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Relational and functional aspects of safety for patients and caregivers in intensive care: scoping review

Aspectos relacionais e funcionais da segurança por pacientes/cuidadores na terapia intensiva: revisão de escopo

Aspectos relacionales y funcionales de la seguridad para pacientes y cuidadores en cuidados intensivos: revisión del alcance

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ABSTRACT

Objective: To analyze the relational and functional aspects of patient safety through the experiences reported by the patients themselves and/or their caregivers in intensive care units.

Method: Scoping review developed with searches, in September 2021 and updated in November 2022, in the following databases: Virtual Health Library, considering only the LILACS, BDENF, IBECS, ColecionaSUS databases; SCIELO, PsycINFO, EMBASE, COCHRANE, CINAHL, SCOPUS and Web of Science.

Results: The final selection included 14 articles highlighting communication as an essential relational factor for care safety. The most predominant functional aspects were physical care environment, structured protocols, and the performance of professionals in the care process.

Conclusion: Communication processes were predominant in relational aspects and were decisive for functional aspects, with emphasis on the performance of professionals in the care process. Instruments developed for quality process analysis were used in most of the studies.

Descriptors: Patient Safety. Adult; Intensive Care Unit. Intensive Care Nursing. Psychological Adaptation.

RESUMO

Objetivo: analisar os aspectos relacionais e funcionais sobre segurança do paciente por meio das experiências relatadas pelo próprio paciente e/ou seus cuidadores em unidades de terapia intensiva.

Método: revisão de escopo desenvolvida com buscas, em setembro de 2021 e atualizadas em novembro de 2022, nas bases de dados: Biblioteca Virtual em Saúde, considerando apenas as bases LILACS, BDENF, IBECS, ColecionaSUS; SCIELO, PSYCINFO, EMBASE, COCHRANE, CINAHL, SCOPUS e *Web of Science*.

Resultados: a seleção final contou com 14 artigos que evidenciaram a comunicação como um fator relacional imprescindível à segurança do cuidado e os aspectos funcionais mais predominantes foram: o ambiente físico do cuidado, os protocolos estruturados e a performance dos profissionais no processo do cuidado.

Conclusão: os processos de comunicação foram predominantes nos aspectos relacionais e foram determinantes para os aspectos funcionais, com destaque para o fator performance dos profissionais no processo de cuidado. Foram utilizados instrumentos, desenvolvidos para análise dos processos de qualidade, na maioria dos estudos.

Descritores: Segurança do paciente. Adulto. Unidade de Terapia Intensiva. Enfermagem. Adaptação Psicológica.

RESUMEN

Objetivo: Analizar los aspectos relacionales y funcionales de la seguridad del paciente a través de experiencias relatadas por el paciente o sus cuidadores en unidades de cuidados intensivos.

Método: revisión de alcance desarrollada con búsquedas, en septiembre de 2021 y actualizada en noviembre de 2022, en las bases de datos: Biblioteca Virtual en Salud, considerando únicamente las bases de datos LILACS, BDENF, IBECS, ColecionaSUS; SCIELO, PSYCINFO, EMBASE, COCHRANE, CINAHL, SCOPUS y *Web of Science*.

Resultados: la selección final incluyó 14 artículos que destacaron la comunicación como factor relacional esencial para la seguridad del cuidado y los aspectos funcionales más predominantes fueron: el ambiente físico del cuidado, los protocolos estructurados, la actuación de los profesionales en el proceso de cuidar.

Conclusión: Los procesos de comunicación predominaron en los aspectos relacionales y fueron decisivos para los aspectos funcionales, con énfasis en el factor desempeño de los profesionales en el proceso de cuidar. Fueron utilizados instrumentos desarrollados para analizar procesos de calidad, en la mayoría de los estudios.

Descriptores: Seguridad del Paciente. Adulto. Unidad de Terapia Intensiva. Enfermería. Adaptación Psicológica.

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INTRODUCTION

The perception of patient safety from the user's perspective within the healthcare system is desirable and can serve as a guide for improvement strategies so that the patient feels satisfied and contributes to the adaptation of care protocols in all health care settings.

Managing critically ill patients tests the skills of healthcare professionals in complex and dynamic clinical situations, demanding differentiated decision-making. Each intensive care unit (ICU) is unique, with different needs, making the creation of universally applicable guidelines challenging. Recognizing the importance of local and cultural characteristics is crucial in adapting safety guidelines for ICU environments[1].

It is known that not all ICU patients are able to verbalize their wishes, desires, or opinions. In cases where they are incapacitated, caregivers or family members can serve as spokespersons. It is worth noting that optimizing person-centered care in the ICU can transform the patient experience into a phenomenon driven by their active participation[2–3].

