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Virtual physiotherapy for the treatment of pelvic floor dysfunctions: A scoping review protocol

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ADMINISTRATIVE INFORMATION**Support** - Department of Midwifery CMKP.**Review Stage at time of this submission** - Preliminary searches.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY202670064

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 July 2026 and was last updated on 17 July 2026.

INTRODUCTION

Review question / Objective Review question: What evidence exists regarding the use of synchronous virtual physiotherapy for the assessment and treatment of pelvic floor dysfunction in adults, involving real-time interactions between patients and physiotherapy professionals delivered through telehealth technologies?

Objectives:

1. To map the breadth and characteristics of the literature describing synchronous virtual physiotherapy for adults with pelvic floor dysfunction.
2. To describe how synchronous virtual physiotherapy is being used for individualized assessment and treatment.
3. To identify the pelvic floor conditions, patient populations, intervention characteristics, outcome measures, and study designs represented in the literature.
4. To identify knowledge gaps and inform future research and clinical practice.

Background Pelvic floor dysfunction (PFD) encompasses a range of disorders affecting bladder and bowel control, pelvic organ support, and associated pelvic floor function. These conditions are common and can substantially reduce quality of life, social participation, and psychological well-being. Pelvic health physiotherapy is widely recommended as a first-line conservative treatment and commonly includes pelvic floor muscle training, education, behavioural interventions, bladder and bowel management strategies, and individualized exercise programs.

Advances in digital health and the rapid expansion of telehealth have increased the use of virtual physiotherapy across rehabilitation disciplines, particularly following the COVID-19 pandemic. Emerging evidence suggests that virtual physiotherapy may improve access to care while providing comparable outcomes for selected conditions. Within pelvic health, synchronous virtual physiotherapy has been increasingly adopted to deliver individualized assessment, education, exercise prescription, and follow-up care. However, studies vary considerably in

terminology, intervention design, technological platforms, and reported outcomes.

The existing literature has not yet been comprehensively mapped. A scoping review is therefore appropriate to describe how synchronous virtual physiotherapy is currently being used in the management of PFD and to identify areas requiring further investigation.

Rationale Although interest in virtual pelvic health physiotherapy has grown rapidly, the evidence remains heterogeneous and inconsistently reported. Studies differ in the pelvic floor conditions investigated, virtual delivery models, technology used, clinician involvement, and outcome measures, making it difficult to understand the current scope of evidence.

To date, no published or ongoing scoping review has comprehensively mapped synchronous virtual physiotherapy interventions for adults with pelvic floor dysfunction. A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews, and JBI Evidence Synthesis did not identify any existing reviews addressing this topic.

This scoping review will provide a comprehensive overview of the available evidence, clarify terminology and intervention characteristics, identify the populations and conditions represented in the literature, and highlight knowledge gaps to guide future research, implementation, and clinical practice.

METHODS

Strategy of data synthesis A comprehensive search strategy will be developed in consultation with a research librarian and conducted in accordance with JBI methodology for scoping reviews. An initial limited search of MEDLINE (Ovid) and CINAHL will identify relevant keywords and index terms, which will be adapted for each database. The databases to be searched include MEDLINE (Ovid), EMBASE, CINAHL, PsycINFO, SCOPUS, Emcare, and AMED (OVID). Reference lists of included studies and relevant reviews will also be searched to identify additional eligible studies.

No restrictions will be placed on publication year or language. Search results will be managed using Covidence. Data will be extracted using a standardized extraction tool and charted descriptively. The evidence will be mapped according to participant characteristics, pelvic floor conditions, intervention characteristics, technological platforms, outcome measures, study design, and geographic location. A narrative summary will accompany the tables and figures to

describe the extent, range, and characteristics of the available evidence.

Eligibility criteria Participants: Studies including adults (≥ 18 years) with pelvic floor dysfunction (PFD) will be eligible. PFD includes disorders involving impaired bladder or bowel control or pelvic organ support, including urinary incontinence, fecal incontinence, pelvic organ prolapse, and related conditions. Studies including participants with PFD and comorbid pelvic pain will be included when PFD is the primary focus. Studies involving pelvic pain as the sole condition of interest or participants with known cognitive impairment that would limit participation in virtual physiotherapy will be excluded.

