



TEACHING PATIENT SAFETY IN UNDERGRADUATE NURSING IN THE STATE OF BAHIA

Endric Passos Matos*
Rejane Santos Barreto**
Rogério Ribeiro***
Brendo Vitor Nogueira Sousa****

ABSTRACT

Objective: to identify the theme of patient safety in the curricular components of undergraduate nursing courses in the state of Bahia. **Method:** quantitative, descriptive, exploratory research of documentary basis developed in February 2019, with data extracted from the Curricular Matrix, Pedagogical Project and Menu, available on the websites of higher education institutions with active situation in the e-MEC system. **Results:** of the 75 registered institutions, nine were public, and 66 were private. The theme of patient safety was not found in any website of public universities and only in 8.06% of private universities. The initial contact with the theme took place in the 3rd semester, the average workload of the subjects that addressed the theme ranged from 30 to 306 hours and the curricular component was mandatory for these disciplines. Only 1.71% of the websites of public institutions had all the documents surveyed, while the private ones presented 33.33%, the curriculum matrix was the most available document. **Conclusion:** the insertion of the patient safety theme in the curricular components proved insufficient, pointing out the need for review of training processes and inclusion of an interdisciplinary and transdisciplinary approach, in view of the complexity of health care and the importance of developing specific competencies focused on patient safety.

Keywords: Patient safety. Curriculum. Education Nursing.

INTRODUCTION

It is estimated that health damage affects thousands of people worldwide. Research indicates that there are more than 40,000 errors associated with health care in the United States (USA) alone annually. In Argentina, according to the Ibero-American study, it was evidenced that 46% of adverse events produced by health care are preventable, which indicates the great relevance of the theme of patient safety^(1,2).

The World Health Organization (WHO) defines patient safety as a reduction to an acceptable minimum of the risk of unnecessary harm associated with health care. Thus, the Ministry of Health (MS) institutes through Ordinance MS/GM n. 529 of April 1, 2012 the National Program for Patient Safety (PNSP), with the general objective of contributing to the qualification of care in all health facilities. In addition, the objective is to systematize and disseminate knowledge about patient safety and

promote the inclusion of the theme in the curriculum of educational institutions⁽³⁾.

In this context, the attention of educational institutions has long been drawn to the reassessment of curricula and the insertion of the theme and specific competencies of patient safety for the development of interdisciplinary practice, especially in undergraduate nursing courses, because nurses play a primary role in the care of health services and directly contribute to the management of patient quality and safety^(4,5).

In this direction, who has launched a curricular guide for multiprofessional health education, with the aim of helping managers and teachers to deal with the theme, because interdisciplinary training in patient quality and safety is the key to the development of innovative teaching strategies focused on the real needs of health services and the training of future nursing professionals, who should consider the importance of integrated work for

*Nurse. Master in Nursing, Feira de Santana, BA, Brazil. E-mail: endric-matos@hotmail.com ORCID ID: <https://orcid.org/0000-0003-3807-4702>.

**Nurse. Master in Nursing, Feira de Santana, BA, Brazil. E-mail: rejebarrreto@gmail.com ORCID ID: <https://orcid.org/0000-0002-2973-0272>.

***Nurse. Master in Nursing, Salvador, BA, Brazil. E-mail: rogerioribeiro@ufba.br ORCID ID: <https://orcid.org/0000-0003-1867-2262>.

****Nurse. Master in Nursing, Brasília, DF, Brazil. E-mail: brendovitor@hotmail.com ORCID ID: <https://orcid.org/0000-0002-3031-3812>.

the development of safer care processes⁽⁶⁾.

Thus, in order to know the current scenario of Higher Education Institutions (HEIs), responsible for the development of competencies in line with national and international recommendations for patient safety, during the professional training process, the following guide question arises: Is the theme patient safety inserted in undergraduate nursing courses in the state of Bahia, as recommended by Ordinance 529/13 of the MS?

With this, the present study aimed to identify the theme of patient safety in the curricular components of undergraduate nursing courses in Bahia.

METHODOLOGY

This is a quantitative, descriptive and exploratory study, documentary based, which addresses the teaching of patient safety in undergraduate nursing courses in public and private HEIs in the State of Bahia.

