

*There is a recently flamed discussion about the connection of Anaesthesiology and Intensive Care Medicine.*

*On one hand, Intensive Care Medicine (or as the French say reanimation) is considered one of the integral parts of "Anaesthesiology" (e.g. in Germany, Intensive Care is counted as one of the four main pillars of anaesthesiology). As a consequence, every anaesthetist counts herself/himself to be "naturally competent" to carry the responsibility of an ICU. One can further argue that they are not inferior to any other colleague with their claim supported by the line Anaesthesiology and Reanimation written in their Diploma.*

*On the other hand, Intensive Care Medicine has become a sub/superspeciality in a lot of countries, including Turkey. Usually, to be an "intensivist", an additional period of 3 years is required after the "mother" speciality; no matter whether it is anaesthesiology or another one. Therefore, every intensivist (whether they originate from anaesthesiology or not) considers herself/himself to be "naturally competent" to carry the responsibility of an ICU; arguing that she/he deserves to be superior to other colleagues who used to "manage" the ICU since some decades.*

*Ufff.*

*We can find numerous "provocative" questions in this topic; here are some of them:*

*How should the "Share of Responsibilities" (SoR) be designed for the ICU's in practical life?*

*A similar (but not the same) question: How should we define the "description of duties" of the intensivists and anaesthesiologists in the ICU?*

*A more "general" question regarding the description of duties of a superspeciality: As an example, if we have "paediatric urology" as a superspeciality, is it the case that a general urologist may not operate a hypospadias anymore and/or a paediatric urologist may not operate a prostate anymore?*

*We can "assume" that the number of the "intensivists" will not be sufficient for the next decades to cover the need of ICU's; and can think that there will be the need for the anaesthetists. But, how should the "transition" be managed with the minimal trauma?*

*And not least, what will happen afterwards to "Anaesthesiology" (if we claim that "modern anaesthesiology stands on anaesthesia, ICM, algology, emergency and palliative care")?*

*Important Disclaimer: The comments should be read exclusively as the personal arguments of the authors, and cannot be extrapolated to any official society of Anaesthesiology and Intensive Care.*

**Editor**

**Nüzhet Mert Şentürk**

**Address for Correspondence:**

Paolo Pelosi

E-mail: ppelosi@hotmail.com

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## Educational and Training Programs in Intensive Care Medicine are the Right Way

**Lorenzo Ball, Chiara Riforgiato, Paolo Pelosi (ESA ex-president)**

*IRCCS AOU San Martino-IST, Department of Surgical Sciences and Integrated Diagnostics, University of Genoa, Genoa, Italy*

Intensive care medicine (ICM) is a relatively young discipline, and even more recent is the attempt to provide formal certifications for those with a particular qualification or specialists in this field: the first examination dedicated to intensivists was introduced by the Australian Faculty of Anesthetists in 1979 (1). In many countries, intensive care medicine developed as part of other specialties: both surgical and several medical specialties developed their own ICM training programs, splitting ICM knowledge in specific sub-sections. This approach was overcome starting from the 1970s, when in Europe and in the United States ICM training programs became a fundamental part of the debate on how ICM should develop. So far, three main models can be identified worldwide, namely the development of ICM: 1) within related medical or surgical specialties, 2) as a stand-alone recognized specialty or 3) as a hybrid of these two ("super specialty"), as frequently occurs (2). Therefore, the ICM educational path can either consist in a complete stand-alone specialization school, a training program with multidisciplinary access with a common curriculum or, as other option, training programs available only for specific specialists, typically anesthesiologists (3). Anesthesiology includes anaesthesia, perioperative care, intensive care medicine, emergency medicine and pain therapy, and it acknowledged as a leading medical specialty in addressing issues of patient safety (4). For this reason, anesthesiology is the base specialty most frequently linked to ICM; others that provide access in some European countries include emergency medicine, internal and pulmonary medicine, cardiology, nephrology, neurosurgery, trauma, neonatology and paediatrics (5). Defining the professional figure of the intensivist, whose mandate is to take care of the critical ill patient and of everything is associated with him or her, including rehabilitation period after ICU discharge and families, is a noble purpose, but overlaps with several political issues (6). As of today, ICM does not fully satisfy the criteria to be recognized as primary specialty according to the European Directive 2005/36/EC on the recognition of professional qualifications since it was not approved as independent discipline by at least one third of the Member States according to the European Union of Medical Specialists (UEMS) (7). In Italy and several North-European countries, ICM is considered a natural development of anaesthesiology competences and formal training programs have been introduced. Conversely, in countries like Spain and Switzerland, ICM is considered as primary specialty. The United Kingdom is a leading country in the competence-based training of intensivists, and has a complex system of evaluation and certification of skills. Of notice, in many countries where ICM is a primary specialty, the first years of training are however spent in anaesthesiology. ICM is intrinsically multidisciplinary (8), and if

