BMJ Open Instruments for assessing the preferences for everyday living of older people with various care needs: protocol for an evidence map

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ABSTRACT

Introduction Consideration of the preferences for everyday living of older people with various care needs is a prerequisite for person-centred and evidencebased nursing care. Knowledge of and respect for these preferences by nursing staff are associated with better care outcomes for older people with various care needs. To assess preferences in a structured way, instruments focusing on different topics of everyday living appear to be useful. It is unclear which instruments exist for assessing preferences for everyday living. The aim of this planned review is to identify relevant instruments for assessing the preferences for everyday living of older people with various care needs in the form of an evidence map. Additionally, gaps requiring further research will be presented. Methods and analysis To identify the different instruments, we will conduct a systematic search in the electronic databases MEDLINE (via PubMed), CINAHL and PsycINFO (via EBSCO). In addition, we will perform backward and forward citation tracking via reference lists and Google Scholar. The identified records will be independently screened (title/abstract and full text) by two reviewers. Data from the included studies will be extracted independently by the same two reviewers. In all three steps, the results will be checked for deviations. and if there are any deviations, they will be discussed. If no consensus can be achieved through discussion, a third reviewer will be engaged. All study designs will be included, and there will be no limitations regarding the publication status or time period. We will include all studies published in English and German that use instruments focusing on the assessment of preferences for everyday living in people older than 60 years of age with various care needs. For data charting, we will extract the number, categories and types of preferences, the care setting for which the instrument was developed and, if available, psychometric properties. Finally, the various extracted results will be presented in the form of tables and a bubble plot.

Ethics and dissemination There are no ethical concerns related to the construction of an evidence map, and ethical approval was given by the Witten/Herdecke University (application number 226/2020). We will discuss our results with practitioners in the field of nursing care and persons with various care needs. We will also make our results available to practitioners in an upcoming Project (PELI-D II)

Strengths and limitations of this study

- ► The evidence map will be, for the first time, identifying instruments used for assessing preferences for everyday living.
- We will include all study designs with no time period or publication status restrictions.
- We will use a broad approach of the term everyday living to identify a high variety of different instruments.
- We may miss instruments published outside of journals (eg, grey literature).
- Main limitation will be the current lack of a general definition for everyday living in the context of preferences.

and to the public at (inter)national conferences and in the form of practice and peer-reviewed articles.

INTRODUCTION

The focus of care for older people with various care needs is shifting from a medicalcentred to a person-centred approach across care settings. A person-centred approach is characterised by the way nursing staff tailor their services to wrap around the individual needs of clients or residents.²⁻⁴ In addition, there is a demand for nursing staff to provide interventions that are evidence based.⁵ For person-centred and evidence-based nursing care, it is a prerequisite that nursing staff have knowledge of the preferences of their clients or residents. This knowledge enables nursing staff to adapt their care interventions based on the preferences and individualised needs of the older people in their care.⁶⁷ This corresponds to a person-centred care approach that affirms the individuality and preferences of clients or residents.^{7 8} In addition, the preferences identified during interactions between nursing staff and client or resident can contribute to the development of internal



evidence and thus promote evidence-based nursing care. In both of these nursing care approaches, information about the preferences for everyday living of older persons with various care needs appears to be a key aspect. This is because one core aspect of nursing is to support older people with various care needs in completing their activities of daily living. Furthermore, studies have shown that taking into account preferences for everyday living can lead to an improvement in nursing care outcomes, such as continence or nutrition status of people with various care needs. 12 13

In the assessment of preferences for everyday living, structured instruments appear to be useful. ¹⁴ To date, there is no systematic overview of the various instruments and their purposes. As a result, practitioners and researchers are not able to determine which instruments can be used in their care setting or what scientific gaps currently exist.

In this article, we report the protocol for our evidence map. It follows the guidelines for systematically identifying and reporting the types and characteristics of instruments used for assessing the preferences for everyday living of older people who receive long-term services and supports in a variety of settings.

METHODS AND ANALYSIS

The evidence map is a newer review method for systematically processing research findings. 15 For an evidence map, it is essential that a broad research question be systematically investigated, and the results are presented by visual mapping of the identified evidence and descriptions of evidence gaps. ¹⁶ In contrast to systematic reviews, as defined by the Cochrane Collaboration, ¹⁷ for evidence maps, it is not necessary to assess the quality or analyse the strength of evidence of the included studies, since the purpose of evidence maps is not to provide recommendations for interventions. In addition, in contrast to a scoping review, as defined by the Joanna Briggs Institute, 18 the focus of an evidence map is on the descriptive visual presentation of the current research landscape, which enables practitioners and researchers to obtain information on existing evidence and research gaps for a specific topic in a user-friendly visual way. 15 16 18 19

For our planned evidence map, starting in November 2020 and scheduled to end in August 2021, we follow the iterative framework for scoping studies developed by Arksey and O'Malley²⁰ which was further modified by Levac *et al.*¹⁹ This framework contains six different stages: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarising and reporting the results and (6) consulting. In addition, we followed, whenever applicable, the Preferred Reporting Items for Systematic Review and Meta-analysis Protocols guidelines²¹ for reporting this protocol (online supplemental table 1).

