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COVID-19 pandemic: A new path to intensive care medicine distinction?

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#### Editorial

## COVID-19 pandemic: A new path to intensive care medicine distinction?

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The current COVID-19 pandemic is causing an unprecedented health disaster in our postmodern world [1]. Never before has a global pandemic involving a new respiratory disease caused the global population to be in lockdown, with many patients clustered in hospitals [2]. At the forefront and on the front lines, the intensivists at the core of this outbreak are enduring intense working conditions and learning from their experiences [3].

In the general population, many are discovering this new, little-known medical specialty. For patients who have gone through an intensive care unit, this experience is often a black hole: they have little or no memories, or only bad ones, of this episode in their lives. For the relatives of these patients, this is often a time of anxiety, distress and post-traumatic disorders. However, the vast majority of people confuse intensive care units with emergency rooms or operating theatres.

Intensive care medicine is a rather new specialty [4]. The Swiss Society of Intensive Care Medicine (Société suisse de médecine intensive: SSMI) was created in Basel in 1972 [5]. Scientific knowledge, applied physiology and technological progress have contributed to the development of modern medicine. Initially, internists, anaesthesiologists and surgeons created the intensive care model and structure to treat their most seriously ill patients. In this regard, organ transplantation and increasingly complex interventions forced these pioneers to extend their know-how beyond their respective specialties to take care of these severely sick patients. The inventors of this discipline had to convince their peers in these "mother" specialties that this particular, subtle medicine was a discipline in its own right that required its own training course and de facto, its own identity. It was only after long negotiations in Switzerland that in 2001, the Specialist Diploma in

Intensive Medicine was created and recognised by the FMH (Foederatio Medicorum Helveticorum) [6].

Our elders were passionate about the discoveries and applications of the specific pathophysiology of shock conditions in intensive care patients, as well as the correct use of new technological devices, especially artificial ventilators [7]. They devoted their lives and careers to justifying daily the mainspring of our specialty and to developing and nourishing it through applied research work on this new, very technical form of care [8]. Thanks to them, we are real specialists who are recognised by our peers in our institutions, and we have inherited this passion for our vocation. However, in the eyes of the general public, our specialty remains relatively unknown and, faced with policies and other insurance lobbies, little recognised. Proof of this lack of recognition is that intensive care medicine suffers, particularly in Switzerland, from a cruel lack of interest for this specialisation. Indeed, beyond the passion of the profession, we face a harsh reality on a daily basis: a heavy workload (more than 80 h per week for the attending physician, including both night and weekend shifts) and an emotional toll (management of the most seriously ill patients with an average of 10% mortality), with little or no visibility, external recognition or compensation commensurate with most other advanced specialties.

The history of intensive care medicine is evolutionary rather than revolutionary; it is a history of process and organisation. Intensive care medicine includes the prevention, diagnosis and treatment of all forms of dysfunction and failure of vital organs where the prognosis is potentially favourable. Its exercise requires specific fundamental and clinical knowledge and management skills. The management of intensive care patients is ensured by specialised doctors in specially equipped premises. The whole is accredited and regularly reassessed by the Certification Committee of the intensive care units of the SSMI on the basis of well-defined and very stable directives and according to an extremely structured process [9]. This certification process respects all the published recommendations in the field of health services (2011) of the Swiss Academy of Medical Sciences (ASSM) [10], and it is unique in the world. The specialists in intensive care medicine must have the knowledge, skills and competences (medical, ethical, economic and legal) that make them able to treat patients in intensive care units independently. Additionally, they should be able to develop social skills allowing them to lead a team and have knowledge in management and communication (teamwork, team building, etc.) The related postgraduate training lasts six years

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### ARTICLE IN PRESS

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[11]. This training must provide candidates with the theoretical knowledge and practical skills to enable them to practice intensive medicine independently and responsibly under their own authority. In particular, it includes anatomy, physiology, pathophysiology and pharmacology, ethics, health economics, communication and the care of terminally ill intensive care patients and their relatives. This training must also enable the candidates to acquire the capacities to manage patient problems, diseases and the structural aspects of intensive care medicine in an interdisciplinary collaboration. This training is sanctioned by a written and oral exam organised each year by the Exam Commission of the SSMI. As evidenced by the curriculum required to obtain the federal specialist's diploma, intensive care medicine is a medical-technical specialty in the same way as anaesthesiology, cardiology, pulmonology, etc. are.

The COVID-19 health crisis has brought intensive care medicine to the forefront, turning its actors, including us, the intensive care physicians, from strangers into "heroes". However, make no mistake: the artificial increase in the number of "intensive care" beds to accommodate all these patients with acute respiratory distress syndrome (ARDS) requiring the use of mechanical ventilation (because usually, apart from surgical operations, it is only in the intensive care units that this therapy should be delivered) was not done by magic. We did not, in a few days, train dozens of intensive care physicians capable of treating this type of very complex and critically ill patients [12]. To manage these intubated and ventilated patients, we called on our anaesthesiologist colleagues, and especially since elective surgery programs were stopped in the context of this health crisis. If some of these individuals have, in the past, obtained. in addition to their specialist diploma in anaesthesiology, the title of specialist in intensive medicine, giving them distant memories about the mechanical ventilation of ARDS patients, most are not accustomed to taking charge of this particular type of patients. Unlike our neighbouring countries such as France and Germany, where anaesthesiology training accounts for almost a third of the rotations in intensive care units, giving them a real diploma and competencies in anaesthesiology and intensive care medicine, in Switzerland, over the 6-year postgraduate training course, only 6 months are mandatorily dedicated to intensive care medicine [13], which is only a vague initiation. Therefore, a bed equipped with a ventilator is not equivalent to a patient managed by an intensive care physician. The same is true for the nursing staff. Fortunately, a close partnership has been established within the various anaesthesiology and intensive care departments in Swiss hospitals to optimise the complex management of these patients. The association of our two specialties and the present useful teamwork are very much appreciated. May the future be supported and celebrate this exceptional episode of our professional lives. Perhaps this will help to increase the recognition, visibility and interest in our beautiful and 126 127 rich specialty. Good luck to all! Financial/non-financial disclosures 128 129 The author declares that no potential conflicts of interest exist with any companies/organisations whose products or services may 130 be discussed in this article. 131 References 132 133 134 135 [1] Organization, WH. 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[13] Spécialiste en anesthésiologie: programme de formation postgraduée; 2013. 162 Raphaël Giraud<sup>a,b,c,d,\*</sup>, Karim Bendjelid<sup>a,b,c</sup> 163 <sup>a</sup>Intensive Care Unit, Geneva University Hospitals, Geneva, Switzerland 164 <sup>b</sup>Faculty of Medicine, University of Geneva, Switzerland 165 <sup>c</sup>Geneva Haemodynamic Research Group, Switzerland 166 <sup>d</sup>President of the Exam Committee of the Swiss Society of Intensive Care 167 Medicine, Switzerland 168 \*Corresponding author at: Intensive Care Service, Geneva University 169 Hospitals, Rue Gabrielle Perret-Gentil 4, CH-1211 Geneva, 170 Switzerland 171 E-mail address: Raphael.Giraud@hcuge.ch (R. Giraud) 172

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