



EDITORIAL

Evaluation of training models as a method to improve the acquisition of skills in Intensive Care Medicine



Evaluación de modelos de formación como método de mejora en la adquisición de competencias en Medicina Intensiva

In most European countries the training curriculum for residents in Intensive Care Medicine is based on rotations that evaluate their knowledge and daily work performance in each year of the training curriculum.¹ However, this time-based system implies a heterogeneous evaluation strategy with the use of very different methods for the real assessment of competencies acquired during training.² At the international level, a change has been proposed in the training and evaluation plans, based on the acquisition of competencies, known as the CoBaTrICE (Competency-Based Training in Intensive Care Medicine in Europe) protocol.³⁻⁵ This method focuses on the progressive acquisition of well-defined, observable and measurable competencies. It has been adopted as a residency curriculum in some European countries, although its effectiveness remains to be determined.

In Spain, several attempts have been made to modify the training system and focus on this evaluation of competencies.^{6,7} This issue of *Medicina Intensiva* presents a multicenter study⁸ that seeks to evaluate this paradigm change in the training of residents in our specialty. Thirteen national ICUs participated in the study, including 36 residents (followed from the third to the fifth and last year of residency), and two groups were established: one in which the usual training plan was maintained, and another in which the CoBaTrICE protocol was implemented. Both groups were evaluated in the same way in the last year of residency, with a simulation-based clinical examination. This type of assessment is designed to test therapeutic and non-technical skills, as well as the ability to integrate knowledge, decision-making, communication and teamwork.

The primary objective of the study was to determine whether the implementation of the CoBaTrICE protocol led to higher levels of competency when compared with the usual training plan. In addition, the secondary objectives were to identify performance failures, determine the percentage of essential skills and masteries achieved, and assess compliance with the evaluations.

The implementation of this protocol included the prior training of the resident tutors, on-the-job assessments to promote learning and ensure the acquisition of competencies and skills, and the development of an electronic portfolio as a training diary.

The final evaluation of the residents involved the simulation of different clinical scenarios in which both essential attitudes (those considered necessary to increase patient survival) and non-essential attitudes (those that do not alter patient survival) were evaluated. This seems fundamental since medical care in each clinical situation should be comprehensive, with essential attitudes being crucial, but without forgetting the non-essential ones. However, although simulation is a tool that is increasingly used and proves to be very useful, it is still to some extent little known to many health professionals, both specialists and physicians in training. This is not because they are unaware of the existence of the tool, but because they are not aware of how to apply it, and this may affect the outcome of the final evaluation of each resident.^{9,10}

We consider it necessary to highlight the period during which the study was conducted, which was marked by the COVID-19 pandemic; this undoubtedly played an important role in the development, follow-up, and results of the study.

Although the results of the study were not statistically significant, they demonstrate a positive impact on the acquisition of skills throughout the CoBaTrICE training plan. Undoubtedly, further research is needed to determine with certainty the benefits observed in this initial study. How-

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ever, it seems that we are at the beginning of a possible major change in the training plan of Spanish residents, at least for critical care ones.

Emphasis should be placed on the importance of this study, which allows for an evaluation of the training and scoring system, which is the path to real improvement in the training of our specialists.

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Declaration of competing interest

The authors declare that they have no conflicts of interest.

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