

*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.*

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## Intensive Care Medicine: Enterprise and Journey

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Due to several catastrophes in the forties and early fifties of 20th century the concept of keeping critically ill patients together in one place was created, eventually leading to the installation of intensive care units. One such situation was the polio epidemic in Copenhagen in 1952. At some point during this epidemic a senior anesthesiologist, Bjorn Ibsen, was called from the operating room to the clinic for consultation (1). Ibsen observed a 12-year-old patient and realized that the negative pressure respirator used commonly at that time was incapable of providing adequate ventilation of the lungs. Ibsen then applied intermittent positive pressure ventilation with a manually squeezed ventilation bag attached to a cuffed endotracheal tube. A tracheostomy was also performed. Soon early tracheostomy, manual ventilation and physiotherapy under blood gas control were applied to other patients and found to improve mortality, compared to the results obtained with negative pressure respirators. The mortality rate dropped from 87% to 25%. Ibsen's success has shown that anesthetists could also have an important task outside the operating theatre, in the treatment of critically ill patients. Intensive therapy came into existence thereafter, largely as an outgrowth of the anesthesiologist's special experience in artificial respiration and it improved as anesthesiologists used their equipment and technique for purposes other than the administration of anesthetics. The Intensive Care was born.

It is important to know the history for those who want to move in the future. However, we cannot ignore that we are now 65 years further in time since polio epidemic in Copenhagen. During the early days of Intensive Care Medicine, we were mostly intending to correct and normalise secondary pathophysiological complications resulting from the primary disease and facilitating management of the disease. Maintaining respiration and circulation were the main aims. The treatment of the patients was fragmented. We needed specialists from internal medicine, nephrology, infectious diseases, neurology and others routinely, each covering their own field. In other words, this was an example of treatment of a patient's organs by different specialists rather than treatment of the patient.

With the technological advances in surgery and medicine, an increasing number of patients needed intensive therapy. And almost every hospital wanted an intensive care unit. However, anesthesiologists were not always in charge, either due to a lack of interest or knowledge. In many cases hospitals wanted more than one unit and formed a cluster of intensive care units, each specialized in different surgical and medical disciplines (2). This clustering had several disadvantages. The clustered intensive care units belonged to different departments. Therefore, leadership in these units was non-existent. Patient care in these units was fragmented due to the different specialties and the varying management of similar illnesses. The organ specialized intensive

care units were well developed, in their field of interest. However, the patients developed other problems and were treated poorly outside the area of specialization of the clustered unit. And finally, the least experienced medical or nursing personnel delivered most care primarily, since they were most likely the ones to be around in emergency situations. Most of the experienced personnel had other duties, either at the outpatient clinics or in the operating rooms (2, 3). Two recent studies have confirmed improved outcome and quality of care and reduced costs with multidisciplinary intensive care compared to specialty intensive care (4, 5).

Today, modern intensive therapy gives the responsibility of patient care and decision-making to specially trained intensivists. More and more the intensive care units are becoming independent medical departments in the organization with allocated budget and staff, committed only to Intensive Care Medicine. Physicians must be trained in order to practice multidisciplinary Intensive Care Medicine. Patient outcomes are shown to be better when patients are cared for by trained intensivists (6). Ideally an intensivist should be available for patient care 24 hours per day. Many other specialisms are focusing on certain fields in order to improve their skills and knowledge. The general surgeons or the internists are slowly disappearing. This is not the case in Intensive Care Medicine. Although the intensivist may have a specific field of interest, he/she has to maintain the generalist approach in order to have the broad knowledge and competencies needed to treat the patient as a whole. European Society of Intensive Care Medicine (ESICM) has defined a decade ago the international competency based training programme in intensive care medicine (CoBaTriCE). The European Union of Medical Specialists (UEMS) Council approved CoBaTriCE recently. The competencies and the knowledge of the trained intensivists have increased dramatically during the last decades. Intensivists routinely perform CVVH, ultrasound, ECMO, bronchoscopy, feeding, antibiotics and many other treatments in their daily practice. Next to the physical well being, there is growing insight on the mental well being of the patients and their families and on the long-term outcomes. Intensive Care Medicine has become a unique multidisciplinary profession, transcending a number of other specialisms.

Considering these developments, at present, no other specialty is in state of considering itself to be “naturally competent” to carry the responsibility of an intensive care unit.

Intensive Care units with multidisciplinary character as mentioned above, need multidisciplinary staff members composed of different specialties. Mismatch of blood groups between the intensivists due to their background should be left behind, for the benefit of the patient. Intensive Care Medicine is complex and the close co-operation of intensivists from various backgrounds improves the quality of care for the critically ill.

In conclusion, when we look back to the last 65 years, we see an evolution, briefly summarized above. The speed of evolution has not been the same everywhere in the intensive care world as some parts have been travelling faster. But the signal given by the evolution is clear. We have come a long way since the polio epidemic in 1952. Nevertheless, we still have a long way to go, to improve the Intensive Care medicine towards an outstanding organization in de medical care.

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