The research was developed in February 2019, in 4 stages, including: 1) elaboration of a structured instrument for data collection; 2) Consultation with the e-MEC system, to search for bahian HEIs that offer undergraduate nursing in the face-to-face modality; 3) access to the websites of the HEIs eligible for the study and verification of the insertion of the theme patient safety in the training process of nursing students, considering as analysis documents the Curricular Matrix (MCC in Portuguese); the Pedagogical Project (PP) and the Menu of disciplines (MD); and 4) analysis and interpretation of the data. Figure 1 visually represents the methodological path.

The instrument used allowed the analysis of other variables: the period and/or semester that the patient's safety theme was addressed; thematic contents in which patient safety was inserted; course workload (WL); WL of the curricular component (CC) that addresses the theme in question; the nature of the CC (optional or mandatory); the administrative category of the HEI, whether public or private and its geographical location in the state of Bahia.

For the evaluation of course documents on the HEI websites, the inclusion criteria were defined as the HEIs with active registration in

the e-MEC portal, in 2019, and with the offer of the undergraduate nursing course in the face-to-face modality and present the theme of patient safety in at least one of the documents (MCC, PP, or MD), available on the courses website. Excluded from the study the HEIs with inactive codes in the e-MEC portal. The HEIs with multicampi that presented the same curriculum even with a number of different records in the e-MEC portal, were considered only once in the data analysis process.

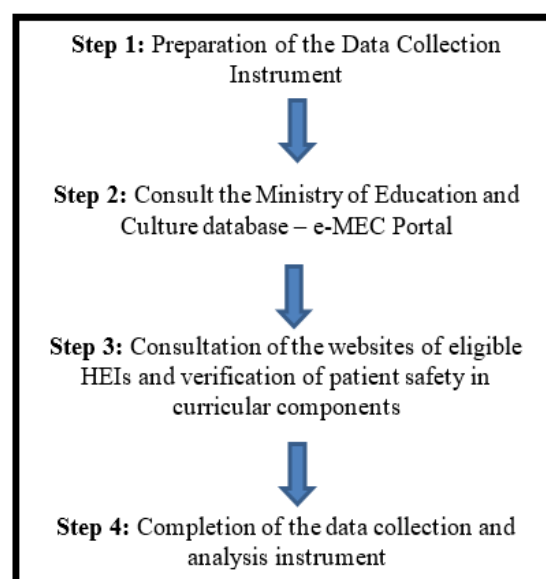


Figure 1. Methodological path.

Source: Prepared by the authors.

Because it is a research in which secondary data from the public domain were used, there was no need for submission to the Ethics Committee in research and application of the Free and Informed Consent Form (TCLE in Portuguese). We sought to guarantee the anonymity of the institutions, therefore, no names and registration numbers were disclosed.

RESULTS

The research allowed the identification of 75 HEIs, distributed in the municipalities of Bahia, which offer the undergraduate nursing course with active registration in the e-MEC portal. Of these, seven did not make any document available on their websites for analysis.

The initial characterization, presented in Table 1, shows that the highest concentration of

HEIs is located in the eastern macro-region, with a higher offer of courses in the state capital, Salvador, with 18 (33.33%) HEIs registered in the e-MEC portal. The North Central region was the least expressive, quantifying only 2 (2.67%).

The item administrative category showed that only 9 (12%) of the HEIs correspond to public institutions and, respectively, 66 (88%) are private for profit purposes, as expressed in Chart 1.

Chart 1. Characterization of Higher Education Institutions by health macro-region of Bahia, registered in the e-MEC. Feira de Santana, Bahia, Brazil, 2019.