Patients' perceptions and experiences are essential for customized care. The evaluation of these aspects is possible using outcome measures (Patient-Reported Outcome Measures – PROMs) and opinions about health status and experience measures (Patient-Reported Experience Measures – PREMs). PROMs and PREMs are instruments considered quality indicators regarding patient care and aim to improve the quality of care by capturing patients' perceptions about the care received[4]. It is believed that patients are the most capable of providing information on what is relevant to them, which is relevant for the provision of high-quality care. Patient experience data can range from qualitative (information obtained through interviews or focus groups) to large quantitative data sets derived from standardized surveys and the use of PREMs[5].

In 2021, the World Health Organization (WHO) initiated the Global Patient Safety Action Plan 2021-2030[6], highlighting the fundamental role of ensuring patient safety in healthcare systems. The guiding principles prioritize patient and family involvement in safe care and leverage scientific knowledge and patient experience to improve safety and thus prevent adverse events.

However, healthcare systems primarily use PREMs to gather information on performance, focusing on quality improvement at the micro-level. There is a notable lack of studies exploring PREMs data along the patient care journey. Despite this, their use offers various benefits, as their results can guide the development and implementation of quality improvement activities, monitor changes, and promote sustainability[7].

In this research, a framework was adopted, as suggested by previous studies[8–9], dividing patient experiences into two dimensions: "relational" and "functional". Relational aspects involve interpersonal care, empathic approaches, patient involvement in decisions, and provision of information on self-care. Functional aspects encompass basic expectations such as attention to physical needs, prompt response, clean and safe environment, efficient collaboration among professionals, and continuity of care.

Thus, the objective of the study was to analyze the relational and functional aspects of patient safety through the experiences reported by the patient themselves and/or their caregivers in intensive care units.

METHOD

Type of study

This is a scoping review, with a protocol registered in the "Open Science Framework" (https://doi.org/10.17605/OSF.IO/KBSD2), conducted according to the methodology proposed by the Joanna Briggs Institute (JBI)[10]. The findings were reported using the checklist extension, known as the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)[11].

Research question

The formulation of the guiding question was based on the Population, Concept, and Context (PCC) strategy. The review question was: "What are the relational and functional aspects indicated by the patient or their family members and/or caregivers regarding their safety in the ICU?". Where P – Patient or their family members and/or caregivers, C – patient safety (relational and functional aspects) C – Intensive Care Unit.

Research strategy

Original articles with quantitative, qualitative, mixed and review methodological designs were included. The time frame adopted for this study covers the period from 2012 to 2022. The decision to use the mentioned interval was influenced by the identification of a systematic review

article published in 2012, which was incorporated into this research, as it covered articles published up to 2011 and that met the eligibility criteria stipulated in this research. Additionally, the authors considered the implementation of the National Patient Safety Policy (PNSP) in Brazil, established by Ordinance No.529, of April 1, 2013. Editorials, books, letters, monographs, dissertations, theses, theoretical articles, reflection articles and pre-prints were excluded.

The searches were conducted in collaboration with a librarian in September 2021, and were updated in November 2022, during which no new articles were found for inclusion.

According to JBI guidelines, the search strategy was conducted in three stages. In the first stage, a search was conducted "on the website https://pubmed.ncbi.nlm.nih.gov//", to identify the most used descriptors in the literature, using Medical Subject Headings (MeSH). In the second stage, the complete search strategy was performed in the MEDLINE database, accessed via Pubmed as demonstrated in Chart 1, which was "subsequently" adapted to the following databases: Virtual Health Library, considering only the databases/portals LILACS, BDENF, IBECS, ColecionaSUS; SCIELO journal portal and databases from the *Portal de Periódicos da Capes*: PsycINFO, EMBASE, COCHRANE, CINAHL, SCOPUS and Web of Science.

In the third stage, it was adopted an additional strategy involved analyzing the reference lists of the included articles to identify any studies related to the concept proposed in this review.

Study Selection

After searching the databases, the search results were exported to the Endnote reference manager and, after removing duplicates, the Rayyan software developed for study selection in systematic reviews was used. The evaluation of the references found was conducted by two reviewers in a blind assessment and divergent cases were assessed by a third reviewer. Thus, the pre-selection of studies was conducted by reading the title and abstract, according to the inclusion and exclusion criteria. The pre-selected studies were subjected to full reading. This process was recorded quantitatively and in detail, allowing for the identification of all decisions made, and took place from October to December 2021, in a narrative form and using the PRISMA-ScR flowchart[10].

As an eligibility criterion, online publications available in full texrt in English, Spanish or Portuguese, that addressed adult and/or elderly patients or their family members and/or caregivers, and that highlighted the "relational" or "functional" aspects of their experiences during or after hospitalization in the ICU environment were considered.

The relational aspects of the experience considered were: interpersonal perspectives of care; behavioral skills of the professional towards the patient; respect for the patient's capacity for autonomy and decision-making; data sharing and interventions aimed at promoting self-care. Functional aspects referred to the basic expectations of how care is provided, such as: attention to physical needs; punctuality in the provision of care; environmental conditions; effective management among professionals and continuity of care[8–9].

