Global Academic Nursing Journal

REVIEW ARTICLE

Nurses' interventions in the safe care of critical patients in the emergency room: an integrative review

Intervenciones de enfermeros en el cuidado seguro de pacientes críticos en urgencias: una revisión integradora

Intervenções do enfermeiro no atendimento seguro ao paciente crítico na emergência: uma revisão integrativa

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How to cite this article:
Bitencourt GR, Oliveira LC, Souza RF, Assis AP, Costa LHO, Barbosa GS, Pereira IB. Nurses' interventions in the safe care of critical patients in the emergency room: an integrative review. Glob Acad Nurs. 2022;3(4):e309. https://dx.doi.org/10.5935/2675-5602.20200309

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Submission: 05-02-2022
Approval: 06-19-2022

Abstract

The aim was to identify in the literature the interventions of nurses related to safe care for critical patients in the Emergency Unit. Integrative review study based on scientific data from February to April 2021, with descriptive data analysis. In 25 articles included in the final sample, interventions related to three categories were identified: 1) patient identification and safe practice in the safe administration of medications; 2) Effective communication with the pre-hospital care team (APH) and intra-hospital care; 3) nurse management and organizational performance of the team in the quality of care. However, no studies on safe surgery were found and the majority considered were of the descriptive type and did not analyze the effectiveness of interventions. Studies are needed that point to the effectiveness of interventions related to the care of critically ill patients in emergencies, as well as organizational proposals for structuring the nursing team in these services.

Descriptors: Patient Safety; Nursing Care; Emergency Service, Hospital; Emergency Nursing; Patient Care.

Resumén

El objetivo fue identificar en la literatura las intervenciones de los enfermeros relacionadas con el cuidado seguro del paciente crítico en la Unidad de Emergencia. Estudio de revisión integrativa basado en datos científicos de febrero a abril de 2021, con análisis descriptivo de datos. En 25 artículos incluidos en la muestra final, se identificaron intervenciones relacionadas con tres categorías: 1) identificación del paciente y práctica segura en la administración segura de medicamentos; 2) Comunicación efectiva con el equipo de atención prehospitalaria (APH) y atención intrahospitalaria; 3) gestión de enfermería y desempeño organizacional del equipo en la calidad del cuidado. Sin embargo, no se encontraron estudios sobre cirugía segura y la mayoría considerados fueron de tipo descriptivo y no analizaron la efectividad de las intervenciones. Son necesarios estudios que apunten a la efectividad de las intervenciones relacionadas con el cuidado del paciente crítico en urgencias, así como propuestas organizativas para la estructuración del equipo de enfermería en estos servicios.

Descriptores: Seguridad del Paciente; Atención de Enfermería; Servicio de Urgencia en Hospital; Enfermería de Urgencia; Atención al Paciente.

Resumo

Objetivou-se identificar na literatura as intervenções do enfermeiro relacionadas a assistência segura ao paciente crítico na Unidade de Emergência. Estudo de revisão integrativa em base de dados científicas nos meses de fevereiro a abril de 2021, com análise de dados descritiva. Em 25 artigos incluídos na amostra final, foram identificadas intervenções relacionadas a três categorias: 1) identificação do paciente e prática segura na administração segura de medicamentos; 2) Comunicação efetiva com a equipe de atendimento pré-hospitalar (APH) e intra-hospitalar; 3) gestão do enfermeiro e desempenho organizacional da equipe na qualidade do atendimento. Entretanto, não foram encontrados estudos sobre cirurgia segura e a maioria considerada era do tipo descritivo e não de análise da efetividade das intervenções. Faz-se necessários estudos que apontem à efetividade de intervenções relacionadas ao atendimento do paciente crítico em emergência, bem como propostas organizacionais de estruturação da equipe de enfermagem nesses serviços.

Descritores: Segurança do Paciente; Cuidados de Enfermagem; Serviço Hospitalar de Emergência; Enfermagem em Emergência; Assistência ao Paciente.

Introduction

Emergency services are intended for immediate care and aim to reduce the morbidity and mortality rates of patients who may be admitted to the unit for various reasons, including the imminent risk of death. To this end, it must have an adequate organizational structure, the necessary material resources and duly trained professionals[1].

In Brazil, among the main causes of care in emergency units, the following stand out: traffic accidents, violence and diseases of the circulatory system, in particular, ischemic heart diseases. These are of great affection in the population, generating many deaths among young people and adults. In the latest survey by the Secretariat of Health Surveillance, it was found that of the diseases related to emergency care, ischemic heart diseases were in first place (80.02%), followed by interpersonal violence (28.2%) and traffic accidents (0.4%)[2].

In this context, upon entering the hospital emergency, the patient will be evaluated and classified according to the table presented through the Manchester Risk Classification System[2]. According to this, the nurse prioritizes the care of the most critical patient, using clinical criteria. According to the Ministry of Health, Art. 2 of Ordinance No. 354 of 2011:

> "*A critical/severe patient is one who is at imminent risk of losing life or function of an organ/system of the human body, as well as one in a fragile clinical condition resulting from trauma or other conditions related to processes that require immediate clinical, surgical, obstetrics or mental health*"[3:1].

