Review

## Effective communication in nursing shift handover: scoping review

Comunicação eficaz na passagem de plantão da enfermagem: revisão de escopo Comunicación eficaz en el traspaso de turnos de enfermería: revisión de alcance

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#### Abstract

Objective: To map available scientific evidence regarding effective communication during the shift handover in nursing. Methods: Scoping review based on the research question "What scientific evidence is available about effective communication in the safe shift handover in nursing?" The selection of studies took place in November 2023, with searches in the MEDLINE, Embase, Web of Science and LILACS databases, Google Scholar screening and manual search in the references of the documents that were part of the sample, with time lapse from 2004, without language restriction. The evaluation was conducted using the data reduction method. Results: The study identified several barriers in communication during the shift handover of the nursing team, including diversification in documentation and lack of privacy. Errors such as omission of information and lack of time were highlighted. Effective strategies involve early preparation, faceto-face communication, an enabling environment, and the inclusion of the patients in the process. Conclusion: The available scientific evidence on effective communication during safe shift handover in nursing was mapped. The study revealed challenges in nursing communication during the shift handover, emphasizing the need for standardization, early preparation and patients' involvement for better continuity in care.

**Descriptors:** Nursing Team; Communication; Patient Safety; Transfer of Patient Responsibility.

#### Whats is already known on this?

Effective communication during the safe transition of shift in nursing is essential to ensure continuity of care, which positively results in the promotion of patient safety.

#### What this study adds?

The study contributes to science by highlighting barriers, errors, factors that predispose failures, strategies, practices and tools used about effective communication in the safe shift handover in nursing.



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#### Resumo

Objetivo: Mapear evidências científicas dispostas quanto à comunicação eficaz durante a passagem de plantão em enfermagem. Métodos: Revisão de escopo, a partir da questão de pesquisa "Quais evidências científicas disponíveis acerca da comunicação eficaz na passagem de plantão segura em enfermagem?". A seleção dos estudos ocorreu em novembro de 2023, com buscas nas bases MEDLINE, Embase, Web of Science e LILACS, rastreio no Google Scholar e pesquisa manual nas referências dos documentos que integraram a amostra. Com lapso temporal a contar de 2004, sem restrição de idioma. A avaliação foi conduzida por meio do método de redução de dados. Resultados: O estudo identificou diversas barreiras na comunicação durante a passagem de plantão da equipe de enfermagem, onde inclui-se diversificação na documentação e falta de privacidade. Erros como omissão de informações e falta de tempo foram destacados. Estratégias eficazes envolvem preparação antecipada, comunicação presencial, ambiente propício e a inclusão do paciente no processo. Conclusão: As evidências científicas disponíveis, acerca da comunicação eficaz na passagem de plantão segura em enfermagem, foram mapeadas. O estudo revelou desafios na comunicação de enfermagem durante a passagem de plantão, logo, ressalta-se a necessidade de padronização, preparação antecipada e envolvimento do paciente para melhor continuidade no cuidado.

**Descritores:** Equipe de Enfermagem; Comunicação; Segurança do Paciente; Transferência da Responsabilidade pelo Paciente.

#### Resumén

Objetivo: Mapear la evidencia científica disponible sobre la comunicación efectiva durante el traspaso de turno de enfermería. Métodos: Revisión de alcance basada en la pregunta de investigación "¿Qué evidencia científica hay disponible sobre la comunicación efectiva en el traspaso de turno seguro en enfermería?". La selección de estudios se realizó en noviembre de 2023, con búsquedas en las bases de datos MEDLINE, Embase, Web of Science y LILACS, cribado en Google Scholar y búsqueda manual en las referencias de los documentos que integraron la muestra, con una vigencia temporal a partir del año 2004, sin restricciones de idioma. La evaluación se realizó mediante el método de reducción de datos. Resultados: El estudio identificó varias barreras en la comunicación durante el traspaso de turno del equipo de enfermería, entre ellas la diversificación de la documentación y la falta de privacidad. Se destacaron errores como omisión de información y falta de tiempo. Las estrategias efectivas implican preparación previa, comunicación presencial, un entorno de apoyo y la inclusión del paciente en el proceso. Conclusión: Se mapeó la evidencia científica disponible sobre la comunicación efectiva en el traspaso de turno seguro en enfermería. El estudio reveló desafíos en la comunicación de enfermería durante el traspaso de turno, destacando la necesidad de estandarización, preparación anticipada y participación del paciente para una mejor continuidad de la atención.

