

## **ORIGINAL**

# Curricular component of Urgency and Emergency in Brazilian Nursing undergraduate courses

Componente curricular de Urgência e Emergência nas graduações brasileiras em Enfermagem Componente curricular de Urgencia y Emergencia en las graduaciones brasileñas de Enfermería

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Objective: To characterize the offer of the Urgency and Emergency discipline in the curricular matrices of Brazilian Nursing undergraduate courses. Methods: This is a descriptive, documentary study carried out on the Ministry of Education's website and in 691 curriculum matrices of bachelor's degree courses in Nursing in Brazil. Results: Of the curriculum matrices, 97.2% belonged to in-person teaching courses; 83.6% from private institutions, mostly located in the Southeast region (36.8%). Regarding the Urgency and Emergency discipline, it appeared in 97.2% of the institutions as a mandatory curricular component, mostly offered in the seventh period (31.2%) of the course, with an average workload of 103.3 hours. Conclusion: Urgency and Emergency disciplines in undergraduate Nursing courses were predominantly from private institutions, with a mandatory component, offered in the seventh semester of the course.

Descriptors: Urgency. Emergency. Education in Nursing. Bachelor of Nursing. Emergency Medicine.

Objetivo: Caracterizar a oferta da disciplina de Urgência e Emergência nas matrizes curriculares dos cursos superiores de Enfermagem no Brasil. Métodos: Trata-se de estudo descritivo, documental, realizado no website do Ministério da Educação e em 691 matrizes curriculares de cursos de bacharelado em Enfermagem no Brasil. Resultados: Das matrizes curriculares, 97,2% pertenciam a cursos de ensino presencial; 83,6%, de instituições privadas, majoritariamente localizada na região sudeste (36,8%). Com relação à disciplina de Urgência e Emergência, esta apareceu em 97,2% das instituições como componente curricular obrigatório, em sua maioria, ofertada no sétimo período (31,2%) do curso, com carga horária média de 103,3 horas. Conclusão: As disciplinas de Urgência e Emergência nos cursos de graduação em Enfermagem foram, predominantemente, oriundas de instituições privadas, de componente obrigatório, ofertadas no sétimo semestre do curso. Descritores: Urgência. Emergência. Educação em Enfermagem. Bacharelado em Enfermagem. Medicina de Emergência.

Objetivo: Caracterizar la oferta de la disciplina Urgencias y Emergencias en las matrices curriculares de los cursos superiores de Enfermería en Brasil. Métodos: Se trata de un estudio descriptivo, documental, realizado en el sitio web del Ministerio de Educación y en 691 matrices curriculares de licenciaturas en Enfermería en Brasil. **Resultados:** De las matrices curriculares, el 97,2% pertenecían a cursos de enseñanza presencial; el 83,6% de instituciones privadas, en su mayoría ubicadas en la región Sudeste (36,8%). En cuanto a la disciplina Urgencias y Emergencias, apareció en el 97,2% de las instituciones como componente curricular obligatorio, ofertada en su mayoría en el séptimo período (31,2%) del curso, con una carga horaria promedio de 103,3 horas. Conclusión: Las disciplinas de Urgencias y Emergencias en los cursos de pregrado en Enfermería fueron predominantemente de instituciones privadas, con componente obligatorio, ofrecidos en el séptimo semestre del curso.

Descriptores: Urgencia. Emergencia. Educación en Enfermería. Licenciaturas en Enfermería. Medicina de Emergencia.

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### **INTRODUCTION**

From the Federal Constitution of 1988, the proposal to create the Unified Health System in Brazil emerged and, along with it, the need for changes in the training of professionals who would work in that system. In an articulated and intersectoral way, the Ministry of Education acts in guiding the training of these professionals and in the National Curriculum Guidelines for courses in the health area, aiming to direct the quality of the education offered<sup>(1)</sup>.

