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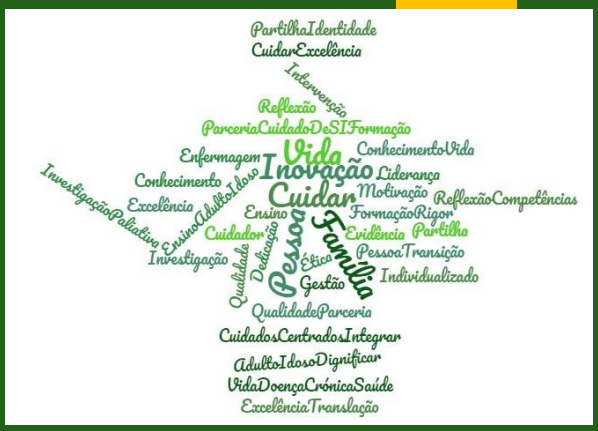

4.º Webinar Nacional e 2.º Webinar Internacional do Departamento de Enfermagem Médico-Cirúrgica/ Adulto e Idoso

Enfermagem e Inteligência Artificial: Desafios e Oportunidades

4th National Webinar and 2nd International Webinar of the Department of Medical-Surgical Nursing / Adult and Elderly Nursing

Nursing and Artificial Intelligence: Challenges and Opportunities

E-book

ESEL
Escola Superior de Enfermagem de Lisboa

ESEL
Escola Superior de Enfermagem de Lisboa

DEPARTMENT OF MEDICAL-SURGICAL NURSING / ADULT AND ELDERLY *NURSING*

E-BOOK OF ABSTRACTS

4th National Webinar and 2nd International Webinar of the Department of Medical-Surgical Nursing / Adult and Elderly *Nursing*

Nursing and Artificial Intelligence: Challenges and Opportunities

february 6th

2025

TECHNICAL INFORMATION

Title
E-Book of Abstract 4th National Webinar and 2nd International Webinar of the Department of Medical-Surgical Nursing / Adult and Elderly Nursing

Subtitle
Nursing and Artificial Intelligence: Challenges and Opportunities

Edition
Nursing School of Lisbon (ESEL)

Editorial Coordination
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Graphic Design
Pedro da Silva Moreira

ISBN 978-989-36239-0-9

DOI: https://doi.org/10.71861/emdd-vn31

DATA 29 de julho 2025

Preface

The advancement of artificial intelligence has profoundly transformed healthcare delivery, challenging and expanding the scope of nursing practice today. This E-Book of Abstracts, stemming from the 4th National Webinar and 2nd International Webinar of the Department of Medical-Surgical / Adult and Elderly Nursing, reflects the timeliness and relevance of this theme, bringing together a collection of research and innovative practices that illustrate the intersection between technology and nursing care.

This book not only documents the progress and challenges associated with the application of artificial intelligence in nursing but also aims to serve as a reference guide for researchers, educators, and professionals interested in deepening their knowledge in this emerging field.

The diversity of the topics presented reflects not only innovation in nursing practice but also the commitment of the academic and professional community to critically and constructively explore the potential of artificial intelligence in healthcare. Among the works featured, rigorous methodological approaches stand out, supporting the implementation of evidence-based solutions and contributing to an informed and enlightening discussion on best practices in the use of new technologies.

The E-Book of Abstracts is organized to provide a structured and thematic reading experience, with content distributed across two main sections. The first section follows the main program of the event: Technology and Care, Promoting Self-Care, AI-Based Platforms, and Decision Making in Nursing: AI-Based Algorithms. The second section gathers the works presented as Oral Communications and Posters.

We invite all readers to explore this publication with a critical and innovative perspective, reflecting on ethical, safe, and efficient ways of integrating technology into nursing care—while never losing sight of the humanistic essence that defines this profession.

We extend our sincere gratitude to all authors, researchers, and participants who made this event possible and contributed to the development of this valuable repository of knowledge.

May this publication serve as an inspiration and catalyst for future research, specialized training, and interdisciplinary collaborations, contributing to a nursing profession increasingly prepared to meet the challenges of the future.

Carla Nascimento

Nursing School of Lisbon

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| Program

15h00 - Oral Presentations and Posters

16h00 - Opening Session

16h30 - Conference: Artificial Intelligence in Nursing and Health Care: Transforming Challenges to Opportunities

Michael Joseph Dino (Our Lady of Fatima University, USA)

Moderator: Cândida Durão (ESEL)

17h00 - Presentation Table 1: Technology and Care

Telenursing in the promotion of Care-of-the-Self in older adults with chronic obstructive pulmonary disease

Amélia Garcia, Ana Ramos & Idalina Gomes (ESEL)

High-tech augmentative and alternative communication with critically ill patients

Rita Nascimento & Florinda Galinha de Sá (ESEL)

Technology in managing peripheral venous access for people in acute situations

Joana Teixeira (ESEL), Celeste Bastos (ESEP) & Maria do Rosário Pinto (ESEL)

Moderator: Idalina Gomes

18h00 – Coffee Break

18h15 - Presentation Table 2: Promoting Self-Care: AI-Based Platforms

Promotion of self-care interventions in kidney transplant patients

João Agrelos, Helga Rafael & Eunice Henriques (ESEL)

eHealth in promoting self-care in people with PICC: Challenges and Solutions

Ana Raquel Alves, Graça Melo & Helga Rafael (ESEL)

Artificial Intelligence in Emergency Triage: Management of Acute Exacerbations of Chronic Disease

Mauro Germano & Bruno Magalhães (School of Health Sciences, UTAD)

Moderator: Eunice Henriques

19h15 - Presentation Table 3: Decision Making in Nursing: AI-Based Algorithms

Nurses' contribution to the planning of end-of-life care

Margarida Vicente Madeira & Eunice Sá (ESEL)

Nursing care that promotes communication with the person undergoing laryngectomy: contributions of new technologies

Inês Alexandra Rodeira, Madalena Tomé & Sara Pires (ESEL)

Nursing education in the age of AI: tools, skills, and ethical challenges

Luis Tinoca (Institute of Education, UL)

Moderator: Filipe Cristóvão

20h15 - Closing Session

Ana Ramos - Organizing Committee

M. Rosário Pinto - Scientific Committee

| Presentation Table 1: Technology and Care

TELENURSING IN THE PROMOTION OF CARE-OF-THE-SELF IN OLDER ADULTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction: Worldwide, COPD has a prevalence of 10.3%, with the prospect of increasing (GOLD, 2024). From a national perspective, it corresponds to a health problem of high magnitude (DGS, 2023), associated with a very significant economic burden in the daily lives of older adults with COPD and their family caregivers (GOLD, 2024). The mobilization of intervention models that address health problems' multidimensionality is vital (DGS, 2023). The Promotion of the Care-of-the-Self Model (Gomes, 2021) allows the operationalization of telenursing interventions that, through establishing a partnership relationship, will enable the response to specific needs and continuity of care.

Objectives: This study aims to reflect on the action, plan, implement, and evaluate telenursing interventions that promote self-management and the Care-of-the-Self of older adults with COPD and their family caregivers; and describe the sensitive outcomes from specialised telenursing partnership care that promotes the Care-of-the-Self and integration of care.

Methodology: As part of the Nursing Care Internship for People with Chronic Illness, there was a need to structure a telenursing intervention for older adults with COPD and their family caregiver, based on The Promotion of the Care-of-the-Self Model (Gomes, 2021), to promote self-management of COPD, continuity, accessibility and integration of care. In this sense, a case study was developed. A specialized consultation was structured, in person and by teleconsultation, based on the different phases of promoting the Care-of-the-Self Model (Gomes, 2021). Considering ethical and deontological principles, written informed consent was requested and obtained, and the data have been anonymised.

Results: Through the implementation of the Geriatric Depression Scale (Score 11 to 9), Barthel Scale (Score 94 to 96), Research Council Dyspnea Questionnaire (mMRC) (Level 4 to Level 2), COPD Assessment Test (CAT) (Score 24-20), Mini-Nutritional Assessment (MNA) (Score 11 to 14) and Zarit Burden Interview (Score 59 to 55), before and after the intervention respectively, was possible to assess the health outcomes obtain. Throughout the three sessions, one in person and two by teleconsultation, improvements were identified regarding respiratory symptoms, gastrointestinal changes, increased appetite, tolerance to effort, and strategies used during daily life activities. The partnership intervention allowed the older adults with COPD and family caregivers to feel supported and involved in the health/illness process and improved their depressive mood and hope. The importance of nursing teleconsultation in improving accessibility and continuity of care is highlighted.
Discussion/Conclusion: The results corroborate Gomes et al. (2022); the nursing teleconsultation implementation promotes adherence to the therapy plan, prevents complications, and fights loneliness. The importance of involving the person and family caregiver in care became evident, directing the beginning of the session towards expressing the main problems that they consider to be priorities. Telenursing partnership interventions are fundamental in promoting self-management and the Care-of-the-Self of the older adults with COPD and their family caregivers, facilitating their health/illness transition. It is recommended that future studies with representative samples be conducted to determine the effectiveness of telenursing for individuals with COPD and their caregivers.

Keywords: frail elderly; pulmonary disease, chronic obstructive; caregivers; self-management; telenursing

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HIGH TECHNOLOGY AUGMENTATIVE AND ALTERNATIVE COMMUNICATION WITH PEOPLE IN CRITICAL SITUATIONS

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Introduction: During hospitalization in Intensive Care Units, communication complications experienced by patients on invasive mechanical ventilation are common. Communication is a primary tool in nursing care, a key element in nurse-patient interaction, and a task that must be outlined and individualized. The involvement of nursing professionals through interventions that promote quality communication is essential for the beneficial recovery of patients in critical situations.
Objectives: Critically analyze the available scientific evidence regarding nursing interventions of high technology in managing communication with patients undergoing invasive mechanical ventilation in intensive care units.
Methodology: Integrative literature review carried out through research in the MEDLINE and CINAHL databases to answer the research question: “What are the nursing interventions in the management of communication (I) in people under invasive mechanical ventilation (P) in the intensive care unit (Co)?”. JBI critical appraisal tools addressed the quality of the thirteen selected manuscripts.
Results: The quality of communication with patients on invasive mechanical ventilation in intensive care units was described as ineffective. The leading causes of communication disturbances, according to the patients' experience, were feelings of vulnerability, the endotracheal tube, the unfamiliar environment, and the lack of receptiveness to new forms of communication by health professionals. Nursing actions and strategies for improving communication efficiency were identified: high-tech augmentative and alternative communication: various software programs and control functions and speech-generating devices; low-tech augmentative and alternative communication: illustrated media, writing with pen and paper, gestures and facial expressions, "Yes" or "No" questions, and lip reading. There are benefits of innovative communication strategies, both for the patient and for health professionals, such as ease of communication, allowing the patient to express their needs and concerns, increasing the quality of health care provided, and increasing patient safety.
Discussion/Conclusion: Nurses play a vital role as mediators of information and emotions between the patient, the multidisciplinary team, and the family. Several interventions and strategies promote communication between nurses and the person on invasive mechanical ventilation, and those based on high technology are emerging for future development in this area. It is also important to consider the person's perspective on invasive mechanical ventilation and their family when implementing these measures. Intensive care units benefit from nurses who are specialized in dealing with people in critical conditions, since a therapeutic relationship with the person and their family is essential to manage interpersonal communication in a highly complex health situation. For the development of nursing research, it is important to have more studies on the application of augmentative and alternative communication in Portugal.

Keywords: Mechanical Ventilators; Health Communication; Communication Barriers; Nurse–Patient Relations; Critical Care.

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TECHNOLOGY IN THE MANAGEMENT OF PERIPHERAL INTRAVENOUS ACCESS FOR PATIENTS IN ACUTE SITUATIONS

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Introduction: Acute and critically ill patients often need a peripheral intravenous catheter (PIVC) for treatment. Their placement and maintenance are a sensitive area for nursing care. However, this medical device had associated risks. Despite international guidelines detailing evidence-based practice (EBP) for PIVC insertion and maintenance (Centers for Disease Control and Prevention, 2017; Gorski et al., 2021; Zingg et al., 2023), many practices remain suboptimal, with high rates of idle (unneeded) catheters, high failure rates, and various complications, including infection. Implementing evidence-based decisions and standardized practices can improve PIVC management (Zingg et al., 2023) and the quality of nursing care.
Objectives: Identify technologies suitable for integrating into a multimodal nursing intervention to enhance PIVC management in the emergency department (ED) within the framework of an action research study.
Methodology: A Narrative review was done on January 27th, in an action research study's exploration phase (planning). To synthetize literature in this area, a search in CINAHL and MEDLINE Ultimate, Cochrane Central Register of Controlled Trials, Scopus, Web of Science, Google Scholar, as well as grey literature, was done, to answer the following research question: Which technologies could improve PIVC management in the adults of an emergency department? All types of documents were included according to the following eligibility criteria: adults acutely ill in the ED (population), technological strategies (interventions) to improve PIVC management, and nursing care (outcomes).
Results: The results highlight technologies with the potential to enhance PIVC management in the care of adults within the ED: ruled-based algorithms for support decision-making, machine learning through the application of decision trees, ultrasonography and near Infrared Light Vein Visualization Technology into PIVC protocols for PIVC insertion, audit tools for the sustainability of the EBP, double-chamber syringe to guarantee the flush before and after the intravenous treatment administration, the use of simulation with 3D to improve practices in the area and avoid failure attempts in PIVC insertion and a visual management safety tracker for adequate surveillance of the patients (Hart & Weathers, 2024; Parreira et al., 2020). These results could be aligned with the Technological Competency of Caring in Nursing by Locsin as a Framework and the Clinical Technology Implementation Model as a structured

framework for adopting and sustaining technology in healthcare, ensuring alignment with EBP.
Discussion/Conclusion: Caring for patients in acute care settings in PIVC management offers challenges that could be transformed into opportunities to improve outcomes, co-created with the Teams, through an action research study. Future research should focus on validating and refining these technologies (e.g., decision-making tools, protocols) to enhance nurses' decision-making processes for PIVC management, improve providers' and patients' experiences, improve patients' outcomes, and reduce healthcare costs. Advocating for EBP, enhancing nurses' compliance with bundles and guidelines, and exploring the long-term impact of these interventions on patient outcomes are crucial.

Keywords: Technology; Catheterization, Peripheral; Nursing; Infection control, Decision-making.

