EDITORIAL

On how Spanish hospital emergency departments coped with the first wave of patients during the COVID-19 pandemic

Acerca de cómo los servicios de urgencias españoles hicieron frente a la primera oleada de pacientes durante la pandemia COVID-19

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On December 31, 2019, a report from Wuhan (China) was made on a cluster of cases of pneumonia of unknown etiology, some of them severe, that had been detected in late November 2019[1]. On January 7, 2020, a new type of virus from the Coronaviridae family, which was called SARS-CoV-2 (Severe Acute Respiratory Syndrome COronaVirus 2) and the disease that generated was named COVID-19 (Coronavirus Disease 2019)[1,2], was identified as the causative agent of the outbreak.

Given the impact that COVID-19 was having on China and Southeast Asia and its spread to other continents, on March 11, 2020, the World Health Organization (WHO), deeply concerned by the alarming levels of transmission of the disease and its severity, and by the also alarming lack of action and response in taking preventive measures from different countries with community transmission, determined that COVID-19 should be fought as a major pandemic[3].

The first case of COVID-19 was reported in Spain on January 31, 2020. Seven months later, Spain makes the news again for leading various indicators that cannot be explained from the perspective of one of the world's recognized best healthcare systems (registered cases, per million inhabitants, mortality, mortality per million inhabitants, infected healthcare personnel, among others)[4]. Thus, with 470,973 confirmed cases (11.93% of those in Europe and 1.87% of those in the world) it continues to be among the 10 most affected countries along with the United States, Brazil, India, Russia, Peru, South Africa, Colombia, Mexico and Argentina[4,5], despite the fact that the population of Spain is smaller than in most of these countries (47,329,981 inhabitants as of January 1, 2020)[6]. The impact by continent and country has been very diverse, intensifying in the Northern Hemisphere from February to April 2020 and increasing exponentially in Latin America since May 2020.

On the other hand, being a health care professional during the pandemic became one of the greatest risks for infection. More than 13% of COVID-19 cases in Spain (56,000) have been in healthcare workers and, unfortunately, some colleagues and friends will not be able to be by our side to beat the second wave[7]. Furthermore, we cannot forget the psychological impact that will remain as a permanent imprint on everyone. Fortunately, we will not forget the solidarity, teamwork and the countless moments of generosity and dedication that all emergency physicians have experienced, together with residents and other specialists, in what became our hospitals, almost monographic centers for the COVID-19 with a single army (service)[7].

The impact on our society, economy, way of living and thinking has been brutal and has placed us in a new order[8]. But what have our reflections and learning been about what we have experienced and suffered from a health perspective?[9,10]. Only from this reflection can we better prepare and face the second wave (and prevent it from becoming a second tsunami). The hospital emergency departments (EDs) heroically resisted, against all odds, the onslaught of the COVID-19 in the months of March to May[11]. But, although it may seem a contradiction in terms, now, if we do not apply and correct everything we have learned, we emergency physicians know that it could be even worse. We cannot lose a minute in preparing and strengthening ourselves because we do not want to suffer a déjà vu, which would be catastrophic. All of this is on the verge of the arrival of the seasonal flu, a possible ally of SARS-CoV-2[12,13].

In this "world war" scenario, this issue of EMERGENCIAS publishes a relevant study by Alquézar-Arbé et al.[14] that shows us how, once again but this time against a cruel, powerful and invisible enemy, the Spanish EDs resisted hour by hour, day by day and week by week the so-called first wave of the COVID-19 during those dramatic months. Looking back, we still do not know how in so many EDs without physical space, without diagnostic material to detect SARS-CoV-2, or per-

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sonal protection, without sufficient human resources (added to the casualties among emergency physicians and the exhaustion of the uninfected), they were able to resist such an attack and emerge victorious like Don Quixote[15]. This excellent work shows how the majority of EDs were reorganized and implemented double circuits, adapted triage, first aid, observation and fitted out new specific spaces for patients with COVID-19. Furthermore, they had to reinforce their nursing staff (83%) and doctors (59%). The most scarce resource was the SARS-CoV-2 diagnostic test (55%), followed by FPP2-FPP3 masks (38%), waterproof boots (34%) and care space (32%). There were more than 5% of healthcare personnel on leave most of the time. These deficits were highest in the second half of March, with marked differences between autonomous communities.

The ENCOVUR study (Survey on COVID-19 in the ED)[14] has several limitations that should be taken into account. First, they are based only on the opinion of the person in charge of each ED and not on that of a sample of professionals working in them. It is known that the opinion of both groups may not coincide. The interviewees are the ones responsible for making decisions in the EDs so their answers could have an influence on the deferred responsibility of these and the organizational problems of these devices. On the contrary, they are the people who have the best and greatest perspective to respond. Secondly, the considered impact of the pandemic to the different EDs was based on the provincial seroprevalence of SARS-CoV-2 (based on data published in a single paper)[14], which may or may not coincide with those of the health areas specific to each center, and depending on the percentage of patients diagnosed with SARS-CoV-2 in each ED. This could lead to a selection bias given the great difference in resources, diagnostic tests, etc., presented by the centers and the different provinces. Thirdly, a qualitative assessment of the aspects surveyed was chosen rather than a score on a quantitative visual-analogical scale. This forced us to give quantitative values to the qualitative estimates, with the possibility of intervalic variability when assigning these quantitative values.

Despite these limitations, this article, together with the importance of its results, has the great strength of having included 246 (87%) of the EDs of the study universe, which were all the EDs of public use in Spain (283) that attended general emergencies of adult patients, 24 hours a day and every day of the week, in the period between March 1 and April 30, 2020. This is undoubtedly a photograph and a faithful and representative account of how (sometimes naked and unarmed) the EDs dealt with that first wave of COVID-19 patients, which had a much greater impact than other waves suffered previously such as the 2009 influenza A (H1N1) and every year seasonally in the winters[12,15].

In view of these results, the EDs themselves, the heads of centers, autonomous communities and the State should take good note of how the Spanish EDs dealt with the first wave of patients in the COVID-19 pandemic. And, of course, demonstrate that we have all learned. In no situation and under no circumstances can we fail again. It is necessary and demandable.

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