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An mHealth app intervention for self-management of knee osteoarthritis: a protocol for a scoping review

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ABSTRACT

Objective: The purpose of this scoping review is to investigate the current status of development and research of mobile health (mHealth) technology or smartphone applications for self-management of knee osteoarthritis (OA) and to summarize their usefulness.

Introduction: Self-management education for patients with knee OA has been reported to reduce pain, improve activities of daily living, and even reduce healthcare costs. Although there is an increasing number of smartphone apps to support self-management, there have been no comprehensive reviews of the usefulness of them for knee OA.

Inclusion/exclusion criteria: This review will include patients with knee OA, based on radiography or physician diagnosis. Eligibility criteria will be interventions with apps that have one or more of the following features: record and manage symptoms, provide patient education, and teach and record daily living. Outcomes will be pain, physical function, and quality of life. The study design will be that of an interventional trial or observational study, and should be published in English.

Methods: PubMed, Web of Science, CINAHL, and CENTRAL will be systematically searched using the keywords "knee osteoarthritis," "mHealth," and "self-management" during May 2021. In the first screening step, two independent reviewers will review all of the titles and abstracts to exclude irrelevant articles. In the second screening step, two independent reviewers will review all of the full texts to exclude irrelevant articles. Outcomes will be focused on pain, physical function, and quality of life. Chapters will be divided for each outcome and the results will be described.

ATTACHMENTS

[Protocol for ScR.pdf](#)

DOI

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PROTOCOL CITATION

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KEYWORDS

digital health, technology, pain, disability, quality of life, eHealth

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