On the need to adapt training in emergency medicine to times of social distancing: Are we late?

Sobre la necesidad de adaptar la formación en emergencias en tiempos de distanciamiento social. ¿Vamos tarde?

To the editor:

During the COVID-19 pandemic, a unique situation has arisen in the field of teaching in general. Due to the State of Alarm decreed by the Government and the confinement, on-site training had to be compulsorily suspended following the recom-

mendations of the Ministries of Health, Consumption and Social Welfare and the Ministry of Education and Vocational Training.

In the field of Health Sciences, many faculties have opted for distance learning (online). The urgent transformation of face-to-face classes to an online format has been carried out in a way that can be described as acceptable in general terms, although the measures taken have been adjusted to the urgency and not to a previous planning to teach the subjects with a completely online methodology¹.

But what has happened to emergency training, masters, postgraduate and specialized courses in this field? Although this type of education has undergone a revolution in recent years as a result of the introduction of new technologies and many centers now offer online or semi-distance training, there are still a number of competencies that cannot be addressed from a distance.

Online training has a number of advantages, such as flexibility, cost reduction, personalized attention, constant updating of academic content and high acceptance among students^{2,3}. In addition, different systematic reviews on e-learning training in healthcare professionals conclude that the differences in skills and knowledge acquired either through face-to-face distance training are minimal or non-existent in some areas^{4,5}. However, there are certain competencies that cannot currently be assessed remotely: technical skills.

To explain this concept, we take as an example the official advanced life support (ALS) courses of the European Resuscitation Council (ERC), which base their teaching on the following structure: a pre-course online phase, with multiple-choice test evaluation and a classroom phase where theoretical concepts are resolved and both technical skills (advanced airway management and initial assessment of the critical patient) and non-technical skills (leadership and decision making) are evaluated. Finally, this phase is evaluated by means of a combination of a multiple-choice test of theoretical knowledge and a clinical simulation of cardiorespiratory arrest, which will determine whether the candidate is qualified or not6.

Despite the emergence of new technologies and ongoing research and innovation in this area⁷, it has not been possible so far to design a training tool that can replace or simulate the teaching of these technical skills. This poses several problems.

In the Autonomous Community of Catalonia alone, 1,341 students were trained in ALS during 2018. If we extrapolate this figure to the Spanish or European level, the number of emergency professionals who will stop receiving this training is striking. These courses include pediatric ALS, adult trauma ALS, comprehensive pediatric trauma care, prehospital trauma life support, etc., all training in the field of emergencies that requires a classroom phase for the assimilation of all competencies. This exceptional situation has generated a lack of professionals with this specific training, so we will have to wait for the results of ongoing studies to evaluate how this situation has influenced emergency care8.

At present, the training directors of these entities are working to provide methodological solutions that can minimize this forced halt in the training activity considered essential for emergency professionals. But we find ourselves at the end of the 2019-2020 academic year with temporary solutions, while the next course is approaching loaded with uncertainties and new challenges that must be addressed from a new approach.

COVID-19 has been a challenge for the entire academic community, both teachers and students, but, on the other hand, it has been an unforeseen but necessary catalyst for digital evolution in emergency training as well as in the search for new formulas to adapt teaching to possible situations of isolation or social distancing.

Given the uncertainty of the evolution of this pandemic and the possibility of new waves and the need for confinement, new, practical and effective measures are urgently needed. But, above all, it is necessary in the academic field in general and in emergency training in particular, to rethink the process of acquiring technical skills. It is time to initiate future projects in the medium and long term, aimed at providing solutions to this deficiency, which has become more noticeable in this pandemic. There is still time.

Ramón Pedrosa Cebador

Department of Nursing, Faculty of Medicine and Health Sciences, Universitat Internacional de Catalunya (UIC), Sant Cugat del Vallès, Barcelona, Spain.

ramonpedrosa@uic.es

Conflicting interests: The authors declare no conflicts of interest in relation to this article.

Contribution of the authors, financing and ethical responsibilities: All authors have confirmed their authorship, the non-existence of external financing and the maintenance of confidentiality and respect for the rights of patients in the document of author responsibilities, publication agreement and assignment of rights to EMERGENCIAS.

Editor in charge: Oscar Miró.

Article not commissioned by the Editorial Committee and with external peer review.

References

- 1 García-Peñalvo FJ, Corell A, Abella-García V, Grande M. Online Assessment in Higher Education in the Time of COVID-19 = La evaluación online en la educación superior en tiempos de la COVID-19. Educ Knowl Soc. 2020;21:12.
- 2 Cordero JÁ, Oliver A. La plataforma Moodle: Una herramienta útil para la formación en soporte vital. Análisis de las encuestas de satisfacción a los alumnos e instructores de los cursos de soporte vital avanzado del programa ESVAP de la semFYC. Aten Primaria. 2015;47:376-84.
- 3 Lockey AS, Dyal L, Kimani PK, Lam J, Bullock I, Buck D, et al. Electronic learning in advanced resuscitation training: The perspective of the candidate. Resuscitation. 2015;97:48-54.
- 4 Vaona A, Banzi R, Kwag KH, Rigon G, Cereda D, Pecoraro V, et al. E-learning for health professionals. Associazione Culturale Pediatri. 2018;25:49.
- 5 Voutilainen A, Saaranen T, Sormunen M. Conventional vs. e-learning in nursing education: A systematic review and meta-analysis. Nurse Educ Today. 2017;50:97-103.
- 6 Napier F, Davies RP, Baldock C, Stevens H, Lockey AS, Bullock I, et al. Validation for a scoring system of the ALS cardiac arrest simulation test (CASTest). Resuscitation. 2009;80:1034-8.
- 7 Buttussi F, Pellis T, Cabas A, Pausler D, Carchietti E, Chittaro L. Evaluation of a 3D serious game for advanced life support retraining. Int J Med Inform. 2013;82:798-809.
- 8 Díaz-Guio DA, Ospina-Vélez J, Ricardo-Zapata A. COVID-19: una crisis que requiere medidas de formación urgentes. Rev Latinoam Simulación Clínica. 2020;2:6-8.