

Patient safety in nursing paths in Brazil

A segurança do paciente nos caminhos percorridos pela enfermagem brasileira Seguridad del paciente en los caminos transitados por la enfermería brasileña

Andréa Tayse de Lima Gomes^{I,IV}, Pétala Tuani Candido de Oliveira Salvador^{II,IV}, Cláudia Cristiane Filgueira Martins Rodrigues^{II,IV}, Micheline da Fonseca Silva^{I,IV}, Larissa de Lima Ferreira^{III,IV}, Viviane Euzébia Pereira Santos^{I,III,IV}

 ¹ Universidade Federal do Rio Grande do Norte, Nursing Department, Postgraduate Program in Nursing. Natal, Rio Grande do Norte, Brazil.
¹¹ Universidade Federal do Rio Grande do Norte, Health Care School. Natal, Rio Grande do Norte, Brazil.
¹¹ Universidade Federal do Rio Grande do Rio Grande do Norte, Nursing Department, Undergraduate Program in Nursing. Natal, Rio Grande do Norte, Brazil.
¹² Universidade Federal do Rio Grande do Norte, Nursing Department, Undergraduate Program in Nursing. Natal, Rio Grande do Norte, Brazil.
¹⁴ Universidade Federal do Rio Grande do Norte, Nursing Department, Research Group and Laboratory of Investigation in Care, Safety and Health and Nursing Technologies. Natal, Rio Grande do Norte, Brazil.

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ABSTRACT

Objective: summarize the dissertations and theses produced by nurses available in the Catalog of Theses and Dissertations of the Brazilian Nursing Association, from volume XIX to XXXII, that address patient safety. **Method**: this is a documentary study. After data collection, the following variables were analyzed: academic level, educational institutions, year, place, type of service, study object, study method, subjects, priority protocol of patient safety, implications and final recommendations. **Results**: 8,720 abstracts were found, 53 (0.61%) of which were analyzed. There was a predominance of dissertations (n = 19; 35.85%) regarding the reduction of risks for fall and pressure ulcer (n = 24; 45.28%), of descriptive type (n = 21; 39.62%), quantitative type (n = 16; 30.19%), in hospital environments (n = 16; 30.19%), using scales and protocols (n = 6; 11.32%). **Conclusion**: there is a tendency towards the development of studies related to patient safety in hospital environments, with an emphasis on the reduction of risk for pressure ulcer. **Descriptors**: Research in Nursing; Patient Safety; Healthcare Services; Healthcare Quality; Nursing.

RESUMO

Objetivo: sumarizar as dissertações e teses produzidas por enfermeiros disponíveis no Catálogo de Teses e Dissertações da Associação Brasileira de Enfermagem, do volume XIX ao XXXII, que abordam a segurança do paciente. **Método**: pesquisa documental. Após coleta de dados, analisaram-se as seguintes variáveis: nível acadêmico, instituição de ensino, ano, local, tipo de serviço, objeto de estudo, desenho metodológico, sujeitos, protocolo prioritário de segurança do paciente, implicações e recomendações finais. **Resultados**: encontrados 8.720 resumos, dos quais 53 (0,61%) foram analisados. Houve predomínio de dissertações (n = 19; 35,85%) relacionadas à redução do risco de quedas e úlcera por pressão (n = 24; 45,28%), do tipo descritivo (n = 21; 39,62%), quantitativo (n = 16; 30,19%), no cenário hospitalar (n = 16; 30,19%), utilizando escalas e protocolos (n = 6; 11,32%). **Conclusão**: observou-se tendência para desenvolvimento de estudos relacionados à segurança do paciente no cenário hospitalar, com ênfase na redução do risco de úlcera por pressão.

Descritores: Pesquisa em Enfermagem; Segurança do Paciente; Serviços de Saúde; Qualidade da Assistência à Saúde; Enfermagem.