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| Presentation Table 2: Promoting Self-Care: AI-Based Platforms

SELF-CARE INTERVENTIONS FOR KIDNEY TRANSPLANT PATIENTS AND MOBILE APPS

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Introduction: Chronic Kidney Disease (CKD) is a significant health issue globally, contributing to premature mortality and disability. Kidney Transplantation is the most

effective treatment for End-Stage Kidney Disease (ESKD). However, complications post-transplant, such as infections, cardiovascular disease, and graft rejection, remain prevalent. Promoting self-care interventions is essential for the early detection of complications and the prevention of more severe adverse events. Technological developments and telehealth offer new tools for nurses to deliver enhanced healthcare.
Objectives: To explore innovative technological solutions for enhancing self-care practices in Kidney Transplant Patients, reducing complications, and improving health outcomes.
Methodology: The Kidney Transplant Self-care Interventions emerged from an integrative literature review. These interventions led to the creation of a manual for Kidney Transplant patients and their families, developed during an academic journey that included a practical internship project in a Kidney Transplant Care Unit. A collaboration with the Instituto Superior de Engenharia de Lisboa resulted in the development of a mobile app for Kidney Transplant Patients.
Results: Findings indicate that early hospital readmissions in Kidney Transplant patients occur in 30% of cases, leading to increased morbidity and mortality. Effective self-care education and technological solutions, including mobile applications, were associated with reduced readmissions. A comprehensive structure was designed for the technological solution based on the identified needs and technological requirements. The proposed interface included several key modules to support patients in their post-transplant journey and consolidate multiple health parameters, including medication management, vital sign tracking, and educational support. One of the central components was a therapeutic education module that could provide detailed information about post-transplant care, reintegration into the community, and pre-defined answers to frequently asked questions. This educational feature aims to empower patients and their families with essential knowledge to support recovery and ongoing health management. Recognizing the critical need for continuous health monitoring, functionalities were implemented to allow patients to record vital health indicators, such as blood pressure, fluid balance, body weight, and capillary glucose levels. These daily entries generated alerts for users and healthcare professionals, fostering timely interventions and promoting proactive health management. Given the complexity of immunosuppressive therapy post-transplant, particularly during the initial adjustment phase, the application provided a dynamic space for recording and visualizing medication schedules. This feature supported better adherence to prescribed regimens and allowed for quick updates to medication plans as needed. **Discussion/Conclusion:** Technological developments, particularly mobile health applications, hold promise for transforming Kidney Transplant care. By enhancing monitoring and self-care practices, these solutions can reduce complications, improve patient satisfaction, and extend graft survival. The integration of real-time alerts and data sharing with healthcare professionals can facilitate timely interventions and promote transplant success. However, ethical and data security considerations must be addressed. Nurses play a crucial role in ensuring that technology complements rather than replaces human-centered care.

Keywords: Self-Care, Kidney Transplant, Health Education, eHealth, Mobile Applications

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EHEALTH IN PROMOTING SELF-CARE IN PEOPLE WITH PERIPHERALLY INSERTED CENTRAL CATHETER: CHALLENGES AND SOLUTIONS

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Introduction: The Peripherally Inserted Central Catheter (PICC) is an increasingly used method by patients requiring prolonged intravenous therapy while living at home (World Health Organisation, 2024). A person's adaptation to the PICC and its weekly maintenance can affect their health and be associated with the incidence of complications (Sharp et al., 2024). Integrating eHealth into nursing interventions has shown promising results, promoting the autonomy of home-based PICC patients in their self-care (Malale et al., 2020).
Objectives: Explore the challenges and solutions of using eHealth to promote self-care among home-based PICC patients.
Methodology: A literature review is conducted on eHealth in promoting self-care among home-based PICC patients to identify challenges and outline proposed solutions. A reflection on the topic is presented based on professional experience in providing care for these individuals and theoretical foundations.
Results: The implementation and use of information and communication technologies face several challenges, with digital literacy among stakeholders being one of the most frequently mentioned (Estrela et al., 2023). Ensuring access to digital health programs that empower healthcare professionals and patients is essential (Estrela et al., 2023). Another identified challenge is the quality of shared information. Integrating information and communication technologies into clinical practice can ensure reliability, up-to-dateness, and adequacy (Estrela et al., 2023). Data security and system interoperability are two additional challenges requiring stringent data protection measures, compliance with legal regulations, and investment in technological infrastructure (Canova-Barrios & Machuca-Contreras, 2022). Interoperability demands adopting common standards that enable efficient integration across different healthcare platforms, facilitating the secure and accurate exchange of clinical information (Canova-Barrios & Machuca-Contreras, 2022).

Discussion/Conclusion: Despite efforts to implement solutions to mitigate the identified challenges, it is believed that new challenges will arise with the advancement of information and communication technologies. However, more personalised and intuitive solutions will also emerge, promoting self-care among home-based PICC patients.

Keywords: Telemedicine; Self Care; Nursing Care; Catheters, Indwelling

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| Presentation Table 3: Decision Making in Nursing: AI-Based Algorithms

NURSES' CONTRIBUTION TO ADVANCED CARE PLANNING IN THE END-OF-LIFE CARE

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Introduction: Advance Care Planning (ACP) is a process that aims to promote the discussion of individual values, life goals, and preferences regarding health care, thinking of the future. The aim is to ensure that the person will receive healthcare in line with their wishes in the face of a life-threatening illness. It can be carried out by anyone with decision-making capacity, regardless of their health condition, and the involvement of a professional in this field is recommended. It is an ongoing process that adapts to

deteriorating health and should become more specific as illness worsens and the end of life (EoL) approaches.
Objectives: to contribute to improving the quality of care provided by Palliative Care and to develop skills around Advanced Care Planning in the End of Life (ACP EoL), seeking to help raise awareness of its importance and impact on the quality of care provided, as well as encouraging its approach.
Methodology: This work is based on project work methodology and took the form of an educational program. A variety of methodologies were used, such as a Scoping Review and a Research Project on nurses' perceptions of the application of the ACP EoL (an exploratory, qualitative, primary, and prospective study), as documents promoting the improvement of records, the ACP EoL approach, and the quality of care, having created a record model based on the Person-Centered Care Process and a Checklist.
Results: The activities carried out resulted in an individual deepening in the topic of ACP EoL, as well as its dissemination among peers and other professionals, because of the frequency with which it was discussed and applied in daily practice. When faced with a serious and incurable illness, the person faces the possibility of suffering cognitive and/or physical deterioration in a short space of time. Because of this, it is the responsibility of the health professional to encourage end-of-life issues, which must be addressed at an early stage of the advanced disease process. Nurses are the professionals who spend more time with the patient, so they can find opportunities to address ACP EoL, and often, it is only possible to discuss desires, values, and preferences if someone knowledgeable about the subject encourages reflection. This attitude promotes active and rehabilitative involvement and encourages individual autonomy.
Discussion/Conclusion: The growing ageing population and multiculturalism of society, combined with the evolution of technology, its influence on health, and the consequent increase in average life expectancy, make it important to discuss the ACP EoL so that, in health, decision-making can be shared and articulated with individual desires and values. As nurses are the professionals with the privilege of spending most of most time with the people they care for, they find unique opportunities to address the ACP EoL.

Keywords: Advance care planning, end of life, nurses, palliative care.

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NURSING CARE TO PROMOTE COMMUNICATION WITH PEOPLE UNDERGOING LARYNGECTOMY: CONTRIBUTIONS OF NEW TECHNOLOGIES

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Introduction: Cancer is a global pandemic, and despite not being among the most common, laryngeal cancer has a high mortality rate. Total laryngectomy is a frequent surgery in this context, resulting in compromised communication, an essential factor in nursing care. Therefore, it is important to establish effective and satisfactory communication for the laryngectomised person, as they tend to value the negative aspects of communication changes, feeling inhibited in expressing themselves, laughing, crying, and social interactions, which can decrease their quality of life. New technologies should be valued as augmentative and alternative communication strategies that enhance effective communication and postsurgical adaptation.
Objectives: to provide a comprehensive and complete understanding of the implementation of technological innovations in nursing care that promote effective communication with the laryngectomized person in the postoperative period. Methodology: Integrative literature review, according to Whittemore & Knafl (2005), with a search in the EBSCO and Google Schoolar search engine databases, with the following MeSH descriptors: "Cancer Patients", "Nursing Care", "Communication", "Technology" and "Assistive technology devices", retrospectively from January 1, 2014, to May 1, 2024.
Results: From a total of 243, 10 articles of primary and secondary studies were selected, with different methodological designs: systematic reviews (n=4), observational studies (n=3), qualitative (n=1), and prospective viability (n=2). The research was carried out in Portugal (n=1), Brazil (n=3), the United Kingdom (n=1), Canada (n=1), and the United States of America (n=4). Communication is a basic nursing tool that enables person-centered care and effective interventions. Technological innovations can optimize the communication process and can be divided into three categories: i) electronic devices, such as iPad, Tablet, Smartphone, Computer and Springboard which allow messages to be stored, retrieved and speech generated through voice synthesizers present in all these devices; ii) communication applications and software, such as Verbally, Proloquo2GoTM, Scala Alternative Communication System, Boardmaker, Speaking Dinamically Pro, Amplisoft, Livox®, TalkRocketGoTM, Speak it, which are examples of software and applications that allow text, symbols and images to be converted into artificial voice; and iii) technologies in the pilot phase, such as the prototype under development Silent Speeches Interfaces, which attempts to automatically recover the speech produced by the person, thus revolutionising the communication strategies available.
Discussion/Conclusion: The outlined dimensions demonstrate positive outcomes in addressing the challenges faced by individuals undergoing total laryngectomy. These

dimensions are relevant to nursing care and enhance the nurse's role as a facilitator during the transition process.

Keywords: communication; laryngectomy, nursing care, postoperative period, technological innovations.

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| Oral Presentation and Posters

CARING FOR PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AFTER CARDIAC ARREST: INTEGRATIVE LITERATURE REVIEW

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Introduction: Nursing care after cardiac arrest (CA) is of utmost importance and begins immediately after the recovery of spontaneous circulation, as a significant number of deaths following resuscitation result from post-cardiac arrest syndrome. Patients with acute myocardial infarction (AMI) after CA face complex hemodynamic and physiological challenges that demand specialized nursing interventions through advanced means of

monitoring, vigilance, and therapy. Nursing interventions are critical in promoting patient stability, improving prognosis, and future quality of life.
Objective: To identify nursing interventions described in the literature for caring for patients with acute myocardial infarction (AMI) after cardiac arrest (CA).
Methods: In June 2024, an integrative review was conducted following PRISMA methodological guidelines, using databases such as MEDLINE, CINAHL, Scopus, PubMed, and grey literature. The research question was: "What are the nursing interventions (I) for patients with acute myocardial infarction (P) in critical care (Co) post-cardiac arrest?" A total of 560 articles were identified, and eligibility criteria were applied. The quality of the final seven articles was assessed using the Joanna Briggs Institute's "Critical Appraisal Tools."
Results: Analysis of the 7 articles highlights the importance of vigilance in nursing interventions for patients with AMI post-CA. Key interventions include temperature management, oxygenation management, ventilation, cerebral perfusion, and rigorous metabolic homeostasis monitoring. Transdisciplinary communication emerged as essential for care coordination. Advanced technology was central to hemodynamic support, coronary perfusion, and pharmacological treatment, complemented by neurological evaluation and prognosis. The management of cardiogenic shock, palliative care, and therapeutic limitations was emphasized in the ethical approach. Interventions such as pressure injury prevention, nutrition management, and psychological support for families underscore the comprehensive role of nurses in patient recovery and prognosis.
Discussion/Conclusion: The findings highlight the role of nursing in vigilance and the use of advanced technologies in caring for patients with AMI post-CA. Interventions such as temperature management, oxygenation, cerebral perfusion, and hemodynamic support stand out in preventing complications and achieving clinical stabilization. Transdisciplinary communication and ethical approaches, including palliative care and family support, reinforce humanized care. The scarcity of primary studies in this field underscores the need for further research and specialized training to optimize clinical outcomes and enhance patient safety.

Keywords: Cardiac Arrest, Acute Myocardial Infarction, Nursing Care, Critical Care, Post-Cardiac Arrest Syndrome.

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ENVIRONMENTAL MANAGEMENT IN THE TRANSPORT OF CRITICALLY ILL PEOPLE: NURSING INTERVENTION: INTEGRATIVE LITERATURE REVIEW

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Introduction: Critically ill patients (CIP) are at high risk of multi-organ failure and mortality, with increased risk when timely and appropriate interventions are not implemented. The CIP is particularly vulnerable due to its reduced adaptability and potential for clinical deterioration, which may justify transport to healthcare contexts with different levels of specialization. Environmental characteristics during transport can adversely affect the CIP, highlighting the importance of identifying interventions for managing the transport environment.
Objectives: Identify nursing interventions in managing the environment while transporting critically ill patients.
Methodology: An integrative literature review (ILR) was conducted based on the research question: "What are the interventions in managing the environment during the transport of critically ill patients?" formulated according to the PICo mnemonic. The databases CINAHL, MEDLINE, and SCOPUS were consulted. Articles were selected using Rayyan software, and results were presented through the PRISMA flowchart based on defined inclusion criteria. The methodological quality assessment followed Joanna Briggs Institute guidelines.
Results: A total of 967 articles were identified in the databases, of which 169 were excluded as duplicates. Of the remaining 798, 720 were excluded after title and abstract analysis for not meeting the inclusion and exclusion criteria. Seven full texts were unavailable among the 78 selected articles. After reading and analyzing the remaining 71 full-text studies, nine eligible studies were included in the final analysis.
Nursing interventions that improve environmental management during CIP transport include prior preparation of transport material using checklists, securing and ensuring the functionality of necessary equipment, preparing expected therapies, reducing external stimuli with noise-cancellation devices, using music, and maintaining body temperature through active and passive measures.
Discussion/Conclusion: Safety during CIP transport is crucial to minimising adverse events and preventing complications, essential elements of nursing surveillance. Environmental management interventions during CIP transport range from planning and selecting material resources to knowledge sharing and continuous care improvement. Using standardized checklists ensures appropriate preparation and verification of equipment, medication, infusions, and equipment fixation. Monitoring vital signs is a critical nursing intervention. Future studies should consider the impact of environmental factors during CIP transport.

Keywords: Environment; Nursing; Critically Ill Person; Transport.