However, if the patient is considered to be clinically unstable or serious, the necessary assistance will be provided to stabilize him. Such assistance should seek to identify its severity and provide the most effective care. From this, in order to organize the systematization of emergency and urgent care provided, to establish priority care and in a synergistic way for these patients, the Ministry of Health implemented in the Unified Health System, the Network of Attention to Urgencies and Emergencies (RUE), whose main objective is to qualify care, carrying out comprehensive health promotion, in which the patient is assisted from primary care to hospital. However, even with this composition, it is still possible to perceive overcrowding in hospitals, mainly in emergency rooms, as well as the lack of supplies, inadequate physical structure, reduced teams and many patients in the same sector, excessive circulation in the place, lack of of interpersonal communication and the exhaustion of the team can contribute to possible errors in care, which can lead to a series of adverse events[1].

These System challenges can directly impact patient safety in emergency units, a topic that has been gaining prominence over the last decade. After a study carried out by the Institute of Medicine (IOM) entitled "To err is Human", it was discovered that errors related to health care caused many deaths in US hospitals. Consequently, other studies were carried out in several countries, including Brazil, where a high incidence of adverse events was found. These are defined by the World Health Organization as incidents that result in damage to the patient, thus explaining the need for attention to the quality of care, since 50% of the cases presented could be avoided[4].

Therefore, with the aim of preventing risks and reducing harm to patients, the World Health Organization has defined patient safety as a global health priority. To this end, some goals were internationally agreed with a view to reducing errors in health practices, namely: correct identification of the patient; clear and effective communication; safety in medication administration; greater safety in surgeries, reduced risk of infection and patient falls[5].

A study carried out in 2018 in France, 840 patients who were treated and analyzed in six emergency units and presented points of interest to patient safety. Of this amount, 8.6% suffered some type of adverse event from non-compliance with practices established in international targets. Even though it is a country with better structure in its hospitals, the rates remain high, which requires attention, since such adverse events, for the most part, are the responsibility of health professionals[6].

For the best development of patient safety strategies and their insertion in care, a professional who is constantly in contact with the patient, such as the nurse, is necessary. From patient entry with the application of the risk classification, to defining the priority of care according to the severity of the clinical condition presented by the patient, the nurse already acts in this context, in addition to carrying out interventions aimed at stabilizing and monitoring patients more serious[7]. However, what are the nurses' interventions directly associated with the safe care of critically ill patients in the emergency unit? From this, this study aims to identify in the literature the interventions of nurses related to safe care for critical patients in the Emergency Unit.

Methodology

This is an integrative literature review that enables a broader understanding of a specific topic in an organized way, synthesizing research, and, according to the search performed, subsequently results in evidence-based practices[8].

This study was conducted by the guiding question: what are the nurses' interventions associated with the safe care of critical patients in the emergency unit? Based on this, the variables considered were: 1) interventions by the critically ill nurse, based on those listed in the Emergency Nursing specialty of the Nursing Interventions Classifications[9]; and 2) safe care based on the association with international patient safety goals: correct patient identification; effective communication; safety in medication administration; safe surgeries, reduced risk of infection and patient falls[5].

A search was carried out for nursing and health publications in scientific databases from February to August 2021. This process consisted of following the six stages of the integrative review: choice, definition of the theme and guiding question; literature search (inclusion and exclusion criteria); data collect; evaluation of studies included in the