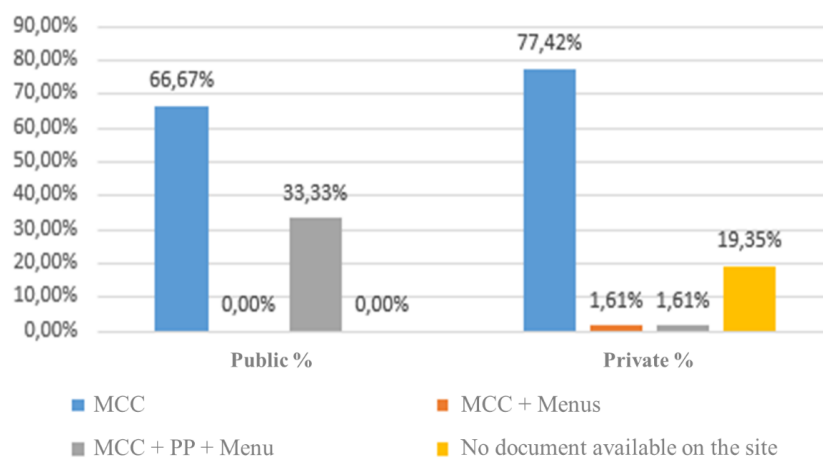
Health Macro-region	City	No. Public Institutions	No. Private Institutions	HEI in the macro-region (%)
East Center	Feira de Santana	1	9	16.00
	Conceição do Coité	0	1	
	Itaberaba	0	1	
Extreme South	Teixeira de Freitas	0	1	4.00
	Eunápolis	0	1	
	Itamaraju	0	1	
East	Lauro de Freitas	0	2	33.33
	Governador Mangabeira	0	1	
	Cachoeira	0	1	
	Salvador	2	16	
	Candeias	0	1	
	Santo Antônio de Jesus	1	1	
North East	Alagoinhas	0	4	9.33
	Ribeira do Pombal	0	1	
	Coronel João Sá	0	1	
	Queimadas	0	1	
North	Senhor do Bonfim	1	1	8.00
	Paulo Afonso	0	1	
	Juazeiro	0	2	
	Paripiranga	0	1	
West	Barreiras	0	2	6.67
	Luiz Eduardo Magalhães	0	2	
	Santa Maria da Vitória	0	1	
South-west	Guanambi	1	1	12.00
	Vitória da Conquista	1	3	
	Jequié	1	2	
South	Ilhéus	1	2	8.00
	Itabuna	0	2	
	Valença	0	1	
North center	Irecê	0	1	2.67
	Jacobina	0	1	

Source: Prepared by the authors based on the e-MEC website.

In the case of the availability of documents on the websites, few institutions presented in sets the three curricular components (PP + MCC + E), with MCC being the most available document online or by downloads on the pages accessed, reaching 77.42%, as the only

component made available by private HEIs. It is recorded that MCC, PP and MD were found in an associated way significantly on the websites of public institutions in 33.33%, and in 19.35% of the HEIs surveyed no available document was found, according to Graph 1.

Graphic 1: Percentage of documents available on HEI websites related to the undergraduate Nursing course. Feira de Santana, Bahia, Brazil, 2019.



Source: Prepared by the authors.

The approach to the theme "patient safety" from the menus provided by the institutions on the websites can be observed in Chart 2, which describes disciplines related to

the area of study, nature of the curricular component, related contents, workload and semester of initial contact with the theme.

Chart 2. Characterization of disciplines/content linked to the patient safety knowledge area. Feira de Santana, Bahia, Brazil, 2019.

Discipline	Nature of the curricular component	Related content covered	Course workload	Semester of contact with the topic
Nursing in hospital infection control	Mandatory	Sanitization of hands; patient safety in health services.	30h	7 th
Nursing care for people in the hospital context	Mandatory	Risk management; patient safety and quality of care.	306h	5 th
Semiology and Semiotics II	Mandatory	Hospital Infection Prevention and Biosecurity; safety in drug administration.	126h	4 th
Adult Health Nursing II	Mandatory	Safe care for surgical patients	126h	6 th
Patient safety in healthcare	Mandatory	National Patient Safety Program	40h	3 rd
Quality management in health services	Mandatory	Patient safety as a dimension of quality in health	40h	9 th
Nursing in the health care of men, workers and patient safety	Mandatory	Patient safety in the hospital context	80h	7 th

Source: Prepared by the authors based on the HEI menus available on the websites.

The theme is addressed in different curricular components, as can be seen in Chart 2, in subjects of a mandatory nature, with workloads ranging between 30 and 306 hours. The initial contact with patient safety takes place between the 3rd and 9th semester and the insertion of the theme appears cross-sectionally in 06 disciplines analyzed and specifically in only 01 discipline, found in only one institution in the entire State of Bahia.

DISCUSSION

The findings regarding the incorporation of the theme of patient safety in undergraduate nursing courses in the state of Bahia point to a significant gap in relation to the recommendations of Ordinance 529/13 of the MS for the training of nursing students, which should be subsidized by competencies and critical practices aimed at safe care.