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THE ROLE OF NURSING INTUITION IN EARLY DETECTION OF CLINICAL DETERIORATION: RESULTS OF A SYSTEMATIC REVIEW

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Introduction: Clinical deterioration is a dynamic state that compromises a patient's hemodynamic stability, marked by variations in physiological parameters and subjective signs (Padilla & Mayo, 2018). Timely identification and response to clinical deterioration are crucial to reduce severe complications, particularly in critically ill patients. Intuition, an essential component in nurses' decision-making, has been recognized as an effective strategy for identifying signs of clinical deterioration. Therefore, it is highly important to reveal the existing evidence on the role of intuition in the early detection of clinical deterioration in emergency and critical care contexts.
Objectives: This study aims to identify the available evidence regarding the role of nursing intuition in the early detection of clinical deterioration.
Methodology: This systematic review followed Joanna Briggs Institute guidelines for evidence synthesis (Aromataris et al., 2024). The research question is: What is the role of nursing intuition in early recognition of clinical deterioration in critically ill patients? The search was conducted in Medline, CINAHL, Scopus, and Web of Science databases from 8 to 31 May 2024. After applying the eligibility criteria, a total of 112 articles were screened by five researchers, and after a thorough review, 15 were included. Data were synthesized, and methodological quality was assessed using JBI's Critical Appraisal Tools.

Results: The fifteen studies included in this review were conducted across various countries, published between 1987 and 2023. The studies have an average methodological quality of 83.7%. Results show intuition is often linked to unconscious recognition or knowledge based on experience, with experienced nurses relying on it to identify subtle changes in patient conditions, frequently before physiological signs emerge. Nurses often use non-quantifiable cues like changes in posture or skin color, relying on pattern recognition. It is also identified that, although intuition is rarely formally documented, it plays a critical role in detecting deterioration, even when vital signs appear stable. Studies also disclose that intuition, combined with training, enhances clinical competence and rapid response. Tools like DENWIS integrate intuition with objective metrics to aid early detection. Some studies propose assessing the accuracy of nursing intuition, showing that intuitive decisions, such as oxygen administration, can indirectly predict in-hospital mortality.
Discussion/ conclusion: This review highlights the critical role of nursing intuition in early clinical deterioration detection, emphasizing its reliance on experience, knowledge, and the nurse-patient relationship. Intuition contributes to positive patient outcomes, despite its nonconsensual nature, particularly when combined with objective tools, like early warning scores. However, challenges remain in formalizing and integrating intuition into clinical practice. Limitations of these results include potential biases in the review process. Future research should focus on validating and enhancing intuitive skills through targeted training, improving nurse awareness, and balancing intuition with digital monitoring for better patient care.

Keywords: Clinical Deterioration, critical care, early detection, Intuition, nursing, systematic review

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NURSING INTERVENTION PROMOTE SAFETY OF THE PATIENT UNDERGOING EXTRACORPOREAL CARDIOPULMONARY RESUSCITATION: AN INTEGRATIVE REVIEW

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Introduction: Extracorporeal cardiopulmonary resuscitation is a last-line technique in the approach to critically ill patients who are victims of cardiorespiratory arrest. Even though this technique is increasingly being used, its use has risks of associated complications (Wengenmayer et al., 2023). In increasing technological work contexts, nurses have an essential intervention in maintaining the focus of care on the person and in the surveillance of possible complications, preventing, identifying, and intervening in their resolution, thus promoting the safety of the person in critical situations (Locsin, 2017; Meyer & Lavin, 2005).
Objective: Recognise complications sensitive to nursing intervention in a person in a critical situation undergoing extracorporeal resuscitation.
Methodology: An Integrative Review was developed according to the recommendations of Toronto and Remington (2020), with the research question: What are the complications of the critically ill patient undergoing extracorporeal cardiopulmonary resuscitation? In the first instance, to identify articles, conventional research was conducted in electronic databases, and articles pertinent to the subject under study were analyzed, identifying the main terms and keywords to be used. The research was carried out in databases MEDLINE Complete, CINAHL Complete, and SCOPUS, between January and March of 2024. The selection involves two reviewers independently screening the main articles, with the aid of the Rayyan® application, and duplicate articles were removed, and selected articles were based on the initial question.
Results: Nine articles relevant to the starting question were considered. Six of the nine articles are primary studies, two are systematic reviews, and one is an expert opinion article. All studies have high methodological quality with a cutoff of more than 70%, according to JBI's Critical Appraisal Tools. The analysis of the articles allowed us to highlight three domains of safety-promoting intervention. One centered on the person, which includes the physical dimension representing the associated complications such as limb ischemia, the risk of hemorrhage, neuromonitoring, and post-resuscitation care, and the environmental dimension with the complications associated with the risk of infection. The second is in the field of technology-focused safety, which includes the complications associated with the equipment and/or circuit. Finally, in the field of team-focused safety, including the time dimension that encompasses the compliance with timings and the training dimension, which includes the training and simulation of the multidisciplinary team.
Discussion/Conclusion: It is fair to consider that nurses are an essential link in the multidisciplinary team in obtaining good results in people undergoing ECPR. The nurses ensure that the procedure is carried out safely and that post-ECPR care is maintained, identifying specific nursing interventions: ensuring the correct functioning of the team, ensuring the correct disinfection of the cannulation sites, and surveillance of associated complications. Specific interventions can be based on the postulate of Meyer & Lavin (2005) with the theory Vigilance: The Essence of Nursing.

Keywords: Critical care nurses; Extracorporeal cardiopulmonary resuscitation; Extracorporeal membrane oxygenation; Patient safety; Prevention of complications.

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THE POWER OF THERAPEUTIC SOUNDS IN THE MANAGEMENT OF ACUTE PAIN IN CRITICAL CARE: A SYSTEMATIC REVIEW

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Introduction: Pain can be defined as a negative sensory and emotional experience associated with actual or potential tissue damage. Acute Pain management in CIP requires continuous assessment and monitoring, combining pharmacological and non-pharmacological interventions to provide relief and improve quality of life. The evidence points to the need to develop more in-depth studies on the effectiveness of non-pharmacological interventions, considering the use of sounds in managing acute pain in CIP as promising.
Objective: To identify in the evidence the contributions of the use of sounds in managing acute pain in critically ill patients that can support the implementation of autonomous nursing interventions through sustainable practice.
Methodology: A Systematic review was conducted according to Joanna Briggs Institute, and PRISMA guidelines between September 1st and December 1st of 2024, in MEDLINE Ultimate, CINAHL Complete, Scopus, Web of Science, Cochrane Central Register of Controlled Trials, and Cochrane Database of Systematic Reviews. The protocol was registered in PROSPERO.
Results: The search identified 311 articles, which, after eliminating duplicates and applying the eligibility criteria, resulted in 13 final articles for analysis. According to the results obtained, sounds, namely music, natural sounds, and the absence of noise or silence, can relieve people's perceived pain.
Conclusions: Using sounds as a non-pharmacological nursing intervention has several positive results in pain management, whether used individually or concomitantly with other pharmacological and non-pharmacological measures. For future studies, the evidence suggests developing primary studies on the effectiveness of different sounds, such as nature sounds, white noise, or relaxing sounds.

Keywords: critical care; sound; pain management; acute pain; nursing care.

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AGITATION MANAGEMENT IN CRITICALLY ILL PATIENTS IN THE INTENSIVE CARE UNIT: SYSTEMATIC REVIEW

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Introduction: Agitation is a common complication in critically ill patients, associated with increased mortality, prolonged mechanical ventilation, and intensive care unit (ICU) stay. Its management involves pharmacological strategies and non-pharmacological interventions (Pun et al., 2019). However, these approaches remain limited and tend to emerge in a non-systematic way. Tools like the Richmond Agitation-Sedation Scale (RASS) enhance monitoring and intervention (Rasheed et al., 2019). This review is justified by the need to consolidate evidence and support standardized practices, addressing inconsistencies in the application of agitation management strategies in ICUs.
Objective: To identify evidence-based interventions for managing agitation in critically ill patients in ICUs.
Methodology: The population included critically ill adult patients in the ICU, focusing on pharmacological and non-pharmacological interventions for agitation management. Studies were identified through CINAHL, MEDLINE, Scopus, the Cochrane Database, and Web of Science, covering the period from 2018 to 2024. Two independent reviewers screened articles by title/abstract and full text, resolving conflicts collaboratively. Data aligned with the objectives were extracted, anonymized, and ethically analyzed. We used JBI critical appraisal tools for risk of bias assessment.
Results: Our sample was composed of 28 articles. Pharmacological interventions, including typical antipsychotics like haloperidol, were effective for controlling severe agitation but associated with adverse effects such as QTc prolongation (E. Zaghla et al., 2019). Atypical antipsychotics, such as quetiapine, demonstrated comparable efficacy with fewer side effects (E. Zaghla et al., 2019). As an adjuvant sedative, magnesium significantly reduced mechanical ventilation duration and benzodiazepine use without adverse outcomes (Altun et al., 2019). Structured protocols like the ABCDEF Bundle

significantly improved outcomes, reducing the incidence of delirium, mechanical ventilation, and ICU readmissions (Pun et al., 2019). Assessment tools, including the Richmond Agitation-Sedation Scale (RASS), showed higher inter-rater reliability and sensitivity compared to the Ramsay Sedation Scale (Rasheed et al., 2019). Additionally, enteral sedation presented cost benefits and lighter sedation targets, though it was associated with a higher incidence of self-extubation (Mistraletti et al., 2019).
Discussion/ Conclusion: Agitation management in ICUs requires multimodal strategies integrating pharmacological interventions, structured protocols like the ABCDEF Bundle, and reliable assessment tools like RASS. While innovative approaches such as enteral sedation offer economic advantages, they necessitate caution due to associated risks like self-extubation. Limitations of this review include the heterogeneity of the studies and the unequal implementation of protocols. Future research should investigate long-term outcomes and standardize these interventions across ICUs.

Keywords: Critical illness; intensive care units; psychomotor agitation.

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RISK FOR COMPROMISED HUMAN DIGNITY: PATIENT IN CRITICAL CONDITION UNDER PHYSICAL RESTRAINT – INTEGRATIVE REVIEW

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Introduction: The main objective of physical restraint is to ensure continuity of care and avoid the removal of invasive therapeutic devices in the critically ill patient (Santos et al., 2021). However, it can be ineffective or even bring risks to the patient, compromising their human dignity (Kawai et al., 2022). Since maintaining and respecting human dignity is a nurse's duty (Lei 156/2015, 2015), it is extremely important in their professional practice to recognize alternative and preventive measures to use physical restraint.
Objectives: Understand which nursing interventions minimize the use of physical restraint in critically ill patients without compromising human dignity.
Methodology: The Integrative Review, drawn up according to the recommendations of Toronto and Redmington (2020), had as its research question "What nursing interventions minimize the need for physical restraint in critically ill patients in intensive care units? ". The inclusion criteria were: person aged >18 years, admitted to an intensive care unit, and under physical restraint; exclusion criteria: pediatric population, person with dementia syndrome, and psychiatric pathology. The search was carried out in the electronic databases SCOPUS Preview, CINAHL Complete, and MEDLINE Complete, yielding a total of 468 articles.
Results: The search resulted in five articles, which make up the sample for this review. The articles were analyzed for data extraction using a previously constructed table containing the title, authors, year, country, type of study, and critical appraisal, using JBI's Critical Appraisal Tools, guaranteeing the reliability and relevance of the results obtained. All the studies considered are of high quality, with a score of over 70% in the critical appraisal. All the articles are primary studies, three qualitative (one Delphi study) and two quantitative (one prospective observational and one prospective cohort). The studies took place on two different continents: North America (n=3), Asia (n=2).
Discussion/Conclusion: Four dimensions of alternative nursing interventions to physical restraint that promote human dignity were identified: person-centered, family-centered, environment-centered, and health professional-centered. A limitation of the review is that the research results were very limited, and it was clear that physical restraint and its ethical dimension are still topics that have not been addressed and explored. As suggestions, we would like to highlight the need for training for health professionals on the subject under study and the development and enforcement of rules governing physical restraint.

Keywords: Critical care nurses; Critical ill patient; Human Dignity; Intensive care units; Physical restraint

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PROMOTING THE SAFETY OF PEOPLE IN CARDIAC ARREST: INTEGRATIVE LITERATURE REVIEW

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Introduction: Nurses have a crucial role in promoting the safety of the person undergoing CPR in the in-hospital environment and are often the first to detect the event or predictive signs. CPR has a high mortality rate and associated morbidity, and it impacts people, families, and health professionals. The response to CPR requires care that guarantees safe and well-structured practices. This integrative literature review analyzes studies that address interventions and strategies focused on promoting the safety of people in cardiac arrest.
Objective: The purpose of this Integrative Literature Review is to identify the factors that promote the safety of people in cardiorespiratory arrest (CRA), in the hospital environment, within the scope of the care provided to them.
Methodology: The search for articles was carried out in the MEDLINE Complete and CINAHL Complete databases, ending in March 2024. The research question was formulated: What factors contribute to safe care (I) for people in cardiac arrest (P) in the hospital environment (C)? Resulting in a total of 680 articles, after eliminating duplicates, analyzing and applying the inclusion and exclusion criteria, 10 articles relevant to the study were included and subjected to methodological quality assessment according to the critical appraisal tools proposed by the Joanna Briggs Institute (JBI).
Results: The results obtained identify three important categories in which nurses can have a specialized intervention to promote the safety of people in cardiac arrest. These categories are prevention, performance, and re-evaluation of the intervention. From the results obtained, we can confirm that more efficient recording of vital signs, appropriate equipment, preparing the physical environment, promoting positive working environments, acquiring technical and non-technical knowledge and skills through training, implementing debriefing and recording incidents are essential factors for optimizing results in terms of the safety of the person undergoing CPR.
Discussion/Conclusion: Reflecting about interventions with the person undergoing CPR is part of a culture of safety that needs to be promoted and is influenced by both human and organizational factors. Nurses must have the necessary training and working conditions to intervene in the prevention, action, and reassessment of CPR events with a focus on safety.

Keywords: Patient Safety; Resuscitation; Nursing; Hospital.

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UNDERSTANDING CLINICAL DETERIORATION AMONG HEMODIALYSIS PATIENTS IN THE EMERGENCY DEPARTMENT: PRELIMINARY RESULTS OF A SYSTEMATIC REVIEW

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Introduction: People with chronic kidney disease belong to the most clinically complex and expensive group of people in terms of treatment. (Lee & Son, 2021). The perception of illness, disability, and dependence, together with low social support, often leads to non-adherence to treatment and, in turn, to frequent hospitalizations (Golestaneh, 2018). Several predictors of deterioration exist in hemodialyzed chronic kidney patients, and these increase whenever there is a change in the patient's routine or health, even more so when hospitalization occurs (Fotheringham, 2014).

Objectives: To have an overview of the reasons that lead chronic kidney disease patients on a hemodialysis program to the emergency department to list the factors that lead to deterioration in this specific patient.

