

INPLASY PROTOCOL

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Telerehabilitation for chronic pelvic pain: a scoping review

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Review question / Objective: 1. How is telerehabilitation-based physiotherapy applied in the literature to support patients with chronic pain in the pelvic area? 2. What is known from the existing research about the forms and effectiveness of telerehabilitation in the treatment of chronic pain in the pelvic area? The aim of this scoping review is to identify and summarize the existing published evidence for the use of telerehabilitation in patients with chronic pain in the pelvic area (chronic pelvic pain and persistent pelvic girdle pain).

Information sources: The following bibliographic databases will be searched: Amed, CINAHL, psyInfo and Sportdiscuss, Medline via EBSCO, Embase via Scopus, Cochrane CENTRAL via Cochrane library and ProQuest to locate peer-reviewed, published articles and/or dissertations.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 08 June 2022 and was last updated on 08 June 2022 (registration number INPLASY202260033).

INTRODUCTION

Review question / Objective: 1. How is telerehabilitation-based physiotherapy applied in the literature to support patients with chronic pain in the pelvic area? 2. What is known from the existing research about the forms and effectiveness of telerehabilitation in the treatment of chronic pain in the pelvic area? The aim of this scoping review is to identify and

summarize the existing published evidence for the use of telerehabilitation in patients with chronic pain in the pelvic area (chronic pelvic pain and persistent pelvic girdle pain).

Rationale: The scenario described underlined the importance of recommendations for the future of digital physiotherapist practice developed by the World Confederation of Physiotherapy

(WCPT) with the International Network of Physiotherapy Regulatory Authorities and offered the physiotherapists community an opportunity to reflect on this issue [1-3]. Physiotherapists adopt a mix of hands-on and applied skills to manage musculoskeletal pain associated with acute and chronic disorders (eg, low back and neck pain) and conditions such as after elective orthopedic surgery (eg, joint arthroplasty). Manual therapy is a prime example of hands-on skills, encompassing a variety of approaches (eg, training, therapeutic exercises) aimed at increasing patients' self-efficacy and restoring functional abilities. Recently, various recommendations for the management of patients with musculoskeletal pain have increasingly emphasized the importance of hands-on approaches to improve quality of care and thus quality of life. Therefore, studies have been conducted emphasizing that it is time to exploit the potential of telerehabilitation for patients with chronic pain [4-5]. This perspective highlights the importance of telerehabilitation in patients with chronic pain and supports the use of telerehabilitation during the COVID-19 pandemic [5]. Telerehabilitation is described as the remote conveyance of healthcare services and clinical information using information and telecommunication technologies involving the internet, wireless satellite, and telephone media to provide series of rehabilitation services by eliminating the barriers of distance, time, and travel to receive care. There is an abundance of commercially available applications (such as Zoom) offered for health care monitoring and management. Currently, there is no literature review about telerehabilitation for pelvic pain. Thus, it is necessary to emphasise the importance of knowledge regarding the support and possibilities offered by telehealth for chronic pain in pelvic region, and exploring successful experiences that can be adapted and used by the physiotherapist from all around the world. The purpose of this review is to summarize the available evidence published studies on telerehabilitation in chronic pain in pelvic region namely chronic pelvic pain and persistend pelvic girdle pain.

Condition being studied: For the purpose of this scoping review, we will analyze chronic pain conditions in the pelvic region, namely chronic pelvic pain and persistent pelvic girdle pain. Chronic Pelvic Pain (CPP) and Pelvic girdle pain (PGP) are defined as pain located between the posterior iliac crest and the gluteal fold, particularly in the area of the sacroiliac joints and/or the pubic symphysis. It may also radiate to the posterior thigh. Patients with PGP have difficulty maintaining prolonged standing or sitting positions and transitioning from sit to stand or rolling in bed [6]. It has been reported that one out of ten women who experience PGP during pregnancy may suffer from severe consequences for up to 11 years after delivery[7]. Pregnancy-related PGP has been shown to have negative psychological effects on the mother and her family as she becomes unable to carry out her daily tasks and social activities[8].

METHODS

Search strategy: The proposed scoping review will be conducted in accordance with the Joanna Briggs Institute (JBI) methodology for scoping reviews and Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) guidelines. The search strategy will aim to locate published studies. Searches will include a combination of medical subject headings and free-text searches for terms related to the cited conditions (chronic pelvic pain, pelvic girdle pain) and investigated intervention (telerehabilitation). An initial limited search of MEDLINE has been undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles will be used to develop a full search strategy. Two reviewers will screen the titles and abstracts independently and identify relevant articles that met the inclusion criteria. Full-text articles for all the titles that appeared to meet the eligibility criteria will be obtained and then assessed for eligibility. Disagreements will be resolved through discussion and a third reviewer will

be included in needed. Reasons for exclusion will be recorded.

