## LETTER



# Is climate change the next pandemic for dermatology? Lessons from COVID-19

Dear Editor,

COVID-19 is a viral disease caused by Tby Severe Acute Respiratory Syndrome - Coronavirus - 2, stated as pandemic by World Health Organization.<sup>1</sup> Like other infectious diseases, it seems to propagate more effectively in specific climatic conditions; indeed, the greatest spread occurs in areas similar in temperature and latitude.<sup>2</sup> Many skin diseases are also influenced by climate and in particular by climate change (CC) recorded in the last decades.<sup>3</sup> CC is the cause of global warming, leading to average high temperature and humidity, and natural disasters; all these conditions are associated to outbreak of cutaneous infectious diseases and especially variations in insect-borne diseases.<sup>3,4</sup> Just as the COVID-19 pandemic has not only affected China, extreme climatic events due to CC may be the cause of morbility and mortality not only in tropical areas but also in Europe, as demonstrated by approximately 70 000 deaths during the 2003 heath waves, especially among vulnerable populations.<sup>5</sup> This was also associated with the impairment of eccrine sweating that can occur in some chronic systemic diseases and in the elderly.<sup>5</sup> Climate may also influence the course of common "western" skin diseases, such as psoriasis, skin cancer, eczema, and acne.<sup>4,6</sup> Therefore, dermatologists have a greater chance in detecting abnormal epidemiological and clinical behaviors of frequent diseases over time when compared to other specialists, thus taking on the role of "sentinel" of the effects of CC on human health. Dermatologists need to become aware of it and should be updated on this matter; some scientific dermatological societies already take care of this.<sup>4,5</sup> The fight against misinformation, which has significantly increased due to the misuse of the Internet, is crucial, and correct and balanced information should be provided.<sup>7</sup> During the COVID-19 pandemic, there is a progressive use of clinical teledermatology, which can help to reduce contacts and affect vehicle traffic as well. Furthermore, an increase in the use of videoconferencing for educational purpose would help reducing air travel as well.<sup>5,7</sup> In perspective, it is likely that these means of communication will be increasingly used after the end of the pandemic, with significant savings in fossil fuels. COVID-19 pandemic also highlights the importance of proximity health services and suggests that the hospital-centered model should be reassessed. Indeed, the amount of patients who access hospitals during pandemic may lead to a crisis even in a high-level health system, such as the Northern Italian one. In the dermatological practice, decentralization of outpatient facilities would help to offer dermatological services widely, and also favor a "sentinel" role to the dermatologist, in addition to saving in carbon emissions due to reduction of use of means of transport. In this regard, a paradoxical lesson from COVID-19 is a reduction of air pollution associated to lockdown measure.<sup>8</sup> All of this would lead to an important economical impact that seems unthinkable during the economic recession induced by COVID-19 pandemic. To be sure, in the long run, "green" policies lead to lower spending. Furthermore, the change must be taken as a challenge in order to make the tragedy of COVID-19 an opportunity for the future.

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