

Dermatology Teleteaching during the COVID-19 Pandemic

Sir,

Since February 2020, the devastating consequences of the novel coronavirus disease 2019 (COVID-19) pandemic have forced governments and health authorities globally to impose lockdowns and restrictions of social distancing, including the temporary suspension of educational activities, so as to prevent further disease transmission.¹ Medical schools and residency programmes have been affected by these decisions, and numerous educational opportunities, that previously required physical presence, have gradually shifted towards digitalised methods, such as lectures *via* teleteaching through various e-platforms.¹ This letter reflects on the compatibility of dermatologic curricula with teleteaching approaches based on a brief presentation of the available limited data concerning successfully applied distance learning for the training of skin physicians and medical students.²⁻⁵

The most popular teleteaching methods include the use of online platforms, such as Zoom, Skype, or Webex, both for real-time lectures as well as pre-recorded e-courses.² The delivery of the educational material can be realised *via* video-based e-classrooms, surgical simulation sessions, web-based dermatopathology slide presentation or even virtual dermatology visits under an attending supervision.²

Limitations to teleteaching modalities include the lack of patient contact, the lack of a hands-on approach, as well as the absence of a substantial instructor-student relationship, which cannot be adequately compensated *via* a long-distance educational process.¹ However, while certain curricula, *e.g.*, of the surgical domain, seem to present compatibility issues with teleteaching; this does not seem to be the case with dermatology.^{4,5}

Among the most important advantages of this teaching method is the access to modules that assess diagnosis and management of common skin diseases using high quality images, from any location and without infection risk.³ Further advantages include the opportunity to attend teledermatology sessions with patients and finally the access to uncommon dermatoses, as well as with skin diseases of the international spectrum, *e.g.* "exotic" or "ethnic" dermatoses without the need of international rotations.⁴ Dermatology teleteaching offers not only a lecture-oriented presentation of exotic/ethnic dermatoses, but also *via* international teledermatology collaborations, a direct interaction with foreign-based dermatologists; and therefore, a first-hand exposure to the management of skin conditions in multiple socio-economic, cultural and ethical settings.⁴ A survey concerning a pilot dermatological international virtual

grand round curriculum presenting four 15-minute teledermatology cases from Kabul, Afghanistan, in four quarterly conferences documented high satisfaction rates among 118 US-based attendees (dermatology specialists, dermatology residents and medical students), with 97% of the latter confirming the important educational value of this method in the overall teaching process.⁴ The high satisfaction scores that were assessed with the use of a 17-question questionnaire, did not vary among participants with differences in training level or in previous experience with global dermatology and teledermatology.⁴ Furthermore, 95% of the participants reported an improvement of their understanding of various ethical and cultural aspects of global health; and therefore, a better management of patients with different ethnic backgrounds.⁴

Similar results are presented in the study by Boyers *et al.*, that assessed the didactic value of dermatology teleteaching among 14 dermatology residents and 16 medical students.⁵ Overall, 79% and 88% of the residents and the students, respectively, expressed high satisfaction rates as far as practice-based learning and improvement and medical knowledge were concerned, whereas, the development of interpersonal communication skills *via* this teaching modality was not highly appreciated.⁵

Although the utility of long-distance learning in dermatology education is not fully examined, preliminary results, such as the ones presented in the aforementioned studies, indicate that this method has indeed a promising potential as a didactic approach.²⁻⁵ Despite the fact that teleteaching cannot substitute the traditional face-to-face and bedside teaching,¹ we believe its role in the dermatologic curricula is worth exploring and evolving. This method could be of use not only in eventual future unusual circumstances, such as the ones we are witnessing right now, but also during the normal function of academic activities, as a way of enhancing the existing educational tools.

CONFLICT OF INTEREST:

Authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

KMP, FM, SG: Substantial contribution to the conception or design of the work, were responsible for drafting the work or revising it critically for important intellectual content. Responsible for final approval of the version to be published, agreed to be accountable for all aspects of the work in ensuring that question related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

REFERENCES

1. Mian A, Khan S. Medical education during pandemics: A UK perspective. *BMC Med* 2020; **18**(1):100. doi: 10.1186/s12916-020-01577-y.
2. Mufti A, Maliyar K, Sachdeva M, Doiron P. Modifications to dermatology residency education during the COVID-19

- pandemic. *J Am Acad Dermatol* 2020; **83(3)**:e235-6. doi: 10.1016/j.jaad.2020.05.106.
3. Ali FM, Caesar J, Chowdhury MMU. Electronic learning for healthcare (e-LfH) e-dermatology modules as a key educational tool for trainees during the COVID-19 pandemic: A regional experience. *Clin Exp Dermatol* 2020; doi: 10.1111/ced.14510.
 4. Yeung H, Sargen MR, Luk KM, Berry EG, Gurnee EA, Heuring E, *et al.* Teledermatology and teledermato-pathology as educational tools for international dermatology: A virtual grand rounds pilot curriculum. *Int J Dermatol* 2018; **57(11)**:1358-62. doi: 10.1111/ijd.14014.
 5. Boyers LN, Schultz A, Baceviciene R, Blaney S, Marvi N, Dellavalle RP, *et al.* Teledermatology as an educational tool for teaching dermatology to residents and medical students. *Telemed J E Health* 2015; **21(4)**:312-4. doi: 10.1089/tmj.2014.0101.

Kerasia-Maria Plachouri¹, Francesk Mulita² and Sophia Georgiou¹

¹Department of Dermatology, University General Hospital of Patras, Greece

²Department of General Surgery, University General Hospital of Patras, Greece

Correspondence to: Dr. Kerasia-Maria Plachouri, Department of Dermatology, University General Hospital of Patras, Greece

E-mail: kerasia.plachouri@hotmail.com

Received: October 21, 2020; Revised: November 19, 2020;

Accepted: November 25, 2020

DOI: <https://doi.org/10.29271/jcpsp.2020.JCPSPCR.CR185>

• • • • •