RESUMEN

Objetivo: sintetizar las disertaciones y tesis realizadas por enfermeros, disponibles en el Catálogo de Tesis y Disertaciones de la Asociación Brasileña de Enfermería, del volumen XIX al XXXII, abordando la seguridad del paciente. **Método**: investigación

documental. Después de recolectar los datos, se analizaron las variables: nivel académico, institución de enseñanza, año, lugar, tipo de servicio, objeto de estudio, diseño metodológico, sujetos, protocolo primario de seguridad del paciente, implicaciones y recomendaciones finales. **Resultados**: se encontraron 8.720 resúmenes, de los que 53 (0,61%) fueron analizados. Predominaron disertaciones (n = 24; 45,28%), de tipo descriptivo (n = 21; 39,62%), cuantitativo (n = 16; 30,19%), en ámbito hospitalario (n = 16; 30,19%), utilizando escalas y protocolos (n = 6; 11,32%). **Conclusión**: Se observó tendencia al desarrollo de estudios relacionados a la seguridad del paciente en ámbito hospitalario, con énfasis en la reducción del riesgo de úlcera por presión. **Descriptores**: Investigación en Enfermería; Seguridad del Paciente; Servicios de Salud; Calidad de la Atención de Salud; Enfermería.

CORRESPONDING AUTHOR Andréa Tayse de Lima Gomes E-mail: andrea.tlgomes@gmail.com

INTRODUCTION

Recent initiatives in the development of nursing practices based on scientific evidence have indicated the need for consumption and production of specific knowledge by nurses, related to the nature of their work in different professional contexts⁽¹⁾.

The publication of studies conducted by professionals of this area has increased significantly when analyzed in the perspective of the historical process that characterizes the progress of nursing as a science. Part of the studies published by national and international journals comes from results of theses and dissertations developed in different areas constituting the nursing expertise⁽²⁾. This way, the experience obtained from the production, organization and communication of nursing as a science has promote it in the global context⁽³⁾.

In the last decades, experts, researchers, managers and health professionals have been increasingly concerned about patient safety (PS), that is, reduction to a minimum acceptable level of risks for unnecessary damage associated with health-care. The minimum acceptable level refers to the tools made available according to current knowledge, available resources and context where healthcare is provided by making decisions about the patient treatment or non-treatment, considering the risks involved in each situation⁽⁴⁻⁵⁾.

With the occurrence of serious mistakes in healthcare, protocols were required to support safe healthcare provision and reduce episodes of adverse events (AE) in healthcare. AEs are incidents that may occur during healthcare provision and result in damage to the patient, which may be of physical, social and/or psychological nature, including disorders, injuries, suffering, inability or death⁽⁶⁻⁷⁾.

In 2013, the National Patient Safety Program (PNSP) was created in Brazil, and through this program, patient safety actions have been implemented in healthcare services, with the issue of six basic protocols to address priority areas, as follows: patient identification; communication among health professionals; safety of using medication; safe surgery; hand hygiene; minimization of risks for fall and pressure ulcer⁽⁷⁻⁸⁾.

Given the scenario described above, conducting studies on PS is essential, considering their contribution to the provision of safe healthcare by health service centers. Then, this study is justified by the search for knowledge about the paths of nursing in Brazil in terms of investigations aiming to improve PS.

Then, this study was based on the following questions: What are the characteristics of dissertations and theses available in the Catalog of Theses and Dissertations (CEPEn) of the Brazilian Nursing Association (ABEn) that address patient safety? How has patient safety been addressed in theses and dissertations?

OBJECTIVE

Summarize the dissertations and theses produced by nurses available in the Catalog of Theses and Dissertations (CEPEn) of the Brazilian Nursing Association (ABEn) that address patient safety.

METHOD

Ethical aspects

No prior approval was required from the Research Ethics Committee, since this study did not involve human beings and used documents of free access as sources of data collection.

Study method, site and period

This is a documentary, descriptive, retrospective study of quantitative approach. A documentary study is based on previous materials, using data that have not been analyzed or that may be redeveloped according to the study object. Besides analyzing primary data, data already processes may receive different interpretations⁽⁹⁾.