As presented in the National Curriculum Guidelines, Nursing education must be in line with the training of students who develop critical and reflective thinking, in addition to skills and decisionmaking, in order to meet existing demands in the health scenario. In this context, the area of Urgency and Emergency stands out, in which the development of knowledge, skill and attitude of professionals should support the care of critical patients who are at imminent risk of death. This is because the criticality of patients treated in urgency and emergency arises from situations of clinical or traumatic origin, which require rapid assessment and interventions; the same in cases of sepsis and septic shock, in order to improve management and care management, in addition to reducing morbidity and mortality. (2-3)

In addition, the scenario of hospital emergencies is, for the most part, overcrowded, with a shortage of material and human resources, which favors a stressful and complex work environment for professionals. (4-5)

In Brazil, the Unified Health System is organized through Health Care Networks, with the Urgency and Emergency Care Network highlighted for its care complexity and included in the National Emergency Care Policy. Its main objective is the expansion, qualification and guarantee of care for patients in emergency situations throughout the national territory, with a view to guaranteeing humanized and integral access to users. (6-7)

Thus, for the profile of the graduates of Nursing courses to be compatible with meeting existing demands, it is necessary that contents about urgency and emergency are addressed in the curricular matrix of such courses.

In view of the expansion of undergraduate Nursing courses and the relevance of this category for urgent and emergency care, the relevance of studies that investigate the offer of disciplines on this topic in the curricular matrix of higher Nursing courses is pointed out. Such investigation will point out possible gaps in the offer of this curricular component and will subsidize the expansion and due adjustments in its offer.

Thus, this study aimed to characterize the offer of the Urgency and Emergency discipline in the curricular matrices of higher education courses in Nursing in Brazil.

## **METHODS**

This was a descriptive, documentary study, with a quantitative approach. Data were collected in the

Curricular component of Urgency and Emergency.. computer laboratory of the Federal Institute of Education, Science and Technology of Pernambuco, Campus Pesqueira, through access of the Ministry of Education's website, which presents information about undergraduate courses, as well as educational institutions in Brazil.

The study population consisted of the curricular matrices of undergraduate Nursing courses. The inclusion criterion adopted was that it was a curricular matrix of a Nursing course in an active situation, and the exclusion criteria used were: the absence of a curricular matrix available online and the matrix not containing the offer of discipline or curricular component of Urgency and Emergency.

Data collection took place in March 2019. To this end, an instrument was created consisting of 20 questions about the variables referring to the name of the institution; modality (distance or in-person teaching); category (private or public state and federal); score on the National Student Performance Exam (Enade); location (interior or capital); city; state; region; nomenclature; period; modality (mandatory or optional); workload; and number of subjects.

Initially, data collection was carried out through access of the website<sup>(8)</sup> of the Ministry of Education to search for registered, authorized and active undergraduate Nursing courses. Thus, a list of 1,221 undergraduate nursing courses was obtained. the variables contained in the Subsequently, aforementioned instrument were collected, available on the website's platform (name, acronym, location of the institution and course concept). According to information from educational institutions registered with the Ministry of Education, access was made to the website of each educational institution to search for the curriculum matrix of the higher education course in Nursing.

Of the 1,221 courses verified, 530 (43%) were excluded from the sample for not having a curriculum available online. Remained 691 (57%) because they have curriculum matrices available on the institutions' website, were selected to compose the sample. In possession of the curricular matrices of the Nursing courses, the variables referring to the characteristics of the offer of the discipline were collected. Data were analyzed descriptively in the R software, based on frequency, percentage, mean and standard deviation.

As it is research which was not carried out with human beings, but with information in the public domain, the submission of the project to the Ethics Committee in Research with Human Beings was not necessary. However, it is noteworthy that the ethical aspects regarding the reliability, secrecy and use of data exclusively for scientific purposes were respected.

### **RESULTS**

Of the 691 courses that offered the discipline of Urgency and Emergency, 672 (97.2%) were in the inperson modality and 19 (2.7%) in the Distance Education modality. As for the category, 578 (83.6%) institutions were private; 70 (10.1%) were federal public; and 43 (6.2%) state public. Regarding

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location, 425 (61.5%) were in the interior of their respective states and 266 (38.5%) in the capital.

Regarding the region and state in which the course was located, the Southeast region had the highest percentage (36.8%), followed by the Northeast region (31.5%). The North region had the lowest rate (9.0%), as detailed in **Table 1**.