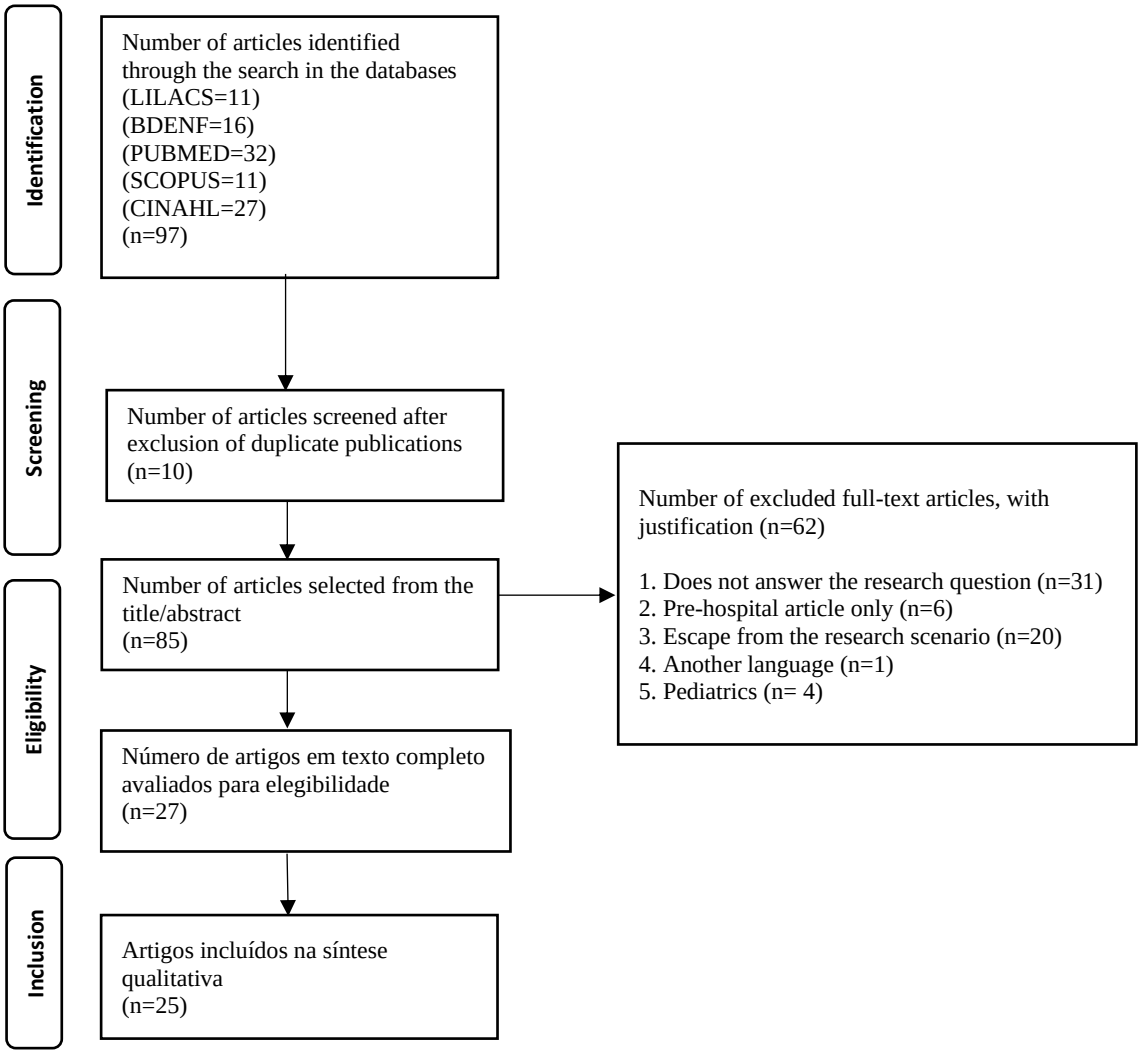
results; discussion of the result and presentation of the integrative review. To summarize in an organized way the extraction of these data, the checklist was chosen: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)[8].

For the selection of articles, five databases were consulted: LILACS (Latin American and Caribbean Literature in Health Sciences), PUBMED (U.S National List of Medicine National Institutes of Health), BDENF (Nursing Database), CINAHL (Cumulative Index to Nursing and Allied Health Literature) and SCOPUS. As a strategy of rigor in the search in the databases, two reviewers nurses, with expertise in the subject under study and in the method used, carried out the research in the databases independently. Articles were included based on consensus. In case of disagreement, a third evaluator was used for inclusion analysis.

Through the Database of Health Science Descriptors (DeCS), the following controlled descriptors were chosen: nursing care, patient safety and emergency hospital service. In the Medical Subject Headings (MESH): "nursing care", "patient safety", "emergency servisse", "hospital" and "emergency department", the latter being chosen as an alternative in some databases to avoid an excess of articles that did not match the the search in the results.

For the search in the PUBMED and SCOPUS databases, quotation marks were used in the descriptors, and the Boolean operator used was "AND". This search strategy being exemplified, according to the base, strategy and number of retrieved references: LILACS – "Nursing Care AND Patient Safety AND Emergency Hospital Service" – 11; PubMed - "Nursing Care AND Patient Safety AND Emergency Service, Hospital" – 32; SCOPUS - "Nursing Care AND Patient Safety AND Emergency Department" – 11; BDENF – "Nursing care AND Patient safety AND Hospital emergency service" – 16; CINAHL – "Nursing Care AND Patient Safety AND Emergency Service Hospital" – 27.

Figure 1. Flowchart of selection of articles for the integrative review of studies according to the databases. Rio de Janeiro, RJ, Brazil, 2016-2021



After data collection, the research was submitted to the first selection stage, through the application of previously defined inclusion and exclusion criteria. From the inclusion criteria, studies published in Portuguese, English and Spanish were selected; full articles that portray the related theme, published and indexed in the aforementioned databases in the last five years (July 2016 to July 2021). Among the exclusion criteria are editorials, duplicate articles, experience reports, theses and dissertations, prehospital care and studies related to care in other hospital departments, as well as studies with animals and children.

From this, the diagram Preferred Reporting Items for Systematic Review and Meta-Analys for Scoping Reviews (PRISMA)[9] was used to present the article selection steps (Figure 1).

A sample of 97 articles distributed among the selected databases was obtained. After using the inclusion and exclusion criteria established above, the final sample consisted of 25 articles. After reading the title/abstract, 23 articles were excluded, after reading the full text 46, among them: 10 were excluded because they were duplicated, 4 because they were measured in children, 31 because they did not answer the guiding question and 18 did not address the theme addressed. In addition to 6 referring only to pre-hospital care and 1 being in another language.

Data analysis was descriptive, with articles coding in Arabic numerals according to their identification in the databases. In addition, thematic categorization was carried out based on the content of the nursing interventions identified in the study related to international patient safety goals. Therefore, the categories created were: 1) patient identification and safe practice in the safe administration of medications; 2) Effective communication with the pre-hospital care team (APH) and intra-hospital care; 3) nurse management and organizational performance of the team in the quality of care.

