Evidence-based practice recommendations for working with individuals with dementia: simulated presence therapy


CRD summary
The authors’ conclusion appears to be that simulated presence therapy (using SimPres) improves agitated and withdrawn behaviours in patients with moderate to severe dementia of the Alzheimer type. In view of the paucity and quality of available studies and the limited reporting of review methods, the authors’ conclusion should be treated with caution.

Authors' objectives
To evaluate the use of simulated presence therapy (SimPres) in patients with dementia of the Alzheimer type (DAT).

Searching
MEDLINE, PubMed, CINAHL, HealthSTAR, PsycINFO, the Cochrane Database of Systematic Reviews, Health Reference Center, ERIC and the Social Sciences Citation Index were searched from inception to August 2002; the search terms were reported. In addition, relevant textbooks, non electronically indexed journals, review articles and book chapters were also screened.

Study selection

Study designs of evaluations included in the review
Inclusion criteria were not specified in terms of the study design.

Specific interventions included in the review
Although inclusion criteria for the interventions were not specified, studies that evaluated SimPres appeared to be eligible for inclusion. All the included studies used the same technique to generate the SimPres audiotape. In the included studies, the audiotape was predominantly made by family members and the tape was intended to be played whenever the patients showed the targeted behaviour or when the problem behaviour was anticipated. Control treatments, where these existed, were placebo tape and usual care. The duration of the treatment periods ranged from 17 days to 2 months.

Participants included in the review
Although inclusion criteria for the participants were not specified, studies of patients with DAT appeared to be eligible for inclusion. The included studies were of nursing home residents described as having moderate to severe cognitive impairment. The review stated that little information was provided about the methods used to diagnose DAT. All of the included studies included patients with previously observed problem behaviour, including social isolation, agitation, and verbal or physical aggression. One study stated that patients with severe hearing impairment or pre-morbid psychiatric illness were excluded. Two studies stated that all participants had the capacity for verbal interaction. One study stated that only patients who tolerated listening through headphones for 5 minutes were included.

Outcomes assessed in the review
Inclusion criteria were not specified in terms of the outcomes. The primary outcomes in the included studies were wellbeing, defined as 'resolution of agitation and withdrawn behaviour', and change in problem behavior. These were evaluated using a variety of the following methods: the appropriateness of behaviour as recorded by nursing staff; nursing staff filling out a standard form about the patient's behaviour before and after SimPres, or rating behaviour following SimPres; and resolution of agitation and withdrawn behaviours assessed using direct observation by trained nonparticipant observers (7-item Observer Rating Scale developed by researchers, an agitation visual analogue scale, two positive effect items from the Philadelphia Geriatric Center Affect Rating Scale and facial diagrams of mood), daily staff observation logs (participant's response to intervention) and weekly behaviour rating surveys by nursing staff (short form of the Cohen-Mansfield Agitation Inventory and items selected from the Multidimensional Observation
Scale for Elderly Subjects) plus numerous cognitive and functional measures.

How were decisions on the relevance of primary studies made?
The DPG committee excluded two of the identified studies. No other details of the study selection process were reported.

Assessment of study quality
Two members of the Dementia Practice Guidelines (DPG) writing committee independently assessed the validity of the included studies. No formal validity assessment was reported, but aspects of validity were discussed: blinding, inter-observer reliability, sample size, replicability and generalisability.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction.

Methods of synthesis
How were the studies combined?
Each study was described in the text and the studies were combined in a narrative.

How were differences between studies investigated?
Differences between the studies were described narratively.

Results of the review
Three studies (n=90) were included: one single-blind Latin squares crossover efficacy study (n=54) and two before-and-after studies (one feasibility study, n=27; one pilot study, n=9).

The feasibility study (n=27) reported that most patients (81.5%) had a positive response to SimPres; in the other 5 patients the problem behaviour was unchanged. SimPres was associated with improved agitation in 78%. Results were uncertain for the 2 patients showing aggression.

The pilot study (n=9) reported that SimPres was associated with an improvement in behaviour in 91% of the observations (i.e. 388 of the 425 observations); in 7% of observations the behaviour problems were unchanged or worse. Positive response rates varied across patients from 100% to 68% of the time.

The efficacy study (n=54) reported that SimPres was associated with reduced agitation 67% of the time and with significantly greater reductions in agitation than usual care or placebo tape. SimPres was also associated with improved withdrawn behaviour 69% of the time and with a significantly greater reduction in withdrawn behaviour than usual care. SimPres was associated with twice as many improvements in withdrawn behaviour than placebo tape, however, this was not significant. There were no significant differences between SimPres, placebo tape and usual care in the selected weekly behaviour rating surveys by nursing staff.

Authors’ conclusions
The authors’ conclusion appears to be that SimPres improves agitated and withdrawn behaviours in patients with moderate to severe DAT.

CRD commentary
The review question was clear but was only reported with respect to the participants and intervention; inclusion and exclusion criteria for the study design and outcomes were not defined. However, given the paucity of identified studies, a broad research question could be considered appropriate. Several relevant sources were searched but no attempts to
minimise either publication or language bias were reported. Review and data extraction methods were incompletely reported, so it is not known whether adequate efforts were made to reduce reviewer error and bias. Although no formal validity assessment was reported, the reviewers did comment on some of the methodological issues of the included studies.

The narrative synthesis seems appropriate when considering the diversity of the studies. However, the conclusion appears over optimistic in view of the paucity of data and the methodological problems with the included studies. Given the limited evidence available and methodological uncertainties, the authors' conclusion should be treated with caution.

**Implications of the review for practice and research**

**Practice:** The authors stated that SimPres should be considered for reducing agitation and social isolation in nursing home residents.

**Research:** The authors stated the need for studies evaluating the effects of SimPres on language production and the effects of different variables in SimPres interventions (e.g. duration of the effect, cost-effectiveness of SimPres interventions, length of tape, frequency of tape use, severity of dementia and other types of dementia, hearing ability, relationship of taped person to patients, and level of memory impairment).

**Bibliographic details**


**Indexing Status**

Subject indexing assigned by CRD

**MeSH**

Aged; Anxiety /psychology; Caregivers /psychology; Dementia /therapy; Happiness; Inpatients; Middle Aged; Negativism; Spouses

**AccessionNumber**

12006007673

**Date bibliographic record published**

31/03/2008

**Date abstract record published**

31/03/2008

**Record Status**

This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.