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References
1. Cao X. COVID-19: immunopathology and its implications for therapy. Nat Rev Immunol 2020; 20: 269–270.
2. COVID-19 situation reports. [WWW document]. URL https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/ (last accessed 8 May 2020).
3. Carugno A, Gambini DM, Raponi F et al. COVID-19 and biologics for psoriasis: a high-epidemic area experience - Bergamo, Lombardy, Italy. J Am Acad Dermatol 2020; 83: 292–294.
4. COVID-19 integrated surveillance: key national data. [WWW document]. URL https://www.epicentro.iss.it/en/coronavirus/sars-cov-2-in-integrated-surveillance-data. (last accessed 8 May 2020).
5. Amerio P, Prignano F, Giuliani F et al. COVID-19 and psoriasis: should we fear for patients treated with biologics? Dermatol Ther 2020; e13434. https://doi.org/10.1111/dth.13434
6. Mahil SK, Yiu ZZN, Mason KJ et al. Global reporting of cases of COVID-19 in psoriasis and atopic dermatitis: an opportunity to inform care during a pandemic. Br J Dermatol 2020; 183: 404–406. https://doi.org/10.1111/bjd.19161
7. Bardazzi F, Loi C, Sacchelli L et al. Biological therapy for psoriasis during the covid-19 outbreak is not a choice. J Dermatol Treat 2020; 31: 320–321.
8. Megna M, Ruggiero A, Marasca C et al. Biologics for psoriasis patients in the COVID-19 era: more evidence, less fears. J Dermatolg Treat 2020; 31: 328–329.
9. Gisondi P, Facheris P, Dapavo P et al. The impact of COVID-19 pandemic on patients with chronic plaque psoriasis being treated with biologic therapy: the Northern Italy experience. Br J Dermatol 2020; 183: 373–374. https://doi.org/10.1111/bjd.19158
10. Lebwohl, M Rivera-Oyola, R Murrell, DF. Should biologics for psoriasis be interrupted in the era of COVID-19? J Am Acad Dermatol 2020; 82: 1217–1218.

Appendix
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[Correction added on 24 November 2020, after first online publication: In Appendix section, ‘K. Hansel’ has been corrected in this version.]

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A survey on teledermatology use and doctors’ perception in times of COVID-19

Dear Editor

The COVID-19 outbreak represented a tipping point for teledermatology. Because of the need of social distancing imposed by healthcare authorities to prevent the spread of the disease, the demand for telehealth increased dramatically.1–3 We aimed to investigate teledermatology (TD) use and doctors’ perception during the recent pandemic. The TD task force of the EADV (European Academy of Dermatology and Venerology) ideated an online survey that was spread via email among dermatologists with the support of EADV, AIDNID (Italian Association of Non Invasive Imaging in Dermatology) and SIDemast (Italian Society of Dermatology and Venerology).

Four hundred and thirty-four doctors from 49 Countries completed the survey, 67.1% women. 35.5% were <40 years old; 24.0% were aged 40–50 years; 25.4% aged between 51–60 years; 15% were older than 60 years. The majority of respondents were board-certified dermatologists (87.1%); working in public hospital/ambulatory clininc in 29.5% of cases, in public University in 24.2%, in private hospital/clinic/ambulatory in 44.0% of cases and 2.3% working in a private University. The majority were from Southern Europe (210; 48.4%), followed by Northern Europe (88; 20.3%) and Eastern Europe (69; 15.9%); 35 (8.1%) were from Asia; 9 (2.1%) were from South America, 3 (0.7%) from Africa; 2 (0.5%) from Australia; 18 (4.0%) did not declare their origin.

The majority of respondents were board-certified dermatologists (87.1%); working in public hospital/ambulatory in 29.5% of cases, in public University in 24.2%, in private hospital/clinic/ambulatory in 44.0% of cases and 2.3% working in a private University. The majority were from Southern Europe (210; 48.4%), followed by Northern Europe (88; 20.3%) and Eastern Europe (69; 15.9%); 35 (8.1%) were from Asia; 9 (2.1%) were from South America, 3 (0.7%) from Africa; 2 (0.5%) from Australia; 18 (4.0%) did not declare their origin.

54.1% (n = 235) of respondents declared to already practice TD before the pandemic, in the last 5 years on average (years of TD practice ranging from 1 to 20 years). Of these, 65.5% (n = 154/235) dermatologists declared to use TD not regularly.
before the pandemic; and 81 (81/235; 34.5%) to regularly practice TD, for first visits and follow-up (50/235 = 21.3%) or only for follow-up (31/235 = 13.2%). The approximate percentage of patients visited before the pandemic with TD was <10% for the majority of respondents, mainly visited asynchronously with a store and forward modality. The great majority of doctors (88.2%) registered an increase in the demand for TD during the pandemic.