For the level of evidence, the following classification was used: level 1 – evidence from systematic review or meta-analysis of relevant randomized controlled clinical trials or clinical guidelines based on systematic reviews of randomized controlled clinical trials; level 2 – evidence from at least one well-designed randomized controlled clinical trial; level 3 – evidence from well-designed clinical trials without randomization; level 4 – evidence from well-designed cohort and case-control studies; level 5 – evidence from a systematic review of descriptive and qualitative studies; level 6 – evidence from a single, descriptive or qualitative study; Level 7 – Evidence of opinion by authorities and/or report by expert committees[9].

Results

The synthesis of evidence from the 25 studies included in this review was distributed according to database, author/journal/country/year, level of evidence (LE) and type of study (Chart 1).

Chart 1. Selection of articles by integrative literature review according to PUBMED, CINAHL, LILACS and SCOPUS databases. Rio de Janeiro, RJ, Brazil, 2016-2021

No.	Data base	Author/journal/country/year	LE	Study type
01	LILACS	Santos et al./Revista Gaúcha de Enfermagem. /Brazil/2019	6	Qualitative study
02	LILACS	Paixão et al./Revista Brasileira de Enfermagem /Brazil/2018	6	Qualitative study
03	LILACS	Olino et al./Rev.gaúch.enf. /Brazil/2019	6	Descriptive study
04	LILACS	Dias et al./ Revista da Escola de Enfermagem da USP/Brazil/2020	6	Qualitative study
05	LILACS	Gomes et al./ Revista Brasileira de Enfermagem /Brazil/2019	6	Descriptive study
06	LILACS	Miorin et al./ Texto & contexto de enfermagem/Brazil/2020	6	Qualitative study
07	LILACS	Melo C.L./ Repositório. UFMG/Brazil/2019	6	Qualitative study
08	BDENF	Bampi et al/Revista de enfermagem da UFPE on line/ Brazil/2017	6	Qualitative study
09	BDENF	Oliveira et al./ Revista de enfermagem da UFPE on line/Brazil/2019	6	Descriptive study
10	BDENF	Pagliotto et al./ Cuidado, arte, e enfermagem/Brazil/2019	6	Descriptive study
11	BDENF	Rubim et al./ Revista de enfermagem da UFPE on line /Brazil/2017	6	Qualitative study
12	CINAHL	Yoo HJ et al/ PLoS One/Korea/2020	6	Qualitative study
13	CINAHL	Twigg et al./ Online Journal of Rural Nursing & Health Care/Australia/2016	6	Qualitative study
14	SCOPUS	Curtis et al./ Australasian Emergency Care/ Australia/2020	6	Descriptive study
15	SCOPUS	Ausserho fer et al./ International Journal of Nursing Studies/ Italy/2021	6	Descriptive study
16	SCOPUS	Kerr et al./ International Journal of Nursing Practice/ Australia/2016	6	Descriptive study
17	SCOPUS	Jones,A.Johnstone,M.J./Australian College of Nursing/Australia/2019	4	Cohort study
18	SCOPUS	McFarlan et al./ Journal of Emergency Nursing/United States/2019	4	Qualitative study
19	SCOPUS	Jaggi et al./ Applied Nursing Research/ Canada/2018	4	Cohort study

20	SCOPUS	Jones et al./ Journal of clinical nursing/Australia/2016	6	Descriptive study
21	SCOPUS	Eriksson et al./ Journal of Clinical Nursing/ Switzerland /2018	6	Qualitative study
22	PUBMED	Olofin biyi et al./ The Pan African medical journal / South Africa /2020	6	Qualitative study
23	PUBMED	Mendes et al./ Einsten (São Paulo) /Brazil/2018	6	Descriptive study
24	PUBMED	Husebø, S. E.& Olsen, Ø. E/ Scandinavian journal of trauma, resuscitation and emergency medicine / Scandinavia / 2019	6	Qualitative study
25	PUBMED	Castilho et al./ Revista latino-americana de enfermagem/ Brazil/2020	6	Descriptive study

The selection of studies that make up the sample of this integrative review starts from the year 2016 and most are from 2019. The highest concentration of articles comes from Brazil. The main types of studies that made up this sample were descriptive and qualitative. With regard to the levels of evidence in these studies, most are level 6, which brings up a gap in the study of the effectiveness of the interventions carried out.

Chart 2 presents the nursing interventions related to safe care through the international goals of critical patient safety in the emergency unit.