Data collection was performed in April and May 2015 by two master's degree students; two doctor's degree students and one nurse at the CEPEn of ABEn, which is a database of theses and dissertations produced by graduate programs in nursing in Brazil. Data were collected from the catalogs of theses and dissertations available on the ABEn website, from volume XIX to XXXII.

Study population or sample and inclusion and exclusion criteria

The abstracts were selected via previously defined eligibility criteria (inclusion and exclusion criteria). The inclusion criteria were: dissertations and theses from the Catalog of Theses and Dissertations (CEPEn) of the ABEn, produced by nurses, and addressing PS. The exclusion criteria were: dissertations and theses with incomplete abstracts and those that did not fully respond to the collection indicators.

At first, a search was performed on Lattes platform seeking bios of authors of abstracts from theses and dissertations published in the catalogs of the ABEn to ensure only studies produced by nurses would be analyzed, according to the preset selection criteria. Then, in total, 53 abstracts were included in the final sample of this study, as indicated in Table 1.

Volume	Study results		Abstracts selected according to the eligibility criteria	
	n	%	n	%
XIX	412	4.72	0	0.00
XX	557	6.39	1	1.89
XXI	565	6.48	5	9.43
XXII	316	3.62	3	5.66
XXIII	383	4.39	1	1.89
XXIV	553	6.34	1	1.89
XXV	518	5.94	1	1.89
XXVI	445	5.10	0	0.00
XXVII	482	5.53	0	0.00
XXVIII	368	4.22	0	0.00
XXIX	547	6.27	3	5.66
XXX	888	10.18	2	3.77
XXXI	2.122	24.33	22	41.51
XXXII	564	6.47	14	26.42
Total	8.720	100.00	53	100.00

Table 1 –Distribution of abstracts found and selected according to the eligibility criteria, 2015

Study protocol

A "Documentary Study Protocol" was developed to guide data collection – it has been used in similar studies and was adapted to this study. It comprised the following topics: theme, study objective, guiding questions, search strategies, study eligibility criteria, data collection strategies, critical evaluation of studies, and data synthesis.

Analysis of results and statistics

Collected data were entered on a Microsoft Excel 2010[®] spreadsheet, according to the following variables: academic level (professional master's degree, academic master's degree or doctor's degree); higher education institution (HEI) at which they study was conducted; publication year (year the dissertation or thesis was published in full); study place (Brazilian state where the study was conducted); type of health service analyzed (hospital, basic healthcare unit (UBS), laboratory or another facility); study object; study method/design (bibliographical, descriptive, experimental or exploratory study of qualitative, quantitative or mixed approach)⁽¹⁰⁾; subjects (health professionals (what kind), students (what course), patients (sector), managers or others); the priority protocol for PS issued by the Ministry of Health⁽⁷⁾; and the implications and final recommendations of studies for nursing regarding PS.

The priority protocol for PS was classified according to the study object and will be presented as follows: Protocol 1 (P1) – proper patient identification; Protocol 2 (P2) – communication among health professionals; Protocol 3 (P3) – improve the safety in using medications; Protocol 4 (P4) – prevent wrongsite, wrong-procedure and wrong-person surgery; Protocol 5 (P5) – hand hygiene to prevent infections; and Protocol 6 (P6) – reduce risks for fall and pressure ulcer (PU).

After that, data were exported to a statistical computer program and, after a descriptive analysis, they were presented as charts with their respective absolute and relative frequencies.

RESULTS

After exploring the catalog of theses and dissertations of the ABEn, from volume XIX to XXXII, the sample comprised 8,720 abstracts from studies conducted for master's degree and doctor's degree programs produced by nurses. Of these, 53 (0.61%) answered to the study question and comprised the final sample of this study.

