

BMJ Open Barriers, facilitators and implementation strategies for guideline-adherence in physiotherapy: a scoping review protocol

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ABSTRACT

Introduction Guideline-adherent physiotherapy can improve patient outcomes and reduce costs in the healthcare system. However, although there are numerous guidelines for physiotherapy practice, services are not consistently based on clinical practice guidelines. While various systematic and scoping reviews have highlighted barriers, facilitators and implementation strategies for guideline-adherent practice in other health professions, this scoping review aims to explore the barriers and facilitators for guideline-adherent physiotherapy and summarises the strategies used to implement such practice.

Methods and analysis This scoping review will be based on Arksey and O'Malley's scoping review methodology and the methodological guidance for conducting scoping reviews published by Joanna Briggs Institute. Relevant publications will be first searched from the beginning of June 2023 on the MEDLINE and CINAHL databases before we expand the search to other databases such as EMBASE, the Cochrane Library and PEDro at the end of June 2023. Two reviewers will independently screen the titles and abstracts of all retrieved citations for inclusion against the eligibility criteria before conducting an independent full-text screening. The criteria will be tested on a sample of abstracts before beginning the abstract review to ensure that they are robust enough to capture any articles that may relate. The extracted data will finally be collated and charted to summarise key findings regarding our research question.

Ethics and dissemination This scoping review will provide an extensive overview of the barriers, facilitators and implementation strategies for guideline-adherent physiotherapy. As scoping reviews are a form of secondary data analysis, ethical review is not required. Results will be disseminated through a peer-reviewed publication and stakeholder meetings.

Trial registration number This scoping review has been registered on 3 April 2023 on the Open Science Framework under <https://doi.org/10.17605/OSF.IO/SEUW6>.

INTRODUCTION

Clinical practice guidelines are systematically developed statements to assist healthcare professionals in evidence-informed decision

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The authors are an interdisciplinary team of health scientists and physiotherapists with a high level of expertise in the field of physiotherapy.
- ⇒ To our knowledge, this is the first scoping review to combine research findings on barriers and facilitators related to guideline-adherent physiotherapy with findings on the implementation strategies used in this context.
- ⇒ Our scoping review is conducted according to current methodological standards and can provide a broad overview of the available literature.
- ⇒ As only studies in English or German will be included, there is a probability of a selection bias.
- ⇒ As this scoping review will include different study types, it might be possible to enhance a measurement bias, as the included studies won't be fully comparable.

making.¹ They include recommendations based on the best available evidence and aim to reduce practice variations in planning and delivering healthcare interventions.² Clinicians are therefore encouraged to use guidelines to improve patient health outcomes, the quality of clinical decisions, and the safety and cost-effectiveness of care.³ In particular, several studies suggest that patients who receive guideline-adherent physiotherapy will likely use fewer physiotherapy and physician office visits, fewer prescription medications, less emergency department care and advanced imaging.⁴

However, health services are not consistently based on clinical practice guidelines and the availability of a guideline does not guarantee improved quality of care.⁵ Although there are numerous guidelines for physiotherapy practice,^{6–8} studies from different countries show that physiotherapists often do not follow guideline recommendations.^{9–11} A frequently studied construct, therefore, is the 'adherence' to clinical practice guidelines of

clinicians to better understand the uptake and implementation of guideline recommendations and their effect on patient outcomes and healthcare utilisation.^{12–14}

Implementation science studies identify barriers and facilitators for the uptake of guideline-adherent healthcare practices and develop and apply implementation strategies to enhance the uptake of evidence-based clinical innovations.^{15–17} Physiotherapists generally have a positive attitude towards guidelines.¹⁸ However, studies with different methodological approaches show that there are many barriers that hinder the implementation of guidelines in physiotherapy.^{9–11} For example, Lemmers *et al.* classify them as patient factors, guideline characteristics, institutional factors, implementation process and provider factors.¹¹

While various systematic and scoping reviews highlighted barriers, facilitators and implementation strategies for guideline-adherent practice in other health professions,^{2 16} to our knowledge, there are no reviews of this type in physiotherapy. Therefore, this scoping review aims to map the available evidence to provide an overview of the barriers and facilitators to guideline-adherent physiotherapy and the strategies used to implement such practice.

METHODS

Methods for this study were developed based on Arksey and O'Malley's scoping review methodology and the methodological guidance for conducting scoping reviews published by Joanna Briggs Institute (JBI).^{19 20} According to this framework, our scoping review includes five steps: (1) identification of the research question; (2) identifying relevant studies; (3) selection of studies; (4) charting data and (5) collating, summarising and reporting the results.¹⁹

Since our review complies with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews statement, we will critically appraise relevant studies' methodological quality to improve the interpretability of our results.²¹

Identifying the research question

This scoping review aims to answer the following research questions:

- ▶ What are the barriers, facilitators and other determinants of guideline-adherence in physiotherapy practice?
- ▶ Which strategies are used to implement guideline-adherent practice in physiotherapy?