Chart 2. Nursing interventions related to international safety goals for critically ill patients in the emergency unit. Rio de Janeiro, RJ, Brazil, 2016-2021

Thematic categories	Goals	Nursing interventions	Reference
Patient identification and safe practice in safe medication administration	Correct identification of the patient	Patient identification.	01; 09; 23.
	Safety in medication administration	Sanitization of hands; asepsis of materials; identification of allergies; medication administration; monitoring and surveillance after administration; double check; drug compatibility analysis.	01; 09; 23.
Effective communication with the pre-hospital care team (APH) and intra-hospital care	Effective communication	Use of SBAR or Passometer; interaction with a multidisciplinary team; Triage, security protocols and bundles; Training of the protocols used; implementation of existing protocols; encouraging team interpersonal relationships.	02; 03; 06; 07; 10; 14, 15; 16; 17; 18; 22.
Nurse management and organizational performance of the team in the quality of care	Decreased risk of infection	Sanitization of hands; asepsis of materials.	01; 09; 23.
	Decreased risk of falls and pressure injuries	Sector organization; prevention of falls and pressure ulcers; SAE; provide materials and inputs; management and training of the nursing team; team coaching.	04;05;08;11;12; 13; 17; 19; 20; 21; 24; 25.

The articles analyzed brought updated data that reflect the relationship between the routine of nurses who work in the emergency room and the international goals of patient safety, whether in triage, in direct patient care, or in the management and organization of the team and the unit in question. In the elaborated categories, the goal of safe surgery was not included, since it was not associated in the studies included in this review.

Discussion

Most studies that addressed nurses' interventions in the safe care of critically ill patients in the emergency unit were descriptive or qualitative. This finding brings up the need for further studies that analyze the effectiveness of these interventions and approach evidence-based practice in a way that is applied to the context. As these are critically ill patients who need early care, this development is considered emerging, in order to base and qualify the practice.

On the other hand, the analyzed studies brought contributions in the sense of identifying what is already available in the scientific literature on the subject and were organized into categories presented below..

Patient identification and safe practice in safe medication administration

Risks and incidents related to patient safety involve medication administration errors in the emergency unit. They are related to individual and organizational errors and the high number of calls and procedures, in addition to work overload in the emergency room. A strategy for mitigating these errors is the management of risks related to medication administration, which include the stages of identifying the patient through the wristband; survey of the

risk of possible drug allergies; computerization of medical prescription; adoption of safe dispensing systems; conference of data referring to the medication to be administered and involvement of the patient and team throughout the process[5].

In addition, the emergency sector requires continuing education of the professional team on appropriate conduct during the use of medications, especially in performing calculations and measuring doses. This measure would be a way to prevent adverse events in drug administration from happening. In addition, avoiding external factors that may interfere with this execution, such as: noise, places with a large flow of people can favor safe care[8].

The main errors identified, in this context, are related to hand hygiene in the preparation and administration of medications, asepsis of materials, dilution and infusion time, which often happens in advance of the scheduled time. It was also noticed that the medication and the patient were not correctly identified before administration. This may occur because it deals with a scenario that has patients at imminent risk of death and requires a quick performance of procedures. With this, the possible strategies that the nurse can perform to reduce the risks to patients include the implementation of double checking by the nursing and medical staff. The possibility of the nurse also taking on the preparation of some medications, as well as the need for knowledge of drug incompatibility, surveillance and continuous monitoring of patients after drug administration, above all, supervising the nursing team[10].

When reflecting on the participation of nurses in medication administration, the need for professional experience and knowledge is brought up as intrinsic factors for safe care. Training is also suggested as a way to increase the level of knowledge, skill and improvement in nursing care. Nurses must guarantee the nine basic “rights” at all times when administering medications recommended by the National Health Surveillance Agency (ANVISA): patient, medication, route, time, dose, correct medication administration record, guidance, form and response right. Regular training for nurses on new medication and administration protocols, computerized prescribing systems, and nurse managers and policy makers for implementing effective measures can reduce the incidence of medication errors[9].

However, a finding of interest is that the studies indicated that patient identification was only associated with medication administration. Considering that in most serious emergency situations the patient is admitted with changes in the level of consciousness and incapable of providing identification data, this is a valid finding when pointing out future studies.

Effective communication with the pre-hospital care team (APH)

Emergency care may include different approaches, due to the need to perceive the patient's clinical deterioration in order to activate the Rapid Response Team (TRR), one of whose members is the nurse. The RRT favors safe care in the hospital environment, as it favors effective communication between the multidisciplinary team and offers the possibility of care in order to avoid adverse events in patients hospitalized in beds outside the intensive care unit[11].

In addition, before the patient enters the emergency, he is attended by the APH team, so that the patient may be exposed to several risks that affect his safety. Upon arriving at the hospital, he is received by the intra-hospital team who must collect the necessary information and provide the appropriate care as quickly as possible. The nurse receives the case of this patient, to then put into practice their certain intra-hospital actions and protocols[12].

In this communication between the teams, there may be failures that reflect negatively on patient safety. The transfer of care, also known as Handoff or Handover, can be divided into two types. In the first, it is a transfer between different types of health units or within the same unit. In the second, it is about the transfer between shift changes. The nurse must be aware of the patient's general situation and clinical instability; it should not be interfered regardless of the professional who is passing on the information, and which professional is receiving it. This process can interfere with the continuity of care. If the patient's diagnosis is wrong, verbal prescriptions interfere with the performance of procedures and their safety. When the nurse receives the patient's admission, he is responsible for that comprehensive care, the use of the SBAR method (Situation-Background-Assessment-Recommendation) is indicated, which is a validated and effective instrument in this communication and care, in order to standardize effective communication among nurses. The Passometer was also reported as an alternative for data transfer, as it is simple and contains important information[12].

