




BMJ Open Protocol for conducting scoping reviews to map implementation strategies in different care settings: focusing on evidence-based interventions for preselected phenomena in people with dementia

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ABSTRACT

Introduction Various evidence-based interventions are available to improve the care of people with dementia in different care settings, many of which are not or are only partially implemented in routine care. Different implementation strategies have been developed to support the implementation of interventions in routine care; however, the implementation of complex interventions remains challenging. The aim of our reviews is to identify promising strategies for, significant facilitators of and barriers to the implementation of evidence-based interventions for very common dementia care phenomena: (A) behaviour that challenges supporting a person with dementia in long-term care, (B) delirium in acute care and (C) the postacute care needs of people with dementia.

Methods and analysis We will conduct one scoping review for each preselected dementia care phenomenon (A, B and C). For this, three literature searches will be carried out in the following electronic databases: MEDLINE (via PubMed), CINAHL (via EBSCO) and PsycINFO (via EBSCO). Additionally, we will perform backward and forward citation tracking via reference lists and Google Scholar. Identified records will be independently screened by two reviewers (title/abstract and full text) using the defined inclusion criteria. We will include all study designs and publications in the German or English language. For the data analyses, we will conduct a deductive content analysis using two different analytical approaches: Expert Recommendations for Implementation Change and the Consolidated Framework for Implementation Research.

Ethics and dissemination Due to the nature of a review, ethical clearing is not required. We will disseminate our results in peer-reviewed journals, workshops with stakeholders, and (inter)national conferences.

INTRODUCTION

International health policy, stakeholders and non-government organisations are responding to the increasing number of people with dementia through national

Strengths and limitations of this study

- To our knowledge, our three scoping reviews will, for the first time, map promising strategies for, significant facilitators of and barriers to the implementation of evidence-based interventions for three preselected common phenomena in people with dementia.
- We expect that the results of our three scoping reviews will inform practitioners and researchers about various strategies for, facilitators of and barriers to implementation.
- The three scoping reviews are part of a larger study (TRANSFER-DEM BMG: FKZ 5021FSB001) and are in line with the goal of supporting the development of a blueprint for the successful implementation of interventions.
- This study protocol provides transparency for all three scoping reviews and, furthermore, reduces the likelihood of review bias.
- The main limitation of our reviews is that we will restrict the search to three preselected common phenomena in dementia care.

dementia strategies. These national dementia strategies, for example, describe the demands for action and the recommended approaches to improving healthcare for people with dementia in various care settings; in particular, long-term care and acute care settings should be given priority.^{1–3} This priority is partly because care for people with dementia often presents challenges for healthcare professionals,⁴ which then leads to poor care outcomes.⁵ Due to the high prevalence^{6,7} and associated negative consequences^{8–12} for people with dementia, their relatives and healthcare professionals, behaviour that challenges supporting a person with dementia,

delirium and postacute care needs are particularly relevant phenomena in the care of people with dementia. To optimise care, various interventions addressing these phenomena have been developed and evaluated.^{13–17}

Study results show that despite the increasing number of evidence-based interventions, patients receive only 30%–40% of their care in line with the current scientific evidence, and in 20%–25% of patients, there is a risk of harm in care.¹⁸ Additionally, healthcare professionals report that they implement research findings relatively seldomly in their care routines.¹⁹ This means that there is currently a gap between the existence of evidence-based interventions and their successful implementation in routine care. To improve the care of people with dementia in different settings, it seems to be necessary to focus on promising implementation strategies for evidence-based interventions. Implementation strategies for evidence-based interventions for people with dementia appear to be complex and extensive.²⁰ Various factors for successful implementation seem to be required.^{21 22}

To our knowledge, there is no comprehensive, systematised evidence on implementation strategies for evidence-based interventions for specific care phenomena in people with dementia. With our three scoping reviews, we aim to identify promising implementation strategies for evidence-based interventions that focus on three preselected phenomena in people with symptoms of or who have been diagnosed with dementia: (A) behaviour that challenges supporting a person with dementia in long-term care, (B) delirium in acute care and (C) postacute care needs. In addition, barriers and facilitators that influence the implementation of the different interventions will be identified.

