

Scoping Review Protocol

Title:

Physical Therapist and Student Physical Therapist Attitudes and Beliefs Toward Low Back Pain and Factors Influencing Attitudes and Beliefs: A Scoping Review Protocol

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Contributions:

- Roles each author will play in scoping review
 - Sarah Case-Morris – guarantor, primary researcher
 - Sarah Case-Morris, Emily Ahern, and Emily Newberry will develop the selection criteria
 - GSRAs Magdalena Beyer and Emily Ahern will perform screening of sources with a third reviewer, Sarah Case-Morris to settle any discrepancies

All authors will draft and approve the final manuscript.

Amendments

If amendments to the protocol are needed, the date will be provided along with a rationale describing the change.

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Introduction

The World Health Organization characterizes low back pain (LBP) as a worldwide epidemic affecting approximately 619 million individuals.¹ LBP is a major public health issue associated with a decline in work productivity, causing a significant economic burden in many societies.¹ Therefore, healthcare professionals are often sought to help patients manage and treat their LBP symptoms.

There are two primary frameworks which guide healthcare practitioners' treatment of low back pain: the biomedical model and the biopsychosocial model. The biomedical model states that pain and tissue damage are directly related, keeping the mind and body as two separate entities.² Conversely, the biopsychosocial model suggests a complex interplay between the biological, psychological, and sociocultural factors influencing a patient's experience of pain.³ Current clinical practice guidelines (CPGs) for LBP endorse the biopsychosocial model when treating patients with LBP.⁴

Additionally, healthcare professionals' attitudes and beliefs toward LBP influence their treatment strategies, affecting patient care and outcomes. Several studies explored the association between healthcare practitioners' attitudes and beliefs about chronic LBP and how their beliefs influence professional recommendations for returning to work, activity restrictions, and treatment selections.⁵⁻⁷

Traditionally, physical therapists have been trained within the biomedical model, which attributes pain as resulting from tissue damage. Fortunately, over the past twenty years, there has been a shift in healthcare education, leading to a larger push toward the biopsychosocial model for treating patients, especially those with LBP. This shift in healthcare education is evidenced by the International Association for the Study of Pain's (IASP) comprehensive pain education curriculum consisting of four domains of the IASP's core competencies originally published in 2012 and updated in 2018.⁸

In response to the IASP curriculum, a group of physical therapist educators published a consensus statement of the core competencies required for pre licensure physical therapy education in pain management.⁹ In 2015, Bement, et.al published a report on the current state of physical therapy pain curricula in the U.S., wherein the average hours of pain education was about 31 contact hours.¹⁰ There has not been another widespread survey since; however, reports from groups such as the Academy of Orthopedics Pain Special Interest Group show an increased awareness of pain competencies and need to incorporate them into entry-level education, as evidenced by the publication of the Pain Education Manual in 2021.¹¹

In theory, the incorporation of the core competencies within physical therapy education would adequately prepare physical therapy students to understand the complexity of pain, knowledge and use of proper assessment tools, and the importance of collaboration with other healthcare professionals when treating patients with LBP.⁸ If physical therapy education and training has adapted to incorporate the core competencies, we would expect a greater prevalence of biopsychosocial-oriented attitudes and beliefs among physical therapists and physical therapy

students since the introduction of the core competencies. In this scoping review, we will describe the attitudes and beliefs of physical therapists and physical therapy students, and the factors influencing their beliefs toward LBP in the past 10 years to determine whether there has been a change based on new curriculum standards.

Objectives

The purpose of this scoping review is to describe the attitudes and beliefs of physical therapists and physical therapy students regarding low back pain and identify factors influencing their attitudes and beliefs. The proposed scoping review will answer the following questions:

- Have physical therapist attitudes and beliefs about LBP changed in the last 10 years?
- Have physical therapy students’ attitudes and beliefs changed (indicating a change in PT education)?
- What factors have influenced physical therapists’ and physical therapy students’ attitudes and beliefs about LBP?

Methods

This scoping review will be conducted following the Joanna Briggs Institute (JBI) scoping review framework and reported using the reporting standards of PRISMA-ScR extension for Scoping Reviews.

Eligibility criteria

Studies will be included in this scoping review according to the criteria outlined below.

PCC Framework:

- Population: Physical therapists and physical therapy students
- Concept: Attitudes and beliefs about low back pain
- Context: Change in attitudes and beliefs over time
- Principal concept of interest: Potential factors that influence attitudes and beliefs

Included sources will consist of full studies with quantitative data and studies about factors influencing the attitudes and beliefs about low back pain. Included articles will comprise data involving physical therapists and/or physical therapy students published in the past 10 years.

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> ● Studies including quantitative data ● Studies that include physical therapists or physical therapy students ● Published and unpublished primary sources and reviews within the last 10 years ● Studies on factors influencing attitudes and beliefs about LBP 	<ul style="list-style-type: none"> ● Studies that only include qualitative data ● Studies that do not include physical therapists or physical therapy students ● Studies that do not include attitudes and beliefs toward low back pain ● Patient attitudes and beliefs ● Intervention studies

<ul style="list-style-type: none"> ● Studies from any setting/geographical location where physical therapists practice ● Quality gray literature 	<ul style="list-style-type: none"> ● Evaluation of pain or pain perception ● Pain management training or education ● Campaigns/editorials ● Specific diagnoses studies ● Case studies ● Partial articles ● Educational interventions ● Descriptions of treatment approaches/models ● Knowledge of LBP only (no attitudes and beliefs) ● Conference abstracts
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Study characteristics

The study characteristics that will be included are only full research articles, studies involving physical therapists' and physical therapy students' attitudes and beliefs about low back pain, and studies on factors that influence these beliefs.