Articles addressing healthcare professional training or that evaluated interventions aimed at improving patient safety were excluded from the analysis. This decision was made due to the potential influence of these interventions on the reported experiences, since the proposed changes focus primarily on evaluating the improvement strategy implemented.

Data extraction and analysis

Data extraction was conducted using an Excel spreadsheet specially developed for this research. Two of the study authors performed preliminary tests of the form on the first 15 articles selected for full reading, with the aim of improving and ensuring that all relevant data were captured. The following information from the studies was summarized: title, author, year, country, journal name; evaluation area and journal classification by *Qualis Periódicos* on the Sucupira platform; impact factor; methodological design; identification of the subtypes of the sample studied; and the "relational" and "functional" aspects of the experience.

Data analysis was performed narratively, and the findings are presented in Chart 2. The "relational" and "functional" aspects of the experiences were described respecting their relationship with the eligibility criteria defined.

Given that the scoping review does not aim to perform a critical assessment of the methodological quality of primary studies, no analyses related to risk of bias or other methodological issues were performed in this study.

Chart 1 – Search strategy used in the MEDLINE database. Rio de Janeiro, Rio de Janeiro, Brazil, 2021/2022

Search strategies used according to the PCC (MEDLINE via Pubmed)	Description of descriptors and keywords included in each search strategy	Results in number of articles retrieved according to search key
Search Key #1	Search: "Patient Safety"[mh] OR "Patient Safety"[tiab]	52,471
Search Key #2	Search: "Adult"[mh] OR Adult*[tiab] OR "Aged"[mh] OR Elderly[tiab] OR "senior citizen"[tiab] OR "Middle Aged"[mh] OR "Middle Age"[tiab] OR Middle-Aged[tiab]	8,569,706
Search Key #3	Search:"Adaptation, Psychological"[mh] OR "Psychologic Adaptation"[tiab] OR "Psychological Adaptation"[tiab] OR Adjustment*[tiab] OR "Coping Skills"[tiab] OR "Coping Skill"[tiab] OR "Adaptive Behavior"[tiab] OR "Adaptive Behaviors"[tiab] OR "Coping Behavior"[tiab] OR "Coping Behaviors"[tiab] OR Meaning*[tiab] OR experience*[tiab] OR Behavior*[tiab] OR Coping*[tiab] OR Adaptation*[tiab] OR Perception[mh] OR Perception[tiab] OR "Sensory Processing"[tiab] OR "Surveys and Questionnaires"[mh] Survey*[tiab] OR Questionnaire[tiab] OR Respondent*[tiab] OR Questionnaire[tiab] OR Nonrespondent*[tiab] OR Emotions[mh] OR Emotion*[tiab] OR Feeling*[tiab] OR Regret*[tiab] OR "Patient Satisfaction"[mh] OR "Patient Satisfaction"[tiab] OR Respect[tiab] OR Dignity[tiab]	1,797,855
Search Key #4	Search:"Intensive Care Units"[mh] OR "Intensive Care Units"[tiab] OR "Intensive Care Unit"[tiab] OR ICU[tiab] OR "Critical Care"[mh] OR "Critical Care"[tiab] OR "Intensive Care"[tiab] OR "critical care unit"[tiab] OR "intensive therapy unit"[tiab] OR "intensive treatment unit"[tiab] OR "respiratory care unit"[tiab] OR "respiratory care units"[tiab] OR "intensive therapy"[tiab] OR acute-care[tiab] OR "Critical Care Nursing"[mh] OR "Critical Care Nursing"[tiab] OR "Intensive Care Nursing"[tiab]	303,777
Search Key #5	Search: Search key #1 AND Search key #2 AND Search key #3 AND Search key #4	332

Source: The Authors, 2021/2022.

Chart 2 – Characteristics of the studies included in the scoping review. Rio de Janeiro, Rio de Janeiro, Brazil, 2021/2022

