Pennsylvania). All five sites were evaluated for outcomes. REACH II also was implemented within the Veterans Health Administration in 29 sites from 24 facilities in 15 States, with a total of 127 caregiving dyads participating, and was implemented by 2 Area Agencies on Aging in Kentucky and Illinois. The intervention is also being used by the Rosalynn Carter Institute at Georgia Southwestern State University with rural dementia caregivers through an Administration on Aging grant. Approximately 900 individuals have participated in this intervention.

### NIH Funding/CER Studies
- Partially/fully funded by National Institutes of Health: Yes
- Evaluated in comparative effectiveness research studies: Yes

### Adaptations
- Intervention materials and assessment instruments have been translated in Spanish and allow for regional
Outcomes

Outcome 1: Caregiver quality of life

Description of Measures

Caregiver quality of life was assessed by the standardized differences between baseline and 6-month follow-up for five measures:

- Depression--measured by self-report on the 10-item version of the Center for Epidemiologic Studies Depression scale (CES-D), with respondents indicating how they felt during the past week on a scale from 0 to 3
- Caregiver burden--measured using the 12-item Zarit Caregiver Burden Interview, with caregivers rating each item on a 5-point scale
- Self-care--assessed using 11 questions pertaining to caregivers' diligence in looking after their own health, with self-report items scored as 0 or 1 (yes or no), yielding a total score of 0 to 11
- Social support--assessed using 10 items on support received, satisfaction with support, and negative interactions or support
- Problem behaviors--assessed by three questions based on the Revised Memory and Behavior Problem Checklist (memory, depression, and disruption), with clinicians scoring responses on a scale from 1 (substantial improvement) to 5 (substantial decline)

Key Findings

Hispanic or Latino and White or Caucasian caregivers in the intervention group experienced greater improvement in quality of life than comparable caregivers who received only educational materials and two brief "check-in" phone calls, p < .001 and p < .037, respectively.

Studies Measuring Outcome

Study 1

Study Designs

Experimental

Quality of Research Rating

3.8 (0.0-4.0 scale)

Outcome 2: Prevalence of caregiver clinical depression

Description of Measures

Prevalence of caregiver clinical depression was assessed using self-reports on the 10-item version of the Center for Epidemiologic Studies Depression Scale (CES-D). For each item, respondents indicated how they felt during the past week using a scale from 0 (rarely or never) to 3 (most or all of the time). Caregivers with scores of 15 or higher had symptoms that were judged to be at the level of having clinical depression and requiring clinical intervention.

Key Findings

A smaller percentage of caregivers who received the intervention (12.6%) experienced clinical depression compared with caregivers who received educational materials and two brief "check-in" phone calls (22.7%), p = .001.

Studies Measuring Outcome

Study 1

Study Designs

Experimental

Quality of Research Rating

4.0 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
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</table>

Variation in language expression. Bilingual and bicultural staff were employed for the evaluation, and all assessors and interventionists received cultural-sensitivity training.
Quality of Research

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1


Supplementary Materials


List of additional references for outcome measures


Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention’s reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see Quality of Research.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Reliability of Measures</th>
<th>Validity of Measures</th>
<th>Fidelity</th>
<th>Missing Data/Attrition</th>
<th>Confounding Variables</th>
<th>Data Analysis</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Caregiver quality of life</td>
<td>3.5</td>
<td>3.5</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>3.8</td>
</tr>
<tr>
<td>2: Prevalence of caregiver clinical depression</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
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</table>

Study Strengths

The outcome measures were selected by a subcommittee that sought to identify psychometrically sound and well-researched measures. A manualized approach was used with substantial training of intervention staff. The study had very good participant retention rate. Research included well-thought-out inclusion and exclusion criteria to control for potential confounds. Additionally, variables that might have been potential confounds were controlled in the statistical analysis. Sample size was calculated as adequate across caregiver groups, and control for repeated analyses was conducted. The development of intervention and study methods from earlier REACH I research is a particular strength.
**Study Weaknesses**

Additional details about the caregiver health (i.e., self-care) measure should have been provided, as this might be a possible confounding variable.

**Readiness for Dissemination**

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.

**Dissemination Materials**

REACH II Program Web site, http://www.edc.pitt.edu/reach2

REACH II Quality Assurance Protocol Overview

Support Resources for Potential Implementers

**Readiness for Dissemination Ratings by Criteria (0.0–4.0 scale)**

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

<table>
<thead>
<tr>
<th>Implementation Materials</th>
<th>Training and Support Resources</th>
<th>Quality Assurance Procedures</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>2.8</td>
<td>4.0</td>
<td>3.3</td>
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</tbody>
</table>

**Dissemination Strengths**

High-quality clinical intervention and data protocols are provided. Numerous "Behavioral Prescription Sheets" are available to guide potential implementers in assisting caregivers in addressing the most common problems among persons with Alzheimer's disease. Some handouts, forms, and scripts are available in Spanish. A range of training materials are available, including a manual, posttests, required readings, worksheets, role-play rosters, and observation checklists. Support is available to potential implementers through current program researchers. Outcome measures, scenario protocols, and implementer monitoring checklists are provided to support quality assurance.

**Dissemination Weaknesses**

Program materials were written for implementation as a research study and could benefit from modification for use in general application. Further information on the technical aspects of the required telephone system would be helpful for potential implementers. The described training and certification process accommodates sites participating in the research study; there is no indication that these trainings are available to others interested in the use of this program.

**Costs**

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Required by Developer</th>
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<tbody>
<tr>
<td>Training manual</td>
<td>$13.50 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Interventionist manual</td>
<td>$13.50 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Group leader manual</td>
<td>$12.50 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Caregiver workbook</td>
<td>$20 per caregiver</td>
<td>Yes</td>
</tr>
<tr>
<td>On- or off-site training from VA medical center in Memphis, TN (includes ongoing</td>
<td>$10,000 plus travel</td>
<td>Yes</td>
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</table>
Additional Information
The cost to implement REACH II has been estimated at $1,212 per caregiver-care recipient pair. This cost includes $1,064 for the in-home intervention components and $148 for telephone support.

Replications
No replications were identified by the developer.

Contact Information
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Consider these Questions to Ask (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):
- [http://www.edc.pitt.edu/reach2](http://www.edc.pitt.edu/reach2)

The NREPP review of this intervention was funded by the Center for Mental Health Services (CMHS).

This PDF was generated from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=129 on 4/24/2012