**Descriptores**: Equipo de Enfermería; Comunicación; Seguridad del paciente; Transferencia de Responsabilidad al Paciente.

## **INTRODUCTION**

Ineffectiveness in communication emerges as the primary cause of adverse health events, and constitutes more than 70% of these incidents.<sup>(1)</sup> This scenario is alarming, considering that such events represent injuries associated with medical care, and transcends natural complications of the patients' disease.<sup>(2)</sup> Errors in medication administration, misidentification of the patients and inadequate prescribing illustrate critical problems.<sup>(1)</sup> The National Health Surveillance Agency (ANVISA), in its annual report (October 2021 to September 2022), reveals an estimated 230,000 adverse events during hospitalizations in Brazil, of which 2,251 are classified as "never events" - serious adversities that should not occur, which can result in serious damage or death.<sup>(3)</sup> The vital importance of effective communication in preventing these episodes is undeniable.

The application of communication strategies to inform and influence individual and community decisions has a direct impact on the promotion of quality of life, safety and, consequently, on the health of the patients. (4) Effective communication is directly linked to patient safety as a quality tool, and has the potential to reduce ordinary failures of task automation. Communication in health care requires a careful transfer of information and responsibilities between professionals. Therefore, it is important that this exchange of information is carried out in a clear and effective way to ensure safe service. (5)

The nursing team plays an essential role in the integrity of the patients during care and faces challenges due to the complex and error-prone nature of its activities. The shift handover, a crucial moment to ensure the continuity of assistance, stands out as an area of special attention. (6-7) Measures aimed at improving communication during the nursing shift have significant repercussions on reductions in falls (between 9.3% to 80%), incidence of pressure injuries (between 45% to 75%), and the occurrence of errors in the preparation and administration of medications (between 11.1% to more than 50%). (8)

Faced with these challenges, the search for scientific evidence to support action strategies becomes imperative. Identifying gaps in the literature enables the nursing team to develop tools and strategies that promote effective communication during the shift handover. Therefore, this study aimed to map the available scientific evidence on effective communication in safe shift handover in nursing, aiming to contribute to the prevention of errors and the minimization of adverse events.

#### **METHODS**

This is a scoping review registered on the Open Science Framework (OSF) platform under DOI: 10.17605/OSF.IO/SHWG4. The process was conducted in accordance with the methodology established by the Joanna Briggs Institute (JBI). The phases followed were outlined in the protocol, including the definition of the objective and the research question, establishment of the inclusion criteria, planning of the search strategy, execution of the search for studies, selection, data extraction, analysis, presentation of the results and summarization of the mapped evidence in relation to the objective of the review. (9-10)

The research question was formulated as follows: "What is the available scientific evidence on safe shift handover in nursing?" This question integrates the elements of the PCC mnemonic (Population, Concept and Context). The population identified for analysis comprises the "nursing staff", the concept of interest is "communication", and the context investigated is "patient safety".

The inclusion criteria were: studies that contemplated the patient safety strategies, theories and tools used by the nursing team in the shift handover in secondary care health services to achieve effective communication, without language restrictions, published from the promulgation of the Patient Safety Program of the World Health Organization (WHO) in 2004<sup>(11)</sup> until the day of the search in the bases (November 1, 2023). The delimitation of studies that referred to secondary care services was based on differences in flow and organization compared to other levels of care. Duplicate studies and those that did not include information relevant to the population, concept and context of interest were excluded.

The search strategy was meticulously planned in three distinct phases. In the first stage, we conducted a survey in four databases: Medical Literature Analysis and Retrieval System Online (MEDLINE via PubMed), Web of Science via main collection (Clarivate Analytics), Embase (Elsevier) and Latin American and Caribbean Health Sciences Literature (LILACS) via Virtual Health Library (VHL). In the second stage, we conducted a comprehensive search of gray literature, consulted Google Scholar®, legislation and guidance from class councils, as well as instructions and protocols from the Brazilian Institute for Patient Safety (IBSP).<sup>(1)</sup> The third stage consisted of a manual search in the reference list of the studies included in the previous phases, aiming to identify additional studies that were not initially found in the databases.