Characteristics							Experiences	
							Aspects	
Author/journal/year	Title	Qualis Capes	Impact Factor	Origin	Methodological Design	Sample Subtype	Relational	Functional
Dodek,P M et al/ Critical Care Medicine/ 2012	The relationship between organizational culture and family satisfaction in critical care/2012	A1	9.2	Canada	Quantitative	Family Members	Openness in communication between healthcare professionals and family members	Teamwork
Lasiter, Sue/ Clinical Nursing Research / 2014	"The Button": initiating the Patient–Nurse Interaction	A1	1.7	USA	Qualitative	Patients		Physical structure (e.g., visual call devices) that facilitates quick visibility and response from the nursing team.
Galvis López CR, Salamanca Ramos E/ Investigación en Enfermería: Imagen Desarrolo/ 2014	*Percepción de necesidades en cuidadores familiares de adultos internados en una unidad de cuidados intensivos de una institución prestadora de salud (IPS) privada en Villavicencio, Colombia*	B1	Without impact factor	Colombia	Quantitative	Family Members of ICU Patients	Clear communication about prognosis. Being informed about changes in the patient's condition. Honest responses to questions	Receiving information once a day.
Wassenaar, Annelies et al / International Journal of Nursing Studies/ 2014	Factors promoting intensive care patients' perception of feeling safe: A systematic review	A1	8,1	United Kingdom	Systematic review	Studies with ICU Patients	Communication and information. Nursing care was mainly referenced in terms of how the professional interacts with the patient; respectful interaction	Patients noted that technological support provided a sense of security and that being able to visualize or "feel" the presence of the team due to the structural organization in the ICU was reassuring.
Rainey, H et al/ Health Expectations/ 2015	The role of patients and their relatives in 'speaking up' about their own safety – a qualitative study of acute illness	Without Qualis	3.2	London	Qualitative	Patient	Adequate communication and information	Appropriate care for medical needs regarding both the team's technical skills and the hospital system; workload overload for the team reduced the likelihood of the patient expressing their needs
Wong, et al/ Intensive and Critical Care Nursing/ 2015	Families' experiences of their interactionswith staff in an Australian intensive careunit (ICU): A qualitative study	Without Qualis	5.3	Australia	Qualitative	Families of Patients	Communication was identified as a relevant theme; the nurse was seen as an accessible professional with simplified language; some identified inconsistent communication; family exclusion.	
Alasad, et al/ Journal of Critical Care/ 2015	Patients' experience of being in intensive care units	A3	3.7	Jordan	Quantitative	Surgical and Medical ICU Patients	Adequate information	Noisy ward; inability to distinguish between day and night; poor pain management. Reported that technological support provided a sense of security and that being able to visualize the team or know they were nearby.
Lupieri, Giulia et al. / Intensive and Critical Care Nursing/ 2015	Cardio-thoracic surgical patients' experience on bedside nursing handovers: Findings from a qualitative study	A1	5.3	Italy	Qualitative	Cardiac ICU Patients		Bedside shift change
Jensen, et al/ Critical Care / 2017	Satisfaction with quality of ICU care for patients and families: the euroQ2 project	A1	15.1	Denmark	Quantitative	Patients and Family Members	Consistency of information; need for improvement in emotional support; including the patient in decision-making	Management of dyspnea and agitation;
Jerng, Jih-Shuin et al/ Critical Care/ 2018	Comparison of complaints to the intensive care units and those to the general wards: an analysis using the Healthcare Complaint Analysis Tool in an academic medical center in Taiwan	A1	15.1	Taiwan	Mixed Methods	ICU Patients and Family Members	Decisions or planning not communicated; recognized problems not addressed, not followed up, or not resolved; staff with poor behaviors	Issues with visits or scheduling; delays in medical procedures; insufficient equipment; uncomfortable physical environments; interaction problems between patients and visitors.
Bell SK, Roche SD, Mueller A, et al/ BMJ Quality & Safety/ 2018	Speaking up about care concerns in the ICU: patient and family experiences, attitudes, and perceived barriers	A1	5.7	USA	Mixed Methods	Patients and Family Members	Patients and family members perceive barriers to communicating their safety concerns, fearing they might harm the relationship with the medical team, being labeled as troublemakers, or finding the team too busy or not knowing whom to speak with	
Schenk, Elizabeth C et al/ Journal of Nursing Care Quality / 2019	Perspectives on Patient and Family Engagement with Reduction in Harm: The Forgotten Voice	Without Qualis	1.2	USA	Qualitative	Patients, Family Members, and Healthcare Professionals	Patient/family involvement and communication.	
Collins, Sarah A et al/ Journal of Patient Safety/ 2020	Mixed-Methods Evaluation of Real-time Safety Reporting by Hospitalized Patients and their care partners: The MySafeCare Application	A2	2.2	USA	Mixed Methods	Patients and Family Members or Caregivers	Inadequate communication related to treatment; shift changes; performance of procedures; professionals not introducing themselves upon entering the ward	Lack of adherence to institutional protocols; inadequate physical structure that does not support hand hygiene; lack of identification of visitors.
Pérez E & Dzubay DP/ Health Care Management Science/ 2021	A scheduling-based methodology for improving patient perceptions of quality of care in intensive care units	Without Qualis	3.6	USA	Mixed Methods	Patients	Communication from the physician and information regarding discharge	

Source: The Authors, 2021/2022.

