

DIGITAL TECHNOLOGIES IN PALLIATIVE CARE TEACHING: SCOPE REVIEW PROTOCOL**TECNOLOGÍAS DIGITALES EN LA ENSEÑANZA DE CUIDADOS PALIATIVOS: PROTOCOLO DE REVISIÓN DEL ALCANCE****TECNOLOGIAS DIGITAIS NO ENSINO DE CUIDADOS PALIATIVOS: PROTOCOLO DE SCOPE REVIEW**

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ABSTRACT

Objective: to map scientific evidence on the use of educational and digital technologies in palliative care teaching. **Methodology:** This is a scoping review protocol, registered on the Open Science Framework (OSF) platform at: <http://OSF.IO/5MQ7V> conducted by the Joanna Briggs Institute (JBI) methodology and the PRISMA tool with the extension for scoping reviews Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review (PRISMA-ScR). It will be carried out in seven electronic databases: Medical Literature Analysis and Retrieval System Online, Latin American and Caribbean Literature in Health Sciences, Cumulative Index to Nursing and Allied Health Literature, Excerpta Medica Database, Web of Science, SciVerse Scopus and Cochrane. And in two gray literatures, the Digital Library of Theses and Dissertations and Google Scholar. Studies involving primary research, systematic and literature reviews, meta-analyses and clinical trials will be considered. **Results:** Data will be collected and processed in three stages, using Rayyan® software for compilation, carried out by two independent reviewers and a third as a decision maker. **Conclusion:** It is expected that the mapping of the types of educational and digital technologies used in palliative care teaching will allow us to elucidate these data, and will show us the current teaching scenario in this specialty, possible gaps and provide reflections.

Keywords: Palliative Care; Hypermedia; Digital Technology; Teaching; Educational Technology.

RESUMEN

Objetivo: mapear evidencia científica sobre el uso de tecnologías educativas y digitales en la enseñanza de cuidados paliativos. **Metodología:** Se trata de un protocolo de revisión de alcance, registrado en la plataforma Open Science Framework (OSF) en: <http://OSF.IO/5MQ7V> realizado mediante la metodología del Joanna Briggs Institute (JBI) y la herramienta PRISMA con la extensión para revisiones de alcance Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review (PRISMA-ScR). Se realizará en siete bases de datos electrónicas: Medical Literature Analysis and Retrieval System Online, Literatura Latinoamericana y del Caribe en Ciencias de la Salud, Cumulative Index to Nursing and Allied Health Literature, Excerpta Medica Database, Web of Science, SciVerse Scopus y Cochrane. Y en dos literaturas grises, la Biblioteca Digital de Tesis y Disertaciones y Google Académico. Se considerarán estudios que involucren investigación primaria, revisiones sistemáticas y de literatura, metaanálisis y ensayos clínicos. **Resultados:** Los datos serán recolectados y procesados en tres etapas, utilizando el software Rayyan® para su compilación, realizada por dos revisores independientes y un tercero como tomador de decisiones. **Conclusión:** Se espera que el mapeo de los tipos de tecnologías educativas y digitales utilizadas en la enseñanza de cuidados paliativos no sólo nos permita dilucidar estos datos, sino que también nos muestre el escenario actual de la enseñanza en esta especialidad, posibles brechas y brinde reflexiones.

Palabras clave: Cuidados Paliativos; Hipermedia; Tecnología Digital; Enseñanza; Tecnología Educativa.

RESUMO

Objetivo: mapear evidências científicas acerca do uso de tecnologias educacionais e digitais no ensino de cuidados paliativos. **Metodologia:** Trata-se de um protocolo de revisão de escopo, registrado na plataforma Open Science Framework (OSF) em: <http://OSF.IO/5MQ7V> conduzido pela metodologia de Joanna Briggs Institute (JBI) e a ferramenta PRISMA com a extensão para revisões de escopo Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review (PRISMA-ScR). Será realizado em sete bases de dados eletrônicas: Medical Literature Analysis and Retrieval System Online, Literatura Latino-Americana e do Caribe em Ciências da Saúde, Cumulative Index to Nursing and Allied Health Literature, Excerpta Medica Database, Web of Science, SciVerse Scopus e a Cochrane. E em duas literaturas cinzentas, a Biblioteca Digital de Teses e Dissertações e o Google Scholar. Serão considerados estudos que envolvam pesquisas primárias, revisões sistemáticas e de literatura, meta-análises e ensaios clínicos. **Resultados:** Os dados serão coletados e processados em três etapas, utilizando o software Rayyan® para a compilação, realizada por dois revisores independentes e um terceiro como decisor. **Conclusão:** Espera-se o mapeamento dos tipos de tecnologias educacionais e digitais, usadas no ensino de cuidados paliativos, além de permitir elucidar esses dados, poderá nos mostrar o cenário atual do ensino nessa especialidade, possíveis lacunas e propiciar reflexões

Palavras-chave: Cuidados Paliativos; Hipermidia; Tecnologia Digital; Ensino; Tecnologia Educacional.



