



## 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 effectiveness of interventions designed to establish, modify, or maintain routines on the occupational performance, quality of life, health and wellness, and client and caregiver satisfaction of persons with Alzheimer's disease?**

Doody, R. S., Stevens, J. C., Beck, C., Dubinsky, R. M., Kaye, J. A., Gwyther, L., et al. (2001). Practice parameter: Management of dementia (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology*, 56, 1154–1166.

#### **PROBLEM STATEMENT (JUSTIFICATION OF THE NEED FOR THE STUDY)**

State the problem the authors are investigating in this study.

There are a wide variety of pharmacological, nonpharmacological, and educational interventions for patients with dementia. The Quality Standards Subcommittee of the American Academy of Neurology develops practice parameters to assist in the practice of neurology. With increases in the number of people with dementia, this practice parameter was designed to review the literature and present recommendations for practice related to the management of dementia.

#### **RESEARCH OBJECTIVE(S)**

List study objectives.

The goal of the paper is to review the evidence and provide recommendations for management of dementia, including pharmacological and nonpharmacological interventions.

The practice parameter addresses the following questions regarding the management of dementia:

- Does pharmacotherapy for cognitive symptoms improve outcomes in patients with dementia compared with no therapy?
- Does pharmacotherapy for noncognitive symptoms improve outcomes in patients with dementia compared with no therapy?

- Do educational interventions improve outcomes in patients and/or caregivers of patients with dementia compared with no such interventions?
- Do nonpharmacologic interventions other than education improve outcomes in patients and/or caregivers of patients with dementia compared with no such interventions?

Describe how the research objectives address the focused question.

The fourth question could potentially include issues specific to the focused question related to establishing, modifying, and maintaining routines. The search terms used by the panel included *rehabilitation, environment, behavior, and management issues*. Although caregiver education is used in interventions using routines, the authors do not provide any detail about the types of caregiver education provided in their review of the third question. This evidence then does not provide any information applicable to the focused question.

Since this is an evidence-based review, much of this worksheet cannot be completed (sections noted with \*). A systematic approach to the review is described in the methods section. Results are presented with descriptions of the interventions, conclusions, practice recommendations, and recommendations for future research. See Results, Conclusions, and Clinical Implications of this worksheet for discussion of how this review contributes to the evidence-based review question.

**DESIGN TYPE:**

Evidence-based review

**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**

**Exclusion Criteria**

Sample Selection Biases: If yes, explain.

Volunteers/Referrals

Yes

No

Attention

Yes

No

Others (list and explain):

**\*SAMPLE CHARACTERISTICS**

*N* =

% Dropouts

#/ (%) Male

#/ (%) Female

Ethnicity

Disease/disability diagnosis

Check appropriate group:

< 20/study group	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

Were the reasons for the dropouts reported?

Yes

No

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

Group 1

Brief Description	
Setting	
Who Delivered?	
Frequency?	
Duration?	

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:

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

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?

Measurement Biases

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

Yes

No

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.

Two studies (Skelly & Flint, 1995; Ouslander & Schnelle, 1993) demonstrated that behavior modification, scheduled toileting, and prompted voiding can reduce urinary incontinence. The review panel members felt that the evidence was strong enough that they recommended the use of these strategies as standard practice.

\*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 authors conclude that there was evidence, from studies they deemed to be Level I studies, to support the use of behavior management, scheduled toileting, and prompted voiding as standard practice to reduce incontinence in people with dementia. The link of reduced incontinence to quality of life, occupational performance, or satisfaction is not discussed.

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

Yes

No  The two studies cited in this review include Skelly and Flint (1995), which is a review article also reviewed for this focused question. Although the review panel identified it as a Level I study, little information is provided about the methods used for the review (e.g., inclusion criteria, data extraction, quality ratings are not discussed by the authors, and limited information about search strategies are provided), making it appear to be more of a narrative review than a systematic review. The second study cited is from a book, and it is unclear if it is a report on a specific study or an overview of other research. However, later systematic reviews on toileting published in the Cochrane library do not cite either of these references as primary sources of data.

\*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.

This evidence-based review noted support for the use of toileting routines including scheduled toileting and prompted voiding as strategies for addressing incontinence. The authors do not mention the impact of reduced incontinence on quality of life, client or caregiver satisfaction, or occupational performance, although such benefits may be reasonably assumed to occur. Occupational therapists and occupational therapy assistants, when working with people with dementia, need to be alert to any toileting routines being implemented to ensure adherence. Clients and/or caregivers with problems related to toileting may want to consider implementing such routines (at least on a pilot basis) to reduce incontinence. Occupational therapists may be in a good position to take a stronger role in proposing the adoption of toileting routines for clients with dementia and incontinence.

## Relevant references from studies included in the review

Ouslander, J., & Schnelle, J. (1993). Assessment, treatment and management of urinary incontinence in the nursing home. In L. Rubenstein & D. Wieland (Eds.), *Improving care in the nursing home: Comprehensive review of clinical research* (pp. 131–159). Newbury Park, CA: Sage Publications.

Skelly, J., & Flint, A. J. (1995). Urinary incontinence associated with dementia. *Journal of the American Geriatrics Society*, 43, 286–294.

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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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