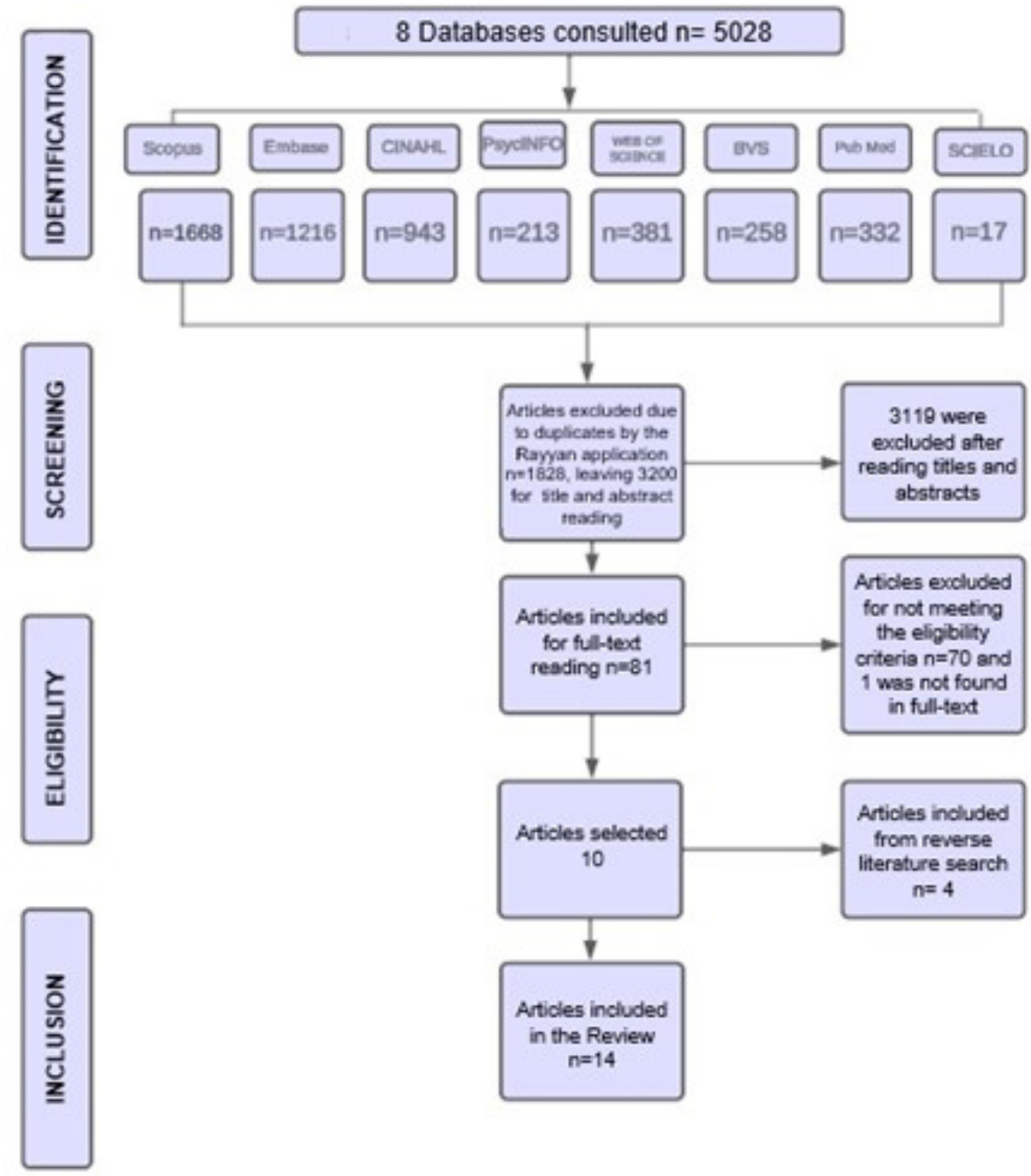
RESULTS

A total of 5,028 articles were initially found. Subsequently,1,828 duplicates were identified using Endnote software. After title and abstract screening, 81 remaining articles met the eligibility criteria and were submitted to full-text screening.

A total of 70 articles were excluded and one could not be found in full text. The reference list of the 10 selected articles was reviewed, in which four eligible studies were identified and included in the mapping as shown in Figure 1.

A total of 14 studies published in 13 different journals written by researchers, mostly from the United States (n=5) were selected. There was a predominance of the English

Figure 1 – Study selection flowchart for the literature review. Rio de Janeiro, Rio de Janeiro, Brazil, 2021/2022



Source: The Authors, 2021/2022.

language and publications in journals predominantly evaluated in different health fields, following the criteria established by "*Qualis Periódicos Capes*". Regarding the methodological design, the studies were divided into research with quantitative (n=4), qualitative (n=5), mixed methods (n=4) and systematic review (n=1).

Some studies found in this research presented data on experiences obtained through PREMs, not specific to patient safety, indicating that healthcare services adopt the patient experience as a quality indicator.

DISCUSSION

In the intensive care environment, relational and functional aspects play distinct roles, which, through their integration, validate the team's behavior in ensuring that healthcare is provided efficiently and with quality.

The articles identified in this review referred to the various ways in which the communication processes conducted need to be clearer, more appropriate, and reliable. They highlighted the need for professionals to offer more accessible information, with simplified language, considering the family and the patient as a unit of care. The need for practices with actions that respect a shared decision on the direction of care and aspects related to their own health was highlighted, situations that need to be in line with institutional protocols, considering the available resources and reflecting a harmonious relationship between relational and functional aspects in the intensive care environment.