A higher number of publications on PS was observed in 2012 (n = 21; 39.62%), followed by 2013 (n = 11; 20.75%) and 2002 (n = 7; 13.21%). However, there was no scientific study on PS produced in Brazil in 2005, 2007, 2008 and 2009.

Regarding the HEIs where theses and dissertations were produced, the most relevant for studies on PS were: Universidade de São Paulo – USP (n=26; 49.06%); Universidade Federal do Rio de Janeiro – UFRJ (n=5; 9.43%); Universidade de Brasília – UNB (n=3; 5.66%); Universidade Federal da Paraíba – UFPB (n=3; 5.66%); and Universidade Federal de Minas Gerais – UFMG (n=3; 5.66%).

Regarding the distribution of publications by Brazilian states where the studies were conducted, the most relevant states were: São Paulo (n = 19; 35.85%), Rio de Janeiro (n = 5; 9.43%), Paraíba (n = 4; 7.55%), and Rio Grande do Sul (n = 4; 7.55%). However, 10 (18.87%) abstracts did not present this information, representing of the challenges for data collection.

Regarding the study sites by Brazilian region, the Southeast (n = 24; 45.28%), the South (n = 8; 15.09%) and the Northeast (n = 7; 13.21%) regions predominated in the production of studies on PS. Fewer studies on PS were conducted in the Central West (n = 3; 5.66%) and the North (n = 1; 1.89%) regions.

Chart 1 shows the general characteristics of abstracts analyzed and associated with the priority protocols for PS proposed by the Ministry of Health⁽⁷⁾. The characteristics correspond to the academic level, type of health service where the study was conducted and subjects involved in the study.

Among the academic levels, 44 (83.02%) abstracts were for master's degree programs and 9 (16.98%) for doctor's degree programs. Regarding the types of health service were they were conducted, most were in hospitals (n = 41; 77.36%).

Regarding the analysis of study subjects, most were patients hospitalized in shared rooms (n = 9; 16.98%), nursing team (n = 9; 16.98%) and patients in the ICU (n = 13.21%).

When associating the general characteristics of abstracts with the priority protocols for PS, the publications for master's degree (n = 19; 35.85%) and doctor's degree (n = 5; 9.43%) programs were higher when related to Protocol 6, as well as studies conducted in hospitals (n = 16; 30.19%), and studies addressing risks for falls and PU in patients hospitalized in shared rooms (n = 5; 9.43%).

Chart 2 shows the study methods (data collection technique, study type and approach) of the abstracts analyzed and associated with the priority protocols for PS implemented by the Ministry of Health⁽⁷⁾. **Chart 1** – Distribution of general characteristics of abstracts analyzed and associated with the priority protocols of patient safety proposed by the Ministry of Health, 2015 (n = 53)

Protocol	Academic level	Type of service	Study subjects
P1	Master's degree (n = 1; 1.89%)	Hospital (n = 1; 1.89%)	Health professionals (n = 1; 1.89%)
P2	Master's degree (n = 5; 9.43%)	Hospital (n = 4; 7.55%); Basic Health Unit (n = 1; 1.89%)	Patients in shared rooms (n = 2; 3.77%); Patients in the ICU** (n = 1; 1.89%); Nursing team (n = 1; 1.89%); Medical records (n = 1; 1.89%)
Ρ3	Master's degree (n = 11; 20.75%); Doctor's degree (n = 2; 3.77%)	Hospital (n = 13; 24.53%)	Outpatients (n = 1; 1.89%); Patients in shared rooms (n = 1; 1.89%); Patients in the ICU** (n = 3; 5.66%); Nurses (1; 1.89%); Outros** (n = 1; 1.89%); Health professionals (n = 1; 1.89%); Nursing team (n = 4; 7.55%); Medical records (n = 1; 1.89%)
Р4	Master's degree (n = 2; 11.32%); Doctor's degree (n = 1; 1.89%)	Hospital (n = 3; 5.66%)	Operating room team $(n = 1;$ 1.89%); Nursing academicians (n = 1; 1.89%); Nursing team (n = 1; 1.89%)
Ρ5	Master's degree (n = 6; 11.32%); Doctor's degree (n = 1; 1.89%)	Hospital (n = 4; 7.55%); Not identified (n = 3; 5.66%)	Patients in shared rooms (n = 1; 1.89%); Nurses (n = 1; 1.89%); Nursing team (n = 3; 5.66%); Medical records (n = 2; 3.77%)
Р6	Master's degree (n = 19; 35.85%); Doctor's degree (n = 5; 9.43%)	Hospital (n = 16; 30.19%); Others* (n = 2; 3.77%); Basic Health Unit (n = 2; 3.77%); Not identified (n = 4; 7.55%)	Outpatients (n = 1; 1.89%); Patients in shared rooms (n = 5; 9.43%); Patients in the ICU** (n = 3; 5.66%); Nurses (n = 4; 7.55%); Operating room team (n = 1; 1.89%); Others* (n = 1; 1.89%); Patients in Basic Health Units (n = 1; 1.89%); Volunteers without comorbidities (n = 1; 1.89%); Health professionals (n = 2; 3.77%)