Methodology: The question of this review was: "What are the characteristics of episodes of deterioration in hemodialysis patients in the emergency department?". The inclusion criteria were adult/elderly, chronic kidney disease, and a hemodialysis program, and the exclusion criteria were neonates, children, and adolescents. A search was carried out in the electronic databases CINAHL, PubMed, Scopus, Web of Science, and Cochrane Systematic Review, yielding 646 articles. They were analyzed using a previously constructed table, guaranteeing the reliability and relevance of the results obtained.

Results: The sample is composed of twelve articles. The studies were carried out in several different countries: Russia (n=2), Australia (n=1), European countries (n=1), Egypt (n=1), Sweden (n=1), China (n=2), USA (n=2), Nova Scotia (n=1), Pakistan (n=1) and Palestine (n=1).

Preliminary analysis of the data reveals several common causes of clinical deterioration in hemodialysis patients presenting to the emergency department. These include electrolyte imbalances, infections, vascular access complications, infarction, stroke, covid19. In addition, comorbidities such as hypertension, diabetes, and cardiovascular disease were often identified as significant contributors to patient deterioration. Early indicators of deterioration often included changes in vital signs.

Discussion/Conclusion: This systematic review highlights the multifaceted nature of clinical deterioration among hemodialysis patients presenting to the emergency department. The findings underline the importance of the timely identification and management of key factors contributing to deterioration. Early recognition of changes may offer a critical window for intervention, potentially reducing morbidity and mortality

in this vulnerable population.

Keywords: Chronic kidney disease; Hemodialysis; Clinical deterioration; Emergency department.

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VIRTUAL REALITY IN PAIN MANAGEMENT IN BURN PATIENTS: PRELIMINARY RESULTS OF A SYSTEMATIC REVIEW

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Introduction: Given their complexity, burns are one of the injuries with the greatest impact on the person, making pain management a priority. Technological evolution has driven the development of non-pharmacological strategies to promote pain relief, with virtual reality (VR) standing out as an innovative technological approach with benefits for pain management (Bermo et al., 2020; Lopes, 2020).
Objective: To analyze the effect of virtual reality as a non-pharmacological pain management strategy for burn patients. Methodology: Systematic review started on 11/11/2024, in the MEDLINE Ultimate, CINAHL Ultimate, Scopus, Web of Science, and COCHRANE Central Registry of Controlled Trials databases, following the Joanna Briggs Institute guidelines (Aromataris et al., 2024).
Results: The preliminary research identified 133 articles. After applying the eligibility criteria, 6 final articles were analyzed. According to the results obtained, VR has shown a positive effect on pain management for burn patients. Successful results were seen during painful procedures, such as physiotherapy sessions and burn wound care treatments. The studies show that this technique can potentially reduce pharmacological therapy, making it a safe non-pharmacological alternative to be integrated into a multimodal pain management strategy (Lee et al., 2022; Maani et al., 2008).
Conclusions: The use of technology to improve care highlights the technological competence that Locsin described as essential to person-centered nursing care.

Keywords: Virtual Reality; Pain; Burn; Nursing; Person-centered care.

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OPTIMIZING INFECTION PREVENTION AND CONTROL FOR ACUTE PATIENTS REQUIRING PERIPHERALLY INSERTED VENOUS ACCESS. A SYSTEMATIZED OVERVIEW

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Introduction: Healthcare-associated infections (HAIs) are common and severe complications in healthcare, increasing mortality, morbidity, and costs (Kopsidas et al., 2021). Globally, 7% to 10% of hospitalized patients acquire HAIs, with Europe reporting one in 20 patients affected, costing around 7 billion euros annually (Kopsidas et al., 2021). These infections are commonly associated with venous catheterization, often with peripheral inserted venous catheters (PIVA), and can cause local or systemic complications (Marsh et al., 2021). Bloodstream infections are the fourth most prevalent HAIs (European Centre for Disease Prevention and Control, 2023). Preventing HAIs requires evidence-based nursing practices, including updated and systematized guidelines for clinical contexts (World Health Organisation, 2022). Peripheral venous catheterization, the most common invasive hospital procedure, highlights the critical need for improved insertion and care practices to ensure patient safety (Marsh et. al., 2021).
Objectives: Synthesize the available scientific evidence on which nursing interventions prevent and control infections in acute patients with peripherally inserted venous access
Methodology: The Joanna Briggs Institute (JBI) methodology for umbrella reviews (Aromataris et al., 2024) was applied to permit the compilation of evidence from multiple systematic reviews, providing a high-level synthesis of available research. The

databases CINAHL, MEDLINE, JBI Evidence Synthesis, Cochrane Database of Systematic Reviews, and SCOPUS addressed the research question: "Which nursing interventions prevent and control infections in acute patients requiring peripherally intravenous access?". Data extraction followed an adapted JBI instrument, gathering study details, evidence quality, and results. Two reviewers independently performed the extraction, with a third resolving disagreements. Quality assessment adhered to the JBI Critical Appraisal Checklist for Systematic Reviews.
Results: Out of a total of 2,644 reports initially retrieved from the databases, and following the various steps recognized by JBI, six reviews met the inclusion criteria. Results show that the risk of catheter-related bloodstream infections can be reduced through several strategies, including using chlorhexidine gluconate solution for skin preparation, adherence to insertion and maintenance bundles, and implementing strategies to support bundle compliance. Additional measures include using in-line filters, reducing the duration of catheter placement, minimizing continuous antibiotic infusions, and employing Teflon cannulas. Specifically, for peripherally inserted central catheters (PICCs), performing quantified grip exercises can lower the incidence of thrombosis and infection by improving venous blood circulation in PICC patients. Furthermore, the risk of catheter failure, including infections, was significantly reduced when integrated short peripheral catheters (ISPCs) were compared to non-integrated short peripheral catheters (SPCs).
Discussion/Conclusion: This umbrella review identifies nurse-led interventions that can prevent and control infections associated with PIVAs, including using updated management bundles. These practices align with Portuguese legislation and international guidelines from the Directorate-General of Health and the European Centre for Disease Prevention and Control. It emphasizes the importance of device selection, especially regarding materials, where nurse leaders play a key role in procurement. When implemented correctly, these strategies help to prevent and reduce PIVA-associated infections. Nurses should incorporate these interventions into practice and stay updated with scientific evidence. Future research should explore other types of PIVAs.

Keywords: Infection control; Catheterization, Peripheral; Nursing; Critical Care

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TRUST IN THE THERAPEUTIC RELATIONSHIP WITH CRITICALLY ILL CHILDREN AND THEIR FAMILIES: NURSING INTERVENTIONS

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Introduction: Developing a solid and trusting therapeutic relationship between nurses, critically ill children, and their families is essential to optimize care in the pediatric context. Studies highlight that mutual trust facilitates effective communication and active family involvement, which are crucial in high-pressure settings like pediatric intensive care. Nursing interventions, such as emotional support and ensuring clear communication, are recommended to reduce family stress and improve the care experience (Lebel & Charette, 2021). The integration of family-centered care fosters trust by providing a supportive psychological and physical environment (Lebel & Charette, 2021).
Objectives: Identify nursing interventions that promote trust in the therapeutic relationship with critically ill children and their families to optimize and provide better nursing care in the pediatric emergency context.
Methodology: An integrative literature review was conducted to identify nursing interventions that promote trust in the therapeutic relationship with children and families in pediatric emergency care. Studies were selected from the Medline database, following defined inclusion/exclusion criteria to ensure rigour and applicability of the results, including qualitative and cohort studies. The analysis was systematically conducted, categorizing the interventions by themes. The use of the PRISMA checklist and peer validation ensured the quality of the process, allowing the methodology to be assessed for its rigour in research, analysis, and data synthesis. The review identified clear communication as one of the key interventions.
Results: The results reveal that interventions promoting trust are related to the form and content of communication. The content requires nurses' attention to language barriers between children/families and healthcare professionals, which must be overcome. The effectiveness of communication depends on the use of accessible and clear language, adapted to the child's age and the family's understanding. For adolescents, ensuring confidentiality is crucial for trust in healthcare professionals. Child- and family-centered care, which recognizes their knowledge and potential, is essential for the therapeutic relationship and trust in the care provided. The way of communicating, the content of the message, and how it is transmitted are crucial for building trust in the nursing therapeutic relationship (Buchanan & Godfrey, 2021).
Discussion/Conclusion: The review highlights the importance of effective communication, overcoming language barriers, making decisions based on clinical knowledge and nursing theories, and ensuring confidentiality and trust. Communication, centered on trust, ensures everyone understands the message (Mendes, 2022). Fernandes and Dixe (2024) point to the scarcity of studies on the effectiveness of communication with families of critically ill patients in the emergency department. Scientific evidence emphasizes that communication should be clear and appropriate to others, reflecting a child- and family-centered approach (McCormack, 2006), essential to strengthen the therapeutic relationship and ensure humane care in the pediatric critical context.

Keywords: Child, family, trust, therapeutic relationship.

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AIRWAY SURVEILLANCE IN CRITICALLY ILL PATIENTS AFTER HEAD AND NECK SURGERY: INTEGRATIVE REVIEW PRELIMINAR RESULTS

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Introduction: Postoperative airway surveillance is critical for preventing complications in head and neck surgery patients. Nursing interventions are pivotal in ensuring safety during the immediate postoperative period. This study aims to analyze evidence-based nursing interventions for airway surveillance to improve outcomes in critically ill patients.
Objectives: To identify and categorize nursing interventions for airway surveillance in patients after head and neck surgery.
Methodology: A systematic integrative literature review was conducted, focusing on studies published between 2019 and 2024. The search was performed in the CINAHL and MEDLINE databases using predefined inclusion and exclusion criteria. Data extraction and analysis followed a thematic clustering approach, ensuring ethical compliance by anonymizing data.
Results: Preliminary findings identified three key clusters of intervention:
-Surveillance: Continuous airway monitoring, hemodynamic management, and monitoring for hemorrhage.
-Prevention: Strategies such as oral hygiene, infection control, and device maintenance.
-Education: Teaching breathing techniques, patient anxiety management, and effective communication to enhance cooperation and safety.
Discussion/conclusion: A multifaceted and evidence-based approach is essential to ensure safety and recovery in postoperative head and neck surgery patients. Standardized protocols, continuous nursing education, and the integration of innovative technologies such as artificial intelligence can optimize care quality and patient outcomes.

Keywords: Airway Management; Nursing Care; Head and Neck Surgical Procedures; Postoperative Care; Evidence-Based Practice

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IMPACT OF ARTIFICIAL INTELLIGENCE ON PATIENT SAFETY IN HEALTHCARE

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Introduction: Artificial Intelligence (AI) has gained prominence in improving patient safety, mainly in the prevention of clinical errors and risk management. However, the increased use of AI raises ethical and operational issues such as data privacy, clinical decision support, and oversight of healthcare professionals. AI, combined with humanized care, offers opportunities to nursing by addressing its benefits and challenges, keeping patient safety as a priority.
Objective: Analyze the impact of AI on patient safety in healthcare.
Methodology: Narrative review of the literature, with a search carried out in the scientific databases of EBSCOhost, CINAHL Complete, MEDLINE Complete, and PubMed®. After applying the eligibility criteria, followed by reading the titles, abstracts, and reading the articles in full, 14 articles were obtained for analysis.
Results: AI plays an increasing role in improving patient safety and healthcare efficiency. AI systems such as machine learning and intelligent personal assistants excel in fall prediction, triage, and clinical decision support. These systems reduce mortality, response time, and nurse workload, as well as improve the personalization of care. Despite advances, concerns arise about privacy and the replacement of professionals, and AI must act as support, without replacing humans.

Discussion and Conclusions: AI has demonstrated a positive impact on patient safety and healthcare in general. However, the success of its implementation depends on collaboration between AI and nursing professionals, namely the specialist nurse, who must be the pillar, ensuring its use ethically and safely. By addressing the challenges of data privacy and algorithmic transparency, AI can complement clinical judgment to make care more accurate and efficient without compromising the human relationship in healthcare.

Keywords: patient safety; artificial intelligence; healthcare; nursing

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INNOVATION IN SURGICAL SITE INFECTION (SSI) PREVENTION: DEVELOPMENT OF PERIOPERATIVE NURSING INTERVENTION – SCOPING REVIEW

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Introduction: Technological innovation and its rapid and growing integration into health services are seen as a challenge for perioperative nursing (Cheffer et al., 2022), which requires a safe environment for the surgical client (Carlos & Saulan, 2018). According to the Healthcare-Associated Infections, 20% could be avoided (Pina et al., 2010), with SSI being a complication associated with high morbidity, mortality, increased length of hospital stays, and an increase in health costs (DGS, 2013). Innovative interventions in nursing practice allow more precise, personalized, and efficient practices in preventing surgical site infection, promoting safety and quality of nursing care.
Objectives: Map the evidence on nursing interventions developed in the perioperative period to prevent surgical site infection in surgical clients.
Methodology: Research question: What are perioperative nursing interventions for preventing SSI in surgical clients? And the PCC mnemonic was used for research guidance. A scoping review was carried out, guided by the methodology of The Joanna Briggs Institute (2021), and the PRISMA ScR model was used to structure the collected data. The research using the databases CINAHL, MEDLINE, Cochrane Database of

Systematic Review, Scielo, and Google Scholar, in the period 2019-2024, using the descriptors “nursing interventions” OR “perioperative nurs*” OR “operative care” AND “Surgical patients” AND “surgical wound infection prevention”. Studies in English, Portuguese, French, and Spanish were included.
Results: 8 articles were selected. Hand hygiene, preparation of the surgical site, appropriate clothing in the perioperative environment, limited number of people in the operating room and maintenance of normothermia stand out (Bashaw & Kathy, 2019; Tripp & Fencl, 2020); aseptic and sterile technique, interprofessional education and correct disinfection of the perioperative environment (Bashaw & Kathy, 2019; Lacourciere, 2019); administration of antibiotic therapy (Tripp & Fencl, 2020: Larry & Bertram, 2021); Duff (2021) highlight communication and collaboration between teams as a strategy in preventing preventable adverse events related to SSI. Zhu & Luo (2023) highlight perioperative nursing care in a sterile environment as being influential in reducing the incidence of infection in orthopedic surgery. Larry & Bertram (2021) highlight the decisive role of the perioperative nursing team in the management of antibiotic prophylaxis. Castro Oliveira et al. (2023) highlight customer involvement as a strategy for preventing SSI.
Discussion/Conclusion: The review emphasizes the need for client-directed care, namely in what concerns the hand hygiene, antiseptic preparation of the surgical site, the aseptic technique, maintenance of normothermia and homeostasis, adequate clothing, limited number of professionals in the operating room, and administration of antibiotic prophylaxis. It was suggested that the inclusion of the client in the prevention of SSI. Interprofessional communication and education were highlighted, essential for excellent, safe, and efficient nursing care. The perioperative nurse has a fundamental role in the management of the person-centered environment for therapeutic effectiveness and for the prevention of incidents.

