An umbrella review of digital supportive care interventions for cancer patients and their relatives

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Background

In the last two decades, **digital interventions in cancer care** developed tremendously. Studies on their efficacy are **numerous but diverse**.

Given the necessity to develop digital solutions in patient care, it seems necessary to carry a **synthesis of the literature to identify the existing interventions** providing supportive care to cancer patients and relatives, their methodology, and their efficacy.

Aim

Identify digital supportive care interventions in cancer care and determine their efficacy

Methods

An **umbrella review** (i.e., systematic review of systematic reviews) was conducted following international guidelines[1,2].

Databases:

Embase, PsycINFO, PubMed, CINAHL et Cochrane Library

Keywords:

Systematic review or **Meta-analysis** + **Digital intervention** (e.g., web-based, mobile app, e-health) + **Cancer** (e.g., neoplasm, tumor)

Results

20 references

reporting 260 studies were identified*

Interventions for whom?

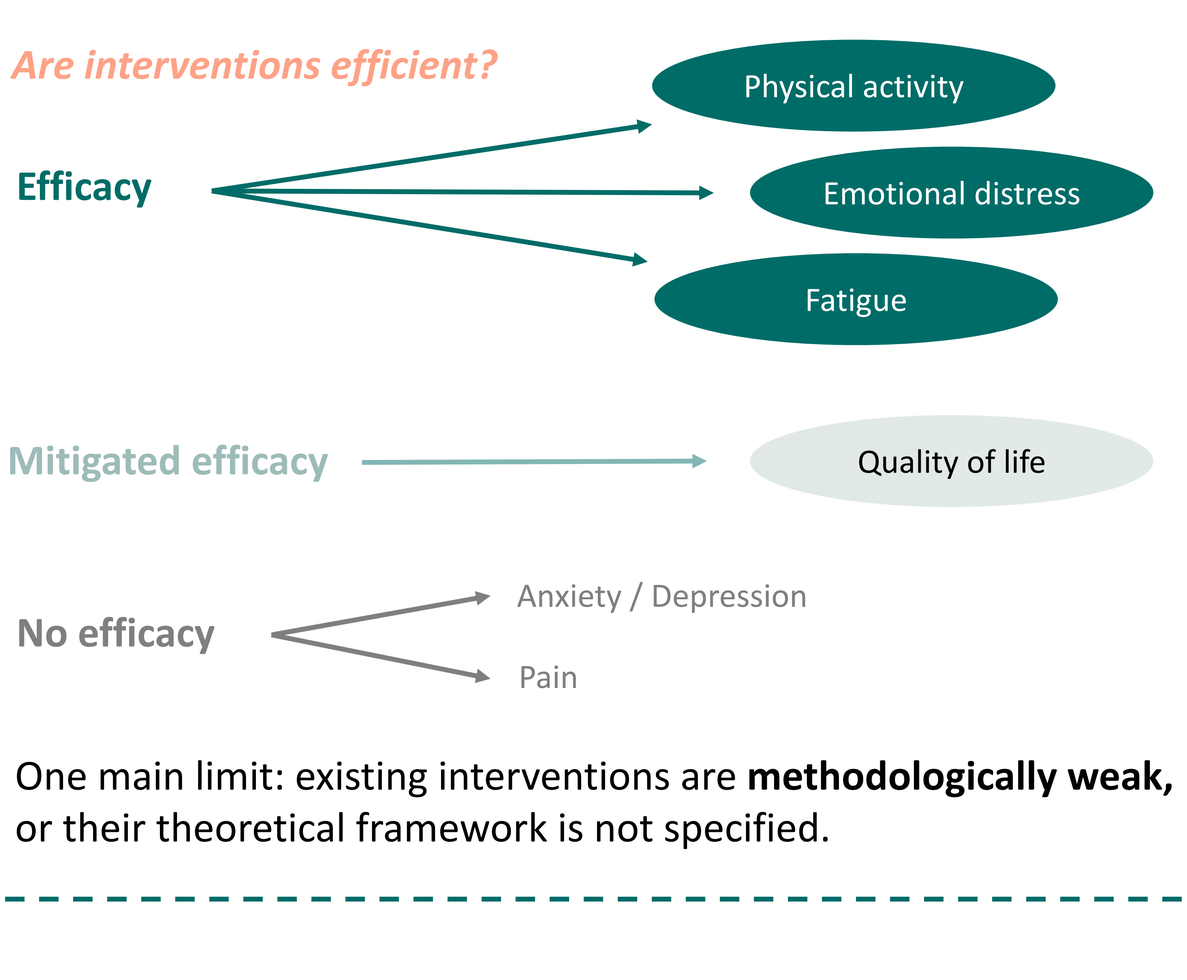
Adult patients (n = 16), children with cancer (n = 2), and patients relatives (n = 2)

Interventions for what?

Interventions can target:

- Behaviors (e.g., physical activity);
- Emotions (e.g., emotional management);
- Functional variables (e.g., fatigue, pain);
- Quality of life.

Are interventions efficient?



One main limit: existing interventions are **methodologically weak,** or their theoretical framework is not specified.

Conclusion

Digital supportive care interventions can be an efficient tool in oncology.

Some points should draw a particular attention in further development of interventions:

- A specific attention should be payed to **develop interventions for relatives** as they are members of the patients' system;
- Those interventions should meet recommendations allowing for a solid methodological anchoring[3,4];
- They should **consider and precise the role of healthcare professionals** in the digitalization of the patientcare;
- **Transparency** in each phase of the development of interventions should be crucial, meeting the principles of open science

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References

[1] Rethlefsen et al. (2021) *Syst. Rev ;* [2] Aromataris et al. (2015) *Int J Evid Based Healthc ;* [3] Czajkowski et al. (2015) *Health Psychol ;* [4] O'Cathain et al. (2019) *BMJ Open*

*For the flowchart and the complete list of included studies, scan the QR code: