

Effect of psychological interventions for people with dementia

This is an excerpt from the full technical report, which is written in Norwegian.

The excerpt provides the report's main messages in English

No. 28-2014

Review of systematic reviews

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Institution Norwegian Knowledge Centre for the Health Services
(Nasjonalt kunnskapssenter for helsetjenesten)
Magne Nylenna, *Director*
Authors Dahm, Kristin Thuve, *Project leader*
Dalsbø, Therese Kristine, *Senior Advisor*
Håvelsrud, Kari, *Senior Advisor*
Reinar, Liv Merete, *Head of unit*

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Norwegian Knowledge Centre for the Health Services summarizes and disseminates evidence concerning the effect of treatments, methods, and interventions in health services, in addition to monitoring health service quality. Our goal is to support good decision making in order to provide patients in Norway with the best possible care. The Centre is organized under The Norwegian Directorate for Health, but is scientifically and professionally independent. The Centre has no authority to develop health policy or responsibility to implement policies.

We would like to thank all contributors for their expertise in this project. Norwegian Knowledge Centre for the Health Services assumes final responsibility for the content of this report.

Norwegian Knowledge Centre for the Health Services
Oslo, December 2014

Key messages (English)

About 70 000 people in Norway are afflicted by dementia. Dementia is a progressive disease and the incidence increases with the age. More than the half of people with dementia are living at home and about 80 percent of all residents in nursing homes have a dementia disorder.

We have critically appraised Cochrane-reviews and graded the available evidence about the efficacy of psychological interventions for people with dementia on the following outcomes; cognition, agitation, depression, anxiety, quality of life, activity of daily living and 24-hours care. The Norwegian Directorate of Health commissioned this work. The results will be used in the development of a new evidence-based guideline.

We included eight Cochrane reviews representing 61 primary studies. We presented the reviews in three categories. The documentation shows that:

1. The effect of different interventions directed at cognitive symptoms and maintenance of function:
 - Cognitive stimulation probably contribute to better cognitive function and quality of life for people with dementia compared with usual care. The difference between groups was not statistically significant at three month follow-up.
 - Cognitive training and rehabilitation, reminiscence therapy and validation therapy might have little or no effect for people with dementia.
 - Conclusions could not be drawn about the effect of music therapy and multi-sensory stimulation for people with dementia.
2. The effect of interventions for challenging behavior in dementia:
 - Functional analysis aimed at challenging behavior might have little or no effect on challenging behavior and depression as well as for caregiver burden and depression.

Title:

Effect of psychological interventions for people with dementia

Type of publication:

Overview of systematic review Systematic review

A systematic review is a review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyze data from studies that are included in the review. Statistical methods (meta-analysis) may or may not be used to analyze and summarize the results of the included studies

Doesn't answer everything:

Excludes studies that fall outside of the inclusion criteria

- No health economic evaluation
 - No recommendations
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Publisher:

Norwegian Knowledge Centre for the Health Services

Updated:

Last search for studies: April, 2014.

Peer review:

Anne Marie Mork Rokstad, Researcher, Ageing and Health

Kia Minna Johanna Hynninen, Associate Professor, Faculty at Department of Clinical Psychology, University of Bergen

3. Psychological interventions aimed to reduce anxiety and depression in dementia:

- Psychological interventions probably reduce depression and might reduce anxiety, but might have little or no effect on cognitive function, or caregiver depression.

There is a lack of research on several key-endpoints, and there is a general lack of summarized research on 24-hours care.

Executive summary (English)

Background

About 70 000 people in Norway are afflicted by dementia. Dementia is a progressive disease and the incidence increases with the age. More than the half of the people with dementia live at home and about 80 percent of all residents in nursing homes have a dementia disorder. If the incidence of dementia diseases remains at current levels, the number of people with dementia will be doubled to about 140 000 by 2040. A number of non-pharmacological interventions are recommended in a British guideline from 2014, including psychological interventions, physical activity and other care interventions.

Norwegian Knowledge Centre for Health Services was commissioned by the Ministry of Health and Care Services to summarize the available research on non-pharmacological interventions for people with dementia, defined as psychological interventions, physical activity and other care interventions. In this report the objective was to synthesize research about the effectiveness of psychological interventions in a broad context for people with dementia. The results will be used in the development of a new evidence-based guideline.

Method

We prepared an overview of systematic reviews based on the method presented in the Cochrane handbook. We searched for systematic reviews in the Cochrane library and included Cochrane reviews of high quality.