Keywords: nursing interventions, perioperative nursing, surgical client, surgical site infection.

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ARTIFICIAL INTELLIGENCE IN PERIOPERATIVE NURSING CARE: A SYSTEMATIC LITERATURE REVIEW

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Introduction: Artificial intelligence is transforming healthcare, including perioperative nursing, by introducing advanced tools for predictive analysis, clinical decision support, and personalization of care. In the perioperative context, AI offers the potential to improve continuous monitoring, predict complications, optimize operational flows, and improve patient safety. Based on the integration of emerging technologies and evidence-based practices, this study seeks to explore the contributions of AI in strengthening the critical role of perioperative nursing. It is justified by the gap in the literature on how AI can improve the quality and efficiency of care.
Objectives: To determine the applications of Artificial Intelligence in perioperative nursing care, focusing on its contributions to improving the quality and efficiency of nursing interventions.
Methodology: Systematic review of effectiveness, based on the Joanna Briggs Institute methodology, using CINAHL, Medline, Scopus, and Cochrane databases. Eligible studies were those published in Portuguese, English, and Spanish between January 2014 and December 2024. The population to which the review refers is perioperative nurses in the operating room or pre- or postoperative contexts, where artificial intelligence systems are used. Two independent reviewers assessed eligibility and extracted data. Rayyan was used as a tool for selecting and extracting articles. A narrative synthesis was carried out due to the heterogeneity of the studies. The methodological quality of the included studies was assessed by the Joanna Briggs Institute.
Results: 1335 studies were selected, 26 of which met the eligibility criteria. Interventions using AI in the perioperative period included chatbots to reduce preoperative anxiety; artificial intelligence models in preoperative nursing consultations; machine learning algorithms for identifying patients at risk of PPU and intraoperative hypotension; clinical decision support technology systems; analyzing and discussing interventions; checking perioperative safety; radiofrequency identification; robotic nurse instrumentation and benchmarks. As well as artificial intelligence in the transition of care in the immediate post-operative period; machine learning as a predictor of post-operative pain; discharge of care, and artificial intelligence in communication with the relatives of patients undergoing surgery.
Discussion/Conclusion: This review highlights the applications of Artificial Intelligence in the perioperative period, focusing on nursing interventions such as managing preoperative anxiety through chatbots and supporting postoperative pain management with machine learning predictions. AI-driven tools have demonstrated potential in enhancing patient safety, improving clinical decision-making, and streamlining transitions of care. However, limitations include a lack of standardized methodologies and insufficient large-scale validation. Future research should focus on robust clinical trials, integrating AI with human expertise, and addressing ethical concerns. Implementing Artificial intelligence effectively in perioperative care can transform patient outcomes and healthcare efficiency, but widespread adoption requires addressing these challenges systematically.

Keywords: artificial intelligence; efficiency; nursing; perioperative care; review.

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ARTIFICIAL INTELLIGENCE IN THE MANAGEMENT OF FALLS IN THE 'PATHWAY FOR THE ELDERLY WITH FRAILTY'

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Introduction: Artificial Intelligence (AI) has had a significant impact on various areas of society, including healthcare (Stanfill & Marc, 2019). AI has the potential to predict trends and behaviours to improve the responsiveness of healthcare professionals and organisations (Jiang et al., 2017). AI has demonstrated applicability in different areas of healthcare, including predicting falls in elderly patients (Beauchet et al., 2017). The aging global population presents challenges for health systems, with those over 65 comprising 9.3% of the population in 2020 and expected to grow. Falls are the second leading cause of accidental death worldwide and a major concern for morbidity and mortality in this age group (World Health Organisation, 2021).
The use of AI in managing and predicting the risk of falls can be an effective strategy for reducing the impact of this problem. The "Pathway for the Elderly with Frailty" - Via Verde Idoso com Fragilidade (VVIF) is a circuit set up in a hospital emergency department to optimise the integrated response to patients aged ≥ 75 years and with a Clinical Frailty Score (CFS) ≥ 5. The introduction of AI-based technologies into the VVIF with the aim of predicting the risk of falls in patients could make an important contribution to optimising the care provided to these patients.
Objectives: This project aims to introduce AI-based technologies into the VVIF to predict the risk of falls in VVIF patients.

Methodology: The project will collaborate with technology companies to implement AI systems that predict fall risks in VVIF patients. Data collection will focus on key predictors, such as fall history, cognitive impairment, reduced vision, and use of psychotropic or pain-relief medications. Potential strategies may include inertial or environmental sensors and other relevant technologies.
Results: In 2023, 52 falls were reported in the hospital emergency department, with 83% (n=43) involving patients over 60. In the first half of 2024, 9 falls occurred, all in patients over 60. Between June and November 2024, 540 users were eligible for VVIF, 56% with a CFS ≥ 7. Fall risk assessments using tools like the Morse or Downton scales were hindered by staff shortages. Introducing AI technologies is expected to enhance fall risk prediction in VVIF patients, enabling the adoption of care that minimises the occurrence of falls, such as increased vigilance, allocation to spaces with a higher level of vigilance, involvement of family and carers, increased assistance in self-care, or therapeutic review.
The possible financial costs of introducing these technologies could be minimised with a significant reduction in the occurrence of falls, which entail high costs for healthcare institutions, patients, and their families.
Conclusion: Assessing fall risk in the elderly is crucial to prevent complications, enhance quality of life, and reduce healthcare costs. Prioritizing at-risk patients and integrating AI technologies into VVIF will optimize this process, benefiting patients and health systems alike.

Keywords: Elderly; Artificial Intelligence; Frailty; Falls.

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TECHNOLOGICAL NURSING INTERVENTIONS AND SELF-CARE ON NUTRITIONAL STATUS OF HEMODIALYSIS PATIENTS: PRELIMINARY RESULTS OF SYSTEMATIC REVIEW

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Introduction: Chronic kidney disease (CKD) is a major global health challenge. In its advanced stage, hemodialysis (HD) is the primary renal replacement therapy in Portugal (SPN, 2023). The complexity of treatment, combined with underlying health conditions and poor adherence to dietary guidelines, significantly impacts the health and quality of life of individuals with CKD (Lim et al., 2020). These challenges directly affect nutritional status, making its optimization essential to reduce clinical complications, hospitalization rates, and mortality (Oliveira et al., 2019). Effective self-care is critical for managing chronic diseases and ensuring treatment adherence, highlighting the need for specialized support to promote appropriate nutrition in dialysis patients.
Objectives: To identify technological nursing interventions aimed at improving the nutritional status of hemodialysis patients, and to analyze the outcomes of nursing interventions on self-care behaviors related to nutritional status.
Methodology: A systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Four electronic databases were included: MEDLINE, CINAHL (EBSCOhost), Google Scholar, and Cochrane. The review focused on adult hemodialysis patients (≥19 years) and considered studies with various designs, including randomized controlled trials (RCTs), quasi-experimental, longitudinal, cross-sectional, and qualitative studies.
Methodological quality was assessed using the JBI Critical Appraisal Tools, and only manuscripts scoring ≥60% were selected. Articles published in Portuguese, Spanish, and English between 2018 and 2024 were included. The systematic review was registered in PROSPERO: CRD4202457310.
Results: Virtual educational programs, such as the Diapass app, have shown significant potential to enhance self-efficacy and self-care by up to 50%, contributing to better stress management and the development of positive attitudes. Techniques like the teach-back method and the use of visual aids have proven effective in increasing understanding of dietary restrictions, thereby promoting greater adherence to nutritional guidelines. Improved self-care capacity has positively impacted nutritional status, supporting changes in eating habits and improving clinical markers such as serum albumin and creatinine. Clinical outcomes highlight significant reductions in potassium levels (up to 0.5 mEq/L) and phosphorus levels (up to 0.97 mg/dL), alongside improvements in overall well-being. These findings underscore the importance of nursing interventions that integrate technological tools with personalized strategies, emphasizing continuous education as a cornerstone for achieving sustainable behavioral changes and better clinical outcomes in hemodialysis care.
Discussion/Conclusion: Protein-energy waste and micronutrient deficiencies, including vitamins (e.g., Vitamin D) and minerals (e.g., iron, calcium, sodium), contribute to muscle weakness, bone disorders, and cardiovascular issues in hemodialysis patients. Chronic inflammation exacerbates these deficits by increasing catabolism and reducing appetite, while uremia and dialysis-related complications can lead to nausea, vomiting, and reduced caloric intake.
Nutritional nursing interventions leveraging technologies such as mobile apps and online education have proven effective in enhancing self-care and quality of life. Personalized nutritional education is essential, particularly for individuals with low health literacy. Limitations include small sample sizes, lack of long-term evaluation, and nurse workload. Future research should focus on Artificial Intelligence-based tools for nutritional risk stratification and malnutrition prevention programs.

Keywords: Nutritional status; Nursing care; Self-Care; hemodialysis; Technological innovation

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EXPLORING NURSING STRATEGIES FOR CASE MANAGEMENT IN HEMODIALYSIS PATIENTS: A SCOPING REVIEW

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Introduction: Chronic kidney disease (CKD) is a progressive condition affecting over 10% of the global population, with high prevalence and mortality in hemodialysis patients (Kovesdy, 2022). Scientific evidence supports that one of the beneficial care models for promoting self-care in individuals with chronic illnesses is the nurse case manager model. (Hernández-Tejada et al, 2012)**.** Nursing case management is a dynamic, systematic, and collaborative approach that results in reduced mortality, hospitalizations, and care fragmentation while enhancing treatment adherence and satisfaction (Steele et al, 2007). Effective case management requires empowering self-care through personalized care plans, leadership, and communication, addressing patients' complex needs holistically (Joo & Huber, 2018).
Objectives: To map the scientific evidence on nursing strategies that support case management for patients with chronic kidney disease undergoing hemodialysis.
Methodology: A scoping review followed by the Joanna Briggs Institute methodology and PRISMA-ScR as a supplementary checklist (Peters et al., 2020)**.** The MEDLINE

(PubMed) and CINAHL (EBSCOHost) databases were used for article searches, retrospectively until 2018.
Using the Population, Context, and Concept (PCC) framework, the research question was: “What are the nursing strategies that facilitate case management implementation for individuals with CKD on hemodialysis?” Inclusion criteria targeted adults with CKD on hemodialysis, focusing on nursing strategies in hospitals or hemodialysis units. People under 19 years, articles of opinion or editorials were excluded from the analysis, as were all those with no correlation to the defined scope. The protocol was registered in Open Science Framework: https://doi.org/10.17605/OSF.IO/WG6CV
Results: After removing duplicates, a total of 915 articles were obtained, with around 65 articles selected for eligibility, resulting in a total of 9 for analysis. The screening was carried out using the Rayyan Intelligent Systematic Review software. Disagreements between reviewers were resolved through discussion and consensus with a third reviewer. The studies analyzed highlighted case management facilitating strategies developed by nurses that include planning, intervention, and coordination based on a structured model of care; motivational interviewing of the person on a regular hemodialysis program; implementation of health education programs; emotional and psychological support; integration of technologies; continuous assessment and monitoring. The studies analyzed employed scales focusing on quality of life, self-care, fatigue, and psychological parameters in hemodialysis patients. The KDQOL-SF was commonly used to assess health-related quality of life, while self-care tools like the Self-Care Behavior Scale and the Behavioral Self-Management Scale measured adherence to clinical management. Orem’s Self-Care Model, serving as a framework, guided evaluations of daily weight and blood pressure control, dietary adherence, and treatment monitoring. Intervention durations ranged from 4 weeks to 6 months.
Discussion/Conclusion: Case management in nursing improves clinical outcomes but requires adaptation for older adults with multimorbidity or frailty. In hemodialysis, nurses play a key role in care coordination, ensuring integration and continuity. However, variations in intervention duration and limited economic evaluations emphasize the need for further research on long-term outcomes and cost-effectiveness. Structured, evidence-based interventions, ongoing nurse training, and technology are essential. Future studies should explore family involvement, care environments, and address methodological and regional differences.

Keywords: Nursing care; Case management; Chronic kidney disease; Hemodialysis.

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PROMOTING SELF-CARE IN PEOPLE WITH CHRONIC KIDNEY DISEASE ON HEMODIALYSIS: A CASE STUDY

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Introduction: Chronic Kidney Disease (CKD) is a condition that significantly affects the quality of life of patients and their families or caregivers, increasing the demand for multidimensional support. In this context, the theoretical approach of the Partnership Care Model, proposed by Gomes (2021), highlights the importance of partnership in nursing care, focusing on patient autonomy and the psychosocial dimensions of health. This case study examines the health and illness context of Mr. J.N. (fictitious name), a patient with CKD undergoing hemodialysis. His journey reflects the complexity of managing a chronic condition.

Objectives: To identify, through a multidimensional assessment, the needs of a person with CKD on hemodialysis and to develop a personalized care plan that addresses their individual needs, values, and life goals, while promoting autonomy and well-being.

Methodology: The Partnership Care Model by Gomes (2021) was applied, encompassing its five outlined phases. The assessment tools used included the Graffar Index, Mini-Mental State Examination, Pain Scale, Barthel Index, Morse Fall Scale, Braden Scale, APGAR Family Scale, and Mini Nutritional Assessment. The following problems were identified: Acute pain (5/10 on the pain scale); Risk of surgical wound infection; Interdialytic fluid volume exceeding 6%; Non-compliance with the therapeutic regimen; Body image disturbance related to vascular access. Data collection methods included informal interviews, observation, and review of the clinical file. All ethical and deontological principles were respected, and informed consent was obtained.

Planning / Interventions / Results: Based on Mr. J.N.'s multidimensional assessment, his life context, expectations, needs, and potential were identified, enabling the development of a collaborative care plan. The intervention aimed to foster independence, allowing him to maintain his health and life goals while acknowledging his knowledge and emotions. Nursing interventions included Pain management and monitoring, Prevention of surgical wound infection, Fluid volume management, Promoting adherence to the therapeutic regimen, Providing support for body image acceptance. The outcomes of the planned interventions were: Reduction in pain intensity (2/10 on the numerical pain scale); Absence of surgical wound infection; Decrease in interdialytic weight gain (to less than 5%); Improved compliance with the therapeutic regimen; Enhanced acceptance of body image.