INTRODUCTION

Palliative care (PC) is a holistic approach that seeks to improve the quality of life of patients and their families facing serious and life-threatening illnesses. This approach aims to prevent and alleviate suffering through early identification, appropriate assessment, and effective treatment of pain, as well as other physical, psychosocial, and spiritual problems that may arise during the course of the illness.⁽¹⁾ Resolution No. 41⁽²⁾ states that palliative care must be integrated into the continuing care offered by the Health Care Network (RAD).

This approach aims to ensure that palliative care is an essential part of the health system, in addition to providing comprehensive, quality care for patients with serious and progressive illnesses or in terminal situations.⁽²⁾ The health team that cares for patients with life-threatening illnesses is composed of several professionals, forming a multidisciplinary team. Nurses, as an integral member, stand out for their continuous and uninterrupted dedication to providing care, which begins with the diagnosis of the disease and continues through bereavement. These professionals closely witness the anguish and suffering of patients during the process of death and dying.⁽³⁾ The draft of the new National Curricular Guidelines for Undergraduate Nursing Courses⁽⁴⁾ addresses the professional profile of nurses, in line with contemporary perspectives and approaches to nursing education and professional practice, based on the principles and guidelines of the Unified Health System (SUS).

In 2024, the Ministry of Health launched the National Palliative Care Policy, expanding and qualifying care for patients and families facing life-threatening illnesses ⁽⁵⁾. However, it is important to note that there is still no specific determination in the guidelines to guide training in palliative care. However, it is understood that a curriculum that deepens the understanding of palliative care is extremely important in the training of professionals, and should include courses that address ethics, interprofessional communication, pain and symptom management, grief psychology, and finitude.⁽⁶⁾

However, this gap does not prevent undergraduate curricula from being updated to include content on this care approach and effectively integrate theory and practice.⁽⁶⁾ Technologies contribute significantly to this teaching-learning process, being definitively integrated into the curriculum, no longer merely a supplementary tool. Furthermore, a direct relationship between the use of ICT and transformations in teaching practices is evident, promoting changes in student learning.⁽⁷⁾ The integration of educational technologies can represent an alternative approach to innovative teaching. This protocol is justified by the need to map such digital and educational technology strategies, which are focused on palliative care. This protocol aims to systematize a review that elucidates these data and to highlight the current teaching landscape in this specialty, identify potential gaps, and provide insights.

This study focuses on the problem of PC, addressing the concept of educational and digital

technologies within the context of teaching in this field. And as a guiding question for the review: what scientific evidence is available in the literature on the use of educational and digital technologies in teaching palliative care?

OBJETIVE

Map scientific evidence on the use of educational and digital technologies in teaching palliative care.

METHODS

Study Type

This is a scoping review protocol study,

based on the Joanna Briggs Institute⁽⁸⁾ (JBI) methodology and using the PRISMA tool, with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review (PRISMA-ScR) extension for scoping reviews. Data will be collected and processed in three stages, using Rayyan® software for compilation, performed by two independent reviewers and a third as the decision maker.

Eligibility Criteria

The PCC (Population, Concept, Context) strategy will be used, as shown in Table 1:

Table 1 - PCC Strategy

Strategy	Description
P (Population)	Palliative care or hospital
C (Concept)	Educational, digital technologies, and mobile applications
C (Context)	Teaching and professional education in health

Source: Prepared by the authors, 2025.

Table 1 outlines the inclusion and exclusion criteria established based on the PCC (Population, Concept, Context) strategy, which guide the selection of studies to be considered in the scoping review.

Table 1 - Study eligibility criteria, according to the PCC strategy used. João Pessoa, Paraíba, Brazil, 2025.

PCC	Inclusion	Exclusion
Population	Studies that highlight palliative or hospital care, aimed at teaching in this area.	Studies on other topics.
Concept	Studies that cover educational technologies, digital technology and mobile applications used for teaching palliative care.	Studies that bring technologies to other topics.
Context	Studies that address teaching and professional education, and that portray technological innovations aimed at palliative care, in school and/or hospital environments.	Studies that address teaching in another discipline.
Types of Evidence Sources	Studies involving primary research, systematic and literature reviews, meta-analyses and clinical trials, without temporal or linguistic restrictions.	Studies with in-depth articles, studies with divergent themes and/or designs.

