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## Correspondence

# COVID-19 Pandemic and Child Neurology Training: A Bumpy Road Ahead



I read with interest the recently published article “Pediatric Neurology Research in the 21st Century: Status, Challenges, and Future Directions Post-COVID-19” by Bonkowski et al. The authors have reiterated the difficulties faced in the field of pediatric neurology research and the funding post COVID-19 in the developed countries.<sup>1</sup> We would like to address the challenges in the training of pediatric neurology residents and fellows and research activities in the teaching hospitals of developing countries.

During this ongoing pandemic, the public health and the medical community, especially pediatric neurologists, face critical challenges. The academic curriculum has been gravely affected, and new residents bear the brunt of the problem. Large gatherings such as morning academic sessions, educational conferences, workshops, etc., have been called off or made virtual. Although the on-line virtual teaching platforms, webinars, etc., partly fill the vacuum, they are not designed with residents or fellows in mind and can be monotonous. To assist with the increasing numbers of COVID patients, the residents are deployed in severe acute respiratory infection and COVID wards.<sup>2</sup> Hence, an ample amount of time is spent in COVID areas. Also, residents who are high-risk contacts may be quarantined. The current pandemic is likely to continue, so both the new residents and those already in training may be deprived of patient-based skills such as history taking, clinical examination, procedural skills, and the classical art of diagnostic questioning through discussions at the bedside. Also, a lot of knowledge is acquired during specialized procedures in clinical laboratories. Due to the focus shifting to COVID-19, there has been a reduction in the functioning of these specialized laboratories and thus less hands-on training of the residents.

Many international societies and disease-specific research groups have recommended telemedicine-based patient care in these challenging times.<sup>3-5</sup> However, with the rapid evolution of telehealth-based models, the clinical landscape has changed drastically. There has been a dramatic decline in the in-patient admissions and outpatient encounters. However, these telemedicine-based models cannot replace the bedside history and examination, which play an important role in nurturing the clinical approach of the residents. Also, due to the demand-supply mismatch for personal protective equipment, the working atmosphere is distraught and residents experience psychological fear. Additionally, the reduced interaction with mentors, connectivity

problems, and delayed assessments and exit-examinations of residents have further affected the pace of learning.

COVID-19 has also affected ongoing research. The dissertations of the residents with ongoing randomized controlled trials and prospective studies have come to a halt. This has required amendments in their thesis protocols, such as a reduction in sample size, further extension of the study duration, telemedicine-based follow-up, etc. Hence, the quality of ongoing research has been affected.

To overcome these problems, teaching hospitals should try to balance patient care and resident education. Due preference needs to be given to the concerned superspecialties. Virtual teaching and timely assessments should be used to aid learning. The dissertations of residents should either focus on patients with COVID-19 or retrospective studies and surveys.<sup>5</sup> The current situation looks gloomy, and stakeholders need to keenly address this glaring issue soon.

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