Conclusion: The person-centered approach had a significant impact on the delivery of nursing care in this case study. By utilizing Gomes' Partnership Care Model (2021), the uniqueness of the patient was prioritized, effectively translating the model's phases into practice and promoting self-care. Through effective communication, empathy, and the development of a therapeutic relationship, the patient's needs, values, and life goals were understood. This approach enabled the creation of a personalized and humanized care plan focused on well-being and health promotion throughout life, demonstrating its effectiveness.

Keywords: Chronic Kidney Disease; Hemodialysis; Partnership Model; Nursing Care;

Life Project

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NURSE NAVIGATOR'S CONTRIBUTIONS TO CARING FOR PEOPLE UNDERGOING TOTAL LARYNGECTOMY: SCOPING REVIEW

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Introduction: In 2022, an estimated 20 million new cancer cases were diagnosed worldwide, with approximately 9.7 million deaths attributed to the disease. This contextual reality highlights the need to empower people by making them partners, contributing in an informed and collaborative way to therapeutic decisions. Laryngeal cancer and, therefore, total laryngectomy, as a surgical treatment, has an impact on the person's psychosocial sphere, given the compromise in crucial areas such as communication and self-image. The Nurse Navigator concept emerged as a strategic approach aimed at providing person-centered care, promoting personalized and comprehensive support to optimize people's adaptation and quality of life.
Objectives: Mapping the Nurse Navigator's competences; in promoting person-centered care, to improve the quality of care and the person's satisfaction.
Methodology: Scoping Review based on the JBI methodology, following the PCC version (Population; Concept; Context). Research carried out using databases such as MEDLINE and CINAHL Complete, through EBSCOhost. Grey literature: Google Scholar. The publication period was between 2019 and 2024. With the research question: What

are the Nurse Navigator's competences in nursing care for people undergoing total laryngectomy due to cancer? Two independent reviewers selected the articles using the Rayyan® program, based on inclusion/exclusion criteria, which facilitated study screening and selection. Consequently, 15 studies were selected.
Results: A total of 568 articles were identified, of which 72 duplicates were removed and 470 excluded based on the eligibility criteria, after reading the title and abstract. Twenty-six articles were selected for full reading, 10 articles were included, and 5 articles from grey literature, using the same criteria, totaling 15 articles for analysis. The Nurse Navigator has four core competences: continuous coordination of care, where leadership and communication skills are required to establish a stable care partnership with the person and family; therapeutic education and empowerment of the person and family, to enable them to self-care for the permanent respiratory stoma, enhancing involvement in the care process, self-confidence and self-management; emotional and psychosocial support with the identification of personal and system barriers to facilitate the person's journey; continuous evaluation of the effectiveness of interventions, through indicators of improved satisfaction with the care received and the person's quality of life [4,5].
Discussion/Conclusion: The Nurse Navigator promotes holistic care, where the person is an active partner in the decision-making process, helping to increase their self-confidence, boost their quality of life, and achieve health gains. The entire care plan defined in partnership is centered on the person, and through their intervention, treatment adherence is promoted, and the flow of communication between the person and the multidisciplinary team is optimized.

Keywords: Nursing Care; Nurse Navigator; Oncological Disease; Total Laringectomy; Review.

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ADVANCED NURSING CARE TO THE AGED WITH CHRONIC PAIN IN HOSPITALIZATION: CLINICAL REPORT

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Introduction: Care for elderly people with chronic pain requires a partnership intervention involving shared decision-making to provide training for pain management outside the clinical environment. The elderly should be an integral part of a personalized care plan aligned with their life plan. The Nurse Specialist in Medical-Surgical for People in Chronic Situations has a fundamental intervention in the assessment of pain, understanding its implications for an individual´s life and health project, and providing training for its management. This involves mobilizing resources to promote the Care-of-the-Self.

Objectives: Understand the psychosocial context, uniqueness, and life project of the individuals being cared for. Identify the needs and potential of the individual and family/caregiver to promote the Care-of-the-Self. Plan and implement care interventions in partnership during hospital admission. Reflect on advanced nursing intervention.

Methodology: This Clinical Report documents advanced nursing care for elderly people with chronic pain during hospital admission, based on the Care Partnership Model for the Promotion of the Care-of-the-Self by Gomes (2021). This model encompasses five phases for Care Partnership: Reveal Oneself, Get Involved, Train/Enable, Commit, and Ensure Care-of-the-Self or ensure Care-of-the-Other. After selecting the case, the objectives were explained, and free and informed consent was obtained. Data collection included clinical interviews and direct observation, guided by the multidimensional assessment framework for hospitalized elderly people with chronic diseases.

Planning/Intervention/Results: 1. Reveal Oneself and Get involved: Using a multidimensional assessment, the elderly individual and caregiver were evaluated within their life and health context. Pain was assessed via a numerical scale, and its impact on mood and activity was measured with the *Brief Pain Inventory* (BPI). In partnership with the elderly individual and caregiver, the following priority nursing diagnoses were identified: Chronic pain, Chronic sadness, Impaired physical mobility, Impaired social interaction. 2. Train/Enable: Pain management strategies included distraction techniques (listening to music on the radio and performing massage), moist heat application, and active mobilization. Social interaction was encouraged through activities like attending religious or family events and engaging in day-care center programs. 3. Commit: The elderly people and caregivers committed to adopting the proposed pain management strategies. 4. Ensure care-of-the-self or Ensure care-of-the-other: At discharge, the elderly people and caregiver were trained to manage pain at home, supported by family and community resources.

Conclusion: The interventions implemented to control pain resulted in a decrease in intensity (intensity between 2-8 on the numerical scale at the beginning of hospitalization and intensity between 2-4 at the end of hospitalization), as well as the impact on mood and activity in general, according to the BPI. The elderly people and caregivers were trained to promote care in the home context, ensuring the Promotion of Ensure care-of-the-self or Ensure care-of-the-other according to the Gomes Model (2021).

Keywords: Elderly; Chronic Pain; Hospitalization; Self-Care; Care-of-the-Other.

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REHABILITATION EFFECTS ON PATIENTS WITH SPINAL DISORDERS IN LONG-TERM CARE: A MULTIPLE CASE STUDY

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Introduction: Spinal disorders are complex conditions that can significantly impact patients' quality of life. Spinal cord injury severely compromises an individual's ability to perform self-care activities, resulting in significant physical, psychological, and social challenges. The degree of impact is closely tied to the injury's gravity and location on the spinal cord, as these factors dictate the extent of motor and sensory impairments. Higher-level injuries often result in greater loss of function, which requires support and adaptations to maintain a basic level of independence in daily living activities. Integrating care and implementing a comprehensive rehabilitation plan is crucial to enhancing functionality and minimizing associated complications.
Objective: To determine the effects of a multidisciplinary rehabilitation program, coordinated by nurses, on the self-care and functional capacity of patients with spinal disorders in long-term care settings.
Methods: A multiple case study following the CARE reporting guidelines, conducted from September 2023 to September 2024, at a Medium-Length Care and Rehabilitation Unit in the Lisbon and Tagus Valley region. Participants included individuals with spinal column pathology, aged 18 or older. The rehabilitation program was implemented by a multidisciplinary team: internists and physiatrists, psychologists, physiotherapists, occupational therapists, speech therapists, nutritionists, social workers, spiritual assistants, nurses, and specialist nurses, coordinated by a case nurse manager, for 3 months. The intervention targeted cardiorespiratory, metabolic, infectious, neurogenic, vascular, dermatological rehabilitation, and pain control. Outcomes were evaluated

before and after the program using the Functional Independence Measure (FIM), consisting of 18 items: 6 related to self-care, 2 to sphincter control, 3 to mobility/transfers, 2 to locomotion, 2 to communication, and 3 to social cognition. Information consent was obtained from participants, and confidentiality and data security were ensured, with approval from the Ethics Committee.
Results: Seven participants were included, with an average age of 58 years (SD=20.89), of which 100% were male. The post-intervention assessment showed a 20% improvement in self-care capacity, a 15% increase in sphincter control, a 25% improvement in mobility, a 10% rise in communication score, an 18% boost in social cognition, and a 22% enhancement in motor function. These results reflected a reduction of neuropathic pain, spasticity, osteoporosis, autonomic dysreflexia, and respiratory, urinary, and gastrointestinal complications, with positive progress in all evaluated domains.
Discussion/ Conclusion: The multidisciplinary rehabilitation program led by nurses significantly improved the self-care and functional capacity of patients with spinal disorders. These results highlight the importance of comprehensive, individualized care in enhancing independence and reducing adverse effects. Future studies should explore long-term outcomes, the impact of specific interventions, and the effectiveness of nurse-led care across diverse patient populations to refine rehabilitation strategies and optimize patient recovery. This approach could further promote functional independence and well-being in patients with spinal disorders.

Keywords: Spinal Diseases, Rehabilitation, Care Integration, Nursing Care

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COMPASSIONATE COMMUNICATION AND PERSON-CENTERED CARE IN PALLIATIVE NURSING: PRELIMINARY RESULTS OF A SCOPING REVIEW

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Introduction: Compassionate communication is fundamental in nursing, especially in palliative care, fostering empathy, understanding, and harmony. In the current healthcare context, particularly in situations of vulnerability, communication becomes increasingly relevant because it contributes to person-centered care. Communication is essential for the comfort and support of people and their families. In this context, nurses face challenges such as a lack of time, specific training, intense emotions, fears, uncertainties, cultural and religious differences, resistance to communication, and difficulties in interdisciplinary collaboration (Scholz et al., 2020; Paladino et al., 2023).
Objectives: To map scientific evidence on compassionate communication strategies in nursing patients in palliative situations.
Methodology: A scoping review was conducted following the Joanna Briggs Institute method. The main sources of information were the databases: MEDLINE (via PubMed), CINAHL Complete (EBSCOhost), and Google Scholar in English, Portuguese, and Spanish, with a time limit of the last 5 years. Studies were included based on the research question: Population – Individuals over 19 years old in palliative care; Concept – Compassionate communication strategies in nursing; and Context – Palliative care environment. This review includes studies with qualitative, quantitative, and mixed designs and encompasses other systematic reviews. The manuscripts were exported to the Rayyan software. This revision was registered in OSF: https://doi.org/10.17605/OSF.IO/ZXBJW
Results: From a total of 46 articles, 7 were selected. The compassionate communication strategies in nursing included comfort, supported by active listening, empathy, congruence, and focused attention (holistic care, family support, and opposition to therapeutic obstinacy). Effective communication, training with simulation, and real-time feedback develop communication skills while integrating conversations about values and goals into clinical practice improves the quality of care. Communication in palliative care faces barriers such as workload overload and the difficulty of family members in openly addressing the topic of death. Less than one-third of people with serious illnesses discuss care goals with the health team, and these conversations rarely encompass psychosocial, emotional, and cultural needs, resulting in low-quality care and avoidable suffering. Family closeness is essential for a peaceful end of life, while distance causes feelings of abandonment and distress.
Discussion/Conclusion: Interdisciplinary action, continuous training, and the availability of the nursing team also ensure humanization and compassionate communication in palliative care. Further research should focus on identifying and addressing persistent barriers to effective communication in palliative care, ensuring that every patient receives dignified and compassionate care during their final stages of life.

We suggested future studies about the effects of compassionate communication and nursing interventions centered on palliative patients on their well-being.

Keywords Palliative care; Nursing; Person-centered care; Compassionate communication.

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THE IMPACT OF ADVANCE CARE PLANNING ON THE QUALITY OF LIFE OF PEOPLE WITH CHRONIC KIDNEY DISEASE: A SCOPING REVIEW

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Introduction: Chronic Kidney Disease (CKD) is a progressive condition that negatively impacts quality of life due to physical, emotional, social, and psychological complications. Advance Care Planning (ACP) is an approach that aligns healthcare with individual preferences, promoting a more dignified life experience. This study is justified by the need to understand how ACP affects the quality of life of people with CKD, a topic of increasing relevance in palliative and nephrological care.
Objectives: To explore and map the available literature on the impact of ACP on the quality of life of people with CKD, focusing on physical, emotional, social, and psychological dimensions.
Methodology: A scoping review was conducted based on the PCC framework (Population: people with CKD; Concept: ACP; Context: quality of life). The search included qualitative, quantitative, and mixed-method studies published between 2019 and 2024 in databases such as MEDLINE and CINAHL. The selection process followed rigorous inclusion and exclusion criteria, ensuring relevance and data anonymization.
Results: Seventeen studies were included, identifying three main themes: 1. Impact of ACP on quality of life: Improvement in symptom control, alignment of care with personal values, and reduction of aggressive end-of-life interventions. 2. Patients' perceptions: Hope, clarity, and valuing autonomy emerged as central elements. 3. Barriers and

facilitators: Insufficient training and cultural differences were identified as barriers, while structured tools and interdisciplinary teams acted as facilitators.
Discussion/Conclusion: ACP is an essential tool to improve the quality of life of people with CKD by promoting patient-centered care. However, its implementation faces challenges, such as cultural barriers and a lack of training. Educational strategies and standardized resources are needed to overcome these obstacles and expand the positive impact of ACP globally.

Keywords: Advance Care Planning; Quality of Life; Chronic Kidney Disease; Palliative Care; Patient-Centered Care

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THE SPIRITUAL NEEDS OF PEOPLE IN PALLIATIVE CARE: A SCOPING REVIEW

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Introduction: Spirituality is a central aspect of palliative care, representing an essential dimension of the human being that provides emotional support and alleviates suffering. However, spiritual needs are often underestimated. This scoping review mapped and

identified the spiritual needs of people in palliative care.
Objectives: To map the spiritual needs of individuals in palliative care and identify gaps in scientific evidence.
Methodology: The review was conducted following PRISMA-ScR guidelines and the Joanna Briggs Institute methodology, based on the research question: What are the spiritual needs experienced by people in palliative care hospitalized in a hospital setting? Qualitative, quantitative, and mixed-method studies published between 2019 and 2024 in Portuguese, English, and Spanish were included. The MEDLINE and CINAHL databases were searched using validated descriptors from DeCS and MeSH: “Palliative Care,” “Spirituality,” “Spiritual Care,” “Patient,” “Needs Assessment.”
Duplicate articles were removed using the Rayyan tool, and all disagreements regarding article inclusion were resolved through discussion between the two reviewers and a third reviewer.
Results: A total of 76 articles were obtained, 28 from MEDLINE and 48 from CINAHL. After removing duplicates, 62 articles were considered. Following the abstract review and based on the inclusion criteria, 48 articles were excluded, and 14 were deemed eligible for further analysis. After a full-text review of these 14 articles, 8 were excluded, leaving 6 articles included in this review. The spiritual needs of individuals in palliative care emerge across four dimensions: personal, community, environmental, and transcendental.
Discussion/Conclusion: The results show that spiritual needs in palliative care include autonomy, finding meaning in life, connection with others, and preparation for death. Needs for dignity, respect, emotional support from family and healthcare professionals, and connection with religious beliefs were highlighted in the literature. The review emphasizes that palliative care must be holistic, addressing physical, psychological, and spiritual dimensions to enhance quality of life and ensure a dignified death. Raising awareness and training healthcare professionals is crucial to identifying and meeting spiritual needs in a personalized way.