METHOD

In this article, we report the protocol used for all three scoping reviews because all reviews are part of a larger study ('Transfer of evidence-based prevention and care concepts into routine care for people with dementia' TRANSFER-DEM), and the results will be synthesised and used in later steps of this study. In line with our research aim, we defined the following research questions:

1. Which implementation strategies are promising for the implementation of evidence-based interventions for three preselected phenomena: (A) behaviour that challenges supporting a person with dementia in long-term care, (B) delirium in acute care and (C) postacute care needs?
2. What are the significant facilitators and barriers that influence the implementation of evidence-based interventions?
3. What are the effects of these implementation strategies on implementation outcomes?

To answer our research questions, we will conduct three scoping reviews starting in March 2021 that are scheduled to end in December 2021. Each scoping review will address question 1 for one of the three preselected

phenomena (A, B or C) and will address questions 2 and 3.

Scoping reviews are meant to map, for example, the available evidence in a given field, to examine how research is conducted in a certain field and to identify knowledge gaps.²³ We will follow the Joanna Briggs Institute approach to scoping studies developed by Peters *et al.*²⁴ The approach includes the following nine steps: (1) defining and aligning the objective/s and question/s, (2) developing and aligning the inclusion criteria with the objective/s and question/s, (3) describing the planned approach to searches for evidence, the selection of records, data extraction and the presentation of the evidence, (4) searching for the evidence, (5) selecting the evidence, (6) extracting the evidence, (7) analysing the evidence, (8) presenting the results and (9) summarising the evidence in relation to the purpose of the review, drawing conclusions and noting any implications of the findings.

To report the review protocol, we follow, whenever applicable, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Protocols guidelines²⁵ (online supplemental table 1).

Inclusion criteria

Our inclusion criteria are based on our research aims and questions. We report these inclusion criteria by using the 'Population, Concept of interest, Context (PCC)' mnemonic.²⁴ Additionally, we report the criteria for the types of evidence sources and other criteria (table 1).

Search strategies

We conducted one literature search for evidence-based interventions addressing each type of preselected phenomenon (A, B and C) in the following electronic databases: MEDLINE (via PubMed), CINAHL (via EBSCO) and PsycINFO (via EBSCO). The search terms were derived from our research questions. Additionally, we used an initial limited search and key publications to identify free search terms and indexing words. These search terms were clustered according to the 'PCC' mnemonic²⁴ and resulted in three search strings. The search strings were developed by the first reviewers of each review (A and B: MR-M; C: CM) and were checked by the second reviewers (A and B: JIB; C: DP) using Peer Review of Electronic Search Strategies.²⁶ The search strings were developed first for MEDLINE (via PubMed) (online supplemental table 2) and then adopted for the other two databases with RefHunter V.5.0.²⁷ Additionally, we will perform backward and forward citation tracking (via reference lists and Google Scholar).

Selection of evidence sources

Records identified through our literature searches (A, B, C) will be imported under separate Covidence²⁸ licences and automatically checked for duplicates. Titles and abstracts of records for each review will be screened by two reviewers (A and B: MR-M/JIB; C: CM/DP)

Table 1 Inclusion criteria

Criteria	Definition
Population	▶ People with symptoms of dementia (with and without a dementia/an Alzheimer's diagnosis) as the target population for the evidence-based interventions
Concept of interest	▶ Implementation of evidence-based: (A) Psychosocial interventions for behaviour that challenges supporting a person with dementia, (B) Psychosocial interventions for delirium and (C) interventions for postacute care needs
Context	A. Long-term care. B. Acute care. C. Acute care.
Types of evidence sources	▶ Any kind of study that describes or evaluates the implementation process of interventions (eg, within the context of trials such as randomised controlled trial or hybrid design) or daily practice
Other	▶ Languages: German and English ▶ Year: no restrictions

independently against the inclusion criteria. Thereafter, the full text of all potentially relevant records will also be independently screened for inclusion by the same reviewers. The reasons for excluding full texts will be recorded. During the screening process, disagreements between the votes of the two reviewers will be resolved through a discussion between them or, if no consensus can be reached, through a discussion with all coauthors. The first 25 records will be used to pilot test our inclusion criteria for each review, and the criteria will be adjusted if necessary. Adjustments will be required if the number of vote discrepancies between the two reviewers is greater than 25%.²⁴ If adjustments for inclusion criteria are made during the screening process, we will report them in our following publications. We will use the PRISMA flow chart²⁹ to report the process for evidence selection.