The search of the studies in the databases was carried out through the journal portal of the Coordination for the Improvement of Higher Education Personnel (CAPES), for this we used the remote access of the Federated Academic Community (CAFe) with registration at the Federal Institute of Pernambuco. For the search of the studies, controlled descriptors of the Medical Subject Headings (MeSH), Embase Subject Headings (EMTREE) and Descriptors in Health Sciences (DeCS) were chosen, aiming to cover the elements of the PCC mnemonic: nursing team, communication and patient safety. In addition, uncontrolled descriptors were included, derived from the synonyms of the controlled descriptors of the respective databases. To ensure a high sensitivity search, the descriptors of each set of the PCC strategy were combined with each other using the Boolean OR connector, an additive combination was generated. Subsequently, for a more restrictive combination, the sets of the PCC strategy were crossed with each other using the AND connector. The search strategy was adapted according to the peculiarities of each base, to maintain a sensitive and comprehensive approach.

Box 1 shows the search expressions in the databases.

Box 1. Search strategy in databases. Pesqueira, PE, Brazil, 2023.

Base	Final search expression			
MEDLINE	(("Nursing, Team" [Mesh] OR (Nursing, Team) OR (Team Nursing)) AND ("Communication" [Mesh] OR (Communication) OR (Personal Communication) OR (Communication, Personal) OR (Communication Programs) OR (Communication Program) OR (Program, Communication) OR (Programs, Communication) OR (Social Communication) OR (Communication, Social) OR (Communications, Social) OR (Social Communications) OR (Misinformation) OR (Misinformations) OR (Communications Personnel) OR (Personnel, Communications) OR (Miscommunication) OR (Miscommunications))) AND ("Patient Safety" [Mesh] OR (Patient Safety) OR (Patient Safeties) OR (Safeties, Patient) OR (Safety, Patient))			
Embase	('team nursing'/exp OR (team AND nursing) OR 'team nursing') AND ('interpersonal communication'/exp OR (interpersonal AND communication) OR communication OR (communication AND interpersonal) OR disclosure OR ('teach back' AND communication) OR (truth AND disclosure)) AND ('patient safety'/exp OR (patient AND safety))			

Web Of Science	(Nursing, Team) OR (Team Nursing) (All fields) and (Communication) OR (Personal Communication) OR (Communication, Personal) OR (Communication Programs) OR (Communication Program) OR (Program, Communication) OR (Programs, Communication) OR (Social Communication) OR (Communication, Social) OR (Communications, Social) OR (Social Communications) OR (Misinformation) OR (misinformation) OR (Communications Personnel) OR (Personnel, Communications) OR (Miscommunication) OR (miscommunication) (All fields) and (Patient Safety) OR (Patient sabethes) OR (sabethes, Patient) OR (Safety, Patient) (All fields)  (MH: "Nursing, Team" OR (Equipe de Enfermagem) OR (Nursing, Team) OR (Grupo de Enfermería) OR (Équipe infirmiers) OR (Team Nursing) OR N04.590.715.571*) AND (MH: "Communication" OR (Comunicação) OR (Communication) OR (Comunicação) OR (Comunicação Social) OR (Canal Interpessoal) OR (Comunicação Educacional) OR (Comunicação Educacional) OR (Comunicação OR (Desinformação) OR (Educação Comunicacional) OR (Educação Comunicação OR (Pessoal de Comunicações) OR (Programas de Falsa) OR (Pessoal de Comunicação) OR (Programas de
LILACS	OR (Communications, Social) OR (Educational Communication) OR (Misinformation) OR (Personal Communication) OR (Personal Communication) OR (Programs, Communication) OR (Programs, Communication) OR (Social Communication) (Social Communications) OR (Comunicación Educacional) OR (Comunicación Educativa) OR (Comunicación Personal) OR (Comunicación Social) OR (Desinformación) OR (Educación Comunicativa) OR (Información Falsa) OR (Personal de Comunicaciones) OR (Personal de Comunicación) OR (Programas de Comunicación) OR (Communication personnelle) OR (Communication sociale) OR (Fausse information) OR (Information erronée) OR (Information fausse) OR (Personnel de communication) OR (Programmes de communication) OR F01.145.209* OR L01.143* OR SP8.946.819.802*) AND (MH: "Patient Safety" OR (Segurança do Paciente) OR (Patient Safety) OR (Seguridad del Paciente) OR (Patient Safeties) OR (Safeties, Patient) OR (Safety, Patient) OR (Sécurité des patientes) OR (Sécurité du patient) OR N06.850.135.060.075.399*)

**Source:** authors, 2023.

To improve the storage, organization and identification of duplicate studies, as well as facilitate the selection of articles, the identified references were integrated into the Rayyan® application. (12) Study selection was conducted by two independent reviewers. The results obtained were submitted to comparison and there was a divergence between the opinions of the reviewers in 18.2% of the decisions. In view of this, to ensure the impartiality of the process, a third reviewer was appointed who evaluated the articles selected and rejected by the previous reviewers and, therefore, the final decision was made.