Note: *Others: long-stay institution (type of service); studies published in databases (study subjects); **ICU = intensive care unit.

Chart 2 – Distribution of study methods of the abstracts analyzed and associated with the priority protocols for PS implemented by the Ministry of Health, 2015 (n = 53)

Protocol	Data collection technique	Study type	Approach
P1	Questionnaire (n=1; 1.89%)	Descriptive (n = 1; 1.89%)	Quantitative (n = 1; 1.89%)
P2	Analysis of medical records $(n = 2;$ 3.77%); Interview (n = 1; 1.89%); Observation (n = 1; 1.89%); Questionnaire (n = 1; 1.89%)	Descriptive (n = 5; 9.43%)	Quantitative (n = 2; 3.77%); Qualitative (n = 3; 5.66%)
Ρ3	Analysis of medical records (n = 3; 5.66%); Application of scales and protocols (n = 1; 1.89%); Interview (n = 3; 5.66%); Focal group and photographic method (n = 1; 1.89%); Questionnaire (n = 5; 9.43%)	Descriptive (n = 10; 18.87%); Experimental (n = 1; 1.89%); Exploratory (n = 2; 3.77%)	Quantitative (n=9; 16.98%); Qualitative (n=2; 3.77%); Mixed (n=2; 3.77%)
P4	Interview (n = 1; 1.89%); Observation (n = 1; 1.89%); Not informed (n = 1; 1.89%)	Descriptive (n = 3; 5.66%)	Quantitative (n = 3; 5.66%)
Ρ5	Interview (n = 3; 5.66%); Photographic method (n = 1; 1.89%); Observation (n = 1; 1.89%); Questionnaire (n = 2; 3.77%)	Descriptive (n = 4; 7.55%); Experimental (n = 2; 3.77%); Exploratory (n = 1; 1.89%)	Quantitative (n = 6; 11.32%); Qualitative (n = 1; 1.89%)
Р6	Analysis of medical records (n = 2; 3.77%); Application of scales and protocols $(n = 6;$ 11.32%); Others* (n = 3; 5.66%); Interview $(n = 5;$ 9.43%); Focal group and photographic method $(n = 1;$ 1.89%); Observation (n = 1; 1.89%); Questionnaire (n = 4; 7.55%); Not informed $(n = 2;$ 3.77%)	Descriptive (n = 21; 39.62%); Bibliographical (n = 3; 5.66%)	Quantitative (n = 16; 30.19%); Qualitative (n = 5; 9.43%); Mixed (n = 3; 5.66%)

Note: *Others: studies published in databases.

Regarding the study method characteristics from the abstracts analyzed, for data collection techniques, the application of questionnaires (n = 13; 24.53%) and interviews (n = 12; 22.64%) prevailed over the other techniques. Regarding the study type, most studies were descriptive (n = 44; 83.02%) and quantitative (n = 37; 69.81%), followed by qualitative (n = 11; 20.75%) studies.