**Table 1.** Distribution of the Urgency and Emergency discipline in Nursing graduations by region and state. Pesqueira,

Pernambuco, Brazil, 2020 (n=691).				
Region/State	n(%)			
n(%)	11(26)			
Midwest				
91(13.2%)				
Goiás	34 (4.9)			
Mato Grosso	16 (2.3)			
Mato Grosso do Sul	13 (1.9)			
Distrito Federal	13 (1.7)			
	28 (4.0)			
Northeast				
218(31.5%)	10 (2.7)			
Maranhão	19 (2.7)			
Piauí	20 (2.9)			
Ceará	37 (5.4)			
Rio Grande do Norte	10 (1.4)			
Paraíba	14 (2.1)			
Pernambuco	33 (4.8)			
Alagoas	13 (1.9)			
Sergipe	10 (1.4)			
Bahia	62 (9.0)			
North 62(9.0%)				
Amazonas	14 (2.1)			
Roraima	4 (0.5)			
Amapá	5 (0.7)			
Pará	23 (3.3)			
Tocantins	4 (0.6)			
Rondônia	8 (1.1)			
Acre	4 (0.6)			
Southeast				
254(36.8%)				
São Paulo	108 (15.6)			
Rio de Janeiro	33 (4.8)			
Espírito Santo				
Minas Gerais	22 (3.2)			
	91 (13.2)			
South				
66(9.5%)				
Paraná	26 (3.8)			
Rio Grande do Sul	27(3.9)			
Santa Catarina	13 (1.9)			
Source: Flaborated by the authors (2022)				

Source: Elaborated by the authors (2022).

Among the 691 courses that provide the Urgency and Emergency disciplines in their curriculum, 579 (83.8%) had only one discipline; 105 (15.2%) offered two disciplines; four (0.6%), three disciplines; 2 (0.3%), four disciplines; and one (0.1%), eight disciplines related to the theme. It was also found that 672 (97.2%) of the disciplines that involved the theme were offered in the mandatory modality and 19 (2.7%) in the optional modality.

Regarding the Enade score, 47 (6.8%) courses had a grade of 5; 109 (15.8%), grade 4; 188 (27.2%) had a grade of 3; 180 (26.0%), grade 2; 29 (4.2%) had the lowest score (1); and 138 (20.0%) had no grade.

It was found that in 8.9% of the courses the discipline was offered together with the Intensive Care Unit discipline and in 13.5% it was presented as an integrated component of the Nursing discipline in Adult and Elderly Health Care. The most used nomenclature for the curricular component was "Urgency and Emergency in Nursing", found in 340 (49.2%) curriculum matrices. The second most common nomenclature was "Basic Life

Support/Nursing in First Aid/Pre-Hospital Care", present in 140 (20.2%), while "Nursing in adult and elderly health care" was found in 93 (13.5%), "Nursing Care for Critical Patients", in 60 (8.7%) and "Nursing Care in Emergencies and Traumas", in 58 (8.4%).

Regarding the semester of the Nursing course in which the Urgency and Emergency disciplines were offered, the seventh period stood out as the one with the highest frequency of offering this curricular component (31%). It is noteworthy that in 87 (12.6%) of the analyzed matrices the subject was offered in more than one period and in 24 (3.5%) this information was not available, as shown in **Table 2**.

Regarding the workload of the Urgency and Emergency disciplines, it was observed that public institutions have a greater theoretical, practical and total workload invested in this type of curricular component (Table 3).

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**Table 2.** Period of the course in which the Urgency and Emergency disciplines are offered in the Bachelors of Nursing in Brazil. Pesqueira, Pernambuco, Brazil, 2019 (n=691).

Period offering the course	n(%)
First	10(1.3)
Second	29(4.2)
Third	9(1.3)
Forth	17(2.3)
Fifth	35(5.0)
Sixth	70(10.0)
Seventh	216(31.2)
Eighth	186(27.9)
Ninth	2(0.3)
Tenth	6(0.7)
Offered in more than one period	87(12.4)
Not informed	24(3.4)

Source: Elaborated by the authors (2022).

**Table 3.** Distribution of the workload of the Urgency and Emergency disciplines offered in the Bachelor's Degrees in Nursing in Brazil. Pesqueira, Pernambuco, Brazil, 2019 (n=691).

Type of workload	Public Institution	Private Institution (n=	Total			
	(n=113)	578)	(n=691)			
	Average + (SD*)	Average + (SD*)	Average + (SD*)			
Theoretic	94.82 (69.6)	71.82 (45.3)	75.6 (50.8)			
Practical	42.73 (56.0)	24.37 (29.3)	27.53 (35.8)			
Total	139.09 (96.3)	96.26 (52.03)	103.3 (63.4)			

\*SD = Standard Deviation
Source: Elaborated by the authors (2022).

**DISCUSSION** 

The present study contributes to the understanding of how Urgent and Emergency disciplines are offered in undergraduate Nursing courses in Brazil, in order to support the identification of gaps that can direct adjustments to existing curriculum matrices and guide the construction of new matrices.