Two authors independently assessed the reviews for inclusion and assessed the methodological quality by using a checklist for methodological quality of systematic reviews. The quality of the evidence was assessed using Grades of Recommendations Assessment, development and Evaluation (GRADE). The quality of evidence is described as high (⊕⊕⊕⊕), moderate (⊕⊕⊕⊖), low (⊕⊕⊖⊖) or very low (⊕⊖⊖⊖).

Results

We identified 242 citations in the search for systematic reviews, conducted in April 2014. We screened titles and abstracts, articles in full text and assessed the methodological quality. We included eight systematic reviews on the efficacy of psychological interventions for people with dementia. The systematic reviews represented 61 primary studies reporting results relevant to our research question. We presented the overviews in three categories; 1) Measures aimed at cognitive symptoms and maintenance of function (six systematic reviews), 2) Measures aimed at challenging behavior (one systematic review), 3) Measures aimed at comorbid emotional disorder as anxiety and depression (one systematic review).

Six systematic reviews (43 primary studies) examined the effect of different interventions directed at cognitive symptoms and maintenance of function. The interventions examined: cognitive training and rehabilitation, cognitive stimulation, reminiscence therapy, validation therapy, music therapy and multi-sensory stimulation. Cognitive stimulation probably contribute to better cognitive function (SMD 0.41, 95 % KI 0.25 - 0.57) and quality of life (SMD 0.38, 95 % KI 0.11 – 0.65) for people with dementia ($\oplus\oplus\oplus\ominus$). We also found that cognitive training and rehabilitation, reminiscence therapy and validation therapy might have little or no effect for people with dementia. Conclusions could not be drawn about the effect of music therapy and multi-sensory stimulation for people with dementia.

One systematic review including 12 studies relevant for our research question examined the effect of functional analysis based interventions for challenging behavior in dementia. Functional analysis is based on analyzing behavior focusing on enhancing knowledge among family members and caregivers. Functional analysis aimed at challenging behavior might have little or no effect on challenging behavior (SMD 0.02, 95 % KI -0.13 – 0.17) and depression (SMD -0.15, 95 % KI -0.33 – 0.03), as well as for caregiver burden and depression ($\oplus\oplus\oplus\ominus$).

One systematic review including six studies, examined the effect of psychological interventions to reduce anxiety and depression in dementia and mild cognitive impairment. Psychological interventions including interventions as cognitive behavioral therapy, psychodynamic therapy, interpersonal therapy and supportive counselling. Psychological interventions probably reduce depression (SMD -0.22, 95 % KI -0.41 to -0.03) $\oplus\oplus\oplus\ominus$ and might reduce anxiety (MD -4.57, 95 % -7.81 to -1.32) ($\oplus\oplus\ominus\ominus$) for people with dementia, lower score indicate less depression and anxiety. We also found that psychological interventions might have little or no effect on cognitive function, quality of life and daily activity level for person with dementia or caregiver depression.

Discussion

We included eight systematic reviews of high quality. We graded the quality of evidence for all relevant outcomes as moderate, low and very low. None of the studies were from Norway.

We included only Cochrane-reviews and there may exist other systematic reviews of high quality. Three systematic reviews had not conducted literature search after 2008. We do not know if the lack of updates is because of no longer published research in the field or other factors. If there are newer primary studies, we do not know whether these would change or confirm the conclusions from the systematic reviews.

The search for systematic reviews revealed more than 40 protocols for systematic reviews of people with dementia. Some of the protocols focused on diagnostic tests or medications, but many dealt with interventions such as dance and movement, art therapy, technological assistance measures and personally organized activity.

Considering a systematic review to be of high quality does not mean that all the included primary studies necessarily are of high quality. Many of the primary studies are unclear in reporting randomization sequence generation and allocation concealment, and there was a lack of blinding of the outcome assessor. For some of the comparisons and outcome the quality of the evidence was low and very low. This does not mean that these interventions do not work, but indicate that we have little confidence in the effect estimates.

Conclusion

Cognitive stimulation probably contribute to better cognitive function and quality of life for people with dementia. The difference between groups was not statistically significant at three month follow-up. Functional analysis aimed at challenging behavior might have little or no effect on depression and challenging behavior, as well as for caregiver burden and depression. Psychological interventions probably reduce depression and might reduce anxiety for people with dementia.

There is a lack of research on several key-endpoints, and there is a general lack of summarized research on 24-hours care.