Reply: Impact of reduced elective ophthalmic surgical volume on U.S. hospitals during the early coronavirus disease 2019 pandemic. We thank Ferrara et al. for their interest in our article on the effect of reduced elective ophthalmic surgery during the early coronavirus disease-19 (COVID-19) pandemic.1 Ferrara et al. highlight several additional important effects of COVID-19–related lockdowns on the surgical experience of ophthalmology trainees, including a significant decline in the proportion of cataract surgery cases involving trainees at 2 institutions in the United Kingdom.2 As the most recent national surgical case logs available from the Accreditation Council for Graduate Medical Education from the 2020 graduating class demonstrate, this trend was also seen nationally across the United States. In 2020, the mean number of cases performed by residents was lower than that in 2019 across all procedure types. Importantly, the mean number of cataract surgery cases logged by residents as primary surgeon decreased by 22.0% from 2019 (mean [SD] 208 [68] cases) to 2020 (162 [60] cases).3,4

In addition, at our institution— an urban tertiary academic eye center in the U.S.—a similar trend was observed in a retrospective review of surgical cases performed during our shutdown from March 18 to May 27, 2020, and from March 18 to May 27, 2019. This retrospective review was reviewed by the Johns Hopkins University Institutional Review Board and deemed exempt. Residents and fellows were involved in 213 (75.5%) of the 282 urgent and emergent surgical cases performed during the early COVID-19 pandemic, compared with 1063 (77.5%) of the 1371 elective, urgent, and emergent cases during the same time period in 2019 (P = .79; Figure 1). Trainees experienced a 76.7% decrease in surgical volume. Although the proportion of cases involving fellows remained roughly stable (52.1% in 2020 vs 43.5% in 2019, P = .05), the absolute number fell from 597 to 147 (a 75.4% decrease). The proportion of cases involving residents decreased from 26.3% in 2019 to 12.4% in 2020 (P < .001) as the absolute number fell from 360 to 36 (a 90% decrease). Our senior residents and fellows graduate at the end of June, so the period of shutdown also potentially affected their postgraduation practice when there may be less supervision and support available from senior surgeons; the effects of this on early career surgical experience requires further study.

The work by Ferrara et al. suggests that the decreased surgical volume likely had a negative effect on patient outcomes for cases performed by trainees but not faculty. This is an important issue that merits further investigation and the development of strategies for mitigation. Residency program directors and teaching faculty worldwide innovated quickly to meet the demand for educational continuity amidst during this unprecedented global health crisis, with increased online didactics and an emphasis on virtual surgical simulation to supplement trainees’ learning in the setting of decreased surgical volumes.5 However, such experiences cannot adequately substitute for hands-on experience with live surgery. We appreciate the authors’ important contribution in presenting these data as part of the ongoing conversation about the effects of the pandemic on ophthalmology resident education.

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REFERENCES

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