Participants

Included studies will involve physical therapists, physical therapy students in any setting/geographical location where physical therapists practice across the globe.

Time period

Included studies will consist of published and unpublished (quality gray literature) within the last twenty years.

Language

Included articles will be reported in the English language or translated into English for ease of use by the researchers.

Information sources

Literature search strategies will be developed using medical subject headings (MeSH) and text words related to:

- Physical therapist/physiotherapist specialty
 - Student physical therapist
 - Doctor of physical therapy
- Physical therapy modalities
- Attitudes and beliefs
 - perspectives, perceptions

- Musculoskeletal pain
- Chronic pain
- Back pain
 - Low back pain

We will search:

- CINAHL via Ebsco (2013-present)
- EMBASE via Science Direct (2013-present)
- PubMed (2003-present)
- Web of Science Core Collection (2013-present)
- PsychInfo & PsycArticles via Ebsco (2013-present)
- Gray literature (Google Scholar, proceedings, dissertations)
- Online databases will be searched for evidence locations (see Peters article, 2020, pg. 2123)

Reference lists of included articles will be searched for inclusion of additional studies and reviews.

Search Strategy

The search strategy below was submitted for PRESS review and suggested revisions were discussed and implemented as appropriate. Results will be limited to the past 10 years as this is directly related to the research question. No other filters were used in the search strategy. The following search will be translated into appropriate headings and other syntax of the databases identified above.

Search strategy for PubMed

((("Attitude to Health"[MeSH Terms:noexp] OR "health knowledge, attitudes, practice"[MeSH Terms] OR "attitude of health personnel"[MeSH Terms] OR "Attitude"[Title/Abstract] OR "Attitudes"[Title/Abstract] OR "attitude of health personnel"[Title/Abstract] OR "Belief"[Title/Abstract] OR "Beliefs"[Title/Abstract] OR "perceiv*"[Title/Abstract] OR "perception*"[Title/Abstract] OR "perspective*"[Title/Abstract] OR "believ*"[Title/Abstract]) AND ("Physical Therapy Specialty"[MeSH Terms] OR "Physical Therapists"[MeSH Terms] OR "Physical Therapy Modalities"[MeSH Terms] OR "physical therap*"[Title/Abstract] OR "physiotherap*"[Title/Abstract] OR "physical therapy student*"[Title/Abstract] OR "physiotherapy student*"[Title/Abstract]) AND ("Musculoskeletal Pain"[MeSH Terms:noexp] OR "Chronic Pain"[MeSH Terms] OR "Back Pain"[MeSH Terms:noexp] OR "Low Back Pain"[MeSH Terms] OR "low back pain*"[Title/Abstract] OR "musculoskeletal pain*"[Title/Abstract] OR "Chronic Pain"[Title/Abstract] OR "back ache*"[Title/Abstract] OR "backache*"[Title/Abstract] OR "Lumbago"[Title/Abstract] OR "back strain"[Title/Abstract] OR "back sprain"[Title/Abstract] OR "lumbar strain"[Title/Abstract] OR "lumbar pain"[Title/Abstract] OR "lumbosacral pain"[Title/Abstract] OR "back injur*"[Title/Abstract])

OR "back problem*" [Title/Abstract] OR "back discomfort" [Title/Abstract]) AND (2003:2024[pdat]))

Study Records

Records will be exported from the identified databases into .ris or .nbib files. The results will be deduplicated using EndNote. The results will then be exported in .ris format and uploaded to Covidence software, an Internet based software program that facilitates collaboration among reviewers during the study selection process. The team will develop screening questions for level one and two assessments based on the inclusion and exclusion criteria.

Selection Process

Two separate reviewers will independently screen titles and abstracts, found in the search, against the inclusion criteria. The reviewers will obtain full articles for all titles that either meet the inclusion criteria or where there is any uncertainty. Two reviewers will then screen full text reports and decide which articles meet the inclusion criteria. When necessary, additional guidance will be sought from a third reviewer to resolve questions about eligibility. Furthermore, email communication will be established with corresponding authors of studies involving questionable article eligibility to help determine its qualification for the scoping review. Any disagreements will be resolved through discussion with a third reviewer and reasons for excluding articles will be documented. None of the reviewers will be blind to the journal titles or to the study authors or institutions.

Data Collection Process

A data collection chart will be used to collect data on included sources. The data collection chart will include the following headings:

- First Author
- Year of publication
- Title
- Study Design
- Sample Size
- Geographic setting
- Instrument(s)/Tools
- Relevant results/findings
 - Specific results
 - Discussion points
 - Factors influencing beliefs

The data collection process will be iterative to allow for modifications to the information collected as determined by the reviewers, especially as it relates to factors influencing attitudes and belief (principle concept of interest). In the event that the review authors encounter missing

or unclear information they will attempt to contact corresponding authors to understand the necessary information regarding the inclusion/exclusion of the articles in question.

Risk of Bias Individual Studies

To mitigate the risk of bias, Covidence will be utilized to blind two separate reviewers during the tiered article selection process. Once all articles have been evaluated by both reviewers, any conflicting decisions will be evaluated by a third reviewer.

Data synthesis, Meta-bias(es), Confidence in cumulative evidence

No meta-analyses will be conducted.

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