

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*
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Question

“For people with dementia, how effective is cognitive stimulation therapy compared with the use of cholinesterase inhibitors in maintaining or improving a persons activities of daily living skills (ADLs)?”

Clarification of question using PICO structure (PICTRO for diagnostic questions)

Patients: People with dementia
Intervention: Cognitive Stimulation Therapy
Comparator: Cholinesterase inhibitors
Outcome: Maintaining or improving a persons’ activity of daily living skills.

Clinical and research implications

No clinical or research implications regarding the effectiveness of cognitive stimulation therapy compared to cholinesterase inhibitors was suggested in the evidence evaluated. The authors of a systematic review on cognitive stimulation therapy generally stated that there is a clear need for more randomised controlled trials which explore the long term benefits of this intervention.

What does the evidence say?

Number of included studies/reviews (number of participants)

We identified one potentially relevant systematic review (SR) that appeared to meet the inclusion criteria. The main aim of the SR, however, was to evaluate cognitive stimulation to improve *cognitive functioning*. Only three randomised controlled trials (RCTs) included in this SR appeared to address all the inclusion criteria above.

Main Findings

Two of the RCTs included in the SR found no significant differences in activities of daily life (ADL) for those participants who received cognitive stimulation therapy compared with participants who received an acetylcholinesterase. No results were reported for the other relevant RCT that evaluated ADL.

Authors Conclusions

No specific conclusions were made regarding maintaining or improving a persons' activity of daily living skills. The authors of the SR concluded that there was consistent evidence that cognitive stimulation programmes benefit *cognition* in people with mild to moderate dementia over and above any medication effects. They also noted, however, that the trials included in the SR were of variable quality with small sample sizes.

Reliability of conclusions/Strength of evidence

While aspects of the SR were very well conducted, detailed results from all trials that reported measures of ADL were not provided in the text or tables. As not all results appears to have been reported, and as the authors of the SR did not make any specific conclusions regarding ADL, the reliability of the evidence can not be addressed.

What do guidelines say?

NICE guidance (on dementia) provides the following recommendations for promoting and maintaining independence of people with dementia:

Health and social care staff should aim to promote and maintain the independence, including mobility, of people with dementia. Care plans should address activities of daily living (ADLs) that maximise independent activity, enhance function, adapt and develop skills, and minimise the need for support. When writing care plans, the varying needs of people with different types of dementia should be addressed. Care plans should always include:

- consistent and stable staffing
- retaining a familiar environment

- minimising relocations
- flexibility to accommodate fluctuating abilities
- assessment and care-planning advice regarding ADLs, and ADL skill training from an occupational therapist
- assessment and care-planning advice about independent toileting skills; if incontinence occurs all possible causes should be assessed and relevant treatments tried before concluding that it is permanent
- environmental modifications to aid independent functioning, including assistive technology, with advice from an occupational therapist and/or clinical psychologist
- physical exercise, with assessment and advice from a physiotherapist when needed
- support for people to go at their own pace and participate in activities they enjoy.

When developing a care plan for a person with a learning disability newly diagnosed with dementia, an assessment using the Assessment of Motor and Process Skills (AMPS) should be considered. The Dementia Questionnaire for Mentally Retarded Persons (DMR) and Dalton's Brief Praxis Test (BPT) should be considered for monitoring change in function over time.

The following NICE guidance addresses non-pharmacological interventions for cognitive symptoms and maintenance of function for people with dementia:

People with mild-to-moderate dementia of all types should be given the opportunity to participate in a structured group cognitive stimulation programme. This should be commissioned and provided by a range of health and social care staff with appropriate training and supervision, and offered irrespective of any drug prescribed for the treatment of cognitive symptoms of dementia.

Date question received: 07/03/2012
Date searches conducted: 12/03/2012
Date answer completed: 30/03/2012

References

Systematic reviews

1. Woods B, Aguirre E, Spector AE, Orrell M. Cognitive stimulation to improve cognitive functioning in people with dementia. *Cochrane Database of Systematic Reviews* 2012, Issue 2. Art. No.: CD005562. DOI: 10.1002/14651858.CD005562.pub2.
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005562.pub2/pdf>

Guidelines

2. NICE Clinical Guideline 42. Dementia Supporting people with dementia and their carers in health and social care. November 2006 (updated March 2011)
<http://www.nice.org.uk/nicemedia/live/10998/30318/30318.pdf>