Keywords: Spirituality; Palliative Care; Spiritual Needs; Needs Assessment; Spiritual Support.

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NURSE INTERVENTION IN THE MANAGEMENT OF DELIRIUM IN PALLIATIVE CARE PATIENTS: ANALYSIS OF A CLINICAL REPORT

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Introduction: Delirium is particularly prevalent at the end of life and is considered a sign of poor prognosis (Bush et al., 2017). If addressed urgently, it can be prevented and treated (NICE, 2023). This paper will present the clinical case of a person in a palliative situation with mixed delirium, accompanied by a Community Palliative Care Support Team, and will analyze the challenges faced by the team and the family in order to achieve adequate symptom control. The care plan established was anchored in the Peaceful End-of-Life Theory, focusing on the five outcome indicators that contributed to a peaceful end-of-life.
Objectives: To analyze the strategies implemented in identifying, preventing, and managing delirium in the palliative care patient (PCP) and support for the family/caregivers, and to demonstrate the importance of delirium management in promoting a peaceful end-of-life, based on the evidence.
Methodology: The case is presented using the CAse REport (CARE) methodology of the Joanna Briggs Institute. A 79-year-old male PCP was diagnosed with advanced cardiac amyloidosis, with a personal history of multiple comorbidities and progressive worsening. Main current problems: altered speech and swallowing, nocturnal agitation, delirium, uncontrolled pain and constipation, all gradually worsening symptoms, with little response to the pharmacological (neuroleptics, opioids, and laxatives) and non-pharmacological approaches instituted. He is at home, supported by his family, whose needs are: stress and exhaustion of the caregiver, empowerment of the family to administer medication, and record it. **Planning/ Intervention/ Results:** NEECHAM scale was applied, mixed delirium condition was identified (NICE, 2023). Regularization of bowel function was promoted, therapy was simplified, caregivers were educated about its administration, the etiology of delirium, and its manifestations. Involving the family in decision-making. Reality orientation, using a calm tone and adequate lighting (Bush et al., 2018). Analyzing the interventions put in place, we acted on possible causal factors of delirium, constipation, and uncontrolled pain may be at its root (Seiler et al., 2020), and we also sought to improve the symptoms by reducing polymedication (Bush et al., 2018). The family was supported, as their support for the person in delirium is relevant (Arnold et al., 2022). They were regularly informed about the evolution of the clinical state, the etiology of delirium, and were involved in decision-making (Uchida et al., 2019), which contributed to a Peaceful End-of-Life, respecting the dignity of the PCP/family (Ruland & Moore, 1998).
Conclusion: The analysis of this clinical case brought contributions to nursing care for people with delirium in a palliative situation. It was possible to identify and implement strategies for its identification, prevention, and management, using pharmacological and non-pharmacological interventions, supported by evidence. The need to care for the family was also evident, supporting them in their decision-making, explaining the whole illness process, and empowering them to care. Valuing these dimensions and interventions, in this specific clinical case, helped to promote a peaceful end-of-life.

Keywords: Caregivers; delirium; nursing interventions; palliative care; terminally ill.

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FUNDAMENTAL NEEDS OF FAMILY CAREGIVERS OF PATIENTS AT THE END OF LIFE: PRELIMINARY FINDINGS OF A SCOPING REVIEW

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Introduction: Family caregivers play an essential role in long-term care systems, particularly in managing end-of-life care at home. However, this responsibility imposes significant challenges to their physical and emotional health, exposing them to increased vulnerability, feelings of uncertainty, powerlessness, and despair. Emotional overload

can severely compromise the caregiver's well-being, increasing the risk of physical and mental exhaustion (Santos et al., 2022). Recognizing and addressing caregivers' needs is crucial to improving their quality of life and helping them face the challenges associated with the care they provide (Washington et al., 2021).
Objectives: To map the needs of family caregivers of individuals at the end of life sensitive to nursing care, based on the Fundamentals of Care Nursing Theory; to identify assessment tools that evaluate the fundamental needs of family caregivers.
Methodology: The scoping review follows the method of the Joanna Briggs Institute, and the reports were prepared according to the guidance of systematic reviews and extension of meta-analyses (PRISMA-ScR). The databases Medline Complete, CINAHL Complete, and Cochrane via EBSCOhost, SciELO, and Google Scholar were accessed. Studies in English, Spanish, and Portuguese were included based on: Population – Family caregivers aged 19 years or older; Concept – Fundamental care needs; Context – Patients at the end-of-life in any palliative care setting. The review includes studies with primary and secondary methodologies, using qualitative, quantitative, or mixed designs, published between 2018 and 2024. The documents retrieved from the search were exported to the Rayyan software. The protocol was registered in Open Science Framework: https://doi.org/10.17605/OSF.IO/RKCW3.
Results: Family caregivers face multiple needs in palliative care, particularly during the last month of life. Clear communication with healthcare professionals is essential for understanding diagnoses, treatments, and prognoses, while support groups are valuable but often underutilized. Many caregivers wish to be treated as active healthcare team members, making decisions and accessing up-to-date information. Tools such as the SpIRIT and the Family Need Scale assess caregivers' emotional, spiritual, and practical needs. Emotional validation and educational interventions to enhance management skills are crucial. Emotional burdens, physical limitations, and economic difficulties compromise the caregiver's well-being and safety.
Discussion/Conclusion: Family caregivers experience physical exhaustion, emotional strain, and financial difficulties. Their key needs involve clear communication, emotional support, education, and practical support to manage caregiving tasks. Many express a desire to actively participate in decision-making, while also struggling with sleep deprivation, health neglect, and the physical demands of care. Future research should explore interventions that enhance caregiver resilience, including the use of digital tools and community-based support networks. Studies focusing on the long-term effects of individualized nursing interventions and the role of cultural and socioeconomic factors in shaping caregiver experiences could provide valuable insights for improving caregiver self-care and health outcomes.

Keywords: Terminal Care; Health services needs and demand; Family Caregivers; Needs Assessment; Palliative care nursing

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NURSE INTERVENTION IN SUFFERING RELIEF OF THE PERSON IN PALLIATIVE SITUATION: PRELIMINARY RESULTS SCOPING REVIEW

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Introduction: In palliative care, suffering is addressed holistically, through ongoing support during an incurable or progressive illness, based on a set of interventions and approaches that help alleviate physical, psychological, social, and spiritual symptoms, as well as improve quality of life and comfort. Alleviating suffering is a priority in palliative care, with its importance established through the nurse's intervention, aiming to meet the needs of the individual, providing person-centered care, promoting well-being, and allowing for a dignified death.
Objectives: Map the nurse's intervention in alleviating the suffering of the person in a palliative situation.
Methodology: The methodology used was the Scoping Review, based on the research question "What is the nurse's intervention in alleviating the suffering of the Person in Palliative Situation?" The scoping review follows the Joanna Briggs Institute (JBI) methodology. The research strategy and article analysis will be conducted based on the guidelines for systematic reviews and meta-analysis extension: Prisma-ScR.
Results: Suffering manifests regardless of the presence of physical symptoms, and the provision of care can also be a triggering factor. However, nurses have difficulty naming interventions to address suffering. Complementary therapies have been identified that show benefits in alleviating suffering in individuals in palliative care, but few articles clarify the nurse's role in this intervention. Life meaning therapy was used as a psycho-existential intervention. Some articles describe existential suffering as a criterion for palliative sedation, which involves symptom assessment, interpretation, and monitoring. In spiritual suffering, the importance of promoting faith and religion is observed. Interventions that respect religious beliefs show results in alleviating suffering. The same

applies when the person is cared for by family members; providing moments of contact with family and friends contributes to comfort.
Discussion/Conclusion: Suffering presents various dimensions that need to be recognized by professionals so that they can tailor interventions to each situation. There is a prevalence of studies addressing non-somatic suffering and a gap in research regarding the nurse's interventions in alleviating suffering. The existence of validated scales for the Portuguese population could serve as a starting point for assessing and identifying the causes of suffering in individuals in palliative care. Further research is needed on the implications of suffering in palliative care, as well as the approaches and strategies that nurses can implement, focusing on comfort and well-being.

Keywords: Suffering; Palliative care; nurse intervention

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NURSING INTERVENTIONS TO REDUCE CAREGIVER BURDEN THROUGH DYADIC SUPPORT IN PALLIATIVE CARE: PRELIMINARY RESULTS OF A SYSTEMATIC REVIEW

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Introduction: The increase in longevity estimated by the United Nations points to a doubling of older adults between 2019 and 2050, which could translate into an increase

in chronic diseases and associated comorbidities, increasing the complexity at the end of life and the need for populations to receive palliative care. The person in a palliative situation and the family caregiver are considered a dyad and care unit [3]. Family caregivers are challenged to manage physical symptoms and deal with patients' psychological and spiritual issues, increasing the risk of physical and emotional exhaustion of the family caregiver.
Objective: To determine the effects of nursing interventions focused on dyadic support in reducing caregiver burden in palliative care settings. Methodology: The systematic literature review follows Joanna Briggs Institute and PRISMA guidelines across four databases: MEDLINE (via PubMed), CINAHL (EBSCOhost), SciELO, and Web of Science, retrospectively from January 2018 to December 2024. The population to which the review refers is caregivers of patients in palliative care settings, involved in a dyadic relationship (patient-caregiver pair). Quality was appraised using Joanna Briggs Institute critical evaluation tools. Two independent reviewers assessed eligibility and extracted data. Quantitative effectiveness data were collected, and intervention content was synthesized and categorized using narrative synthesis. Rayyan facilitated study screening and selection. The protocol of review was registered in PROSPERO: CRD42024612836.
Results: The search yielded a total of 415 articles, with 54 duplicates removed. The remaining 361 articles were screened by two independent researchers based on titles and abstracts, with a third reviewer consulted in cases of disagreement. Currently, 17 articles have been selected, comprising randomized controlled trials, quasi-experimental studies, and cohort studies. Interventions such as music therapy, laughter therapy, and spiritual or religious support have shown positive effects in reducing caregiver burden and enhancing quality of life. Several studies emphasize the value of an integrated multimodal approach to improve outcomes, including functional abilities (physical and social), symptom management (pain, dyspnea, insomnia, constipation), reduced anxiety and depression, and enhanced quality of life for patients and caregivers.
Discussion/Conclusion: Patient characteristics, such as the patient performance index (PPI), can be key predictors of caregiver burden over time. Future research should incorporate artificial intelligence to develop predictive models that analyze patient data in real time, offering early detection of caregiver stress and personalized interventions. An integrated, combined approach that links physical, psychological, and social support is crucial to improving caregiver well-being and patient outcomes in palliative care settings.

Keywords: Nursing care; dyad; caregiver; burden caregiver; palliative care.

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NURSING INTERVENTIONS TO FACILITATE PATIENT HOPE IN PALLIATIVE CARE: PRELIMINARY RESULTS SCOPING REVIEW

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Introduction: Hope is a spiritual need inherent to life and crucial in the experience of suffering associated with chronic, advanced, and progressive pathology. It allows us to understand the complexity of symptoms, promoting harmony between body-minded-spirit, nurses playing an important role in facilitating hope, in order to help people direct their energy towards restoring a state of health and comfort.
Objectives: Mapping nursing interventions that facilitate patients' hope in palliative care.
Methodology: The methodology of the Joanna Briggs Institute is followed, and the research question is: What are the nursing interventions for Facilitating Hope (C) in the care (C) of the Person in a Palliative Situation (P)? The research was carried out in the CINAHL Complete and MEDLINE databases, Google Scholar, and Repositório Científico de Acesso Aberto, between January 2019 and October 2024, using keywords, DeCs, MeSH, and CINAHL Subject Headings. The documents obtained are being analyzed by three reviewers according to the defined inclusion and exclusion criteria, using Rayyan software. A data extraction table has been built and will be filled in after the documents have been screened.
Results: Of the 21 total articles still being analyzed, seven, published between 2019 and 2024, point to the dynamism of hope, changing during chronic, advanced, and progressive pathology and associated with higher levels of quality of life. Interventions to facilitate hope show significant results in the well-being of people in palliative care. The use of psychotherapies focused on dignity and meaning, active listening, symptomatic control, activities such as life review, creating legacy, and redefining realistic goals have all contributed to fostering hope and a sense of purpose in life, as well as reducing depressive symptoms, improving adaptation to the situation and focusing on resilience. Interventions aimed at family support and involvement are essential for maintaining and strengthening social relationships and reducing spiritual suffering.
Discussion/Conclusion: Interventions to facilitate hope aim to improve the palliative patient's spiritual and emotional well-being and quality of life. These interventions should be adapted to patients' individual and cultural needs, and it is essential to train health professionals to implement these strategies in the provision of care. The limitations of this study are that the search was carried out in a small number of databases and that only documents in three languages were considered.

Keywords: Hope; Palliative Care; Nursing Care

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NURSING INTERVENTION AT TERMINAL PATIENT FEEDING: PRELIMINARY FINDINGS OF A SCOPING REVIEW

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Introduction: As the disease progresses, the terminal patient is usually faced with various losses or changes in the area of feeding, such as reduced oral intake, anorexia, xerostomia, dysphagia, altered taste, nausea and vomiting, and the inability to eat independently. These and other changes can cause disagreements between the patient, their family, and health professionals (Botejara & Neto, 2016). As the nurse is close to the patient at many moments related to feeding, they have an essential intervention in maximizing comfort when it comes to an end-of-life feeding process (Alves, 2021).
Objectives: To map the scientific evidence available on nursing intervention at terminal patient feeding, in palliative care, and to identify areas for future research in this area.
Methodology: The Joanna Briggs Institute methodology was followed. The search was carried out in the following databases: MEDLINE (EBSCOhost), CINAHL Complete (EBSCOhost), and Repositório Científico de Acesso Aberto in Portugal. The studies were selected based on the following criteria: population – people at the end-of-life, aged 19

or over; concept - nursing intervention in the context of feeding; context - in palliative care. Primary and secondary research studies published between May 2011 and November 2024 in English, Spanish, and Portuguese were included. The search results were exported to *Rayyan Software,* and screening is being carried out by two reviewers and a third for discrepancies.
Results: The nurse is one of the members of the multidisciplinary team who spends the most time with the terminal patient, facilitating the creation of a close therapeutic relationship. The better the nurse knows the patient, the easier it is to recognize their dietary needs and, consequently, the better the quality of care. The nurse's intervention with the end-of-life patient involves individualizing care in the area of feeding, whether it's personalizing the meal, considering the type of food desired, the time, and the place where they want to be fed. When the terminal patient experiences losses or changes in their diet, it is the nurse who often provides support, guidance, and information to facilitate the decision-making process, reducing the risk of therapeutic obstinacy.
Discussion/Conclusion: Nurses play a fundamental role in the end-of-life feeding process, ensuring the implementation of an individualized care plan that meets the patient´s needs. In the practice of care, nurses carry out various interventions in the end-of-life feeding process. However, recent literature is scarce, and it is a challenge for the future to carry out primary studies in this area.