Among those who did not practice TD before COVID-19 (n = 199/434; 45.9%), 72.9% (145/199) declared to have started to practice it during the pandemic.

The main mode of TD during the pandemic was via telephone call (67.9%) alone or in combination with a store and forward (51.1%) and live interactive modality (41.1%). Acute inflammatory conditions were the main reason for consultation (32.8%).

There was a high variability in the platforms used, with ‘informal’ platforms (Skype, Zoom, WhatsApp) being the most frequently chosen (49.0%). 39% declared to use a dedicated secure hospital platform.

We asked to those who did not use TD, which was the main reason why the majority had a scarce opinion of this modality of consultation, which was judged not to be adequate to make a diagnosis by 33.3% of responders (14/42); others prefer to visit patients face by face (31%; 13/42).

32% of doctors changed their attitudes towards TD; they started TD during the pandemic and found it effective; 47% were already convinced about its utility.

In summary, in times of COVID-19 dermatology surfs the web. As highlighted by the results of this survey, many dermatologists experienced TD for the first time because of the need of social distancing and found it effective, thus reducing the number of face to face consultation and the number of accesses to the ambulatories. The efficacy of TD was already known and demonstrated by many publications; however, sometimes an epochal event is needed to speed up a process.4–10 The further steps could be re-thinking dermatological care in a more sustainable way, for doctors, patients and environment.

Conflicts of interest

None.

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References

1 Farshchian M, Potts G, Kimyai-Asadi A, Mehregan D, Daveluy S. Outpatient teledermatology implementation during the COVID-19 pandemic: challenges and lessons learned. J Drugs Dermatol 2020; 19: 683.

2 McGee JS, Reynolds RV, Olbricht SM. Fighting COVID-19: early teledermatology lessons learned. J Am Acad Dermatol 2020. https://doi.org/10.1016/j.jaad.2020.06.027

3 Keesara S, Jonas A, Schulman K. Covid-19 and health care’s digital revolution. N Engl J Med 2020; 382: e82.

4 Andrees V, Klein TM, Augustin M, Otten M. Live interactive teledermatology compared to in-person care – a systematic review. J Eur Acad Dermatol Venereol 2020; 34: 733–745.

5 Clark AK, Bossanac S, Ho B, Sivamani RK. Systematic review of mobile phone-based teledermatology. Arch Dermatol Res 2018; 310: 675–689.

6 Mounessa JS, Chapman S, Braunberger T et al. A systematic review of satisfaction with teledermatology. J Telemed Telecare 2018; 24: 263–270.

7 Finnanne A, Dallest K, Janda M, Soyer HP. Teledermatology for the diagnosis and management of skin cancer: a systematic review. JAMA Dermatol 2017; 153: 319–327.

8 Snoswell C, Finnanne A, Janda M, Soyer HP, Whitty JA. Cost-effectiveness of store-and-forward teledermatology: a systematic review. JAMA Dermatol 2016; 152: 702–708.

9 Warshaw EM, Hillman YJ, Greer NI et al. Teledermatology for diagnosis and management of skin conditions: a systematic review. J Am Acad Dermatol 2011; 64: 759–772.

10 Romero G, de Argila D, Ferrandiz L et al. Practice Models in Teledermatology in Spain: Longitudinal Study, 2009–2014. Modelos de práctica de la teledermatología en España. Estudio longitudinal 2009-2014. Actas Dermosifiliogr 2018; 109: 624–630.

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Concerns related to the coronavirus disease 2019 pandemic in adult patients with atopic dermatitis and psoriasis treated with systemic immunomodulatory therapy: a Danish questionnaire survey

Dear Editor

Patients with moderate-to-severe atopic dermatitis (AD) or psoriasis often require systemic immunomodulatory therapy. The uncertainty of the potential of these therapies to increase the risk of more serious illness due to coronavirus disease 2019 (COVID-19) may have caused anxiety and led to treatment discontinuation. Therefore, we conducted an anonymous questionnaire on concerns of COVID-19 in patients with AD or psoriasis treated with systemic immunomodulatory therapy.

Adult AD and psoriasis patients with an outpatient visit at the Department of Dermatology at Aarhus University Hospital or Gentofte Hospital, Denmark, between 2 April 2020 and 15 June 2020 were invited to participate. We assessed whether patients were concerned about becoming ill with COVID-19 due to their disease and/or their systemic immunomodulatory therapy and