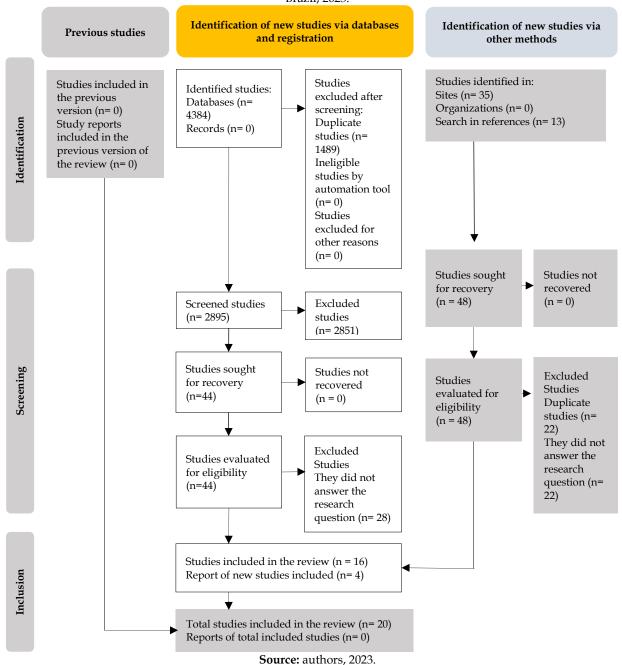
For the extraction and mapping of data from the selected studies, an instrument adapted from a form recommended by the JBI was used to ensure the standardization and effectiveness of the analysis process.<sup>(13)</sup> The following information was extracted: title of the study; journal; main evidence about effective communication during the shift handover in nursing; type of study; year of publication; and country of origin of the publication.

In order to summarize the information obtained and identify possible gaps in the literature, the data reduction method was adopted, which consisted of performing a critical reading and classifying the results into conceptual categories. This process allowed a more accurate and comprehensive analysis of the data collected, allowing the identification of trends and gaps that can contribute to the development of new research and improvement of knowledge in the area.<sup>(14)</sup> The mapping of the results was carried out in a descriptive manner, with the presentation of simple counts and summarization of the data in boxes. This approach proved to be useful for the organization and visualization of data, allowing a clearer and more objective analysis of the results obtained. In addition, the use of boxes contributed to the standardization and systematization of information, which facilitated readers' understanding and interpretation of the data. The reporting of the results of this review followed the checklist of the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR).<sup>(15)</sup>

#### **RESULTS**

The search strategies resulted in the identification of 4384 studies, distributed among 1752 in Embase, 1279 in Web of Science, 1150 in MEDLINE and 203 in LILACS. After excluding duplicate studies and applying the eligibility criteria, only 16 studies were selected. In addition, through consultation with Google Scholar®, three more studies were identified. During the manual search in the reference lists of the included studies, a new study that addressed the research question was identified. Thus, 20 studies comprised the final sample. The flow of the study selection process is illustrated in figure 1.

**Figure 1.** Flowchart of the study selection process, based on the PRISMA-ScR recommendations (15). Pesqueira, PE, Brazil, 2023.



The results show that in relation to the year in which the publications occurred, studies published between 2006 and 2022 were found and higher productions were observed in 2015 and 2011.

Most of the studies (n=8/40%) were published in the USA. The predominant designs were observational and experimental, conducted in eight studies (40%) each.

The characteristics of the included studies are detailed in Box 2.