Results

Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Woods (2012)	December 2011	<p><i>Studies:</i> RCTs, English language, published in peer review journals.</p> <p><i>Participants:</i> • Participants with a diagnosis of dementia. The main diagnostic categories that were included were Alzheimer's disease, vascular dementia or mixed Alzheimer's and vascular dementia. These diagnostic categories were considered together. Older studies, included from the previous review of Reality orientation (RO), used other terms for this population but were included where the review authors were satisfied that the included population would now be described as having a dementia. Participants with mild cognitive impairment, where the extent of cognitive impairment or its effects on day-to-day function were insufficient to justify a dementia diagnosis, were not included.</p> <ul style="list-style-type: none"> • Severity of dementia was indicated through group mean scores, range of scores, or individual scores on a standardised scale such as the Mini-Mental State Examination (MMSE) or Clinical Dementia Rating (CDR) All levels of severity were included. • Qualifying participants received the intervention in a range of settings, including their own home, as outpatients and in daycare and residential settings. • No specific restrictions regarding age were applied. • Data from family caregivers were included where this was available and where the relationship between the 	15 studies (n=718; 407 receiving cognitive stimulation, 311 in control groups)	<p>It appears that four of the RCTs included in this SR compared cognitive stimulation therapy with an acetylcholinesterase (Chapman 2004; Bottino 2005; Onder 2005; Requena 2006); three of which evaluated activities of daily living (ADL) outcomes (Chapman 2004; Bottino 2005; Onder 2005). However, clearly reported results on ADL were reported for two of the studies:</p> <p>Bottino 2005: using a ADL scale rated by carer (no other details reported), the intervention group (n=6) had a mean of 1 (SD 3.27) and the control group (n=7) had a mean of 0.15 (SD 2.86) for a mean difference of 0.26 (95% -0.84, 1.36)</p> <p>Onder (2005): this trial used the Barthel and IADL (no other details reported). The intervention group (n=70) had a mean of -0.9 (SD 8.37) and the control group (n=67) of -2.9 (SD 8.19) for a mean difference of 0.24 (-0.10, 0.58)</p>	Low (but the SR authors combined all types of comparators together in the meta-analyses)

		<p>caregiver and the person with dementia was specified, including whether they were co-resident.</p> <ul style="list-style-type: none"> • The number of participants receiving concurrent treatment with acetylcholinesterase inhibitors was documented, where possible. <p><i>Intervention/Comparison:</i></p> <ul style="list-style-type: none"> • Studies were considered for this review if they described a cognitive stimulation intervention targeting cognitive and social functioning. These interventions may also have been described as RO groups, sessions or classes. • The definition of cognitive stimulation as proposed by Clare 2004 was adopted. This meant that some studies which described their intervention as 'cognitive stimulation' were excluded. Interventions needed to offer exposure to generalised cognitive activities rather than training in a specific modality. • Interventions were typically conducted in a group to enhance social functioning, or could involve family caregivers. • Studies were included if a comparison was made to 'no treatment', 'standard treatment' or placebo. Standard treatment was understood to be the treatment that was normally provided to patients with dementia in the study setting and could include provision of medication, clinic consultations, contact with a community mental health team, day care, or support from voluntary organisations. Placebo conditions could consist, for example, of an equivalent number of sessions in which general support, but no structured intervention, was offered. • The minimum duration of intervention for inclusion of a study was one month. There were no restrictions on the number of treatment sessions, although this was noted. 			
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		<p><i>Outcome:</i></p> <ul style="list-style-type: none"> • Outcomes were considered in relation to the impact of the intervention on the person with dementia and on the primary family caregiver. Studies could present data in both these categories. • Short term (immediately after the intervention) and medium term (follow-up one month to one year after the intervention finished) outcomes were considered. • Outcomes for the person with dementia and the caregiver were considered where these were assessed using scores on standardised tests, rating scales and questionnaires. • Rates of attrition and reasons for participants dropping out from the study were noted. <p>Outcome measures for the person with dementia sought to identify whether changes were observed following the intervention. The following variables were considered as outcome measures for the person with dementia.</p> <ul style="list-style-type: none"> • Performance on at least one test of cognitive functioning (including tests of memory and orientation). • Self-reported, clinically-rated or carer-reported measures for mood of the person with dementia. • Self-reported or carer-reported quality of life or well-being measures for the person with dementia. • Observer or carer ratings of everyday functioning (activities of daily living) of the person with dementia. • Carer ratings of the participant's behaviour. • Clinician or carer ratings of neuropsychiatric symptoms or behaviour problems of the person with dementia. • Clinician or carer ratings of the social engagement of the person with dementia. 'Carer' in this context included care staff as well as family caregivers. 			
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		<p>The outcomes for the family caregiver that were considered included any of the following.</p> <ul style="list-style-type: none">• Self-reported well-being, depression and anxiety.• Self-reported burden, strain and coping.			
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Risk of Bias:

SRs

Author (year)	Risk of Bias				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Woods (2012)					

 Low Risk

 High Risk

 Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
NICE	(cognitive stimulation therapy) AND (dementia)	34	1
DARE	(cognitive stimulation)	7	1
Summary	NA	NA	

Full searches were not conducted for this clinical question as a relevant high quality up-to-date systematic review was published within the last year. Project search protocols state that no subsequent searches should be conducted in this situation.

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