A set of data was evidenced that corroborated and validated the readiness of patients and their families/caregivers to perceive factors related to the team's behavior regarding interpersonal relationships.

Most studies identified that relational factors were perceived by patients as having a great impact on their safety. These cases, when involving the patient and the care team, were directly linked to effective communication, which is seen as a crucial tactic to maintain the integrity of the hospital care model.

In the collaboration of context of care between the multidisciplinary team and the patient/family, they are often not included as they would wish in the exchange of messages or do not understand the technical terms used by the team[12–13].

In recent studies, it was observed that patients and/or caregivers highlighted the importance of the way in which communication with the healthcare team began. This first impression played a fundamental role in determining whether they felt encouraged to continue interacting with the team. In many cases, study participants identified deficiencies in the care process but were hesitant to express their concerns or perceptions regarding the team's behavior. As a result, patients perceived a lack of respectful treatment by the team as a risk situation or, in some cases, even as harm[13–14].

The nurse was referenced as a facilitator of the communication process between the physician and the patient. Patients in an ICU reported that the presence of a nurse during the medical visit seemed to ensure a better perception of the quality of care. This occurred because, after the physician left, the nurse was able to clarify the information passed on, dispelling doubts from the patient and family, thus contributing to an improvement in the attribute "communication/information"[15].

In a retrospective study, it was found that higher socioeconomic status was associated with patients' desire to receive information about their health. It was also demonstrated that when they had the opportunity to interact with the team and share their experiences, the care was perceived as higher quality[16]. It was also found, through reports in another study that patients did not want to be inconvenient or disrupt the team and, often did not feel that there was an open willingness for dialogue. Thus, it becomes evident how important it is to create means for the partnership between the team, patient and family to be consolidated and to mitigate communication barriers[17].

It is also noteworthy that, in the neonatal ICU environment, the perception of safe care was greater when there was a partnership between parents and physicians. It was observed that, when physicians engaged in sharing concerns about what they observed, it helped parents to have more confidence in reporting of concerning situations[18].

At the University of Kentucky in the United States, an innovative work model was implemented for the interprofessional team, involving daily bedside rounds. These included the participation of the nurse, the case manager or social worker, the pharmacist and the physician together with the patient and family members. During this activity, care plans, treatment and discharge planning were discussed, showing satisfactory results, in addition to improving the patient experience and agreement among those involved. Additionally, as patients felt encouraged to ask more questions, the perception of a positive experience increased, with their doubts about the care provided being addressed[19].

Regarding factors related to functionality domains, understanding the duties and responsibilities of each team member becomes essential for patients. If they are not aware of these duties, they become inhibited in communicating their safety concerns and use passive strategies to make such communications, hoping that there will be possible

understanding from the team. In other words, they are unable to share any needs or concerns, which indicates a gap in the implementation of effective strategies to resolve doubts and concerns in healthcare services[13].

Considering the functional aspects, the following were highlighted: deficiencies in teamwork, lack of technological devices, infrastructure that allow to facilitate a closer connection between the team and the individual, structural adequacy that would provide greater comfort and ease of access for family members and caregivers. It was also evidenced that the team's workload negatively influenced the individualized care and attention needs, especially in following care protocols.

When mentioned, the team's work overload was usually related to staffing. This factor was mentioned by patients as a demotivation for sharing their needs, and can be interpreted as an obstacle to effective interaction between patient and team[20].

An analysis of a complaints management database from a university-affiliated medical center in Taiwan retrospectively identified health-related complaints records for the ICU from 2008 to 2016. These records revealed multiple complaints related to management, usually involving clinical, managerial, and relationship issues. The largest number of complaints referred to aspects of the professional practice environment and situations that negatively influenced it[12].

Thus, the real need for alignment between relational and functional skills in the work environment is understood. Sometimes, there are circumstances in which patient dissatisfaction is related to feelings of fear, distrust, or impatience, which cannot be analyzed in a way that diverges from a scientific basis that supports the specialized technical aspects involved in intensive care practice. Factors such as longer waiting times, poor hygiene that prevents hospitalizations or transfers, understaffing of nursing professionals, and lack of information can significantly contribute to this situation[16,17]. Therefore, it is crucial to pay simultaneous attention to both technical aspects of care and patients' emotional concerns, aiming to provide a more positive and satisfactory experience in intensive care.

Patients often identify the ICU nurse as an advocate, a figure who provides, or should provide them safety. Evidence shows that nurses need to understand what patients perceive and what makes them happy. This understanding fosters better interaction and creates a favorable scenario for meeting all needs[21].

Renal patients undergoing dialysis identified functional factors that most contributed to reducing their sense of safety, such as sharing a room with patients in contact isolation, inadequate cleaning, delays in addressing their care needs, and lack of awareness of the organizational safety notification system. However, most of the identified factors were related to emotional and relationship issues that are generally not valued by healthcare organizations, which are concerned with the physical aspects of promoting patient safety[22], corroborating, once again, the urgency of a joint discussion of the relational and functional dimensions.