Nurses are concerned with this exchange of information and that is why they must always be up to date on new ways of carrying out effective communication with PHC team members and their own interdisciplinary team. This occurs in order to plan and organize the care for each one, exercising their role and working together, in order to reduce the risks to the patient in the emergency room[12,13].

On the other hand, the adoption of safety barriers, implementation of strategies and protocols mitigate the risks of errors in care. The national patient safety program (PNSP) constitutes basic safety practices in emergency care and is indicated for use in emergency care units (UPA) to investigate invasive procedures[14].

In a study carried out in a hospital in Australia, a new form of shift transfer was applied in order to reduce adverse events and improve the provision of quality nursing care. After the auditor nurses implemented this new method, in a standardized approach, it was possible to obtain positive results in the shift change of nurses in the emergency department, in which it was verified that it can occur better in the patient's bed, where it is already possible to verify identification of the patient's wristband and identification of possible allergies, which helps to prevent medication-related adverse events[15].

In a teaching hospital, a communication tool was adopted to facilitate the continuity of care between the emergency team and the sector team that will receive the patient. They used the Modified Early Warning Score (MEWS) tools and the transfer note (NT) record, which the nurse completes before the transfer. These proposals ensure that there is continuity of care, which generates quality and increases patient safety, even generating a reduction in costs. The MEWS is used to assess the clinical deterioration of critically ill patients, its score is based on five physiological parameters: level of consciousness, respiratory rate, heart rate, systolic blood pressure and temperature. This tool enables communication about the severity of the patient, if it is a high score, it requires the presence of a multidisciplinary team with doctors and nurses to transport the patient safely[16].

There are tools that are used to assess patients in the emergency room, their strategy is to reduce overcrowding and identify who is at imminent risk of death, such as the Manchester triage system, where the order of priority is classified by color. The most emergency patients, represented by the color red, must be attended to immediately. The nurse is a professional responsible for carrying out this triage and it is up to him to master it and be qualified for a performance that configures the safest care for patients who enter the reception. To perform this function, physical examination, assessment of vital signs, symptoms and nursing history are required. Individual patient factors should be considered for this assessment, such as age and chronic diseases. If the factors are not considered correctly, the classification is impaired. It is also possible to create tools using existing protocols, as was done in a hospital in Australia, where an electronic checklist was implemented for screening emergency patients with a focus on falls using the Ontario Modified Stratify (Sydney Scoring) Falls Risk WHO screening, pressure ulcer (Waterlow scale) and substance use, factors that led patients to hospitalization. This triage used by nurses allowed an evaluation of patients with continuous monitoring, which generates positive feedback and allows the identification of possible adverse events[17-19].

Nurse-led triage is successful when performed according to the protocol, it helps in decision-making about nursing treatments, patient guidelines, making the role of the nurse highly indispensable[13,19-21].

Nurse management and organizational performance of the team in the quality of care

The nursing team demonstrates concern about the structure of the service interfering with safe patient care. This also includes the organization of the sector and the team and the lack of inputs and materials, pointed out in association with wound care. Nurses need to see the individual as a unique and complex being, aiming to meet their individual needs. For this, it is necessary to assess the patient, due to the overcrowding of emergency rooms, cases of elderly patients and/or patients with long waiting times, preventive care should be planned, such as changing the position, applying the Braden scale and the implementation of fall prevention programs in the sector[7,12].

In the general context, management is necessary for safe care to take place, with the availability of adequate materials for the care and prevention of injuries by the unit. As far as the nurse is concerned, he is responsible for providing care, but he needs to be trained and have dexterity. He will have to worry about proper hand hygiene, will have to intervene through qualification and training of nursing professionals, use routines and protocols, systematize nursing care and encourage patient safety goals. In addition, he has the role of manager, with regard to the provision of materials and inputs, and by playing leadership, through dialogue with the team and guidance to patients and families[7,22,23].

When portraying work management, it was possible to identify that nurses with an average time working in the hospital have more difficulty in exercising this competence, especially in care considered less urgent, such as the prevention of falls and injuries. The professional, due to lack of time or work overload, can “create gaps” in care, failing to perform some type of essential care. To avoid such behavior, nursing surveillance should be carried out, methods or instruments created that make it possible to reveal possible gaps that induce errors in the emergency sector, in order to reduce adverse events, such as pressure injuries and falls. Health policies should be proposed for staff dimensioning, reviewing work schedules, together with managers of health institutions and encouraging organizational learning through mistakes[11,24-27].

Another method implemented by a survey in Missouri in the US, a leader in a hospital emergency room, was the daily “hourly” round and nurse rounds. Regarding the rounds process, it included greeting the patient, reducing their anxiety and reducing the number of requests they made. Helping to go to the bathroom and changing positions were factors that helped to reduce the number of falls and pressure injuries. While in the nurses' rounds at the bedside, the benefits are to connect directly with the patients in the unit, not focusing on the physiological part, but on the service needs, on the care provided by the team, thus gaining the respect and trust of the patients and from the care team[18].

