



The Impact of the COVID-19 Pandemic on Laryngology Fellowships: A National Survey of Fellowship Program Directors

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INTRODUCTION

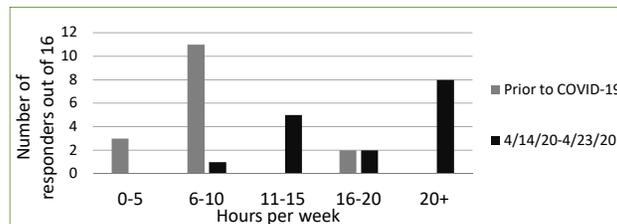
- This study sought to highlight the impact of the COVID-19 pandemic on laryngology fellowship programs, and how programs have adapted to the crisis
- As experts of the upper airway, otolaryngologists and laryngologists play special roles in the management of COVID-19, which puts them at significant risk
- In surgical specialties, elective cases have been postponed, clinic and office visits have been reduced, and some surgical fellows have been deployed as attending physicians in their core specialties
- In otolaryngology residency programs, many procedures including ACGME-designated key indicators (KIs) are not time sensitive and therefore not essential in most COVID-19 protocols
- Similar studies have examined the effect of the COVID-19 pandemic on various fellowships within otolaryngology; however, the effect of the pandemic on laryngology fellowships has yet to be explored
- An anonymous survey was sent to program directors of all laryngology fellowship programs; they were asked about changes to fellowship education, training, interviewing, didactics, and virtual technologies in the context of the COVID-19 pandemic

METHODS

- An anonymous survey was sent to fellowship directors of the 26 laryngology fellowship programs
- Using a scale from “no impact” to “significant impact,” fellowship program directors were asked several questions regarding the effect of the pandemic on fellowship education, training, and interviewing
- Fellowship program directors were also asked about changes to didactics and the involvement of telehealth and other virtual technologies
- Survey data was collected from April 14, 2020, to April 23, 2020.

Aspect of Fellowship Education	No Impact (1)	Mild Impact (2)	Moderate Impact (3)	Significant Impact (4)	Average Rating
Educational experience of fellows overall	0/16	3/16	8/16	5/16	3.13
Educational experience of the program's fellow(s) specifically	0/16	3/16	7/16	6/16	3.19
Time spent performing day-to-day fellowship activities	0/16	0/16	4/16	12/16	3.75
Surgical aspect of fellows' education	0/16	3/16	7/16	6/16	3.19
Clinical aspect of fellows' education	0/16	4/16	5/16	7/16	3.19
Fellows' ability to become a well-trained laryngologist	0/16	4/16	11/16	1/16	2.81

↳ **Table 1:** The Impact of COVID-19 on Fellowship Programs. On a scale of 1–4 with 1 being “no impact” and 4 being “significant impact,” how has COVID-19 affected the following?



↳ **Figure 1:** Hours of academic-focused time per week before and after the onset of COVID-19 pandemic.

11/16 (69%) fellowship directors reported a moderate impact on their fellows' ability to become well-trained laryngologists, and 1/16 reported a significant impact

RESULTS

- 16 (62%) of 26 fellowship directors responded to the survey
- Time spent performing day-to-day fellowship activities had been most affected, followed by clinical and surgical aspects of fellows' education (**Table 1**)
- Fellows in 13/16 (81%) programs were still performing surgical cases as of April 23, 2020
- Academic-focused time has increased during the pandemic (**Figure 1**)
- 16/16 fellowship programs reported adding research to substitute for lost clinical and surgical experiences, and 14/16 (88%) reported incorporating more self-study
- 12/16 (75%) programs had fellows participating in online lecture series such as the Great Lakes Otolaryngology Consortium or Collaborative Otolaryngology Residency Education Program
- 8/16 (50%) programs had fellows involved in telehealth visits

CONCLUSIONS

- The COVID-19 pandemic has altered the landscape of medical education
- In laryngology fellowship programs, time spent performing day-to-day fellowship activities has been most affected, followed by clinical and surgical aspects of the fellows' education
- Consequently, fellowship programs have had more time to focus on academic aspects of training, especially through online didactic courses and research
- Virtual technologies such as telehealth and online didactics have played a key role in medical education and training during the pandemic, and may have a more permanent role moving forward
- The effect of the pandemic on laryngology fellowship training is a microcosm for what has happened in multiple subspecialty programs, and the extent of its impact will only be fully understood when the dust settles