**Box 2.** Studies included in the scoping review, second title, journal, evidence on effective communication in nursing shift handover, type of study, year of publication and country of origin. Pesqueira, PE, Brazil, 2023.

shift handover, type of study, year of publication and country of origin. Pesqueira, PE, Brazil, 2023.						
Ctorder Ctde	Country, year of	Evidence on effective	Recommendations for			
Study title	publication and Study Design	communication in nursing shift handover	effective communication in nursing shift handover			
Handoffs in care -can we make them safer?.(16)	Canada, 2006 - Reflective	Accuracy of information communicated during transfers reduces errors and patient harm.	Timely communication of complete and accurate information.			
Incorporating bedside reporting into change-of-shift report. <sup>(17)</sup>	USA, 2010 - Experimental	The practice of changing shifts at the bedside reduces communication errors during the nursing shift handover.	Shift handover to the patient's bedside.			
Handoff communication: using failure modes and effects analysis to improve the transition in care process. <sup>(18)</sup>	USA, 2011 - Experimental	Standardization of a shift handover tool in SBAR format and physical relocation of shift handover to bedside reduces communication bottlenecks during shift handover.	Use of the SBAR tool and the shift handover at the patient's bedside.			
Implementing handoff communication. <sup>(19)</sup>	USA, 2011 - Experimental	The implementation of the SBAR tool reduces communication errors and improves patient safety.	Using the SBAR tool.			
The importance of the verbal shift handover report: a multi-site case study. <sup>(20)</sup>	USA, 2011 - Observational	The verbal shift handover is focused, showing the ability of the health professionals to know what information is needed and where further explanations are needed. In addition to supporting teaching and team cohesion, the shift handover can provide an opportunity for reflection on the previous shift and discussion with patients and their families.	Verbal shift handover focused on the needs of each patient.			
Context, culture and (non-verbal) communication affect handover quality.(21)	USA, 2012 - Observational	The use of nonverbal behaviors, including gestures, posture, body orientation, facial expression, eye contact, and physical distance, along with education and practice in delivering information during face-to-face transfers, can improve the quality and reliability of communication.  Standardize the format, content,	Use of non-verbal communication and face-to-face handover.			
Challenges to nurses' efforts of retrieving, documenting, and communicating patient care information. (22)	USA, 2012 - Observational	and words used to document essential information, such as the care plan, and make it easily accessible to all team members. And conduct usability testing to ensure that electronic health record tools help interdisciplinary team members maintain a shared understanding of the patient's plan.	Standardization of communication and testing of its usability among the team.			
Nurses discuss bedside handover and using written handover sheets. <sup>(23)</sup>	Australia, 2013 - Observational	The shift handover at the bedside reduces communication errors.	Shift handover to the patient's bedside.			
Communication during the transition of nursing teams: a case study on the	Portugal, 2013 - Observational	There are pressures in terms of time and the transmission of irrelevant information.	Use of face-to-face, verbal and written communication in			

characteristics of communication in nursing shift handovers in a surgical ward of a Portuguese hospital. <sup>(24)</sup>			addition to the existence of a favorable environment and use of information confirmation techniques.
Bedside reporting protocols for improving patient care. <sup>(25)</sup>	USA, 2015 - Experimental	The practice of changing shifts at the bedside reduces potential communication errors in medical- surgical and rehabilitation units.	Shift handover to the patient's bedside.
Nurse knowledge exchange plus: human-centered implementation for spread and sustainability. (26)	USA, 2015 - Experimental	The strategy of performing bedside nursing reporting improves effective communication in the shift change of the team.	Shift handover to the patient's bedside.
Nursing bedside clinical handover – an integrated review of issues and tools. <sup>(27)</sup>	Australia, 2015 - Literature review	Clinical nursing transfer at the bedside is poorly implemented.	Improvements in shift handover strategies at the patient's bedside. The professional who is
Between standardisation and resilience: nurses' emergent risk management strategies during handovers. <sup>(28)</sup>	Israel, 2015 - Observational	The importance of the time dedicated to changing shifts and the communication initiative of the professional who is taking the shift leading the transfer.	taking the shift should: to read the written report, receive an impression from the patient, and ask the outgoing professional for additional information.
Nursing handovers: An integrative review of the different models and processes available. <sup>(29)</sup>	Australia, 2016 - Literature review	There are different models and processes of shift handover in nursing, but there is no evidence that any model has superior effectiveness.	More research is needed to determine if any transfer model is superior in effectiveness.
Interprofessional communication supporting clinical handover in emergency departments: an observation study. (30)	Australia, 2017 - Observational	Structural components of shift handover processes can help design sustainable change.	The professional receiving the shift must request: Background; Behaviors and interactions; Content; and Delegation of continuing care.
Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review. <sup>(31)</sup>	Switzerland, 2018 - Systematic Review	The SBAR tool can be an adaptive tool suitable for many healthcare settings, in particular when clear and effective interpersonal communication is required.	Using the SBAR tool.
Shift handover as a management tool for patient safety. (32)	Brazil, 2018 - Description	Location, interruptions and over- communication as critical nodes that interfere with effective communication during handover shift.	Using the SBAR tool.
Positive impacts of electronic hand-off systems designs on nurses' communication effectiveness. (33)	China, 2019 - Experimental	The ISBAR transfer system provides easy-to-use interface and accurate patient-related information in real time. Cooperates with team and leadership factors to support effective communication.	Use of the ISBAR tool.
Nursing handover in surgical clinics: the interface between communication and patient safety.(34)	Brazil, 2020 - Observational	Noises, omission of information, absence of standardized instrument and delay of the team interfere with communication during the shift handover.	Standardization of the shift handover with the use of an instrument for this purpose.
Improving patient-centered care through a tailored intervention addressing clinical nursing handover	Australia, 2022 - Experimental	The use of CARE and ISBAR protocols for patient-centered transfers improves	Use of CARE and ISBAR tools.

