International Journal of Health Science

TRANSVERSAL TEACHING OF EMERGENCY IN MEDICINE COURSES IN BRAZIL: A LITERATURE REVIEW

Tayane Costa Santiago

Acadêmica, Universidade Federal da Bahia

Thiago Santos Novais

Advisor, General Surgeon, Hospital Santo Antônio, Teacher, Universidade Federal da Bahia



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: In the past, emergency education was not included in the curriculum of medical courses in Brazil. After the Abem 50 years project and law no 12.871, this subject became mandatory, as well as its practical application even in graduation. Learning opportunities from the early years of graduation point to the transverse axis as a guide for emergency education. For the literature review, the PRISMA method was used and among the 262 articles found, only 10 were selected after reading their abstracts and full texts. It was seen that there are several emergency teaching models and that most students are satisfied during the internship when they realize that they have maintained the knowledge acquired during graduation. The study had analysis limitations in view of the lack of standardization of the teaching method and teaching evaluation.

Keywords: Teaching. Medical education. Emergency.

INTRODUCTION

According to Sorte, ÉMSB et al (2020), the teaching of the discipline of urgency and emergency in medical schools has gaps, so that newly graduated students feel insecure and often technically unprepared to deal with this type of occurrence. Paradoxically, after completing the medical course, most students, even before entering medical residency or specialization courses, end up working in urgent and emergency departments, a fact proven by the Federal Council of Medicine (CFM).

Until recently, this discipline was not a mandatory part of the curriculum in many schools, while the scenario faced by these physicians is an increase in the prevalence of Urgent and Emergency cases, since there is an increase in life expectancy, in the survival of patients with chronic diseases and in the number of traffic accidents and interpersonal

violence. The training of professionals in the health area has undergone a series of restructurings with the objective of filling the gaps related mainly to the effective capacity of solving the health problems of the Brazilian population.

In 2001, the Ministry of Education approved the National Curriculum Guidelines for the Undergraduate Course in the Health Area (DCN) and established the general skills and abilities to be developed in the doctor's training process - healthcare, decision-making, communication, leadership, administration and management, and permanent education –, seeking to break with the traditional training model.

In 2013, Law No. 12,871 began to require that at least 30% of the workload of the internship be allocated to primary care activities and EU services of the Unified Health System (SUS) for undergraduate medical students. During this period, students must practice their skills through intensive training in emergency care units (UPAs).

In emergency services, the supply of jobs is greater than the demand and experience in the area is not always required for work in the emergency room. The market is then conducive, and the newly graduated doctor ends up entering these services early. The identification and suggestion of learning opportunities from the early years of graduation point to the transverse axis as a guide for emergency teaching and follow the recommendations of the Brazilian Association of Medical Education (Abem) and international references.

The transversal design allows successive approximations of the same object, using different teaching methodologies and in different learning scenarios, thus allowing a more efficient apprehension of knowledge. Therefore, this research seeks to analyze the

transversal teaching of emergency medicine courses and its repercussions for medical training in the last ten years, based on a literature review.

METHODOLOGY

This is a literature review study, conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology. To identify the articles on the subject, a search was carried out in the Scielo, Google academic, BVS and PUBMED databases, in October 2021 with the following search strategy: (Teaching) OR (Medical Education) AND (Emergency). Only terms in Portuguese were used. Manual searches were performed in the bibliographic references of the articles found.

For the inclusion of the articles, the following criteria were used: texts that involved the perception of medical students, that talked about emergency teaching in graduation carried out in the Brazilian territory, published in journals in

Portuguese language, from 2011 to 2021, with texts available in full. 241 texts that did not talk about emergency teaching were excluded.

After consulting the databases and applying the search strategies, studies that were duplicated between the databases were identified. All resulting abstracts were read. In cases where reading the abstract was not enough to establish whether the article must be included, considering the defined inclusion criteria, the article was read in full to determine its eligibility.

21 articles were selected, of which 11 were excluded for the following reasons: 7 duplicate articles, 1 was a case report; 1 study was an academic league experience report; 1 was the perspective of teaching from an academic league and one did not allow access.

DISCUSSION AND RESULTS

In RODERJAN AK, 2021 there is an improvement in the scores within the OSCE simulation in emergency. This is expected according to the literature, because over time, exposure to practice, more assessments, improvements with each feedback and preparations for the residency test increase the grade and knowledge. Despite this, there was a slight increase in the issue of recognizing emergencies and it is known that it is essential for emergency service doctors to know how to recognize an emergency and – mainly – to be able to do so quickly and in any circumstance (PEREIRA GA, 2015).

Already in LUCK IN. 2020, emergency teaching was shown to be sufficient for boarding school students who were dealing with situations in which they needed to use knowledge about emergencies, their care policy and the instruments to effectively implement the line of care. Studies by DIAS, 2016 and AGUIAR et al, 2011 and FERNANDES, corroborate 2014 findings. These authors report the importance of teaching urgency and emergency even during medical graduation, showing that it must occur across the course and that the student's active participation is still necessary in order to expose such teachings in their graduation. According to PURIM, 2016, the training incorporated into graduation contributed to train physicians with general skills to enter the job market, meet the health needs of the population and maintain a commitment to professional improvement, highlighting the studies described above.