defined as a primary specialty it would require, at the beginning of the curriculum, training in different fields, and just few months in anaesthesiology could not be enough to achieve satisfactorily practical skills that are difficult to learn in the critical setting only, such as airway management. Moreover, in some European countries, as in the UK, a change of paradigm is ongoing, passing from duration-based training to competency-based training, as planned by the Competency-Based Training in Intensive Care in Europe (CoBaTrICE) initiative, promoted by the European Society of Intensive Care Medicine (ESICM). In this case, the duration of training depends on individual time spent in reaching each specific competence. The CoBaTrICE collaboration was formed in 2003 and focused on writing a competency-based training program to define the minimum standard of knowledge, skills and attitudes required for a doctor to be identified as a specialist in ICM. The resulting statement, achieved by consensus between a panel of experienced clinicians, was published first in 2006 (9). The document was written considering the importance of “*a necessary compromise between desirable objectives and deliverable training opportunities*”, namely being internationally applicable without interfering with national regulations. The domains of the statement include resuscitation, diagnosis, disease management, interventions, procedures, perioperative care, comfort and recovery, end of life, pediatric care, patient transport, safety and management and professionalism. CoBaTrICE is an ambitious initiative in continuous evolution (10), and should be a real starting point of change in the education of future intensivists. Concerning certification at the European level, two large scientific societies proposed two different diplomas: the ESICM with the European Diploma in Intensive Care (EDIC) and the European Society of Anaesthesiology (ESA) with the European Diploma in Anaesthesiology and Intensive Care (EDAIC). These two certifications share the same aims: to guarantee professional standards, to allow free movement of clinicians and to promote a European certification beyond countries’ differences. Many criticisms for ICM as a multidisciplinary specialty were related to difficulties for the intensivist to move as professional figure across European countries: those diplomas could be a tool to overcome this issue, without necessarily transforming ICM in a primary specialty. The discussion about ICM nature has begun in 1950’s and since that moment the debate was carried also on questions on the education process: these aspects belong to the history of ICM and their importance must not be forgotten in favor of gaining the status of primary specialty, but rather the quality of post-graduation training and education, with high standard skills, should be the main concern. Analyzing the training programs in both countries where ICM is a primary specialty where it is multidisciplinary, the importance of anaesthesiology competences in ICM education comes clearly to light, in terms of practical and non-technical skills that are difficult to learn outside the operating room (11). Moreover, we believe that the difficulties encountered in the management of intensive care units, in terms of quality of care, training, internal

leadership and coordination with other divisions within the hospital would not be necessarily solved by turning ICM into a primary specialty (12). In conclusion, it is our opinion that improving the quality of care should be the main goal, and this should be achieved through improvements of the training and educational process, skills developments considering the differences in local regulations, possibly focusing on competences rather than on the formal recognition of ICM as a primary specialty. More importantly, we believe that, any medical-surgical profession, independently from the type of individual specialty, should include high level of clinical, educational and research skills finalized to optimize the diagnostic and therapeutic approach as well as to improve patients outcome and their quality of life after hospital discharge.

## References

1. Eger II EI, Saidman LJ, Westhorpe RN, editors. *The Wondrous Story of Anesthesia*. Springer; 2014. [CrossRef]
2. McLean AS. Is a Single Entry Training Scheme for Intensive Care Medicine Both Inevitable and Desirable? *Crit. Care Med* 2015; 43: 1816-22. [CrossRef]
3. Bion JF, Ramsay G, Roussos C, Burchardi H. Intensive care training and specialty status in Europe: international comparisons. *Task Force on Educational issues of the European Society of Intensive Care Medicine. Intensive Care Med* 1998; 24: 372-7. [CrossRef]
4. Mellin-Olsen J, Staender S, Whitaker DK, Smith AF. The Helsinki Declaration on Patient Safety in Anaesthesiology. *Eur. J. Anaesthesiol* 2010; 27: 592-7. [CrossRef]
5. Van Gessel E, Goldik Z, Mellin-Olsen J, Education, Training Standing Committee of the European Board of Anaesthesiology, Reanimation, Intensive Care. Postgraduate training in anaesthesiology, resuscitation and intensive care: state-of-the-art for trainee evaluation and assessment in Europe. *Eur J Anaesthesiol* 2010; 27: 673-5. [CrossRef]
6. Amin P, Fox-Robichaud A, Divatia JV, Pelosi P, Altintas D, Eryuksel E, et al. The Intensive care unit specialist: Report from the Task Force of World Federation of Societies of Intensive and Critical Care Medicine. *J Crit Care* 2016; 35: 223-8. [CrossRef]
7. Rubulotta F, Moreno R, Rhodes A. Intensive care medicine: finding its way in the “European labyrinth.” *Intensive Care Med* 2011; 37: 1907-12. [CrossRef]
8. Van Aken H, Mellin-Olsen J, Pelosi P. Intensive care medicine: a multidisciplinary approach! *Eur. J. Anaesthesiol* 2011; 28: 313-5. [CrossRef]
9. CoBaTrICE Collaboration, Bion JF, Barrett H. Development of core competencies for an international training programme in intensive care medicine. *Intensive Care Med* 2006; 32: 1371-83. [CrossRef]
10. CoBaTrICE Collaboration. International standards for programmes of training in intensive care medicine in Europe. *Intensive Care Med* 2011; 37: 385-93. [CrossRef]
11. Junta Directiva de la Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias (SEMICYUC). Intensive medicine in Spain. *Med. Intensiva* 2011; 35: 92-101.
12. Van Aken H, Vallet B, Mellin-Olsen J. Comment on Rubulotta et al.: Intensive care medicine: finding its way in the “European labyrinth.” *Intensive Care Med* 2012; 38: 1074-7. [CrossRef]