Studies have pointed to the physical structure and technological issues of the environment as functional aspects[12–13,23] that directly influenced safety. However, this review demonstrated that relational aspects were predominant and should receive greater attention from healthcare professionals and managers to promote a safe environment.

The results of a recent systematic review, which aimed to examine the dimensions of safety culture assessed in studies over the years, showed that the attribute "leadership" was the most frequently assessed and that the attribute "patient involvement in safety culture" was little explored[24].

However, the practice can already be improved, given that another systematic review already indicated that ICU nurses were capable of improving the perception of patient safety. This occurred when they aligned their practice with elements such as: constant observation, a positive and empathetic approach, clinical competence, transparent communication, proactive attitudes, proximity and trust, as well as supporting patient access to family members and caregivers[23].

Despite all the discussion on this topic and the growing concern for patient safety, the prior inclusion of disciplines aimed at training communication and relationship skills still seems to be undervalued.

However, in nursing, this type of education is necessary, so that the process of communication between team members can occur in terms of care; this process is generally enhanced by human interaction, interdependent relationships, professional recognition and improved understanding of others, sharing of information in various meetings, among other factors[25]. Furthermore, Australian ICU nurses indicated that learning attributes related to professional behavior, communication, teamwork behavior, combined with theoretical knowledge and clinical skills were the most desired and seen as fundamental for their practice. It is worth noting that, without this educational preparation, the leadership role and patient safety measures could be at risk[26].

As a limitation of this investigation, despite the relevant data provided by the analyzed studies for clinical practice and that may indicate paths for new research, it is important to emphasize that many did not use patient safety assessment tools. It is important to note that this research is a theoretical synthesis based on the perspectives from Europe and North America. The findings, which are based on a search strategy in a single care setting, were not compared to other care contexts.

CONCLUSION

Many of the articles found in this review highlighted the fundamental role of relational factors in patient safety perceptions, particularly emphasizing the crucial link between effective communication and the integrity of hospital care models. The reviewed literature advocates for clearer, more appropriate, and reliable communication processes, highlighting the importance of providing accessible information in simplified language. Additionally, it was considered important for healthcare professionals to understand the need to consider patients and family members as units of care and to promote shared decision-making whenever possible in intensive care environments.

Regarding functional aspects, patient awareness of the roles and responsibilities of team members emerged as fundamental. It was highlighted that deficiencies in teamwork, inadequate technological support, and environmental barriers hinder and may inhibit patients from actively articulating concerns about their safety. The functional challenges identified, including work overload and infrastructure limitations, hinder the provision of individualized care and adherence to institutional protocols.