In SENGER MHC, 2016, we see the proposition of curricular matrices so that emergency teaching is longitudinal, thus allowing successive approximations. The studies by CAMPOS, 2014, and FERNANDES, 2014, show the satisfaction of students in the compulsory internship

in emergencies regarding their teaching on the subject during graduation. That said, it is worth mentioning that in the first study mentioned above, students report that the approach to themes related to emergency permeates all semesters and in the second study this fact is not clear.

In FILHO, 2020, it is noted the importance of insertion in the hospital environment to obtain knowledge about the main occurrences attended, leading to greater practical experience and applicability in the area. As in NASR, 2012, it showed an increase in self-confidence (92%), increase in technical knowledge (75%) and necessary for academic training (80%). Although the above studies reveal positive points about the curricular internship, they conclude that the workload dedicated to practical experiences in the emergency context is insufficient for effective learning and adequate training, since the severity of the cases treated requires, several times, competences specific professionals.

In FLATO, 2011, a learning based on realistic simulations is proposed and, through a literature review, it shows the importance of this tool for teaching and to guarantee the best care for patients in the emergency context, despite revealing the limitations in number of the search. In LIMA, 2019, the application of realistic simulation in a cross-sectional way was perceived and it was concluded that the skills in triage and primary assessment were satisfactory, but some aspects that could change the outcome of the victim require more training and commitment.

CONCLUSION

In view of the above, the need for standardization regarding the analysis of emergency teaching in medical courses is remarkable, since this study found limitations to determine the repercussions on medical training of cross-sectional teaching in emergency, since the authors propose different models to measure the same.

REFERENCES

BRASIL. Ministério da Educação. Conselho Nacional de Educação. Câmara de Educação Superior. Resolução nº. 04 de 07 de novembro de 2001. Institui as diretrizes curriculares nacionais do curso de graduação em Medicina. Diário Oficial da União. Brasília, 09 nov. 2001; Seção 1, p. 38

CAMPOS, MARIA CELESTE GONÇALVES E SENGER, MARIA HELENA. Avaliação do estágio de urgências clínicas em uma unidade de pronto atendimento sob a perspectiva dos alunos. **Revista Brasileira de Educação Médica** [online]. 2014, v. 38, n. 1

DIAS NS. Percepção dos alunos do nono semestre de graduação sobre o ensino de urgência e emergência na Faculdade de Medicina da Bahia [monografia]. Salvador: Faculdade de Medicina da Bahia; 2016

FEITOSA FILHO GS et al. Characteristics of training and motivation of physicians working in emergency medicine. Rev. Assoc. Med. Bras. 2017;63(2):112-7

FERNANDES, CLÁUDIA REGINA et al. Ensino de emergências na graduação com participação ativa do estudante. **Revista Brasileira de Educação Médica** [online]. 2014, v. 38, n. 2

FILHO, AILTON. A Inserção de Acadêmicos de Medicina na Sala Vermelha e a Complementação ao Ensino de Urgência e Emergência: Relato de Experiência. **Braz. J. Hea. Rev.,** Curitiba, v. 3, n. 2, p. 2396-2405 mar./apr. 2020.

FLATO UAP E GUIMARÃES HP. Educação baseada em simulação em medicina de urgência e emergência: a arte imita a vida. **Rev Bras Clin Med.** São Paulo, 2011

LIMA, DANIEL SOUZA et al. Simulação de incidente com múltiplas vítimas: treinando profissionais e ensinando universitários. **Revista do Colégio Brasileiro de Cirurgiões** [online]. 2019, v. 46, n. 3

NASR, ADONIS et al. Estágio voluntário em pronto socorro: instrumento para a formação médica de qualidade. **Revista do Colégio Brasileiro de Cirurgiões**, 2012, v. 39, n. 4

PEREIRA JUNIOR GA, FRAGA GP, ARNAUD F, GULA EA, SLULLITEL A, GARCIA VL. O Ensino de Urgência e Emergência de acordo com as Novas Diretrizes Curriculares Nacionais e a Lei dos Mais Médicos. **Cadernos ABEM**. 2015

PURIM KS, BORGES LDE M, POSSEBOM AC. Profile of the newly graduated physicians in southern Brazil and their professional insertion. Rev Col Bras Cir. 2016

RODERJAN, A. K. et al. Competências clínicas do aluno de medicina em urgência e emergência: análise evolutiva através do OSCE. **Revista Brasileira de Educação Médica**, v. 45, n. 4, 2021.

SENGER, MARIA HELENA E CAMPOS, MARIA CELESTE GONÇALVES. Matrizes para a

Aquisição de Competências no Ensino de Urgências Clínicas / Ensino de Urgências Orientado por Competências. **Revista Brasileira de Educação Médica**, 2016, v. 40, n. 2

SORTE, ÉRICA MANUELA DA SILVA BOA et al. Análise da Percepção de Acadêmicos sobre o Ensino de Urgência e Emergência em Curso Médico. **Revista Brasileira de Educação Médica** [online]. 2020, v. 44, n. 03