As a limitation, it is pointed out the fact that were investigated curricular matrices specific to Brazilian Nursing courses, which means that the curricular components about the emergency in other health courses and outside Brazil may have a different profile.

When analyzing the curricular matrices that had the Urgency and Emergency disciplines in the Bachelor's Degrees in Nursing in Brazil, the prevalence of private educational institutions was observed. According to data from the National Institute of Educational Studies and Research Anísio Teixeira, in 2017 the private network had more than 6.2 million students who were part of higher education, so that, of every four undergraduate students, three attended private institutions<sup>(8)</sup>. Thus, it is important that researches that investigate nursing training also include data collection in the private education network, given the high number of professionals who are trained by such institutions.

Regarding the location of educational institutions, the expansion took place mainly in the Southeast region, with emphasis on the private education sector. The gradual increase in undergraduate courses in the private sphere was based on government policies that, while expanding the number of courses, created measures to favor the admission and the dissociated expansion of the

quality of education, since the greater part of private higher education institutions are not associated with teaching, research and extension projects, in addition to not requiring full-time teaching qualifications, with master's and doctoral degrees<sup>(9)</sup>.

The study identified the thematic and methodological trends of Brazilian Nursing in the production of knowledge in emergency, whose results showed that 60.3% of the scientific production on inhospital emergency and 50% of the publications on extra-hospital emergency were found in the Southeast region<sup>(10)</sup>. However, given the continental dimension of Brazil and the particularities of each region, it is pointed out the relevance of expanding the offer of curricular components about emergency in the other regions.

A study carried out in Shanghai, China, showed that it is important for undergraduate Nursing students to have a period of training in the emergency room, since the student improves the development of skills, acquiring confidence in decision making, at the same time in which such training methods must be improved in order to relieve pressure from the sector and improve adaptation to the work environment<sup>(11)</sup>. Another study that investigated the medical internship from the perspective of course coordinators showed that, for most of the coordinators interviewed (84.60%), the teaching of urgency and emergency within the internship deserved to be highlighted even more<sup>(12)</sup>.

Faced with the scarcity of studies that describe the teaching of the Urgency and Emergency disciplines, the role of Academic Leagues and their contributions to university education emerges. They use simulated situations as a starting point, with view to integrate different knowledge, encourage

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student autonomy, develop their critical-reflective spirit, in addition to assuming a leadership role in the group<sup>(13)</sup>.

With regard to the workload of the Urgency and Emergency discipline, there was a greater offer of hours in public educational institutions. This finding converges with the result of a study on the offer of the discipline of Psychiatric Nursing and Mental Health, which found a greater workload in public institutions compared to those of the private category<sup>(14)</sup>. In this context, it is necessary for new studies to investigate the effectiveness of courses aimed at urgency and emergency in their various presentations of workload, in order to know the best curricular structure of this course, within the limitations and structural particularities of higher education courses in Nursing. In this way, it will be possible to suggest adjustments to the workload and a possible trend towards standardization between public and private institutions.

Quality in teaching urgency and emergency care is relevant, since work in hospital emergency services demands from nurses technical-scientific thinking and quick reasoning for decision-making in the various activities carried out by them, which will imply greater quality and safety of the care provided<sup>(15)</sup>. Adequate teaching of urgency and emergency in undergraduate courses will not guarantee the training of specialist professionals. However, it contributes to better care delivery and minimization of possible iatrogenic events.

## **CONCLUSION**

Urgency and Emergency disciplines in the curricula of Brazilian Nursing undergraduate courses are predominantly offered by private institutions located in the Southeast, as a mandatory curricular component, in the seventh semester of the course, with an average workload of 103.3 hours. However, public institutions have a greater workload for the curricular component.

Thus, it is observed that the teaching of the Emergency component in Nursing courses has contributed to critical and reflective training, which strengthens its care practice.