Concept: The concept of interest is synchronous virtual physiotherapy involving individualized assessment and/or treatment delivered through real-time communication technologies (e.g., videoconferencing, telephone, or other live digital platforms). Eligible interventions must include at least one one-on-one synchronous interaction between a patient and a physiotherapy professional for the purpose of individualized physiotherapy assessment and/or treatment. Hybrid models combining virtual and in-person physiotherapy will be included. Studies evaluating only asynchronous interventions (e.g., prerecorded videos, email communication, text messaging, or mobile applications without real-time clinician interaction) will be excluded.

Context: Studies conducted in any healthcare setting or geographic location will be considered. Eligible settings include outpatient clinics, community-based care, home-based rehabilitation, and other clinical environments providing individualized virtual physiotherapy. Studies describing group education sessions, webinars, or interventions that do not include individualized physiotherapy assessment or treatment will be excluded.

Types of evidence: Experimental, quasi-experimental, observational, descriptive, and qualitative studies reporting primary clinical patient data will be eligible. Study designs may include randomized controlled trials, non-randomized controlled trials, before-and-after studies, cohort studies, case-control studies, cross-sectional studies, case series, case reports, and qualitative research. Only studies in which synchronous virtual physiotherapy is the intervention or phenomenon of interest will be included. Grey literature, conference abstracts without primary data, editorials, opinion papers, protocols, and studies

that do not report primary clinical data will be excluded.

Source of evidence screening and selection All records will be imported into Covidence, and duplicates will be removed. Following pilot testing of the screening process, two reviewers will independently screen titles and abstracts against the eligibility criteria. Full-text articles of potentially eligible studies will then be independently assessed by two reviewers. Reasons for exclusion at the full-text stage will be documented and reported. Any disagreements will be resolved through discussion or, when necessary, consultation with a third reviewer. The study selection process will be reported using a PRISMA-ScR flow diagram.

Data management Data will be independently charted by two reviewers using a standardized data extraction tool developed for this review. Information collected will include study characteristics, participant demographics, pelvic floor condition, intervention characteristics, technology used, study design, outcome measures, and findings relevant to the review objectives. The extraction tool will be piloted before use and refined as necessary to ensure all relevant information is captured. Disagreements between reviewers will be resolved through discussion or consultation with a third reviewer. Where required, study authors will be contacted to clarify or provide additional information.

Reporting results / Analysis of the evidence Consistent with JBI guidance for scoping reviews, a formal critical appraisal of methodological quality will not be undertaken because the purpose of this review is to map the breadth, nature, and characteristics of the available evidence rather than evaluate the quality or effectiveness of interventions. Extracted data will be presented descriptively and organized according to participant characteristics, pelvic floor conditions, intervention characteristics, technological platforms, study design, outcome measures, and geographic distribution. A narrative summary will accompany the mapped results to describe patterns across the literature, characterize current applications of synchronous virtual physiotherapy for pelvic floor dysfunction, and identify gaps to guide future research and clinical practice.

Language restriction No language restrictions will be applied. Studies published in any language will be considered for inclusion. Where necessary, translation tools or assistance from multilingual colleagues will be used to facilitate.

Country(ies) involved Canada.

Other relevant information This review will be conducted in accordance with the Joanna Briggs Institute (JBI) methodology for scoping reviews and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). The protocol was developed a priori to enhance methodological transparency and reproducibility. As this is a scoping review, no formal assessment of methodological quality or risk of bias will be undertaken.

Keywords Pelvic floor dysfunction; pelvic health; pelvic floor physiotherapy; virtual physiotherapy; telehealth; telemedicine; telerehabilitation; digital health; rehabilitation; scoping review.

Dissemination plans The findings of this review will be submitted for publication in a peer-reviewed journal and presented at relevant national and international conferences. The results will also be used to inform future research, knowledge translation initiatives, and evidence-informed clinical practice in pelvic health physiotherapy.

Contributions of each author

Author 1 - Nicole A. Guitar - Conceived the review, developed the review question and methodology, designed the search strategy in collaboration with the review team, drafted the protocol.

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