Keywords: terminal patient; feeding; nursing; palliative care.

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THE FAMILY CAREGIVER IN PALLIATIVE CARE THERAPEUTIC MANAGEMENT - FIRST INSIGHTS FROM LIVED EXPERIENCE

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Introduction: The complexity of palliative care (PC) has the family caregiver as a partner of the healthcare team in caring for their relative, particularly in managing the therapeutic regimen. Relieving suffering requires daily compliance with a complex therapeutic regime that is constantly adapted to the fluctuating needs of the family member, which has been studied little from this perspective. The research, therefore, started with the

question: What is the family caregiver's experience of Therapeutic Regimen Management (TRM) in CP at home? To broaden our knowledge of the challenges that family caregivers face and the meaning they give to the care they provide.
Objective: To understand the lived experience of the family caregiver who carries out the GRT of their relative in the context of CP at home.
Methodology: The qualitative research being carried out is based on the method of the phenomenology of practice (Van Manen, 2014) along hermeneutic-interpretative lines. Phenomenological interviews were carried out with 11 intentionally selected family caregivers in the context of a specialized PC team, after receiving the opinion of the institutional ethics committee, which were recorded and transcribed, respecting the ethical principles inherent in the process.
Results: The initial phenomenological writing of the thematic understanding of the texts resulting from the phenomenological interview, as a source of meaning, reveals the editing in search of illustrative episodes of the participants' lived experience. Thus, the first insights are presented, in which GRT in PC takes place in the family, by getting to know the family member well, very individual symptoms and strategies are identified to lead to compliance with RT; previous experiences of the course of the illness and other moments of care enhance and improve GRT; balancing roles in the family to continue being a person; the relationship with the family member has changed, there is gratitude, closeness, not wanting to see suffering; faith and alternative therapies were also valued as something to add.
Discussion/Conclusion: In the future, by accessing the vivid experience of family caregivers through this study, nurses will be able to understand how to improve care from the point of view of family caregivers in their uniqueness.

Keywords: Family caregiver, palliative care, therapeutic management, phenomenology, lived experience.

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COMFORT NEEDS OF THE PALLIATIVE PATIENT DURING THE LAST DAYS OR HOURS OF LIFE: SCOPING REVIEW PRELIMINARY RESULTS

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Introduction: The final days or hours of life usually occur within 12-14 days before death and correspond to the last phase of the end-of-life process of patients in a palliative and terminal situation. It is a physiological phase, with no reversible causes, that leads to functional decline and the emergence of new symptoms and/or worsening of existing ones, with a major emotional impact on the patient. Therefore, nurses must be aware of the comfort needs that emerge during this period to provide the care that aligns with the dignity and quality of life, which contributes to a peaceful death.
Objectives: To map the comfort needs of palliative care patients during the last days or hours of life.
Methodology: This scoping review is conducted according to the JBI methodology, guided by the PRISMA-ScR checklist. Peer-reviewed included research from the electronic databases Medline Complete and CINAHL Complete, as well as grey literature. The descriptors used were validated by the Medical Subject Headings (MeSH) and DeCS (Health Sciences Descriptors). Articles with primary or secondary methodology were included, except for editorial and opinion articles, written in English, Spanish, or Portuguese, published between 2019 and 2024. It seeks to answer the research question: What are the comfort needs of the palliative patient in the last days or hours of life?
Results: Preliminary results of the sixty-two articles included in the screening phase make making possible to map the comfort needs. So far, the results stem from the inclusion of five articles in the scoping review from international journals (Spain, China, India, and Bhutan) of primary qualitative studies (n=4) and one systematic review. Findings were obtained through patients at the end-of-life nearing death (cancer and non-cancer patients). The results showed that comfort needs emerge at all contexts: physical, psycho-spiritual, sociocultural, and environmental. The psycho-spiritual context has been the most cited in the articles (n=5); followed by the physical and sociocultural contexts (n=3 each), and the environmental context is the least mentioned where comfort needs occur (n=1). The need for emotional, psychological, and spiritual support, the need for information and knowledge about the disease and prognosis, or feeling accompanied, are some of the most frequent comfort needs that health care professionals should consider. **Discussion/Conclusion**: Preliminary results highlighted the psycho-spiritual context to address the comfort needs, during the last days our hour of life of the palliative patient. Physical, sociocultural, and environmental contexts also emerge from studies, and this knowledge helps health care professionals develop holistic care to promote a peaceful death. Limitations: The population of the included studies encompasses patients who are not explicitly identified as being in their last days or hours of life. However, the articles were deemed eligible, considering the lack of conceptual homogeneity in addressing the topic, which can be a starting point for deepening knowledge in future studies.

Keywords: Palliative Care; Terminally Ill; Needs Assessment

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PATIENT IN THE LAST DAYS AND HOURS OF LIFE: DECISION-MAKING OF PALLIATIVE CARE NURSES

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Introduction: Global population aging leads to significant changes as life expectancy increases (Bao et al., 2022). This shift has resulted in an exponential rise in chronic diseases (Bao et al., 2022), responsible for 38 million deaths annually, highlighting the urgent need for end-of-life and palliative care (Ferreira et al., 2012). However, only 14% of those requiring palliative care have access to it (WHO, 2020). Providing nursing care to patients in their last days and hours of life presents nurses with complex decisions involving interactions among healthcare teams, patients, families, or caregivers in a dynamic emotional environment characterized by various uncertainties (Silva et al., 2023). Several factors impact healthcare professionals' patient-care decision-making (Silva et al., 2023). However, there is limited literature exploring the factors that influence nurses' decision-making when providing care to patients in their final days and hours, highlighting this as a crucial area for further research.
Objectives: To identify the factors influencing nurses' decision-making in providing care for patients in their last days and hours of life. To describe how these factors influence nurses' decision-making in providing care to patients in their last days and hours of life.
Methodology: Qualitative study adopts a descriptive approach to answer the research question: "What are the factors influencing the decision-making of palliative care nurses in providing care to patients in the last days and hours of life?" Semi-structured interviews are being conducted with nurses who have worked for at least six years in palliative care services, using the snowball sampling technique. Data analysis will follow Bardin's content analysis method. Ethical considerations involve using the

collected data exclusively for this study, ensuring participant privacy, anonymity, and confidentiality. The study received approval from the Ethics Committee: 3802/2024.
Results: Preliminary results of this study highlight several factors that facilitate palliative care nurses' decision-making when caring for patients in their last days and hours of life: patient's clinical condition, nurses' prior knowledge of the patient, early contact and follow-up by a palliative care team, family involvement, and preparation, the multidisciplinary team's training, and effective teamwork.
Discussion/Conclusion: Numerous factors influence palliative care nurses' decision-making when providing care in the final days and hours of life, with the significance of these factors varying based on each nurse's professional experience. Ongoing research in this field is crucial to deepen our understanding of how these factors shape decision-making and to develop strategies that ensure decisions are tailored to each patient's unique needs during their end-of-life care. Such insights will help enhance the quality and appropriateness of care provided in this sensitive and critical time.

Keywords: Decision-Making; Palliative Care; Nursing; Last Days and Hours of Life.

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NURSING INTERVENTIONS TO FACILITATE THE TRANSITION PROCESS IN PALLIATIVE CARE: A SCOPING REVIEW

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Introduction: Transitions represent changes between stability periods triggered by critical events throughout life. In palliative care, they involve changes in location, caregivers, and goals of care, often marked by uncertainty, emotional distress, and redefinition of roles. Transitions stand out as a central concept in nursing, as nurses frequently engage with individuals undergoing transition processes, directly involving their health, well-being, self-care capacity, and the surrounding environment at personal, family, and community levels. This holistic approach to individuals in palliative situations allows for identifying factors influencing the transition and the development of nursing interventions aimed at facilitating this process.
Objectives: To identify and map the available evidence on nursing interventions used to facilitate the transition process in palliative care.
Methodology: A scoping review was conducted according to the guidelines of the Joanna Briggs Institute and the PRISMA-ScR criteria to answer the following research question: What nursing interventions are used to facilitate the transition process in a palliative care context? The search was conducted in the MEDLINE and CINAHL

databases, using the PCC (Population, Concept, Context) model to define the indexing terms. Qualitative, quantitative, mixed studies, literature reviews, and opinion articles published between 2020 and 2024 in English, Portuguese, and Spanish were considered. The selection process followed rigorous inclusion and exclusion criteria, ensuring relevance and data anonymization.
Results: After screening 296 records and excluding studies that did not address the research question, 7 studies were selected. The included studies highlight transitions such as the inclusion of palliative care in the care plan, transition to home care, and transition to end-of-life care. Nursing interventions are directed at the inhibiting and facilitating factors of these transitions, focusing on communication, promoting the therapeutic relationship, care planning and organization, symptom management, and advocacy for the person in palliative care and their families/caregivers. For the three types of transitions identified, interventions such as assessing the perception of the person in palliative care and family about the disease, exploring their care preferences, identifying their needs, providing emotional support, evaluating symptoms, adjusting interventions according to clinical progress, empowering family members for caregiving, providing care materials, and collaborating in an interdisciplinary model are emphasized.
Discussion/Conclusion: The results suggest that nurses play a crucial role in facilitating transitions, helping individuals and their families develop coping mechanisms and skills to manage the process. However, healthcare professionals, including nurses, still need to develop communication skills for therapeutic relationships and create more effective communication channels between teams, as these are key inhibiting factors of transitions. Limitations include the small sample size and the predominance of case studies, which hinder the generalization of findings. Additionally, other types of transitions, such as those to palliative care units or residential care for the elderly, were not addressed.

Keywords: Palliative care; Nursing interventions; Transitions

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ARTIFICIAL INTELLIGENCE IN HEALTHCARE: ETHICAL CHALLENGES AND INNOVATIONS IN NURSING

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Introduction: Technological evolution has brought Artificial Intelligence (AI) to the forefront of healthcare discussions. Recognized as a transformative tool, AI significantly impacts the personalization and efficiency of care delivery and decision-making. However, its use poses ethical challenges and must be applied without compromising autonomy, well-being, and humanization (World Health Organization, 2021). Guided by fundamental ethical principles, AI should complement rather than replace clinical judgment. This study reflects on the potential and ethical implications of AI in nursing, proposing strategies to harmonize technology, humanization, ethical value preservation, data protection, regulatory policies, and continuous training (Assembleia da República, 2021).

Objectives: To analyze ethical challenges associated with the implementation of AI in healthcare and reflect on its impact on nursing practice, considering fundamental principles of bioethics and professional deontology. Additionally, this study aims to explore the intersection between technological evolution and humanization of care within the context of digital transformation in healthcare.

Methodology: A literature review was conducted using PubMed Complete and CINAHL Complete databases, regulatory documents, and grey literature, encompassing publications from 2019 to 2024. Indexed descriptors such as “Artificial Intelligence," "Ethics," "Nursing Care," and "Patient Safety" were used. Studies of ethical and practical relevance were selected, resulting in the analysis of 14 articles.

Results: Six essential ethical principles for AI utilization were identified: 1) protection of autonomy, ensuring human oversight and informed consent; 2) promotion of well-being, prioritizing safety and effectiveness; 3) transparency, with explainability of algorithms; 4) accountability, clarifying roles between developers and clinicians; 5) inclusion, mitigating biases; and 6) sustainability, fostering full integration into healthcare systems (World Health Organization, 2021). Studies highlighted that continuous nurse training in digital ethics is crucial to mitigate risks such as dehumanization and discrimination. AI demonstrated the potential to improve efficiency and safety in care delivery, provided rigorous oversight is maintained (Nunes et al., 2024). The analysis identified critical needs for robust policy development to protect sensitive data and manage healthcare information, emphasizing the pivotal role of nurses as mediators in this digital transformation. The findings underscore the importance of balancing technological innovation with the preservation of therapeutic relationships.

Discussion/Conclusion: Implementing AI requires a delicate balance between technological innovation and the preservation of fundamental nursing values. Developing digital competencies among healthcare professionals while maintaining humanized care is essential. Robust regulation and continuous training are pivotal for successful AI integration into practice. The findings suggest the need for a proactive approach emphasizing the protection of patient privacy and autonomy. Technological evolution demands constant adaptation of regulation and professional practices, ensuring that AI remains a supportive tool without compromising the essence of humanized care.

Keywords: Artificial Intelligence; Nursing; Ethics; Decision-Making; Humanization.

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Conclusion

At 4th National Webinar and 2nd International Webinar of the Department of Medical-Surgical Nursing / Adult and Elderly Nursing" on Nursing and Artificial Intelligence: Challenges and Opportunities." throughout the sessions, we discussed how artificial intelligence is transforming nursing practice, from improving patient care to optimizing clinical processes. The presentations covered a wide range of topics, from using technology in care and communication to promoting self-care and decision-making based on AI algorithms.

The challenges discussed, such as integrating new technologies and the need for continuous training, highlight the importance of preparing nursing professionals for a future where technology plays a central role. The opportunities presented, including the personalization of care and efficiency in clinical practice, show a promising path for the evolution of nursing in which the promotion care of the self will continue to be the commitment of nursing. Thus, this event provided a rich platform for the exchange of knowledge and experiences. It was an enriching event that highlighted the intersection between nursing and artificial intelligence. We deeply thank all speakers and attendees for their invaluable contributions.

This webinar not only expanded our understanding of artificial intelligence's impact on nursing but also reinforced our commitment to innovation and excellence in research, clinical practice, and training in medical-surgical nursing care. With great excitement, we look forward to the next annual DEMC-AI Webinar, which continues to surprise and inspire us every year.

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