After the association between the study method used in theses and dissertations and the priority protocol for PS, the most frequent design was descriptive study (n=21; 39.62%) with quantitative approach (n=16; 30.19%) and the application of scales and protocols as data collection techniques in studies that involved reduced risk for fall and PU (n=6; 11.32%).

Chart 3 lists and summarizes the study objects described in the abstracts analyzed and associated with six priority protocols for PS issued by the Ministry of Health.

Chart 3 –	Summary of study objects listed according to the pa-
	tient safety protocols presented in the abstracts pub-
	lished in the catalogs of the Brazilian Nursing Asso-
	ciation (ABEn), 2015

Protocol	Study objects	
P1	Neonate identification process.	
P2	Records of the nursing team; Communication among health professionals.	
Ρ3	Accounts, concepts, conducts and feelings of nurses in drug-related adverse events; Medication management system and drug preparation and administration processes; Antineoplastic drug administration by the nursing team; Nursing workload and patient safety; Drug incidents in an intensive care unit.	
Ρ4	Adverse events related to the nursing support during the trans-operatory period; Pre- and intra- operatory practices related to the prevention of infections in the surgical site and the integrity of sterile gloves used by surgical teams; Risk assessment for the development of injuries resulting from positioning for surgery.	
Ρ5	Evaluation of hand hygiene techniques and use of gloves performed by nursing professionals; Use of two formulations to reduce the microbial load in hand hygiene.	
Р6	Risk factors, prevalence, incidence, stage, location and preventive measures of pressure ulcer; Nursing workload associated with the occurrence of pressure ulcer; Influence of educational actions on the nursing team for the prevention of pressure ulcer; Protocol for the prevention of fall in elderly patients; Accounts of fall by elderly patients with chronic pain and use of health services; Fall of patients in hospitals; Prevalence of falls in elderly patients who receive home healthcare services; Intervention of the nursing team for the diagnosis of risk for falls among hospitalized adults and elderly patients.	

Chart 4 summarizes the recommendations and implications for the nursing team associated with the priority protocols for PS described in the abstracts from theses and dissertations produced by nurses and published in the catalog of ABEn.

Chart 4 –	Implications and final recommendations associated
	with patient safety protocols presented in the ab-
	stracts analyzed, 2015

Protocol	Implications and recommendations
P1	The study recommends to restructure the patient identification process and define healthcare and managerial goals for continuous improvement of the quality and patient safety.
P2	The participation of operating room nurse is essential in patient reception, and during patient progress and transfer from the operating room to another ward; The health team awareness of the importance of communication strengthens and allows the development of innovative healthcare technology.
Ρ3	It is necessary to implement strategies to change the fault detection culture, to help professionals in the prevention of errors; Managers of hospitals and nursing heads are expected to dedicate attention and invest in continued education to acquire knowledge for proper practice in the process of antineoplastic drug administration, thus ensuring a safe support to patients and professionals; A manual with definitions and conducts should be developed, to standardize the types of drug-related errors and provide the arrangements that should be made in these cases.
P4	Improvements should be implemented in nursing support to surgical patients regarding the nurse's decision-making and healthcare protocols should be developed addressing the patient positioning for surgery.
Ρ5	The perception of infection risk situations is a positive enforcement for the adherence to a new method of infection control using alcohol gel for hand hygiene.
Р6	New studies are recommended in the area of pressure ulcer development, further testing the Braden scale in Portuguese language; The study suggests the development of a continuous and permanent educational practice that is able to keep the nursing team in constant improvement aiming to reduce the risks of pressure ulcer development; The study indicates the need to implement measures for pressure ulcer identification, prevention and treatment, and the development of further studies related to the prevalence; The study recommends the implementation of strategies for the maintenance of autonomy, functionality and prevention of fall in hospitalized elderly patients; The study emphasizes the need to prevent falls to ensure the elderly patients a better quality of life, autonomy and independency.