When the presence of the theme was investigated in the curricular components available on the websites of the Bahian HEI, it was evidenced a lack of information, with a greater presence in the MCC and a small number of TS and PP that were included in the theme, which suggested incipience of its insertion in the pedagogical curricula of undergraduate nursing, denoting the need for reformulation of curricula.

Similarly, a bibliometric study conducted through online search in national and international databases pointed out the simple approach of teaching the theme in undergraduate courses in the health area, highlighting the scarcity of research from the perspective of patient safety training and teaching in the Brazilian context⁽⁷⁾.

Despite the theme of patient safety permeates debates in the world health scenario aiming to institutionalize best practices in care environments, it is observed a slow incorporation of the same in the curricula of undergraduate nursing courses in the state of Bahia, considering the implementation of the PNSP in 2013, and that more than a decade has passed since the elaboration and availability by the WHO of a multidisciplinary guide for the formatting of the patient safety curriculum, which brings guiding information to assist academic health institutions in the training of professionals, thus giving guidelines for the development of competencies in this context⁽⁸⁾.

When it was verified about the existence of specific discipline to approach the theme, only a single discipline was found in the curriculum components researched, which directly and exclusively addressed, entitled "Patient Safety in Health Care". This gap is in line with evidence that shows that the teaching of disciplines focused on patient safety during graduation contributes to the prioritization and implementation of barriers, with emphasis on prevention and risk management, reflecting on the training of critical, sensitive professionals, with scope to be transforming agents of quality in health services⁽⁹⁾.

The insertion of the theme in the researched curricula was perceived in different disciplines and semesters. Similar studies corroborate that the theme is contemplated in scenarios of practices different from graduation, may be

present in a specific discipline or appear subliminally in contents discussed during the course^(6,10). However, it is pertinent to question the selection and quality of contents addressed, with fragmented, horizontalized insertion, without interface with other curricular components, reducing its scope as a transformative promotion of safe practices in health services.

Nevertheless, preamble and compartmentalized insertion of the teaching of patient safety in higher education courses in health, contrasts with the ideas of some authors who argue that it is essential that undergraduates in the health area learn patient safety during the theoretical phase of the course, suggesting inclusion in the initial semesters of graduation, before entering practical internships, considering that these future professionals may suffer the

Another point of discussion is about the cross-cutting approach to the theme. A study conducted in northwestern São Paulo, with 51 teaching nurses and 167 students from two undergraduate nursing courses, one public and one private, pointed out the development of the theme in different disciplines and the importance of a transversalized approach. The theme was found in several key disciplines during the course, such as Semiology and Semitechnics, Adult and Elderly Health and Supervised Internship at the end of the course⁽¹²⁾.

It is worth noting that the teaching of patient safety in undergraduate nursing courses should consider beyond the transversal disposition, the interdisciplinary character of the theme in curricular components, the programmatic content and specific pedagogical strategies that enable the development of safety competencies from the investment in domains that include care management, safety culture, teamwork, effective communication, ability to recognize and manage risks, reveal adverse events and create subsidies for their mitigation⁽¹³⁾.

Regarding the programmatic content, multivariate approaches to the theme were verified in the curricular components studied, without concern with the basic, theoretical-practical framework, which favored the organization of critical thinking of students and the management of practices considering the pluridimensions of the patient safety

phenomenon. Themes on prevention and control of hospital infection; hand hygiene; risk management; ethical, moral, policy issues related to safety and quality in care; safety in the administration of medication; safe care for surgical patients and PNSP guidelines seem to be approached in a timely manner, in specific disciplines and semesters, with little or no interface between them, contrary to the cross-sectional approach recommended by WHO and MS.

It is possible to affirm that, in view of the patient safety element, there are critical points that deserve to be highlighted and discussed, such as: systemic approach to errors, international goals for patient safety in the hospital context and in primary health care, safety indicators, safety culture, fair culture, notification as a tool for fault management, among others, that were not evidenced in the programming of the content of the disciplines⁽¹⁴⁾.

Moreover, the implicit and punctual way of referring to the theme of patient safety in the documents investigated may compromise the professional training of these future nurses, considering it is essential that curricula ensure access to content focused on approaches to standards and safety practices recommended nationally and internationally, in addition to looking at the regional loco prism, through criticality and the development of competencies in students.

