



AOTA Critically Appraised Topics and Papers Series **Alzheimer's Disease**

**A product of the American Occupational Therapy Association's
Evidence-Based Literature Review Project*

CRITICALLY APPRAISED PAPER (CAP)

Focused Question

What is the evidence for the effect of interventions designed to establish, modify, and maintain activities of daily living (ADL), instrumental activities of daily living (IADL), leisure, and social participation on the quality of life, health and wellness, and client and caregiver satisfaction for persons with dementia?

Wishart, L., Macerollo, J., Loney, P., King, A., Beaumont, L., Browne, G., et al. (2000). "Special steps": An effective visiting/walking program for persons with cognitive impairment. *Canadian Journal of Nursing Research*, 31, 57–71.

PROBLEM STATEMENT (JUSTIFICATION OF THE NEED FOR THE STUDY)

State the problem the authors are investigating in this study.

Caregiver burden is a significant issue, especially for caregivers of people with dementia living in their own homes with family members providing most of the caregiving. A volunteer community-based visiting and walking program was initiated to promote the health and well-being of people with dementia and their family caregivers. This study was designed to evaluate that program.

RESEARCH OBJECTIVE(S)

List study objectives.

The objectives of the study were framed as research questions (p. 61):

- Is there a difference in mean change score (baseline to follow-up) in caregiver burden social support and health care expenditures between experimental and control groups?
- Are informal caregivers of persons with cognitive impairment satisfied with the Special Steps Program?

Describe how the research objectives address the focused question.

The second research question focuses on caregiver satisfaction, which is one of the outcomes of interest in this focused question. The intervention is an opportunity for leisure and social participation, through the use of volunteers who provided an intervention that included visiting and walking.

DESIGN TYPE:

Randomized controlled trial

Level of Evidence:

I

Limitations (appropriateness of study design):

Was the study design type appropriate for the knowledge level about this topic? *If no, explain.*

Yes

No

SAMPLE SELECTION

How were subjects selected to participate? Please describe.

Inclusion Criteria

Clients referred to the Special Steps program were considered for inclusion. The following inclusion criteria were used:

- clients had a caregiver
- clients had cognitive impairment
- clients were able to go on outings.

Exclusion Criteria

None reported.

Sample Selection Biases: *If yes, explain.*

Volunteers/Referrals

Yes

No

Attention

Yes People in the control group were put on a wait list, and were offered the intervention after the second measurement period. Therefore, those in the intervention group received more attention during the study period.

No

Others (list and explain):

SAMPLE CHARACTERISTICS

N= 24

% Dropouts	3 (12.5%)		
#/ (%) Male	8 (20%)	#/ (%) Female	16 (80%)
Ethnicity	NR		
Disease/disability diagnosis	All had dementia.		

NR = Not reported

Check appropriate group:

<20/study group <input checked="" type="checkbox"/>	20–50/study group	51–100/study group	101–149/study group	150–200/study group
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Sample Characteristics Bias: If no, explain.

If there is more than one study group, was there a similarity between the groups?

Yes

No The authors report a statistically significant difference in years of education between caregivers in the intervention (12.9) and control (15.8) groups (p=.02). There were not statistically significant differences on any other caregiver or care recipient characteristics.

Were the reasons for the dropouts reported?

Yes

No

INTERVENTION(S)—Included are only those interventions relevant to answering the evidence-based question.

Add groups if necessary

Group 1

Brief Description	Special Steps: Volunteers visited weekly and engaged in crafts, outings and walks tailored to the clients.
Setting	Clients’ homes and local communities
Who Delivered?	Trained volunteers – training involved 6 hours with a focus on education on cognitive impairment, walking with clients with cognitive impairments and engaging them in conversations.
Frequency?	Weekly for 6 weeks
Duration?	Average visits were 2.5 hours (range from 1 – 3 hours)

Group 2

Brief Description	Control – people in the control group were on a wait list and were matched to a volunteer at the end of the 6 week study period.
Setting	Clients' homes
Who Delivered?	N/A
Frequency?	N/A
Duration?	N/A

Intervention Biases: *Explain, if needed.*

Contamination

Yes

No

Co-intervention

Yes

No

Timing

Yes

No

Site

Yes

No

Use of different therapists to provide intervention

Yes

No

MEASURES AND OUTCOMES—Included are measures relevant to answering the focused question.

