Commentary: Restructuring residency training in ophthalmology during COVID-19 era: Challenges and opportunities

The COVID-19 pandemic has adversely impacted the training of residents in all specialties of medicine. Most institutes have discontinued offline didactic lectures, clinical grand rounds, and clinical rotations. They have also modified the working hours of their trainees/residents to reduce unwarranted exposure to coronavirus in hospitals. Surgical training in ophthalmology is severely affected as most of the surgeries are elective in our specialty. With the implementation of standard COVID precautions in hospitals, travel restrictions and fear among patients to contract COVID, the surgical volume will take some time to restore back to normal. A large number of residents are also deployed in the care of COVID positive patients, hampering their training in ophthalmology. These reasons have given rise to stress and anxiety among residents and other stakeholders. These findings are aptly highlighted in the present study.

The need of the hour is to restructure residency programs, trying to address the gaps in the existing ones. This will require the use of technology, innovative ideas and coordinated efforts among stakeholders. It should focus on achieving excellence in 3 important domains – patient care, academic teaching, and research. Trainee health and safety should be always kept on priority.

Most institutes have devised a rotation strategy for residents where some residents are posted in active clinical duty and others are kept in reserve. Residents who are not on active duty can also be involved in patient care, decision making, and surgical planning. This can be easily done by conducting daily briefings about various clinical cases on digital platforms like Zoom, Cisco Webex, Microsoft Teams, etc. Virtual grand rounds can also be undertaken by faculties discussing clinical cases. This will ensure uninterrupted learning of all residents. Didactic lectures/interactive sessions/symposiums/conferences can easily be held on these digital platforms on a routine basis. Technology has now removed barriers of time, space and boundaries. Collaborative sessions can also be held comprising eminent speakers from different regions, sharing their experiences. The present study has also found these online teaching methods useful. Group discussions can also be held among residents on platforms like WhatsApp where they can discuss and clear their doubts.

Getting proficiency in surgical training will be difficult in present times due to limited number of surgeries. Residents can use virtual surgical simulators for basic cataract and vitreoretinal surgery training. Institutes can formulate roster-based posting of residents in skills lab where they can perform basic surgical techniques on goat’s eye and wax models. Some specialties have roped in various 3D printed models to improve basic surgical training, accuracy and muscle memory of residents. They can also learn online from a vast database of surgical videos of different case scenarios. Teachers can discuss important surgical tips through online video-assisted surgical training sessions.

Residents must be increasingly involved in the development of their non-technical skills like crisis management, teamwork, financial literacy, patient communication, etc. Special peer groups can be formed to take care of the mental and emotional health of residents. These can also help in mentoring students in crisis times. Residents must also be encouraged to engage in research activities which will improve their analytical skills. Institutions can formulate revised guidelines for all patient-based clinical studies to make their sample size feasible. These will help residents to complete their research thesis/projects.

Some of the countries are thinking to postpone the recruitment of new batch of fellows temporarily till the conditions revert back to normal. There will be a grace period for existing fellows to make up for their surgical training and become proficient in their field. Virtual exams/interviews can be conducted, limiting large gatherings. Surgical qualifying and certification exams have been postponed globally. Some adjustments and exemptions can be made in these examinations, compensating for hardships related to COVID-19.

Hence, there is an urgent need to formulate policies regarding residency training at a national level. Crises are opportunities in disguise. Efforts must be made to address the existing gaps productively and innovatively.

Atul Kumar, Divya Agarwal
Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, India

Correspondence to: Dr. Divya Agarwal, Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, Ansari Nagar, New Delhi - 110 029, India. E-mail: divyagrm@gmail.com

References

1. Cho DY, Jenny LY, Um GT, Beck CM, Vedder NB, Friedrich JB. The Early Effects of COVID-19 on Plastic Surgery Residency Training: The University of Washington Experience. Plastic and Reconstructive Surgery. 2020 Apr 20. Volume PRS Online First - doi: 10.1097/PRS.0000000000000702.
2. Daodu O, Panda N, Lopushinsky S, Varghese TKJ, Brindle M. COVID-19 – considerations and implications for surgical learners. Ann Surg. 2020.
3. Wong TY, Bandello F. Academic ophthalmology during and after the COVID-19 pandemic. Ophthalmology. 2020.
4. Mishra D, Nair AG, Gandhi RA, Gogate PJ, Mathur S, Bhushan P, et al. The Impact of COVID-19 related lockdown on ophthalmology training programs in India – Outcomes of a survey. Indian J Ophthalmol 2020;68:999-1004.
5. Kumar A, Agarwal D, Nayak S. Commentary: Improving training in retina in Indian residency programmes. Indian J Ophthalmol 2019;67:1819-20.
6. Kania K, Abu-Ghname A, Agrawal N, Maricevich RS. Four Strategies for Plastic Surgery Education Amidst the COVID-19 Pandemic. Plast Reconstr Surg. 2020 Apr 30. doi: 10.1097/PRS.0000000000007122.
7. Kumar A, Agarwal D. Resident-to-resident bedside teaching: An innovative concept. Indian J Ophthalmol 2019;67:1901-2.
8. Farrell DA, Miller TJ, Chambers JR, Joseph VA, McClellan WT.
3D Printed Hand Surgical Simulator for Resident Training. Plast Reconstr Surg. 2020 Apr 27. doi: 10.1097/PRS.0000000000007025.

9. COVID-19 and Trainee Progression in 2020 (update I) – 1 April 2020. Joint Committee on Surgical Training, United Kingdom. Available from: https://www.jcst.org/-/media/files/jcst/key-documents/covid19_jcst-statement_update-i_-1-april-2020.pdf. [Last cited on 2020 May 13].

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Cite this article as: Kumar A, Agarwal D. Commentary: Restructuring residency training in ophthalmology during COVID-19 era. Challenges and opportunities. Indian J Ophthalmol 2020;68:1005-6.