Stage 1: identifying the research question

In the context of a pilot study focusing on the translation and psychometric testing of an instrument for assessing the preferences for everyday living of older people in various care settings, 14 22-24 discussions among the research team resulted in several questions regarding further development of the instrument. In this context, how other instruments are structured and which topics they assess was discussed. This led to an explorative literature search to identify a systematic overview of currently available instruments for this topic. However, no systematic overview could be identified. Based on this, we defined the following research question for our evidence map: 'Which instruments exist for assessing the preferences for everyday living of older people with various care needs?'

Stage 2: identifying relevant studies

In November 2020, we will conduct a literature search to identify relevant instruments for assessing preferences for everyday living in the following electronic databases: MEDLINE (via PubMed), CINAHL and PsycINFO (via EBSCO). Our search string was developed for MEDLINE (via PubMed) (online supplemental table 2) and adapted for the other two databases by a single reviewer (MR-M) according to RefHunter V.5.0.²⁵ Additionally, we will provide backward and forward citation tracking (via reference lists and Google Scholar). For included studies that do not report all characteristics of interest for the instrument, we will identify additional publications with information about, for example, the development and psychometric testing of the instrument.

Stage 3: study selection

Records identified through our electronic database search will be imported into Covidence²⁶ and automatically checked for duplicates. The titles, abstracts and full texts of identified records will be screened independently by two reviewers (MR-M/DP) in Covidence against the eligibility criteria (table 1). The results of these two screening processes will be discussed between the two reviewers in the case of different ratings. If no consensus can be reached by discussion, a third reviewer (MR) will be involved. The first 200 records screened will be used to test our eligibility criteria and adjust them if necessary. An adjustment will be necessary if the variation in ratings (include/exclude) between the two reviewers is more than 20%. If this is the case, we will further refine our eligibility criteria through a team discussion and report the changes in articles published about the evidence map.

Stage 4: charting the data

For data charting, we will create a form in Windows Excel (table 2). Two reviewers (MR-M/DP) will independently extract the data from the included studies. After finishing this extraction process, the same two



Table 1 Eligibility criteria				
Criteria	Definition			
Population	We will include studies with a study population of people older than 60 years with various care needs. Because care dependency is defined variously in the international context, people with few care needs or a need for day-structuring activities only are not always included as people with care needs, especially in studies that focus on non-traditional care settings such as adult day service. We will exclude studies that focus on people receiving palliative care.			
Concept of interest				
Study design	Because the objective is to identify instruments for assessing preferences for everyday living and the broad			
	ways in which the instruments are used in research, we will consider all types of study designs.			
Others	We will only include studies published in English and German. There will be no restrictions on publication status or date.			

reviewers will check every item of the extracted data for consistency. If there are any differences in the extractions, they will be discussed. If no consensus can be reached, a third reviewer (MR) will be involved. Furthermore, we will test the data charting form for

the first five included studies. If there is a 20% difference between the extracted data of the two reviewers, we will revise the data charting form on team discussion and report the changes in articles published about the evidence map.

Table 2 Data charting framework				
Domains	Description (coding)			
Instrument details	 Name (complete name +acronym) Publication date (year) Publication (citations) Preferences (types, numbers and categories) Assessment method (eg, self or proxy rating) Population (eg, people with dementia) Aim (eg, scientific or clinical use) Geographical location (country) Setting (eg, nursing homes, home care or adult day service) 			
Development details	 Development duration (start/end date) Psychometric properties (eg, results of the test-retest analysis) Further developments or modifications (eg, adding additional preferences) 			
Developer details	 Name (first developer) Institution (eg, university or research institute of the first developer) Email (first developer) Address (zip code, city and street) 			



Stage 5: collating, summarising and reporting the results

The extracted data (table 2) will be reported via tables and a bubble plot. We will report general aspects of the identified instruments (eg, developer details) in the form of tables. The more specific information about the instruments will be visualised in the form of a bubble plot. For this purpose, we will use R V.4.0.3 and ggplot2 to collate, summarise and graph the identified instruments according to the type of preferences, the population and the care settings for which each instrument was developed.²⁷ Therefore, one bubble will be created, in the bubble plot, for each included instrument in the evidence map. To illustrate the number and categories of the different preferences (eg, leisure or care) of the included instruments, we will modify the size and colour of the different bubbles accordingly. For example, the size of the bubble will be based on the number of preferences (eg, questions for or visuals of preferences) that an instrument contains. Additionally, for information about the assessment method (eg, using a sorting approach or questionnaire), aim (eg, research or practice) and psychometric properties (eg, reliability and validity) of the instrument, we will add an extra visual element around every mapped bubble, such as a symbol (eg, plus or minus). The aim is by graphically representing the identified instruments in form of bubbles, a quick overview is available for practitioners and/or researchers about possible instruments for example their care setting or the preferences of interest.