Name of measure:

Client Satisfaction

Outcome(s) measured (what was measured?):

8 item client satisfaction

Is the measure reliable (as reported in article)?

Yes

No

NR

Is the measure valid (as reported in article)?

Yes

No

NR

How frequently was the measure used for each group in the study?

Once at the end of the study; completed by caregivers of those in the intervention group.

Measurement Biases

Were the evaluators blinded to treatment status? *If no, explain.*

Yes

No Caregivers could not be blinded to their group allocation.

Recall or memory bias *If yes, explain.*

Yes

No

Others (list and explain):

Limitations (appropriateness of outcomes and measures) *If no, explain.*

Did the measures adequately measure the outcome(s)?

Yes

No

RESULTS

List results of outcomes relevant to answering the focused question

Include statistical significance where appropriate ($p < 0.05$)

Include effect size if reported

All caregivers rated their satisfaction at good or excellent for 6/8 items on the client satisfaction score. For the other two items, one caregiver reported fair (met my needs) or

poor (satisfied with help). Satisfaction data is reported as descriptive data, since there is no control group data.

Was this study adequately powered (large enough to show a difference)? *If no, explain.*

Yes

No

Were appropriate analytic methods used? *If no, explain.*

Yes

No

Were statistics appropriately reported (in written or table format)? *If no, explain.*

Yes

No

CONCLUSIONS

State the authors' conclusions that are applicable to answering the evidence-based question.

The study “provides preliminary evidence to support the benefits of reducing caregiver burden through a relatively inexpensive program coordinated by community nurses” (p. 69). Caregivers were satisfied with the intervention.

Were the conclusions appropriate for the Study Design (Level of Evidence)? *If no, explain.*

Yes

No

Were the conclusions appropriate for the statistical results? *If no, explain.*

Yes

No

Were the conclusions appropriate given the study limitation and biases? *If no, explain.*

Yes

No

IMPLICATIONS FOR OCCUPATIONAL THERAPY

This section provides guidance about clinical practice, program development, and other implications of the study findings as they relate to the focused question.

In relation to the focused question, this study provides evidence that caregivers were satisfied with the volunteer visiting/walking program. There is no comparison group data; it is likely that caregivers would be satisfied with any intervention that involved trained volunteers. Nonetheless, other data presented in the paper (not presented in this CAP because the outcomes were not linked to the focused question) suggest that there may be benefits in relation to caregiver burden. As noted by the authors, the results are preliminary, and they did not present data on care recipient or caregiver health outcomes. Future research is warranted to look at these outcomes. From this study, occupational therapy practitioners could consider involvement in a volunteer visiting and walking program, since caregivers reported high levels of satisfaction; however, further research and / or program evaluation is warranted to compare this intervention to other types of volunteer interventions.

This work is based on the evidence-based literature review completed by Lori Letts, PhD, OT Reg. (Ont.), Julie Berenyi, BSc (OT), OT Reg. (Ont.), Mary Edwards, MHSc, OT Reg. (Ont.), Kathy Moros, BHSc (OT), OT Reg. (Ont.), Colleen O’Neill, BSc (OT), OT Reg. (Ont.), Colleen O’Toole, MSc (OT), OT Reg. (Ont.), and Colleen McGrath, MSc (OT), OT Reg. (Ont.)

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For more information about the Evidence-Based Literature Review Project, contact the American Occupational Therapy Association, 301-652-6611, x 2052.



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