Identifying relevant studies

The search strategy aims to find published and unpublished English and German language studies. An initial limited search of MEDLINE (PubMed) and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) will be conducted from the beginning of June 2023 to identify articles on this topic. This will be

Table 1 Pilot search strategy with draft search terms

Draft search terms	
Participants	Physiotherapy
Concept	<ul style="list-style-type: none"> ▶ Guideline-adherence ▶ Determinants of practice (barriers and facilitators) ▶ Implementation strategies
Context	All physiotherapy settings and fields

followed by analysing the text words in the titles, abstracts and index terms used to describe these articles. The final search strategy includes the identified keywords and index terms which will be tailored for each information source.

Identification of studies relevant to this review will be achieved by searching electronic databases which will include: MEDLINE, EMBASE, the Cochrane Library, PEDro and CINAHL. We will also examine all reference lists of already included studies to identify further studies of relevance.

To ensure that all relevant information is captured, we will also search various grey literature databases (eg, Grey Literature Report, OpenGrey, Web of Science Conference Proceedings) to identify studies, reports and conference abstracts relevant to this review. The identification of relevant studies will be completed by the end of June 2023.

Search terms will be set with input from an experienced research librarian, who will develop the search strategy and revise it in exchange with the research team.

The pilot search strategy is shown in [table 1](#).

Selection of studies

Eligibility criteria

Eligible articles meet the following criteria:

Participants

The current scoping review will consider studies that include physiotherapists from all clinical fields.

Concept

Investigations focusing on barriers, facilitators and other determinants of a guideline-adherent physiotherapy as well as the strategies used to implement such practice.

Context

Studies from any geographical and clinical setting will be eligible for inclusion.

Types of articles

The current scoping review will consider all studies and literature written in English or German. No time limit is applied to the search strategy.

Screening

Two reviewers (NLR, DR) will screen all articles in two phases: (1) a title and abstract review and (2) full-text review.

All articles will be imported to Rayyan.²² First, the two reviewers will independently screen the title and abstract of all retrieved citations for inclusion against the eligibility criteria. The criteria will be tested on a sample of articles prior to the abstract screening to ensure that they are sufficient to capture any articles that may relate. Any articles deemed relevant by either or both of the reviewers will be included in the full-text review. In the second step, the two investigators will then independently assess the full-text articles to determine if they meet the eligibility criteria.

Cohen's κ statistic will be calculated at both the title and abstract review stage and the full article review stage to determine inter-rater agreement. Any discordant full-text articles will be reviewed a second time and further disagreements about study eligibility at the full-text review stage will be resolved through discussion with a third reviewer (BV) until full consensus is obtained.

Charting data

Data from the articles included will be extracted by two independent reviewers (NLR, DR). The extracted data will include details about the authors, healthcare settings, patient populations, study methods, results and authors' interpretation or conclusion of significance to the scoping review questions and objectives. Any reviewer disagreements will be resolved through discussion or with a third reviewer (BV). Where required, authors will be contacted to request missing or additional data. We will assess the quality of the included studies using the JBI critical appraisal tools, depending on the type of study included, or the five-step Mixed Methods Appraisal Tool²³ which permits to appraise the methodological quality of qualitative studies, randomised controlled trials, non-randomised studies, quantitative descriptive studies and mixed-methods studies.

Collating, summarising and reporting the results

Scoping reviews map concepts underpinning a research area and the main sources and types of evidence available. The extracted data will first be analysed in descriptive and thematic forms. In the second step, the data obtained will be presented in diagrammatic or tabular form that aligns with the objectives of this scoping review. The tables and/or charts will report on barriers, facilitators and other determinants of practice regarding the guideline-adherence of physiotherapists and strategies used to implement a guideline-adherent practice. A narrative summary will apply meaning to the results and describe how the results relate to the review's objective and questions.

Patient and public involvement

Patients and the public were not involved in the development of the scoping review protocol. However, the results

of the scoping review will be disseminated to relevant stakeholders from the field of physiotherapy.

CONCLUSION

The aim of this review is to synthesise the available evidence on the barriers and facilitators to guideline-based physiotherapy and the strategies to enable its implementation. Such a synthesis has the potential to structure the available evidence for future implementation of science studies in physiotherapy and provide multiple entry points for this area of research.

ETHICS AND DISSEMINATION

This scoping review will provide an extensive overview of the barriers, facilitators and implementation strategies for guideline-adherent physiotherapy. As scoping reviews are a form of secondary data analysis, ethical review is not required. Results will be disseminated through a peer-reviewed publication and stakeholder meetings.

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Contributors NLR, DR and ME developed the idea and methodology of the scoping review protocol and drafted the manuscript. BV provided extensive feedback on the study methodology and the structure of the study protocol. NLR, DR and ME designed the search strategy. BV made important additions and helped to refine and test it. The present version of the scoping review protocol is the result of consensus among all authors.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

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