Considering also the lacunar character of the approach of the theme during training, we believe that it is necessary a discipline that addresses in an interdisciplinary way, contents that contemplate the teaching of patient safety, in order to expand knowledge, provide nurses with awareness and involvement with culture so that they can later develop actions for safety in the care field, thus qualifying the service.

Another point to be highlighted is the resistance of educators to approach the theme, perhaps due to discomfort tied to ignorance, in view of the epistemology of it having roots outside the academic circles^(4,11).

It is recorded that the teaching of patient safety is an innovative technology, and the HEIs must adapt to meet the national and international recommendations modifying their PP, so that by unifying or at least seeking to adapt the contents

between the courses taught, they will be contributing to a more consistent training of the student with regard to patient safety.

Thus, in parallel to the relevance of updating and incorporating curriculum contents that guide higher education focused on patient safety, it is essential to integrate strategies that collaborate for the improvement of reasoning and clinical judgment skills focused on reducing care errors and consequently reducing harm to patients. The emphasis on pedagogical innovations should go beyond traditional forms of teaching, and represent not only the insertion of novelties and technologies, but also include a change in the way of understanding the complexity of the health field and the patient safety dimension⁽¹⁵⁾.

For this scope, it is indicated the participation of students in the definition of paths and criteria in the teaching and learning process on the subject, it should be valued knowledge, skills and personal experiences, in addition to the readjustment of theoretical and practical contents. Innovative methodologies, such as realistic simulation, video use, staging/dramatization, films, should be used, as they significantly favor the development of skills. Among these trends, the use of scenarios of practices simulated assistance in the laboratory, is pointed out with great potential for effectiveness and effectiveness of the teaching-learning process of the theme⁽¹⁶⁾.

It is worth inferring that, in the walk through the elaboration of a scientific basis, necessary for the consolidation of systems for the development of health problems related to care failures, nurses were not invisible, had active participation in fundamental milestones that supported the modification of rules, elaboration of scientific principles, protocols of care safety, and continues to foster reflections, producing new competencies, serving as a substrate for cultural transformations according to new trends, thus, their contributions are evidenced in research and improvements in the safety and quality of health services^(12,17).

In view of the points discussed, we reinforce the importance of including the theme of patient safety in a massive way in the curricula of undergraduate nursing courses by the training institutions, considering, in addition to the socio-historical construction of the theme and the role

of nursing in this construction, compliance with ordinance 529 of April 1, 2013, of the PNSP, which values the promotion and inclusion of the theme in professional training in the health area with driving practice to mitigate risks and harm to the patient.

However, it is pertinent to note that the unavailability of curricular components to address the contents worked was one of the limits of this study. The theme patient safety appeared as a curricular component in less than 10% of the HEIs surveyed, so it cannot be affirmed that the theme is not worked transversally in these institutions that did not present specific data. Another limitation of the study refers to the characterization of only one Brazilian state, and its results cannot portray the reality of the whole country, and it is necessary to conduct further studies for further analysis and discussion.

CONCLUSION

The insertion of the theme patient safety in undergraduate nursing courses in the state of

Bahia proved insipid and distant from the recommendation of Ordinance 529/13 of the Ministry of Health, a finding evidenced after a detailed analysis of the information present on the websites, which answers the research question.

It is understood that there is a real need to expand and insert the theme in the PP of undergraduate nursing courses, despite the relevance of the theme in the global scientific community and its implications for health services.

To this end, it is imperative to review the formative processes, in search of an interdisciplinary approach, as well as transdisciplinary, in view of the complexity of health care and the importance of developing specific competencies focused on patient safety during professional training of nurses.

It is understood that the standards of care go through processes of continuous changes, measures in which new technical-scientific advances arise, and that in order to have greater safety and quality in care the formative process must move in line with this dynamic.