## **REFERENCES**

- 1. Andrade ACM, Souza SV, Lima JTN, Ferreira FV, Pinto JDM, Melo TS. Atuação da residência multiprofissional em urgência e emergência em bloco cirúrgico de hospital de ensino. SANARE. [Internet]. 2016;15(1):105-11. Available from: https://sanare.emnuvens.com.br/sanare/article/vie w/935.
- 2. Miranda FBG, Pereira-Junior GA, Mazzo A. Competences in the training of nurses to assist the airway of adult patients in urgency and emergency situations. Rev. Latino-Am. Enfermagem. [Internet]. 2021;29:e3434. doi: http://dx.doi.org/10.1590/1518-8345.3380.3434
- 3. Ribeiro LL. A importância da identificação precoce da sepse pela equipe de enfermagem no serviço de emergência. Rev PubSaude. [Internet]. 2020;3:a024. doi: https://doi.org/10.31533/pubsaude3.a024

Curricular component of Urgency and Emergency.. 4. Silva MF, Bezerril MS, Chiavone FTB, Morais SHM, Costa MEG, Dantas MNP, et al. Patient safety culture from the perspective of nursing technicians of an emergency sector. Rev Rene. [Internet]. 2021;22:e60734. doi: https://doi.org/10.15253/2175-6783.20212260734

- 5. Rabelo SK, Lima SBS, Santos JLG, Santos TM, Reisdorfer E, Hoffmann DR. Care management instruments used by nurses in the emergency hospital services. Rev Esc Enferm USP. [Internet]. 2021;55:e20200514. doi: https://doi.org/10.1590/1980-220X-REEUSP-2020-0514
- 6. Feitosa Filho GS, Kirschbaum M, Neves YCS, Loureiro BMC, Lima VACC, Calazans RM, et al. Characteristics of training and motivation of physicians working in emergency medicine. Rev Assoc Med Bras. [Internet]. 2017; 63(2):112-7. doi: https://doi.org/10.1590/1806-9282.63.02.112
- 7. Coifman AHM, Pedreira LC, Jesus APS, Batista REA. Interprofessional communication in an emergency care unit: a case study. Rev Esc Enferm USP. [Internet]. 2021;55:e03781. https://doi.org/10.1590/S1980-220X2020047303781
- 8. Ministério da Educação (BR). Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. Censo da Educação Superior. Brasília: Ministério da Educação; 2017.
- 9. Martins LK, Rodrigues RM, Souza RK, Conterno SFR, Luz MS. Expansão dos cursos de graduação em enfermagem no Brasil entre 2004 e 2017. Enferm. FOCO 2019; 10(6): 63-69.
- 10. Morais MC, Couto CS, Marques PSS, Pereira RMC, Ribeiro WA, Lopes ROP. Tendências temáticas e metodológicas da enfermagem brasileira na produção de conhecimento em emergência. Rev Pró-UniverSUS. [Internet]. 2018;9(2):31-40. Available from: http://editora.universidadedevassouras.edu.br/index.php/RPU/article/view/1433
- 11. Lampert JB, Bicudo AM. 10 anos das Diretrizes Curriculares Nacionais do curso de graduação em Medicina. Rio de Janeiro: Associação Brasileira de Educação Médica; 2014.
- 12. Candido PTS, Batista NA. O Internato Médico após as Diretrizes Curriculares Nacionais de 2014: um Estudo em Escolas Médicas do Estado do Rio de Janeiro. Rev. bras. educ. med., Brasília. [Internet]. 2019;43(3):36-45. doi: https://doi.org/10.1590/1981-52712015v43n3rb20180149
- 13. Pereira Júnior GA, Fraga G, Arnaud F, Gula EA. O Ensino de Urgência e Emergência de acordo com as novas Diretrizes Curriculares Nacionais e a Lei do Mais Médicos. Cadernos ABEM. [Internet]. 2015. Available from:

https://www.researchgate.net/publication/2995732 58\_O\_Ensino\_de\_Urgencia\_e\_Emergencia\_de\_acordo\_ com\_as\_novas\_Diretrizes\_Curriculares\_Nacionais\_e\_a \_Lei\_do\_Mais\_Medicos

14. Vargas D, Maciel MED, Bittencourt MN, Lenate JS, Pereira CF. O ensino de enfermagem psiquiátrica e saúde mental no Brasil: análise curricular da graduação. Texto Contexto Enferm. [Internet]. 2018;27(2):e2610016. doi:

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ISSN: 2238-7234 Galindo Neto NM *et al*. http://dx.doi.org/10.1590/0104-070720180002610016

15. Santos JLG, Menegon FHA, De Pin SB, Erdmann AL, Oliveira RJT, Costa IAP. The nurse's work environment in a hospital emergency service. Rev

Curricular component of Urgency and Emergency.. Rene. [Internet]. 2017;18(2):195-203. doi: https://doi.org/10.15253/2175-6783.2017000200008

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