Data extraction

For data extraction, we will adapt the template for scoping reviews developed by the Joanna Briggs Institute (table 2).²⁴ Data extraction will be conducted for each review by two reviewers (A and B: MR-M/JIB; C: CM/

DP) independently in Covidence.²⁸ After finishing the extraction process, every extracted item will be checked for deviations. Deviations will be discussed, and if no consensus between the two researchers can be reached, the research team will become involved. The data extraction will be performed with an iterative process according to the description from the Joanna Briggs Institute,²⁴ which means that after two studies are extracted, the template will be checked to see whether all relevant data are represented or whether adjustments are needed.

Analysis of the evidence

We will apply deductive content analysis to analyse the strategies for, barriers to and facilitators of implementation reported within the included studies. The deductive categories used for the analysis of the implementation strategies will be derived from the Expert Recommendations for Implementing Change (online supplemental table 3).^{30–32} In addition, the five dimensions of the Consolidated Framework for Implementation Research³³ (online supplemental table 4) and their subconcepts will be used to analyse the reported factors (barriers and

Table 2 Data extraction template

Domain	Description (content)
General information	▶ Author (complete name) ▶ Country (location of the study) ▶ Year (publication date) ▶ Aim (eg, effectiveness of different implementation strategies) ▶ Study design (eg, randomised controlled trial, process evaluation) ▶ Setting (eg, type, no of facilities, size of facilities)
Participants	▶ Target population for the intervention (eg, people with symptoms of dementia or diagnosed dementia) ▶ Participants of the implementation/process evaluation (eg, nursing staff)
Intervention	▶ Implemented intervention (eg, content, components, providers)
Implementation and evaluation	▶ Description of the implementation (eg, theoretical framework, strategies, materials) ▶ Description of the evaluation of the implementation (eg, methods)
Results	▶ Main findings of the implementation (eg, outcomes according to Proctor <i>et al</i>) ³⁷ ▶ Main findings of the evaluation of the implementation (eg, barriers, facilitators)

facilitators), which influencing implementation success. This approach has been shown to be applicable in a previous study.³⁴

First, the included studies for each review will be independently coded by two reviewers (A and B: MR-M/JIB; C: CM/DP) in MAXQDA V.2020.³⁵ Second, the coding of the two reviewers for each review will be compared and, in the case of deviations, discussed. Third, a recoding process based on the results of the comparison will be carried out, and codes will be counted. If a code cannot be clearly assigned, a discussion with all coauthors will be initiated. Fourth, excerpts from the results of the deductive content analysis will be peer checked by one of two researchers (MR and TQ) to ensure trustworthiness.³⁶

Presentation of the results

The results of the three reviews will be reported and presented separately both narratively and visually. For this, we will create a table to describe the characteristics of the included studies (table 2). Additionally, we will report the results of the implementation and evaluation in a narrative form. The results of our content analysis will be presented in an appropriate narrative and/or visual form (eg, tables or figures).

Patient and public involvement

The three scoping reviews are the foundation for a larger study (TRANSFER-DEM) in Germany. The results of the reviews will be used to:

- ▶ Conduct a market analysis to investigate implementation strategies for evidence-based interventions in different care settings.
- ▶ Conduct interviews with stakeholders to investigate the facilitators of and barriers to the implementation of evidence-based interventions.
- ▶ Apply a foresight model for implementation strategies for evidence-based interventions.
- ▶ Develop a framework to guide implementation.

ETHICS AND DISSEMINATION

Because of the nature of scoping reviews, ethical approval is not required. However, ethical approval is needed for the larger study TRANSFER-DEM, we, therefore, will seek ethical approval from the ethic committee of the University of Witten/Herdecke in summer 2021. The results of our scoping reviews will be published in peer-reviewed journals. Furthermore, we will disseminate our results in workshops with stakeholders and at international conferences.

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Contributors CM, TQ, MR-M and JIB wrote the initial draft of the protocol. DP and MR revised the manuscript. All authors read and approved the final manuscript. MR and TQ conducted the larger study TRANSFER-DEM.

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