communication in its organizational and cultural context.(35)

communication during shift handover at the bedside.

Source: authors, 2023.

In general, the studies analyzed reflected issues that permeated communication in different nuances during the shift handover. In this sense, when considering the different elements on the subject, scientific evidence was grouped into three categories: 1) barriers to effective communication during the shift handover of the nursing team<sup>(16,27-29,32,34)</sup>; 2) errors and factors that predispose failures in effective communication in the shift handover of the nursing team<sup>(24,28,32,34)</sup>; 3) strategies, practices and tools for effective communication used in the shift handover of the nursing team<sup>(16-23, 25-35)</sup>.

The summary of the scientific evidence is presented in Box 3.

Box 3. Summary of evidence on effective communication in nursing shift handover. Pesqueira, PE, Brazil, 2023.

#### Barriers to effective communication during nursing staff handover

- Diversification in team documentation and communication and/or absence of standardized instrument.
- Lack of privacy, sound noises, distractions and interruptions.
- Fatigue and work overload due to overcrowding of inpatient units.
- Hierarchy or distant power relations.

#### Errors and factors that predispose failures in effective communication in the shift handover of the nursing team

- Omission of important information and transmission of irrelevant information.
- Little time spent for the shift handover.
- Early departures of the professional who is leaving the service and/or delays at the beginning of the shift

## Strategies, practices and tools for effective communication used in the handover of nursing staff

- Early preparation for transfers.
- Face-to-face, verbal and written communication optimized by non-verbal behaviors and confirmation of understanding.
- Enabling environment and limitation of intermediaries.
- Shift handover at the bedside mediated by patient-focused communication.
- Standardization and simplification of language.
- Adoption of individual care control framework.

**Source:** authors, 2023.

### **DISCUSSION**

A comprehensive analysis of the effectiveness of communication in the multidisciplinary team to improve patients' safety in the hospital environment<sup>(36)</sup> concluded that effective communication between the health team, in addition to positively impacting the safety and quality of care provided to the patients, has a significant influence on the satisfaction and well-being of the professionals involved, since communication failures can generate stress and potentially contribute to the occurrence of errors during care.

An observational study identified a total of 261 barriers and 285 facilitators for communication of the care team of an Australian hospital. Communication failures are identified as the main reason for the interruption in care and inadequate treatment, which raises concerns about patient safety. (37) For this reason, effective communication in the transfer of information needs to be complete, reliable, clear and objective, to contribute positively to the quality of the service offered. (38)

In order to achieve this effective communication between health teams, it is necessary to consider its completeness: answer all questions up to a level of satisfaction of the elements that are involved in the exchange of information; conciseness: extensive expressions should be reduced or omitted. Only relevant statements are included and unnecessary repetition should be avoided; concreteness: the words used should not have double meaning, be specific and weighted, and offer factual data and accurate figures; clarity: short and familiar words should be used to construct understandable and effective messages; and accuracy: the level of language should be appropriate to the occasion. The use of ambiguities, as well as out-of-context expressions, is avoided. It is crucial that professionals have access to information that is appropriate and relevant to their roles, in an efficient and appropriate manner. The use of jargon, acronyms and abbreviations in communication can affect the quality of information exchange and, consequently, the efficiency of the communicative process. (36) In order to give greater clarity to the text, the continuity of this discussion will be stratified into the three categories of evidence outlined by the study.