DISCUSSION

The analysis of abstracts published in the catalogs of ABEn, from volume XIX to XXXII, showed the production of knowledge focused on PS is incipient. This reality may be associated with global mobilization, and particularly in Brazil, as this is a relatively new theme.

Despite the numerous errors and damages to patients in hospital and medical care encouraging intense discussions for more than one century, the visibility of PS still had not impacted the attention from health professionals to reduce such occurrences. Only in 1999, the Institute of Medicine issued a report titled "To Err is Human", which widely disseminated the results of injuries caused by hospital and medical treatment in the United States. This publication had impacts worldwide, leading the World Health Organization (WHO) to launch the World Alliance for Patient Safety in October 2004. In this scenario, the production of knowledge related to PS increased significantly in the scientific community^(4,11).

Then, the adoption of good practices and reduction of errors in healthcare services are essential for ensuring PS in healthcare organizations, being widely disseminated by accreditation bodies, for instance, at the international level, by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which is based on six international goals for PS. These goals include: improve patient identification; improve communication among professionals; improve the safety of using medications; prevent wrong-site, wrong-procedure and wrong-person surgery; reduce the risk of healthcare-related infections (hand hygiene); and reduce the risk of patient injuries due to falls and PU⁽¹¹⁾.

Regarding the association between the abstracts published in the catalog of ABEn and the six priority goals for PS, most theses and dissertations involved hospitalized patients (n = 16; 30.19%), in shared rooms (n = 5; 9.43%), linked with the development of PU and risk for falls (Protocol 6). In agreement with the results obtained in this study, the authors⁽¹²⁾ demonstrated, in a study on AE occurrences in hospital environments, that falls – from the bed, in the bathroom or another hospital area – and the development of PU accounted for about 25% of preventable AEs. However, it should be noted these events can only be prevented or mitigated with continuous risk assessment by the nursing team.

To guarantee PS, proper patient identification should be ensured, as improper notes are often identified in all moments of healthcare process⁽¹³⁾. However, in this study, only one (1.89%) study – for a master's degree program – published in 2011, addressed the protocol related to proper patient identification. It shows poor evidence published about the importance of this theme in healthcare services and the need of greater attention of researchers to this situation.

Regarding the communication among health professionals (Protocol 2), this study analyzed five (9.43%) abstracts related to this protocol. In this scenario, an effective communication among health professionals is extremely important to clarify any question before surgeries, ensuring a correct procedure and a correct patient⁽¹⁴⁾. In addition, records of health

professionals are subjected to faulty handwriting, which in turn may be related to any EA of direct impact on $PS^{(15-16)}$.

Besides, faults in communication among health professionals may cause errors, like AEs related to drug prescription, use and administration which, in this study, were investigated in 11 (20.75%) dissertations and two (2.77%) theses. In situations of illegible patient name, the chances are higher of administration of wrong dose, wrong medication, wrong time, wrong route of administration, and even in the wrong patient⁽¹⁴⁾. This communication fault is one of the main factors that contribute to medical errors and AE, due to the poor transfer of information⁽¹⁷⁾.

Regarding Protocol 4 for the prevention of wrong-site, wrong-procedure and wrong-person surgery, only three (5.66%) abstracts on PS published in the catalog of ABEn were addressing this context. However, numerous AEs are reported resulting from surgical procedures. In this scenario, drug-related AEs account for approximately 20% of total cases analyzed, behind only AEs associated with surgical procedures⁽⁴⁾, disagreeing with the results obtained in this study, which shows the number of studies addressing medications is higher than those about surgeries.

Regarding proper hand hygiene to prevent infections, the studies demonstrate it is the best way to prevent infections in hospitals and highlight the importance of hand hygiene before and after patient handling. It is considered the most important and less expensive procedure to prevent the transmission of health-care infections⁽¹⁸⁻¹⁹⁾. However, despite this important scientific evidence, only seven (13.21%) of 53 abstracts addressed the priority protocol for PS which is related to hand hygiene to prevent infections.

