become popular. Despite the considerable number of applications for low back pain available in the app store, their effectiveness has not been established and there is a lack of evidence regarding the effectiveness of the isolated use of mobile applications in the self-management of low back pain.

**Objectives:** Investigate the effectiveness of interventions using mobile health in improving pain and disability of individuals with chronic low back pain, compared to usual healthcare strategies or no treatment.

**Methods:** A systematic review (PROSPERO:CRD4202238759) with meta-analysis comparing m-Health to usual care or no intervention. The search criteria used were related to low back pain and m-Health. Pain intensity and disability were included as primary outcomes, and quality of life as a secondary outcome. Only randomized clinical trials (RCT) were included, and the primary outcomes were pain intensity and disability, and the secondary outcome was quality of life. Searches were carried out in the following databases, without date or language restriction: PubMed, SCOPUS, EMBASE, PEDro, Cochrane and Opengray, in addition to studies' references. The selection was performed using the Rayyan software, by two independent reviewers (screening of abstracts and full-text reading). The risk of bias was analyzed using the PEDro scale, by two independent reviewers, considering each individual item. Conflicts were resolved by consensus, at all stages. Data were summarized descriptively and through meta-analysis (pain and disability). In the meta-analysis, eligible studies were combined considering clinical and methodological homogeneity. The certainty of evidence was assessed using GRADE.

**Results:** 1,824 relevant publications were identified. After excluding duplicates and screening by title and abstract, 18 were eligible for full-text reading. Five RCTs were included, totaling 894 participants (n: 447 allocated to the m-Health group and n: 445 to the usual care group) and they had similar methodological structure and interventions. Follow-up ranged from 6 weeks to 12 months. The studies did not demonstrate significant differences for pain (MD -0.86; CI95% -2.29;0.58) and disability (SMD -0.24; CI95% -0.69; 0.20) when comparing m-Health and usual care. Most studies showed biases, with emphasis on non-concealed allocation and non-blinding of the outcome assessor. The certainty of the evidence was rated as low for the analyzed outcomes.

**Conclusion:** m-Health alone was not more effective compared to usual care or no treatment in improving pain intensity and disability in individuals with low back pain. Due to the biases found and the low certainty of the evidence, the evidence remains inconclusive and future high-quality clinical trials are needed.

**Implications:** We demonstrated that currently, m-Health does not have consolidated evidence that allows the recommendation of isolated use in the management of people with low back pain. Our findings demonstrate that there are indications of clinical benefits from the use of m-Health, though further studies are needed. Furthermore, we emphasize that research could investigate the complementary effects of m-Health on the self-management of this population.

**Keywords:** Mobile Health, Low Back Pain, Pain Management

**Conflict of interest:** The authors have no conflict of interest.

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