LETTER



Research in dermatology in the COVID-19 era

Dear Editor,

In December 2019, a new virus initially called "novel coronavirus 2019-nCoV" and later renamed to "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" or coronavirus disease 2019 (COVID-19) rapidly emerged in Wuhan, Hubei Province, China, and quickly spreading lengthwise China and other countries around the world. On 30 January 2020, the World Health Organization (WHO) declared that the new SARS-CoV-2 outbreak constitutes a Public Health Emergency of International Concern (PHEIC).¹ At the time of this writing, the total number of cases worldwide exceeded 7 million people, affecting 188 countries and with more than 400 000 deaths. Although Western Europe countries were the most affected at the beginning of the pandemic, a significative increase of cases has been recently observed in other areas such as the United States, Russia, Brazil, India or Peru.² While systemic symptoms such as fever, dry cough or myalgia are the most characteristic features of this disease, a large number of recent papers have shown a wide range of cutaneous manifestations in these patients.^{3,4}

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Paper production in dermatology has significantly experienced an increase in recent years. In the last decade, the impact factor of dermatology journals has shown a progressive enhancement in their scores which relies on an increased publication of articles with a larger number of citations. These data are in contrast with a 2011 study that observed a decrease in the publication of rigorous articles in the 1997 to 2007 period.⁵ Scientific research during pre-residency and residency is especially relevant. A recent study has shown that the publication of a high number of first author original papers during pre-residency period was associated with greater scientific production in the post-residency period and with the achievement of an academic work position, whereas a large number of pre-residency case report publications was associated with lower post-residency publication productivity.⁶

The onset of this outbreak has forced a shift in the priorities of health systems, forcing the withdrawal of nonurgent scheduled consultations. The development of teledermatology over the last decade in Europe has helped the access of dermatological care to a large number of patients during the outbreak. In that way, a recent survey performed during COVID-19 outbreak has demonstrated that telemedicine is an excellent tool for triage during stressful periods for the health care system.⁷ In addition, smartphones applications are playing an increasing role in the management of these patients.⁸ However, this scenario has also adversely affected the development of clinical research studies and clinical trials by preventing patients from attending their treatment and follow-up appointments on many occasions. All of this may lead to the delay of publication of high-quality scientific studies as well as the development of new drugs in the following months or years. In order to keep as many studies as possible running,

the use of digital media such as live interactive visits or smartphone applications may help to achieve this goal. Moreover, videoconferencing has also demonstrated its usefulness for site initiation and monitoring in clinical studies.⁹

The requirements of confinement and maintenance of individual health pose a great challenge to the pursuit of biosanitary research in dermatology. To maintain high standards of research and publications in dermatology during this global health crisis, researchers will need to be very resourceful to keep up adequate data collection without contravening the recommendations of health authorities.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

- World Health Organization. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV); January 30, 2020; Geneva, Switzerland. https://www.who.int/news-room/ detail/30-01-2020-statement-on-the-second-meeting-of-the-internationalhealth-regulations-(2005)-emergency-committee-regarding-the-outbreakof-novel-coronavirus-(2019-ncov). Accessed June 10, 2020.
- Hopkins J. CSSE coronavirus COVID-19 global cases (dashboard). https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/ bda7594740fd40299423467b48e9ecf6. Accessed June 10, 2020.
- Galván Casas C, Català A, Carretero Hernández G, et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. Br J Dermatol. 2020;183:71-77. [Epub ahead of print].

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- Elmas ÖF, Demirbaş A, Özyurt K, Atasoy M, Türsen Ü. Cutaneous manifestations of COVID-19: a review of the published literature. *Dermatol Ther.* 2020;33:e13696. https://doi.org/10.1111/dth.13696.
- 5. Farley-Loftus R, Farley-Ripple EN, Kundu RV. Assessing the evidence: clinical research trends in dermatology over a 10-year period. *J Am Acad Dermatol.* 2011;64:e15-e16.
- Stephens MR, Barbieri J, Lipoff JB. Predicting future dermatology academic productivity from medical school publications. J Am Acad Dermatol. 2019. [Epub ahead of print].
- Sharma A, Jindal V, Singla P, Goldust M, Mhatre M. Will teledermatology be the silver lining during and after COVID-19? *Dermatol Ther.* 2020;e13643. https://doi.org/10.1111/dth.13643.
- Moreno-Ramírez D, Argenziano G. Teledermatology and mobile applications in the management of patients with skin lesions. *Acta Derm Venereol.* 2017;(suppl 218):31-35.
- 9. Randell R, Backhouse MR, Nelson EA. Videoconferencing for site initiations in clinical studies: mixed methods evaluation of usability, acceptability, and impact on recruitment. *Inform Health Soc Care.* 2016;4:362-372.