ENSINO DA SEGURANÇA DO PACIENTE NA GRADUAÇÃO EM ENFERMAGEM NO ESTADO DA BAHIA

RESUMO

Objetivo: identificar o tema segurança do paciente nos componentes curriculares de cursos de graduação em enfermagem no estado da Bahia. **Método:** pesquisa quantitativa, descritiva, exploratória de base documental desenvolvida em fevereiro de 2019, com dados extraídos da Matriz Curricular, Projeto Pedagógico e Ementa, disponíveis nos websites de instituições de ensino superior com situação ativa no sistema e-MEC. **Resultados:** das 75 instituições cadastradas, nove eram públicas, e 66 privadas. O tema segurança do paciente não foi encontrado em nenhum website de universidades públicas e apenas em 8,06% das privadas. O contato inicial com a temática dava-se no 3º semestre, a carga horária média das disciplinas que abordavam o tema variava de 30 a 306 horas e o componente curricular era obrigatório para estas disciplinas. Apenas 1,71% dos websites das instituições públicas apresentavam todos os documentos pesquisados, enquanto as privadas apresentaram 33,33%, a matriz curricular foi o documento mais disponibilizado. **Conclusão:** a inserção do tema segurança do paciente nos componentes curriculares mostrou-se insuficiente, apontando necessidade de revisão dos processos formativos e inclusão de abordagem interdisciplinar e transdisciplinar, tendo em vista a complexidade do cuidado em saúde e a importância do desenvolvimento de competências específicas com foco na segurança do paciente.

Palavras-chave: Segurança do paciente. Currículo. Educação em Enfermagem.

ENSEÑANZA SOBRE LA SEGURIDAD DEL PACIENTE EN EL PREGRADO EN ENFERMERÍA EN EL ESTADO DE BAHIA-BRASIL

RESUMEN

Objetivo: identificar el tema seguridad del paciente en los componentes curriculares de cursos de pregrado en enfermería en el estado de Bahia-Brasil. **Método:** investigación cuantitativa, descriptiva, exploratoria de base documental desarrollada en febrero de 2019, con datos extraídos de la Matriz Curricular, Proyecto Pedagógico y Directrices, disponibles en los sitios electrónicos de instituciones de enseñanza superior con situación activa en el sistema e-MEC. **Resultados:** de las 75 instituciones registradas, nueve eran públicas y 66 privadas. El tema

de la seguridad del paciente no se encontró en ningún *website* de universidades públicas y solo en el 8,06% de las privadas. El contacto inicial con la temática se trabajaba en el 3º semestre, el promedio de la carga horaria de las asignaturas que trataban el tema variaba de 30 a 306 horas y el componente curricular era obligatorio para estas asignaturas. Solo el 1,71% de los sitios electrónicos de las instituciones públicas presentaba todos los documentos investigados, mientras que los privados presentaron el 33,33%, la matriz curricular fue el documento más disponible. **Conclusión:** la inserción del tema seguridad del paciente en los componentes curriculares se mostró insuficiente, señalando necesidad de revisión de los procesos formativos e inclusión de abordaje interdisciplinario y transdisciplinario, teniendo en cuenta la complejidad del cuidado de la salud y la importancia del desarrollo de competencias específicas centradas en la seguridad del paciente.

Palabras clave: Seguridad del paciente. Currículo. Educación en enfermería.