Clinical leadership is needed to safely care for critically ill patients. This leadership can be acquired by seeking specializations involving communication management and team coaching. In addition, nurses with this knowledge can apply methods to better manage the sector, where they can collect documentation of vital signs, early identification and prevention of injuries, in addition to developing active listening, seeking to know the patient's afflictions and use this information for future research, in order to contribute to advancing improvements in safe care[12,28-31].

A limitation of the study is the selection of four databases. In addition, the temporal limitation in the search for studies may also have excluded literature of interest published after refinement in the databases. On the other hand, the gap in studies addressing safe surgery was not

expected, but will be of interest in future studies, especially in preoperative evaluation in emergency situations and prevention of intra and postoperative risks.

Conclusion

The present study identified the interventions of nurses related to safe care for critical patients in the Emergency Unit. According to the data presented, few studies cite direct interventions by nurses in the care of critical patients, but there is emphasis on care with the safe administration of medications in emergency situations.

On the other hand, there is participation of the nurse in the emergency unit in the management and organizational performance of the team in the quality of care, in addition to the organization of triage, safety protocols and bundles, as well as in establishing effective communication with the APH team.

Therefore, studies are needed that point to the effectiveness of direct interventions related to critical patient care in emergencies, as well as organizational proposals for structuring the nursing team in these services, seeking scales that favor quality patient care.

References

1. Brasil. Departamento de Análise em Saúde e Vigilância das doenças não transmissíveis. Principais Causas de Morte. 2017.[cited:2020 Jun 4] Disponível em: http://svs.aids.gov.br/dantps/centrais-de-conteudos/paineis-de-monitoramento/mortalidade/gbd-brasil/principais-causas/
2. Anziliero, F S, Bárbara S, Bárbara T, Thaíla B, Mariur. Sistema Manchester: tempo empregado na classificação de risco e prioridade para atendimento em uma emergência. Rev Gaúcha Enferm. 2016; 37(4):1-6. doi: https://doi.org/10.1590/1983-1447.2016.04.64753.
3. Brasil. Portaria n.º 2.338, de 3 de outubro de 2011. Estabelece diretrizes e cria mecanismos para a implantação do componente Sala de Estabilização (SE) da Rede de Atenção às Urgências. Diário Oficial da União. 3 de out 2011.
4. Santos PRAD, Rocha FLR, Sampaio CSJC. Ações para segurança na prescrição, uso e administração de medicamentos em unidades de pronto atendimento. Rev Gaúcha Enferm. 2019 40(spe):1-9. doi: http://dx.doi.org/10.1590/1983-1447.2019.20180347
5. Dias AO, Bernardes S, Chaves LDP, Sonobe HM, Grion CMC, Haddad CMFL. Critical incidents as perceived by rapid response teams in emergency services. Rev. esc. enferm. USP. 2020; 54(e03595):1-8. doi: http://dx.doi.org/10.1590/s1980-220x2018027903595.
6. Oliveira BHS, Sousa VM de, Fernandes KJSS, Urtiga VLSC; Carvalho LJAR; Carvalho REFL et al. Erros de dose de medicamento em unidade de urgência hospitalar. Rev enferm UFPE on line; 2019;13:(1):1-7. doi: https://doi.org/10.5205/1981-8963.2019.239792.
7. Gomes ATL, Ferreira MA, Salvador PTCO, Bezerril MS, Chiavone FBT, Santos VEP. Safety of the patient in an emergency situation: perceptions of the nursing team. Rev. Bras. Enferm. 2019;72(3):788-95. doi: http://dx.doi.org/10.1590/0034-7167-2018-0544.
8. Ercole FF, Melo LS, Alcoforado CLGC. Revisão integrativa versus revisão sistemática. REME rev mi. enferm 2014; 18(1): 09-11. doi: http://www.dx.doi.org/10.5935/1415-2762.20140001
9. Melnyk BM, Fineoutoverholt E. making the case for evidence-based practice. In: Melnyk BM, Fineoutoverholt E. Evidence-based practice in nursing & healthcare: aguide to best practice. Philadelphia: Lippincott Willians Wilkins; 2005. p. 324.
10. Mendes JR, Lopes MCBT, Vancini-Campanharo CR, Okuno MFP, Batista REA. Types and frequency of errors in the preparation and administration of drugs. Einstein (Sao Paulo). 2018;16(3):eAO4146. doi: 10.1590/S1679-45082018AO4146.
11. Castilho DEC, Silva AEBC, Gimenes FRE, Nunes RLS, Pires ACAC, Bernardes CA. Factors related to the patient safety climate in an emergency hospital. Rev Lat Am Enfermagem. 2020; 28:e3273. doi: 10.1590/1518-8345.3353.3273.
12. Jaggi P, Tomlinson R, McLelland K, Ma W, Manson-McLeod C, Bullard MJ. Nursing duties and accreditation standards and their impacts: The nursing perspective. Appl Nurs Res. 2018; 40:61-67. doi: 10.1016/j.apnr.2017.12.009.
13. Miorin JD, Pai DD, Ciconet RM, Lima MADS, Gerhardt LM, Indruczaki NS. Transfer of pre-hospital care and its potential risks for patient safety. Texto contexto - enferm. 2020;29:1-15. doi: http://dx.doi.org/10.1590/1980-265x-tce-2019-0073.
14. Paixão DPDSSD, Batista J, Maziero ECS, Alpendre FT, Amaya MR, Cruz EDA. Adhesion to patient safety protocols in emergency care units. Rev Bras Enferm.2018;71(suppl 1):577-584. doi: 10.1590/0034-7167-2017-0504.
15. Kerr D, Klim S, Kelly AM, McCann T. Impact of a modified nursing handover model for improving nursing care and documentation in the emergency department: a pre- and post-implementation study. Int J Nurs Pract. 2016;22(1):89-97. doi: 10.1111/ijn.12365.
16. Olino L, Gonçalves AC, Strada JKR, Vieira LB, Machado MLP, Molina KLM et al. Comunicação efetiva para a segurança do paciente: nota de transferência e modified early warning score. Rev Gaúcha Enferm. 2019;40(esp):e20180341. doi: http://dx.doi.org/10.1590/1983-1447.2019.20180341.
17. Pagliotto LF, Souza PB; Thomazini JO, Ortega JBA, Vavra SMF. Classificação de risco em uma unidade de urgência e emergência do interior paulista. CuidArte, Enferm; 2016;10(2): 148-155. Disponível em: http://www.webfipa.net/facfipa/ner/sumarios/cuidarte/2016v2/148-155.pdf.
18. Curtis K, Qian S, Yu P, White J, Ruperto K, Sharyn Balzer, et al. Does electronic medical record redesign increase screening of risk for pressure injury, falls and substance use in the emergency department? An implementation evaluation. Australas Emerg Care. 2021 Mar;24(1):20-27. doi: 10.1016/j.auec.2020.04.002.
19. Ausserhofer D, Zaboli A, Pfeifer N, Solazzo P, Magnarelli G, Marsoner T et al. Errors in nurse-led triage: an observational study. Int J Nurs Stud. 2021; 113:103788. doi: 10.1016/j.ijnurstu.2020.103788.
20. Olofinbiyi OB, Dube M, Mhlongo EM. A perception survey on the roles of nurses during triage in a selected public hospital in Kwazulu-Natal Province, South Africa. Pan Afr Med J. 2020; 2;37:9. doi: 10.11604/pamj.2020.37.9.22211.
21. Melo CL. Transferência de cuidado realizada pelos profissionais de saúde em um serviço de urgência e emergência. Belo Horizonte; REME Rev Min Enferm. 2019;23:e-1194. doi: 10.5935/1415-2762.20190042
22. Eriksson J, Gellerstedt L, Hillerås P, Craftman AG. Registered nurses' perceptions of safe care in overcrowded emergency departments. J Clin Nurs. 2018;27(5-6):e1061-e1067. doi: 10.1111/jocn.14143.

