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EDITORIAL ARTICLE

## COVID-19: Now is the time to come together $^{\Leftrightarrow, \Rightarrow \Rightarrow}$



Covid-19: Es el momento de estar más unidos que nunca

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On 11 March 2020, Tedros Adhanom Ghebreyesus, Director General of the World Health Organization (WHO), issued the following statement: ''WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction. We have therefore made the assessment that COVID-19 can be characterized as a pandemic''.<sup>1</sup> According to the Ministry of Health, more than 135,000 people in Spain have been infected with the virus, with 13,000 deaths so far.<sup>2</sup> Given the situation and the scientific information published to date, a series of national clinical practice guidelines have been developed on the prevention of COVID-19 and the management of patients in different settings. For example, our working group recently published in this journal a series of practical rec-

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ommendations on the perioperative management of patients with suspected or confirmed severe SARS-CoV-2 coronavirus infection.  $^{\rm 3}$ 

The exponential increase in the number of COVID-19 patients in Spain has been accompanied by an increase in the number of seriously ill patients who require admission to specific units equipped with highly specialized material resources and professionals: Intensive Care, Critical Care, or Resuscitation Units. Some Spanish hospitals have reached, or are nearing, saturation in terms of both general and intensive care beds.

Curiously enough, the concept of intensive care was created to deal with another devastating virus – poliomyelitis. Björn Ibsen, born on 30 August 1915 in Copenhagen, is considered the founder of intensive care. In 1940, he graduated in Medicine from the University of Copenhagen, and 10 years later qualified as an anaesthesiologist at Massachusetts General Hospital in Boston, returning to his native country the following year to work in this field.<sup>4,5</sup>

In August 1952, Copenhagen was struck by a polio epidemic that within 6 months had affected nearly 3000 people out of a population of just 2 million, with 50 being hospitalised daily. Polio is particularly deadly because many patients develop respiratory paralysis, and in Copenhagen there were only 7 negative pressure (''steel lung'') respirators and 6 cuirass respirators available. On 25 August 1952,

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Professor Lassen of the Blegdams Hospital called Dr. Ibsen in for consultation due to the extreme emergency. Ibsen's first patient was a 12-year-old girl with bulbar polio who was critically ill despite efforts to ventilate her with an iron lung. The treatment was ineffective in this case because she was unable to cough due to polio-induced paralysis. Despite the reluctance of some of his colleagues, Ibsen performed a tracheostomy under local anaesthesia, administered a barbiturate, aspirated secretions from the respiratory tract, and began to manually ventilate the patient with positive pressure. The patient made good progress with this approach, but worsened significantly every time she was returned to the iron lung.<sup>6</sup> Ibsen's intermittent positive pressure ventilation was the birth of modern mechanical ventilation, and after teaching surgeons, anaesthesiologists, and medical students to manually ventilate and aspirate secretions,<sup>4</sup> he managed to reduce the death rate from 90% to just 15%. The patients were transferred to 3 areas of Blegdams Hospital, each with 35 beds. By the time the epidemic was over. the first intermittent positive pressure respirators had been designed in Denmark, England and Germany. The first intensive care unit was created by Ibsen himself in August 1953 in Copenhagen's Municipal Hospital. It was initially used as a post-anaesthesia care unit, but within a year lbsen was admitting critically ill patients with any pathology. Doctors from around the world visited Copenhagen to learn firsthand the principles of intensive care.4,5

Health professionals who work daily in these units are now represented by a number of scientific societies: the Society of Critical Care Medicine (SCCM) in the US, the European Society of Intensive Care Medicine (ESICM), and on a national level by the Spanish Society of Intensive and Critical Care Medicine and Coronary Units (SEMICYUC) and the Spanish Society of Anaesthesiologists (SEDAR). Critically ill patients are treated by both intensivists and anaesthesiologists. Regardless of the chain of authority in these units, Spain has high-level professionals in both specialties. Returning to COVID-19, the disease has led to a situation in which we need to change the scenario that has prevailed in recent decades. In the words of the Chairman of SEDAR: ''Now is not the time for corporate claims, but for making the most rational use of all our resources and specialist skills. For this reason, SEDAR urges hospital management to use all the available material resources that are usually under the supervision of anaesthesiology services. By this we mean not only Critical Care and Resuscitation areas, but also Post Anaesthesia Care Units and Surgical Units. Making use of all these resources will allow us to provide quality care to a greater number of critically ill patients''.

Therefore, intensivists and anaesthesiologists, now is the time to come together.

#JuntosPodemosLograrlo

## References

- 1. Coronavirus disease (COVID-19) Pandemic https://www.who.int/ emergencies/diseases/novel-coronavirus-2019 [accessed 05.04.20].
- Enfermedad por nuevo coronavirus, COVID-19. Información actualizada sobre el brote. https://www. mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/ nCov-China/home.htm [accessed 05.04.20].
- Montero Feijoo A, et al. Practical recommendations for the perioperative management of the patient with suspection or serious infection by coronavirus SARS-CoV-2. Rev Esp Anestesiol Reanim. 2020, http://dx.doi.org/10.1016/j.redar.2020.03.003.
- 4. Reisner-Sénélar L. The birth of intensive care medicine: Björn Ibsen's records. Intensive Care Med. 2011;37:1084-6, http://dx.doi.org/10.1007/s00134-011-2235-z.
- Berthelsen PG, Cronqvist M. The first intensive care unit in the world: Copenhagen 1953. Acta Anaesthesiol Scand. 2003;47:1190-5, http://dx.doi.org/10. 1046/j.1399-6576.2003.00256.x.
- The anaesthetist's viewpoint on the treatment of respiratory complications in poliomyelitis during the epidemic in Copenhagen, 1952. Proc R Soc Med. 1954;47:72–4. PMID: 13134176.