REFERENCES

1. Brasil. Assistência Segura: Uma Reflexão Teórica Aplicada à Prática. Brasília: Anvisa; 2017. Disponível em: <https://portaldeboaspraticas.iff.fiocruz.br/wp-content/uploads/2019/07/Caderno-1-Assist%C3%A2ncia-Segura-Uma-Reflex%C3%A3o-Te%C3%B3rica-Aplicada-%C3%A0-Pr%C3%A1tica.pdf>
2. Cabaña J V, Medina OA, Altamirano G, Leguiza IC, Gómez C. Percepción sobre el desarrollo de competencias en seguridad de los pacientes de los estudiantes de la Carrera de Licenciatura en Enfermería en el período 2018. *Rev Fac Med*. 2019;1:12–9. Disponível em: <http://revista.med.unne.edu.ar/index.php/med/article/view/100/93>
3. Brasil. Documento de referência para o Programa Nacional de Segurança do Paciente [Internet]. Brasília: Ministério da Saúde; 2014. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/documento_referencia_programa_nacional_seguranca.pdf%0Ahttp://editora.saude.gov.br
4. Bohomol E. Patient safety education of the graduation in Nursing from the teaching perspective. *Esc Anna Nery*. 2019;23(2):1–8. DOI: <https://doi.org/10.1590/2177-9465-EAN-2018-0364>
5. Calazans MSC, Pereira MSR, Coslop S, Maestri E, Luzardo AR, Lima E de FA, et al. Patient safety among nursing students: an integrative review. *Rev Enferm Atual Derme* [Internet]. 2020;94(32):e-020086. DOI: <https://doi.org/10.31011/reaid-2020-v.94-n.32-art.934>
6. Garzin ACA, Melleiro MM. Segurança do paciente na formação dos profissionais de saúde. *Cienc Cuid Saúde*. 2019 Aug 12;18(4):01–8. DOI: <http://dx.doi.org/10.4025/cienccuidsaude.v18i4.45780>
7. Gonçalves N, Siqueira LDC, Caliri MHL. Ensino sobre segurança do paciente nos cursos de graduação: Um estudo bibliométrico. *Rev enferm UERJ*, Rio Janeiro. 2017;25:e15460. DOI: <http://dx.doi.org/10.12957/reuerj.2017.15460>
8. World Health Organization. Global Patient Safety Collaborative. WHO, editor. Genebra: WHO; 2019. Disponível em: <https://www.who.int/initiatives/global-patient-safety-collaborative>
9. Mohsin SU, Ibrahim Y, Levine D. Teaching medical students to recognise and report errors. *BMJ Open Qual* [Internet]. 2019;8(2):e000558. DOI: <http://dx.doi.org/10.1136/bmjopen-2018-000558>
10. Greco PBT, Souza MM, Luz EFM, Ongaro JD, Almeida CS, Kirchhof RS, et al. Patient safety in understanding nursing students of a community university. *Rev Enf Atenção à Saúde* [Online] [Internet]. 2021;10(2):e-202116. DOI: <http://dx.doi.org/10.18554/reas.v10i2.4382.e202116>
11. Marra VN, Mendes W. O ensino da segurança do paciente. In: Souza P, Mendes W. *Segurança do paciente: criando organizações de saúde seguras*. 2a ed. Rio de Janeiro, RJ: CDEAD, ENSP Fiocruz; 2019. p. 149–68. Disponível em: <https://books.scielo.org/id/bskw2/pdf/sousa-9788575416426-14.pdf>
12. Lopes MNA, Beccaria LM, Silva LB, Cesarino CB, Faria JIL. Segurança do paciente: desenvolvimento do tema em cursos de graduação em enfermagem. *Enferm Bras* [Internet]. 2018;17(3):208–17. DOI: <http://dx.doi.org/10.33233/eb.v17i3.1163>
13. Lobos BM, Vergara NF. Effect of an educational intervention program on patient safety knowledge among undergraduate nursing students. *Cienc y Enferm XXVIII* [Internet]. 2017;1:97–108. DOI: <http://dx.doi.org/10.4067/S0717-95532017000100097>
14. Barreto RS, Servo MLS, Ribeiro AMVB. Social representations about patient safety from the perspective of intensive care nurses. *Rev baiana enferm* [Internet]. 2020;34:e36969. DOI: <http://dx.doi.org/10.18471/rbe.v34.36969>
15. Siman AG, Braga LM, Amaro MOF, Brito MJM. Practice challenges in patient safety. *Rev Bras Enferm* [Internet]. 2019;72(6):1504–11. DOI: <http://dx.doi.org/10.1590/0034-7167-2018-0441>
16. Gomes ATL, Salvador PTCO, Goulart CF, Cecilio SG, Bethony MFG. Innovative Methodologies to Teach Patient Safety in Undergraduate Nursing: Scoping Review. *Chía*, Colomb. 2020;20(1):1–15. DOI: <https://doi.org/10.5294/aqui.2020.20.1.8>
17. Cassiani SHB, Wilson LL, Mikael SSE, Peña LM, Grajales RAZ, McCreary LL, et al. The situation of nursing education in latin america and the caribbean towards universal health. *Rev Latino-Am Enferm* [Internet]. 2017;25:e2913. DOI: <http://dx.doi.org/10.1590/1518-8345.2232.2913>

Corresponding author: Endric Passos Matos. Faculdade de Medicina Faculdade de Ciências de Saúde. Campos Universitário Darcy Ribeiro s/n - Asa Norte, Brasília – DF. CEP: 70910-900. E-mail: endric-matos@hotmail.com

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