Regarding the protocol addressing the risk for fall and PU, most abstracts (n = 24; 45.28%) were focused on the components of this protocol as their study object. However, this fact is still insufficiently addressed in documents and studies. On the other hand, the introduction of preventive measures to increase PS requires deep knowledge of this issue in each particular context and mobilization of all associated factors for a healthcare quality culture⁽²⁰⁾.

In this scenario, ensuring safe healthcare is directly related to a multifaceted context involving several care processes, of different degrees of complexity and requiring different resources. Then, it is clear that many problems identified in the healthcare provision process, such as limited or scarce resources, work overload due to insufficient number of professionals and poor qualification of professionals, have a negative influence on $PS^{(21-23)}$.

It is undeniable nurses are increasingly seeking professional progress, dedicating efforts to achieve better qualification and provide high-quality and safe healthcare services, based on scientific evidence.

In this sense, this study shows the abstracts of theses and dissertations on PS produced by Brazilian nurses are predominantly developed at USP (n = 26; 49.06%) and UFRJ (n = 5; 9.43%), probably due to the fact the Southeast region was the first to offer *stricto sensu* graduate programs⁽²⁴⁾.

An interesting fact in the progress of nursing is the asymmetry

and inbreeding in *stricto sensu* graduate programs offered in Brazil, with expressive concentration in the Southeast region and sparse presence in other Brazilian regions⁽²⁵⁾, which confirms the findings of this study, in which 45.28% (n = 24) of studies on PS were conducted in the Southeast region.

Regarding the higher number of descriptive studies (n = 44; 83.02%) among the analyzed abstracts, an investigation showed this study type is commonly used when the objective is to describe the reality of a specific phenomenon. One of its important roles is to characterize demands and show the coverage of a specific pathology in a region or population, as seen in the case of PU in elderly patients⁽²⁶⁾.

In this study, qualitative studies were the second most frequent type (n = 11; 20.75%), behind quantitative studies (n = 37; 69.81%) only. Regarding this finding, quantitative studies allow to evaluate the importance, severity, risk, tendency of complications and threats through statistical associations, allowing to portray aspects of a specific phenomenon. However, healthcare is a multifaceted reality that involves biopsychosocial and environmental aspects, showing the need to consider values, beliefs and attitudes of the groups targeted by the actions⁽²⁷⁾. It requires investigations of both qualitative and quantitative approaches, due to the complexity and singularity of human beings.

This study had the following limitations: incomplete abstracts and abstracts without a defined presentation standard; option for including only abstracts published on the ABEn website; and studies conducted in the Brazilian scenario only.

Despite PS constitutes a current theme, a reduced number of studies published by nurses in Brail was observed on this theme. This reality calls for more attention from the scientific community to the development of studies in this area, considering many irreversible sequelae and deaths result from healthcare-related AEs. In addition, the nursing team has the obligation to provide safe healthcare, free of AEs and/or iatrogenesis.

In situations of AE, it is crucial that health professionals conclude diagnosis as early as possible, so that the action of the healthcare team is fast, patient life is preserved and any error is corrected quickly and efficiently. Therefore, it is important nurses seek permanent training to contribute to PS in healthcare services, observing the priority protocols for PS issued by the Ministry of Health.

CONCLUSION

Regarding the production of knowledge on PS in nursing, the tendency observed is towards studies on this theme conducted in hospitals, focused on reducing the risk of PU, which shows the importance of these aspects to healthcare provision using evidence-based practice.

In addition, the high number of quantitative studies, followed by qualitative studies, reflects the human complexity and the concern of the nursing team about respecting human singularity. Then, the statistical validation of results is very important, and knowing the perceptions and feelings of each patient involved in healthcare.

Considering the global impact of this theme, it is suggested that more detailed studies should be conducted, involving the international scenario, and the analysis of theses and dissertations published in full to define new paths for nursing towards PS.

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