#### Barriers to effective communication during nursing staff handover

The difference in the form of communication and the lack of a standardized method can result in misunderstandings that can hinder the continuity of patients' care. During the shift transfer of the nursing staff, it is important to avoid the use of unknown abbreviations and technical terms, to ensure the understanding and clarity of the information transmitted.<sup>(39)</sup>

Distractions, interruptions and excessive noise are problems associated with the lack of privacy caused by the overload in the treatment units. For effective communication during nursing shift handover, it is important to limit these disruptions. Adequate environments should be used to reduce distractions and preserve the exchange of information, facilitating concentration on the content of the shift transmission.<sup>(39)</sup> It is also important to highlight the need for appropriate behavior, such as reduction of secondary conversations, inattention and lack of interest.<sup>(37)</sup>

Exhaustion and excessive workload caused by overcrowding in inpatient units pose significant challenges for healthcare professionals in maintaining focused attention and providing accurate and complete information during shift handover. These conditions can lead to disruptions in communication, difficulties in memorizing relevant information, decreased ability to recognize subtle changes in the patient's condition, and lapses in attention or inability to maintain focus.<sup>(16)</sup>

Inadequate interpersonal dynamics can result in distancing in the structuring of hierarchical relationships and compromise the sense of collaboration and involvement. Consequently, it is essential to establish an environment in which the professionals involved can feel safe to express their opinions and actively participate in the transfer of care. The standardization of hierarchical relationships in the health sector promotes a sense of comfort and familiarity among the team and favors a culture in which it is acceptable to express concerns and clarify doubts during the transfer. In this way, the efficiency of the process is improved and, in turn, the quality of care provided to the patients is favored.<sup>(16, 28)</sup>

# Errors and factors that predispose failures in effective communication in the shift handover of the nursing team

The omission or inadequate inclusion of information is a significant factor in the occurrence of errors and endangers patients' safety. A study carried out in a cardiology hospital in the city of Rio de Janeiro observed that during shift handovers, critical information was unknown to team members or not recorded in medical records or reports, due to the lack of a standardized model. Cases of examinations, procedures and surgeries that were not performed on the scheduled day and time were also identified, due to lack of adequate preparation or inadequacy of the information transmitted.<sup>(39)</sup>

It is essential to emphasize that the transfer of shifts requires adequate time, which is essential for improving professional efficiency and ensuring patients' safety. Therefore, health facilities and nursing staff need to find a balance between very rapid transfers, which present the risk of relevant information being omitted, which can result in errors in the continuity of care provided, and very long transfers, which can hinder the time available for the provision of quality care to patients. (38-39)

Premature departures and delays are also problems that create gaps in care delivery and affect patient safety, since it leads to repetition of information for professionals who were not present at the transfer, which can result in the addition of new participants in communication, which can distort, hide or forget relevant information. (34, 38)

## Strategies, practices and tools for effective communication used in the shift handover of the nursing team

The professional must ensure to transfer the relevant information to the successor on shift professional before leaving his shift. To this end, it is recommended that he allows an adequate period before the transfer to systematize and compile the necessary information for each patient. The use of efficient communication tools such as standardization using a checklist, the SBAR mnemonic and the shift handover at the bedside can be efficient strategies to achieve this purpose. (16, 19, 40) Another important aspect is the designation of an environment that is silent and free from sources of distraction for carrying out the transfer. (16, 18, 20-22, 24, 28-34)

Nonverbal communication includes tone of voice, body language, and attitudes, and is a crucial component of effective communication during shift handovers. The integration of these aspects of nonverbal communication with verbal communication optimizes the quality of communication during the nursing shift handover. (36)

In this context, it is worth highlighting the use of the goals framework as a complementary strategy during the transmission of information among nursing professionals during the shift handover. The goal framework can be used next to the patient's bed and at the nursing station, aiming to provide continuous focus on patient care. In addition, it is crucial to request confirmation of the recipient's understanding of the information and to avoid interruptions during information transfers. (17, 23, 25-27)

In addition to practical techniques and strategies, there are tools that can help promote the efficiency of communication among members of the health team. An example of this is the use of the acronym SBAR (Situation, Background 'brief history', Assessment, Recommendation), which is a structure designed to facilitate communication about the patient's condition. Using SBAR allows you to set clear expectations about what will be communicated and what is crucial to promoting patient safety. (41, 42)