23. Bampi R, Lorenzini E, Krauzer I, Ferraz L, Silva EFD, Dall'Agnol CM. Perspectivas da equipe de enfermagem sobre a segurança do paciente em unidade de emergência. Rev enferm UFPE on line. 2017; 11(2):584-91. doi: 10.5205/reuol.10263-91568-1-RV.1102201713
24. Rubim MM, Cardoso LS, Silva JJS, Gelati TR, Rodrigues JR, Cezar-Vaz MR. Possibilidades profissionais e materiais em serviço intra-hospitalar de urgência e emergência: relato de experiência. Rev. enferm. UFPE on line; 2017; 11(supl.5): 2231-7. doi: https://doi.org/10.5205/1981-8963-v11i5a23380p2231-2237-2017
25. Twigg D, Cramer J, Pugh J. Nurse staffing and workload drivers in small rural hospitals: an imperative for evidence. Online J Rural Nurs Health Care. 2016;16:97-101. doi: 10.14574/ojrnhc.v16i1.370.
26. Jones A., Johnstone MJ. Managing gaps in the continuity of nursing care to enhance patient safety. Collegian. 2018;1(2): 1-7. doi:10.1016/j.colegn.2018.06.006
27. Jones A, Johnstone MJ, Duke M. Recognising and responding to 'cutting corners' when providing nursing care: a qualitative study. J Clin Nurs. 2016;25(15-16):2126-33. doi: 10.1111/jocn.13352.
28. Yoo HJ, Lim OB, Shim JL. Critical care nurses' communication experiences with patients and families in an intensive care unit: a qualitative study. PLoS One. 2020;15(7):e0235694. doi:10.1371/journal.pone.0235694
29. Husebø SE, Olsen ØE. Actual clinical leadership: a shadowing study of charge nurses and doctors on-call in the emergency department. Scand J Trauma Resusc Emerg Med. 2019;27(1):2. doi: 10.1186/s13049-018-0581-3
30. Taveira RPC, Silva JLL, Souza RD, Rego VTSM, Lima VF, Soares RS. Atuação do enfermeiro no atendimento pré-hospitalar de emergência. Glob Acad Nurs. 2021;2(3):e156. https://dx.doi.org/10.5935/2675-5602.20200156
31. McFarlan S, O'Brien D, Simmons E. Nurse-leader collaborative improvement project: improving patient experience in the emergency department. J Emerg Nurs. 2019;45(2):137-143. doi: 10.1016/j.jen.2018.11.007