

LETTER

# COVID-19 and Severe Asthma: Reflections and Future Solutions [Letter]

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### **Dear editor**

On March 14, 2020, the state of emergency was declared in Spain for the management of the COVID-19 healthcare crisis. The rapid spread of SARS-CoV-2 generated a state of uncertainty as to what the COVID-19 infection could mean for patients with severe asthma (SA) and as to how to manage the disease in a pandemic scenario. 2

In view of the lack of existing knowledge and experience, 12 multidisciplinary healthcare professionals from five different disciplines (pulmonologists, allergists, pediatricians, respiratory specialist nurses and hospital pharmacists) with expertise in SA analyzed the impact of the pandemic situation on SA through the creation of the "Observatory of COVID-19 and Severe Asthma" project. Their objectives were: to analyze the reality of SA management in the COVID-19 setting; to define the specific areas to be addressed in the future; to establish the needs in each area; and to determine the actions to be taken.

We would like to share this model since the pandemic is ongoing and has potential applicability to other clinicians faced with the management of severe asthma during this time.

The panel defined three areas in which immediate action was required and proposed different actions to be implemented and prioritized:

## Knowledge About and Research into COVID-19

The need to investigate the impact of lockdown on severe asthma patients; the impact of COVID-19 among the pediatric population;<sup>3</sup> and the relationship between socioeconomic status and asthma control and the impact of treatment with biologicals on patients with SA infected with COVID-19 as compared to non-infected patients.<sup>4</sup> In this regard, the development of a multidisciplinary database from different hospitals was suggested to perform an in-depth analysis of the impact of COVID-19 on patients with SA.

### Information and Education for Patients and Healthcare Professionals

In addition to the need to explain the COVID-19-related guidelines, a lack of in-depth knowledge about asthma was detected. For this reason, the creation of an educational program for patients with severe asthma was proposed, which would cover relevant disease-related aspects and provide tips and advice on the management of everyday life situations, including pandemic-specific recommendations.

The need for digital education focusing on remote care<sup>5</sup> was detected, and therefore the creation of informative materials for severe asthma patients intended to help them prepare for remote consultations in advance was recommended.

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## e-Health

The lockdown called for the implementation of remote consultations and changes at the organizational level. For this reason, the creation of a multidisciplinary intra-hospital coordination document for healthcare professionals involving the management of SA patients was proposed.

The COVID-19 pandemic has brought to light a number of shortcomings that must be addressed: A better understanding of the real impact of SARS-CoV-2 on severe asthma patients; the need for patient education, with the focus on bolstering the more basic concepts; and, perhaps the most significant change, the reduction in face-to-face appointments, leading to standardized remote consultations and e-health approaches.

These conclusions could be applied to any other group of healthcare professionals, and even to other treatment areas, and will impact the future of healthcare, which is currently immersed in far-reaching change and transformation.

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#### References

- 1. Ministerio de la Presidencia R con las C y MD. Royal Decree 463/2020 of 14 March declaring a state of alarm for the management of the health crisis situation caused by COVID-19. BOE» num. 67, 14 March 2020, pages 25390 to 25400 (11 pages) Section: I. General regulations. BOE-A-2020-3692; 2020. Available from: https://www.boe.es/eli/es/rd/2020/03/14/463. Accessed March 15, 2022.
- 2. SEPAR. SEPAR recommendations for asthma patients in the SARS-CoV-2 pandemia (COVID-19); 2020. Available from: https://drive.google.com/file/d/1hF4AqPEjxuLv8s4CMCgdhTU4YZ4TwKkh/view. Accessed March 15, 2022.
- 3. Sánchez-García S, Ruiz-Hornillos J, Escudero C. Pediatric asthma management during the COVID-19 pandemic: results of a national survey. Pediatr Allergy Immunol Pulmonol. 2020;33:199–203. doi:10.1089/ped.2020.1250
- 4. Domínguez-Ortega J, López-Carrasco V, Barranco P, et al. Early experiences of SARS-CoV-2 infection in severe asthmatics receiving biologic therapy. *J Allergy Clin Immunol Pract.* 2020;8(8):2784–2786. doi:10.1016/j.jaip.2020.06.027
- 5. Almonacid Sánchez C, Blanco Aparicio M, Domínguez Ortega J, et al. Multidisciplinary Consensus for the Monitoring and Control of Asthma Through Telemedicine. The COMETA Project. *Open Respir Arch.* 2021;3:100098. doi:10.1016/j.opresp.2021.100098

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