The SBAR methodology was developed by the U.S. Navy as a standardized communication technique in military environments. In the health area, the implementation of SBAR had as its initial objective the establishment of standardized communication between nurses and physicians during telephone calls. Subsequently, the use of this methodology was expanded to include face-to-face communication between health professionals from different areas. (42) As it originates from a mnemonic, SBAR and its variations, such as ISBAR, SBAR-R, ISBARR and ISOBAR, is easy to remember and useful for structuring critical conversations that require immediate action from a health professional. Some of the factors that contribute to the successful use of SBAR include its ease of memorization by professionals and its ability to adapt to different contexts. (31)

It is important to highlight that the use of the SBAR methodology has the potential to reduce the time required to carry out shift transfers by up to 15% in relation to paper records and by about 28% when compared to records made in electronic systems. (41) Additionally, the use of the SBAR methodology can help create a shared mental model among health professionals, which contributes to their performance as a cohesive team. (19)

Another protocol that can be used is CARE (Connect, Ask, Respond, Empathise), it provides nurses with strategies to improve the quality of interaction with patients to support inclusion and their safety during bedside transfers. (43) It is also important to mention the STICC Protocol (Situation, Task, Intention, Concern, Calibrate), a structured communication tool that aims to provide briefings and ensure that relevant information is understood effectively. The briefing is a tool used in the structuring of projects; (44) it has the potential to promote the maintenance of the focus on the objective and minimize communication failures.

Based on the findings of this study, we suggest the elaboration and development of educational materials, as instruments of continuing education that favor positive results in the construction of knowledge. Well-designed didactic tools are important for the organization and efficiency of work processes in the health sector, allowing quick and effective access to the necessary information, which contributes to the success of the care provided. (45-47) In addition, they strengthen the unique characteristics of the learning process and expand the possibilities of results of educational interventions. (48)

The study contributes to the science of Nursing or related areas by discussing the evidence found on the transfer of care in the nursing team's care practice and reveals the variety of conditions that can improve or hinder effective communication in the transfer of patients' information during the shift handover and, thus, bring repercussions for patients' safety.

The limitations of this study focus on review time. The study may not fully capture the latest trends or innovations in nursing shift handover communication practices. New tools, strategies or policies may have been implemented since the end of the study search.

Effective communication in the shift handover of the nursing team has a positive impact on patient safety, quality of care and team satisfaction. With few publications and an irregular amount over the years, the data found indicate the need to carry out more studies on the subject, thus contributing to the state of the art and evidence-based practice in nursing. Despite the contribution and relevance of observational studies to add evidence to clinical practice, it is necessary to invest in studies with a higher level of evidence, which scientifically support nursing conducts.

#### CONCLUSION

The available scientific evidence on the safe shift handover in nursing was identified, which allowed the identification of the main barriers, errors and factors that predispose failures during the shift

handover of the nursing team, in addition to the main strategies, practices and tools used to promote effective communication at this time of care.

The study revealed communication as a determining factor in both the promotion and generation of obstacles in the transmission of information during the shift handover. Therefore, it is justifiable to implement contextualized institutional measures to strengthen the advantages of communication and overcome its limitations.

As gaps in the literature, the lack of studies on the effectiveness of different communication methods, the lack of consensus on the essential information that should be shared during the shift handover, and the lack of standardization of communication processes between nursing teams in different health institutions were identified. In addition, there is little research on how contextual variables such as workload and interpersonal dynamics affect the quality of shift handover communication. Future studies may choose to compare different methods of communication to determine which is the most effective in different contexts. In addition, studies may be conducted in different health care settings or in different countries to assess how cultural differences affect shift handover communication.

## **CONTRIBUTIONS**

Contributed to the conception or design of the study/research: Silva PCC, Silva TJP, Silva CRDT, Alcoforado JMSG, Alexandre ACS, Sá GGM, Carvalho KM. Contributed to data collection: Silva PCC, Silva TJP, Silva CRDT, Alcoforado JMSG, Alexandre ACS, Sá GGM, Carvalho KM. Contributed to the analysis and/or interpretation of data: Silva PCC, Silva TJP, Silva CRDT, Alcoforado JMSG, Alexandre ACS, Sá GGM, Carvalho KM. Contributed to article writing or critical review: Silva PCC, Silva TJP, Silva CRDT, Alcoforado JMSG, Alexandre ACS, Sá GGM, Carvalho KM. Final approval of the version to be published: Silva PCC, Silva TJP, Silva CRDT, Alcoforado JMSG, Alexandre ACS, Sá GGM, Carvalho KM.

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