Source: Prepared by the authors, 2025.

Study Search

The search strategy was developed for the databases using controlled descriptors in the Health Science Descriptors (DeCS/MeSH). Seven electronic databases will be searched through the CAPES Journal Portal: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Health Sciences Literature (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Web of Science, SciVerse Scopus, and the Cochrane Library.

Two gray literature databases will be searched: the Digital Library of Theses and Dissertations (BDTD) and Google Scholar. Articles will be screened by title and abstract by two independent reviewers, considering studies of any language and period. The content will be read through the paid access of the Federated Academic Community System of the Coordination for the Improvement of Higher Education Personnel (CAFe/CAPES) of the Federal University of Paraíba (UFPB). Table 2 presents the search strategies adopted in each database consulted.

Table 2 - Search strategy performed in each database. João Pessoa, PB, 2025.

Database	Search strategy used	Results obtained (n)
PubMed/ Medline	("Palliative Care"[MeSH] OR "Palliative Medicine") AND ("Educational Technology"[MeSH] OR "Digital Learning") AND ("Education")	423 articles
LILACS	("Palliative Care" OR "Hospice and Palliative Care Nursing") AND (("tecnologia educacional" OR "ensino digital")) AND ("Educational Technology" OR "Digital Technology") AND instance:"regional"	09 articles
CINAHL	(MH "Palliative Care") AND ("educational technology" OR "digital tools") AND ("education")	14 articles
EMBASE	'Palliative Therapy'/Exp OR 'Palliative Nursing'/Exp AND Educational Technology'/Exp OR 'Dgital Technology'/Exp OR 'Mobile Application'/Exp AND Education'/Exp OR 'Vocational Education'/Exp	699 articles
Web of Science	TS=("palliative care") AND TS=("educational technology" OR "digital learning") AND TS=("education")	0 articles
Scopus	(TITLE-ABS-KEY ('palliative AND care') AND TITLE-ABS-KEY ('educational AND technology')AND TITLE-ABS-KEY('education'))	66 articles
Cochrane Library Line	"Palliative Care" OR "Hospice and Palliative Care Nursing" AND "Educational Technology" OR "Digital Technology" OR "Mobile Applications" AND "Education" OR "Education, Professional"	85 articles
BDTD	Cuidados paliativos AND Tecnologia educacional AND Ensino	04 articles
Google scholar	("Palliative Care") AND ("Educational Technology") AND ("Education")	2.540 articles

* Search conducted on February 6, 2025.

Source: Prepared by the authors, 2025.

I Initially, a search was conducted using the Virtual Health Library and PubMed portals to identify keywords and descriptors. Subsequently, the titles and abstracts were carefully read, taking into account the indexed terms and DeCS/MeSH descriptors, with the aim of answering the study's guiding question, following the PRISMA-ScR eligibility criteria.

Study selection

The screening will be conducted by two independent reviewers, with assistance from Rayyan (Qatar Computing Research Institute, Doha, Qatar). Disagreements will be resolved by a third reviewer. Eligible studies will have their full texts evaluated. The process will be represented by the PRISMA-ScR flowchart.



Data extraction and analysis/Information source

A specific form, adapted from the JBI model, will be used to meet the purposes and question of the review. Data extraction will include the author, journal year, country of origin, study design and type, research

objectives, type of educational technology, and its main results. The form may be revised and adjusted if additional information not initially included becomes necessary, as shown in Table 3. Any changes made will be detailed later in the scoping review.

Table 3 - Data extraction table, João Pessoa, PB, 2025.

Author/year/country	Design/Type of Study	Research objectives	Type of educational technology	Main results and conclusions
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Prepared by the authors, 2025.

Data analysis and presentation

The research results will be published in full as part of the scoping review and presented in a scoping review flowchart, as recommended by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). During the study selection process, article authors may be consulted to provide additional information, if necessary. The results will be presented in written and visual format, through a descriptive summary of the variables studied, accompanied by a discussion of the mapped findings and their relationship to the objective and question of the review. The evidence extracted from the selected studies will constitute the product of the scoping review, which will be published in an indexed journal of scientific relevance.

will also serve as a scoping review, one of Patrícia Maria de Oliveira Andrade Araújo's goals for obtaining her doctorate.

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This review aims to contribute to mapping educational and digital technologies focused on teaching palliative care in nursing. It

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Conflicts of Interest

Please note that there is no conflict of interest in this research.

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