

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

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## Background

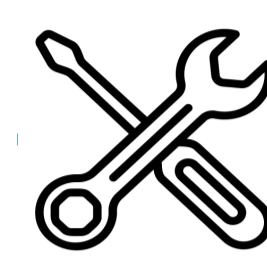
In the last two decades, **digital interventions in cancer care** developed tremendously. Studies on their efficacy are **numerous but diverse**.

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<sup>1,2</sup>.

### 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?

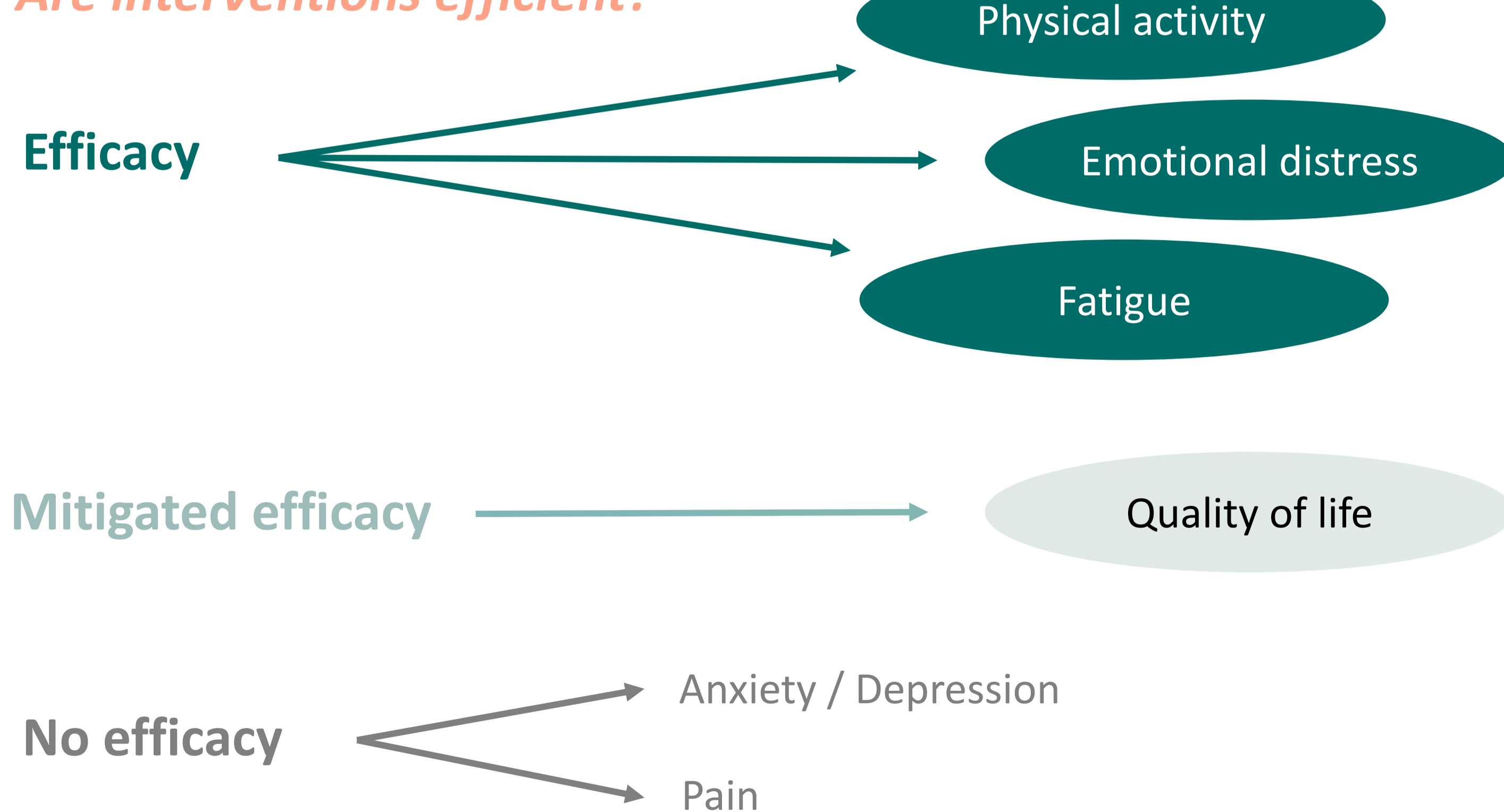
Adult patients (n = 16), children with cancer (n = 2), and patients relatives (n = 2)

### 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 paid to **develop interventions for relatives** as they are members of the patients' system;
- Those interventions should meet recommendations allowing for a solid methodological anchoring<sup>3,4</sup>;
- 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

### Funding

This research was funded by the French National Cancer Institute (INCA/16136), in partnership with the University of Lille, the SCALab UMR CNRS 9193, the Centre Oscar Lambret, and ONCOLille Institute.

### References

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

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