REFERENCES

1. Patil SJ, Ambulkar R, Kulkarni AP. Patient Safety in Intensive Care Unit: what can we do better? Indian J Crit Care Med. 2023;27(3):163-65. https://doi.org/10.5005%2Fjp-journals-10071-24415
2. Campelo CL, Nunes FDO, Silva LDC, Guimarães LF, Sousa SMA, Paiva SS. Patient safety culture among nursing professionals in the intensive care environment. Rev Esc Enferm USP. 2021;55:e03754. https://doi.org/10.1590/S1980-220X2020016403754
3. Souza LS, Vicente KMS, Cruz TRS, Roriz CFF, Santana SMS. A humanização da assistência e o papel da equipe multiprofissional na recuperação do paciente internado nas Unidades de Terapia Intensiva Adulto: uma revisão de literatura. RSD. 2022;11(17);e129111738886. http://dx.doi.org/10.33448/rsd-v11i17.38886
4. Kingsley, C., Patel, S.: Patient-reported outcome measures and patient reported experience measure. BJA Educ. 2020;17(4):137–44. https://doi.org/10.1093/bjaed/mkw060
5. Jamieson Gilmore K, Corazza I, Coletta L, Allin S. The uses of Patient Reported Experience Measures in health systems: a systematic narrative review. Health Policy. 2023;128:1-10. https://doi.org/10.1016/j.healthpol.2022.07.008
6. World Health Organization. Global patient safety action plan 2021-2030: towards eliminating avoidable harm in health care [Internet]. Geneva: WHO; 2021 [cited 2023 Sep 7]. Available from: https://www.who.int/teams/integrated-health-services/patient-safety/policy/global-patient-safety-action-plan
7. Shunmuga Sundaram C, Campbell R, Ju A, King MT, Rutherford C. Patient and healthcare provider perceptions on using patient-reported experience measures (PREMs) in routine clinical care: a systematic review of qualitative studies. J Patient Rep Outcomes. 2022 Dec 2;6(1):122. https://doi.org/10.1186/s41687-022-00524-0
8. Doyle C, Lennox L, Bell D. A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. BMJ Open. 2013;3(1):e001570. https://doi.org/10.1136/bmjopen-2012-001570
9. Topçu S, Ecevit Alpar Ş, Gülseven B, Kebapçı A. Patient experiences in intensive care units: a systematic review. Patient Exp J. 2017;4(3):115-27. https://doi.org/10.35680/2372-0247.1137
10. Peters M, Godfrey C, McInerney P, Munn Z, Tricco A, Khalil H. Chapter 11: Scoping reviews. In: Aromataris E, Munn Z (Editors). JBI Manual for Evidence Synthesis [Internet]. JBI; 2020 [cited 2022 Dec 22]. Available from: https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-20-12
11. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med. 2018;169(7):467–73. https://doi.org/10.7326/M18-0850
12. Jerng JS, Huang SF, Yu HY, Chan YC, Liang HJ, Liang HW, et al. Comparison of complaints to the intensive care units and those to the general wards: an analysis using the Healthcare Complaint Analysis Tool in an academic medical center in Taiwan. Crit Care. 2018;22(1):335. https://doi.org/10.1186/s13054-018-2271-y
13. Collins SA, Couture B, Smith AD, Gershanik E, Lilley E, Chang F, et al. Mixed-Methods evaluation of real-time safety reporting by hospitalized patients and their care partners: the MySafeCare Application. J Patient Saf. 2020;16(2):e75-e81. https://doi.org/10.1097/PTS.0000000000000493
14. Schenk EC, Bryant RA, Van Son CR, Odom-Maryon T. Perspectives on patient and family engagement with reduction in harm: the forgotten voice. J Nurs Care Qual. 2019;34(1):73-9. https://doi.org/10.1097/NCQ.0000000000000333
15. Pérez E, Dzubay DP. A scheduling-based methodology for improving patient perceptions of quality of care in intensive care units. Health Care Manag Sci. 2021;24(1):203-15. https://doi.org/10.1007/s10729-021-09544-6
16. Kelepouri M, Siskou O, Galanis P, Konstantakopoulou O, Kalokairinou A, Mantas J et al. Measuring Patient Experiences from Intensive Care Units to Improve Health IT Systems and Nursing Care. Stud Health Technol Inform. 2019;262:166-7. https://doi.org/10.3233/SHTI190043
17. Bell SK, Roche SD, Mueller A, Dente E, O'Reilly K, Lee BS et al. Speaking up about care concerns in the ICU: patient and family experiences, attitudes and perceived barriers. BMJ Qual Saf. 2018;27(11):928-36. https://doi.org/10.1136/bmjqs-2017-007525
18. Ottosen MJ, Engebretson J, Etchegaray J, Arnold C, Thomas EJ. An ethnography of parents' perceptions of patient safety in the neonatal intensive care unit. Adv Neonatal Care. 2019;19(6):500-8. https://doi.org/10.1097/ANC.0000000000000657
19. Real K, Bell S, Williams MV, Latham B, Talari P, Li J. Patient perceptions and real-time observations of bedside rounding team communication: the Interprofessional Teamwork Innovation Model (ITIM). Jt Comm J Qual Patient Saf. 2020;46(7):400-9. https://doi.org/10.1016/j.jcjq.2020.04.005
20. Rainey H, Ehrich K, Mackintosh N, Sandall J. The role of patients and their relatives in 'speaking up' about their own safety: a qualitative study of acute illness. Health Expect. 2015;18(3):392-405. https://doi.org/10.1111/hex.12044
21. Thomas D, Newcomb P, Fusco P. Perception of caring among patients and nurses. J Patient Exp. 2019;6(3):194-200. https://doi.org/10.1177/2374373518795713
22. New L, Goodridge D, Kappel J, Groot G, Dobson R. "I just have to take it" – patient safety in acute care: perspectives and experiences of patients with chronic kidney disease. BMC Health Serv Res. 2019;19(1):199. https://doi.org/10.1186/s12913-019-4014-4
23. Wassenaar A, Schouten J, Schoonhoven L. Factors promoting intensive care patients' perception of feeling safe: a systematic review. Int J Nurs Stud. 2014;51(2):261-73. https://doi.org/10.1016/j.ijnurstu.2013.07.003

24. Churruca K, Ellis LA, Pomare C, Hogden A, Bierbaum M, Long JC, et al. Dimensions of safety culture: a systematic review of quantitative, qualitative and mixed methods for assessing safety culture in hospitals. BMJ Open. 2021;11(7):e043982. https://doi.org/10.1136/bmjopen-2020-043982
25. Currey J, McIntyre T, Taylor C, Allen J, Jones D. Critical care nurses' perceptions of essential elements for an intensive care liaison or critical care outreach nurse curriculum. Aust Crit Care. 2022;35(4):438-44. https://doi.org/10.1016/j.aucc.2021.05.014
26. McEachan RR, Lawton RJ, O'Hara JK, Armitage G, Giles S, Parveen S, Watt IS, Wright J; Yorkshire Quality and Safety Research Group. Developing a reliable and valid patient measure of safety in hospitals (PMOS): a validation study. BMJ Qual Saf. 2014;23(7):565-73. https://doi.org/10.1136/bmjqs-2013-002312

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