# COMPARISON OF THE EFFECTIVENESS OF EHEALTH SELF-MANAGEMENT INTERVENTIONS FOR PAIN BETWEEN ONCOLOGICAL AND MUSCULOSKELETAL POPULATIONS: A SYSTEMATIC REVIEW WITH NARRATIVE SYNTHESIS

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#### **Background and objective**

Pain is a burden for oncological and musculoskeletal patients. To improve self-management, as a part of pain management, new opportunities can be

found in **e-health**. E-health provides the possibility of care **without** active support from a **health-care provider (HCP)**.

The aim of this systematic review was:

- 1. To compare the effectiveness of e-health self-management interventions for pain intensity between oncological and musculoskeletal populations.
- 2. To examine barriers and facilitators of the use of eHealth self-management tools.

## Methods

**Study inclusion criteria** 

- 1. Adults in oncological or musculoskeletal
  - population.
- 2. Pain intensity as outcome.
- 3. At least one group (intervention/control)
  - received e-health without support from an HCP.

Records identified through database searching (n = 2670)

> Full-text articles assessed for eligibility (n = 60)

> > Full-text articles excluded, with reasons (n = 49)

Articles included in qualitative synthesis

### Results

Ten original studies were included (Fig 1). No study made a direct comparison of the two populations.

Interventions of e-health self-management, regardless of

population, with **education**, **cognitive behavioral therapy** and **social suppor**t showed beneficial effects.

The evidence on e-health without support of an HCP is limited (Fig 2), only one study found a significant interaction effect and three studies reported a significant time-effect. Different barriers and facilitators are identified:

User-friendliness of the tool



#### (n = 11, of which 10 original studies)





Fig 2. Results

### **Conclusion and implication**

- E-health interventions can be useful in supporting self-management in an oncological and musculoskeletal population for the self-management of pain, but evidence is low.
- Education, aspects of cognitive behavioral therapy and social support are universally applicable.
- There seems to be a need of the **support of the HCP** in using e-health.
- More research is needed on barriers and facilitators in the use of e-health pain self-management interventions.



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