

LETTER**THERAPY AREA: OTHER**

Developing a toolkit to navigate clinical, educational and research practice during the COVID-19 pandemic

We read with interest the recent paper published by Khusid et al,¹ highlighting the effects of the COVID-19 pandemic on resident well-being and educational outcomes. We too have sensed the urgent need for adapting clinical, educational and scientific practice to appropriately attend to the public health crisis. As stated by the authors,¹ significant changes have been reported in the structure of academic centres with an important impact on the daily practice of health professionals including resident physicians. Accordingly, teaching hospitals have cancelled academic meetings and many clinicians and investigators may consider it not feasible to follow the rigorous procedures set by research regulation in order to carry out research activities in the context of the pandemic.²

Unprecedented changes in clinical practice, including infrastructural adaptations, new multidisciplinary algorithms and suspending non-urgent outpatient visits have taken place in health care units around the world in order to cope with the increasing demand of patients.³ The available time and resources for academic and research activities are severely limited. In parallel with modifications to clinical practice, both educational and research activities need to be re-organised in order to face the challenges of this global public health emergency, while ensuring workers' health and patients' well-being and safety. We would like to delineate the fundamental elements that should be adapted in order to best assist the development of academic activities and the advancement of science during this critical time (Table 1).

First, in order to appropriately attend to the routine clinical, educational and research practices, administrative procedures should be streamlined and paperwork minimised to deliver high-quality care, while at the same time reducing any delays in attending to patients. To do so, identifying opportunities to improve efficiency is of utmost importance. In particular, it is essential that the medical system

fosters multi-departmental collaboration to facilitate health-care processes and meet the diverse needs of patients.

Second, just as non-urgent procedures have been cancelled, postponed or alternatively managed (eg, with telemedicine), complementary measures should be taken in academic activities (eg, simulation-based teaching and learning) to enhance clinical competences, in addition to the telehealth training programme suggested by Khusid et al.¹ Likewise, it should be considered to cease or prioritise recruitment and visits for some clinical trials at the expense of extending the duration of the trial.

Third, implementing monitoring strategies for detecting and verifying the adequacy of personal protective equipment (PPE) to better ensure frontline workers' safety. Of note, an individual's perception of having inadequate safety equipment has been shown to have a significant impact on mental health.⁴

Fourth, the implementation of SARS-CoV-2 testing of both symptomatic and asymptomatic health-care providers including resident physicians and clinical research staff could reduce transmission to patients/participants.⁵

Facilitating clinical, educational and research practice requires innovation, flexibility, process improvements and co-operation amongst clinicians/researchers, professors/trainees, patients/participants and policymakers to tackle the incredible impact of this pandemic.

DISCLOSURES


The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS

Conception and design: YGP, RV, JBS. Drafting of the article: YGP. Critical revision of the article for important intellectual content: YGP, RV, JBS. Final approval of the article: YGP, RV, JBS.

TABLE 1 Educational and research activities to be reshaped in comparison with the changes in clinical practice during the COVID-19 pandemic

Clinical practice	Educational activities	Clinical research
Providing protection equipment and testing for health-care workers	Developing stress management programmes for resident physicians	Transferring trial participants to research sites away from risk zones
Developing specific protocols for the management of the patients	Enhancing clinical competences using simulation-based teaching and learning	Ensuring that only strictly necessary visits are implemented at sites
Telehealth strategies for the care of the patients	Training residents on how to use telehealth	Adapting visits into call or video visits and medical care using telemedicine

Yuli Guzman-Prado¹ 
Roberto Vita²
Jennifer Ben Shimol^{3,4}

¹International Centre for Medical Research, Dorset, UK
Email: juliguzmanprado@outlook.com

²Department of Clinical and Experimental Medicine, University
of Messina, Messina, Italy

³Department of Medicine, Edith Wolfson Medical Center, Holon,
Israel

⁴Sackler Faculty of Medicine, Tel Aviv University, Ramat Gan,
Israel

ORCID

Yuli Guzman-Prado  <https://orcid.org/0000-0002-0433-1371>

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