Stage 6: consultation

Since stage 6 is described as being in parallel to the other stages, ²⁰ we will discuss our results with a minimum of one practitioner from the field of nursing care after completing stages 3, 4 and 5. Practitioners will be recruited from partner nursing facilities of the German Center for Neurodegenerative Diseases (DZNE). Additionally, we will also involve a minimum of one person from the patient advisory board of the DZNE and/or a person who received care from a partner nursing facility in the discussion. The first aim is to discuss the graphically design of the bubble plot to ensure ease of use and accessibility. Second we will discuss the identified instruments according to their use in practice and to obtain an impression of how the instruments reflect the preferences of older people with various care needs. Results will be influence the design of the bubble plots and will be presented in the result and discussion part of the upcoming publication. In addition, a discussion among the research team members will take place after each stage to evaluate the current approach, the results and the need for further adjustments of the procedure.

Patient and public involvement

We will involve a minimum of one practitioner from the field of nursing care and a minimum of one person from the patient advisory board of the DZNE and/or persons who have visit an adult day service on a regular basis.

The involvement is planned for stage six consultation to discuss the results of our evidence map.

Ethics and dissemination

For our review, there are no ethical concerns. An ethical proposal for a research project focusing on understanding and assessing the preferences for leisure activities of people with care needs in adult day services (PELI-D II), including the evidence map, has been submitted to the Witten/Herdecke University and has received ethical clearing (application number 226/2020). We will present our results to practitioners in participating facilities of the upcoming PELI-D II Project and at (inter)national conferences and publish them in journals for practitioners and peer-reviewed journals. In addition, we will address possible gaps in the current research landscape identify by the evidence map (eg, missing preference instruments for people living with dementia) and incorporate them into possible future projects.

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Supplementary table 1: PRISMA-P Checklist

Section and	Item	Checklist item	Reported on
topic	No		page no.
ADMINISTRATIVE IN	FORM	ATION	
Title:			
Identification	1a	Identify the report as a protocol of a systematic review	4
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	na
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	na
Authors:			
Contact	3a	Provide name, institutional affiliation, and e-mail address of all protocol authors; provide physical mailing address of corresponding author	1
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	1 and 9
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	na
Support:			
Sources	5a	Indicate sources of financial or other support for the review	9
Sponsor	5b	Provide name for the review funder and/or sponsor	na
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	na
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	4
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	5
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	6-7
nformation sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	5-6

Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	
Study records:			
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	5-8
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	5-8
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	5-8
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	5-8
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	na
Risk of bias in individual studies	14	Describe anticipated methods for assessing the risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	na
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	na
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I², Kendall's τ)	na
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	na
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	7-8
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	na
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	na

From: Shamseer, et al. 21

Supplementary table 2: Search strategy example in MEDLINE (via PubMed)

	#4 and [MaCII Tarred]
Population	#1 aged[MeSH Terms]
	#2 aged[Title/Abstract]
	#3 retired[Title/Abstract] #4 older[Title/Abstract]
	#5 resident*[Title/Abstract]
	#6 elder*[Title/Abstract]
	#7 senior*[Title/Abstract]
	#8 OR/ #1-7
C	#9 sleep[MeSH Terms]
Concept	#10 sleep[Title/Abstract]
	#11 hygiene[MeSH Terms]
	#12 hygiene[Title/Abstract]
	#13 grooming[Title/Abstract]
	#14 care[Title/Abstract]
	#15 toileting[Title/Abstract]
	#16 clothing[MeSH Terms]
	#17 cloth*[Title/Abstract]
	#18 Diet, Food, Nutrition[MeSH Terms]
	#19 food[Title/Abstract]
	#20 nutrition[Title/Abstract]
	#21 beverage*[Title/Abstract]
	#22 temperature[MeSH Terms]
	#23 temperature[Title/Abstract]
	#24 safety[MeSH Terms]
	#25 safety[Title/Abstract]
	#26 environment*[Title/Abstract]
	#27 finance*[Title/Abstract]
	#28 work[MeSH Terms]
	#29 work[Title/Abstract]
	#30 sex[MeSH Terms]
	#31 sex[Title/Abstract]
	#32 sexuality[MeSH Terms]
	#33 sexuality[Title/Abstract]
	#34 leisure activities[MeSH Terms]
	#35 leisure[Title/Abstract]
	#36 recreational[Title/Abstract]
	#37 activit*[Title/Abstract]
	#38 sports[Mesh Terms] #39 sport*[Title/Abstract]
	#40 exercise[MeSH Terms]
	#40 exercise[MeSH Terms] #41 exercise[Title/Abstract]
	#42 religion[Title/Abstract]
	#43 health[Title/Abstract]
	#44 learning[Title/Abstract]
	#45 social[Title/Abstract]
	#46 engagement[Title/Abstract]
	#47 OR/ #9-46
	#48 #8 AND #47
	#49 preferenc*[Title/Abstract]
	#50 "preference-based" [Title/Abstract]
	#51 OR/ #49-50
	#52 #48 AND #51
	#53 assessment*[Title/Abstract]
	#54 instrument*[Title/Abstract]
	#55 inventor*[Title/Abstract]
	#56 questionnaire*[Title/Abstract]
	#57 OR/ #53-56
	#58 #52 AND #57