Participant or population: This scoping review will consider studies that involved patients with chronic pelvic pain (vulvodynia, pudendal neuralgia, dyspeurania...etc.) and persistent pelvic girdle pain, with at least 3 months duration of symptoms. Articles will be excluded if they investigated conditions in the pelvic area not related to pain as well as if they involved minor women will be excluded.

Intervention: Literature that describes the use of telerehabilitation in the treatment of chronic pelvic pain or persistent pelvic girdle pain will be included. The intervention must have been telerehabilitation, defined as the provision of rehabilitation with interventions in any area of physical therapy carried out remotely or outside a usual session by a therapist distant from the patient and using telecommunications technologies. The intervention was considered to be within the definition of physiotherapy if it included therapeutic exercises, functional training, manual therapy, respiratory techniques and exercises, integumentary repair and protection techniques, electrotherapy and physical agents, or education as defined by the World Confederation for Physical Therapy [9]. Considering specificity of physiotherapy within the pelvic region, studies investigating pelvic floor therapy and the use of dilators (e.g. stretching techniques, gradual insertion, graded exposure) were also included. Studies investigating multidisciplinary treatments will be included if they were involving interventions delivered by physiotherapist. Studies where physiotherapist was not included but the substantial part of the treatment involved modalities that can be considered within the physiotherapy/pelvic floor therapy scope (e.g. breathing exercises, pelvic floor exercises, insertion techniques with dilators, pain education) will be considered for inclusion. Studies investigating mobile applications and monitors without involving.

Comparator: Any comparator will be eligible for inclusion, including sham intervention, other treatment modalities or values before treatment for before-after studies.

Study designs to be included: This scoping review will consider variety of study designs including randomized controlled trials, non-randomized controlled trials, before and after studies. In addition, analytical observational studies including prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs including case series, individual case reports and descriptive cross-sectional studies for inclusion.

Eligibility criteria: The PCC (Participant, Concept, Context) mnemonic will be used as recommended for scoping reviews. **Participants:** This scoping review will consider all telerehabilitation studies that included patients with chronic pain in pelvic area for at least 3 months. **Concept:** This review will consider the concept of telerehabilitation for pelvic pain and how it develops to support women who have pain in pelvic area. **Context:** in English, Polish, Italian, German and Turkish will be included. Any clinical or research settings and any geographical setting will be considered for inclusion.

Information sources: The following bibliographic databases will be searched: Amed, CINAHL, psyInfo and Sportdiscuss, Medline via EBSCO, Embase via Scopus, Cochrane CENTRAL via Cochrane library and ProQuest to locate peer-reviewed, published articles and/or dissertations.

Main outcome(s): Pain outcomes (pain scale, visual analog scale VAS...) Functional outcomes (Sexual function, pain during sexual intercourse.etc.)

Additional outcome(s): Mood changes; Quality of life.

Data management: The literature search results will be uploaded into the EndNote software program. Two independent reviewers will extract relevant information from the full texts, including the study sample, subject demographics, treatment details, data collection time points, outcome measures, adverse events, dropouts, and results. The drafted data extraction tool will be modified as needed throughout the review depending on the data extracted from the included studies. Disagreements will be resolved by consensus among reviewers.

Quality assessment / Risk of bias analysis: Not necessary.

Strategy of data synthesis: Data will be aggregated and narrative analysis will be performed based on the included studies on telerehabilitation intervention.

Subgroup analysis: Not applicable.

Sensitivity analysis: Not applicable.

Language: Studies in English, Polish, Italian, German and Turkish will be included.

Country(ies) involved: Turkey, Poland.

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Keywords: pelvic pain; pelvic girdle pain; telerehabilitation; pelvic floor physiotherapy.

Dissemination plans: Once the data analysis is completed, results will be published in a peer-reviewed journal and presented at relevant scientific conferences.

Contributions of each author:

Author 1 - Alime Buyuk - The author developed, prepared the protocol and verified the search methodology. The author will participate in the selection of studies based on the inclusion criteria, as well as the critical review of the scope review and manuscript construction.

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Author 2 - Malgorzata Starzec-Proserpio - The author developed, prepared the protocol, and verified the search methodology. The author will participate in data collection and management, extraction for accuracy and detail, as well as participating in the selection of studies based on inclusion criteria, as well as critically reviewing the scoping review and.

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