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Reply: Four Strategies for Plastic Surgery Education amid the COVID-19 Pandemic Sir.

We would first like to thank Mrs. Padley and Dr. Di Pace for their thoughtful reply to our publication.¹ Our article focused on the four strategies that plastic surgery education can employ during the coronavirus disease of 2019 (COVID-19) pandemic in order to facilitate and broaden resident learning: (1) integrating information technology, (2) nationally integrated didactics, (3) daily briefings for those working from home, and (4) simulation models.¹ The perspective offered by Padley and Di Pace provides additional insight and useful strategies that can be adopted.

With the strain that COVID-19 poses on current education models by limiting in-person meetings, Padley and Di Pace agree with our model of asynchronous offline activities (assignments and a surgical laboratory) and synchronous online activities (daily briefings, didactic lectures, and grand rounds). They offer additional strategies that would be a useful addition to supplementing resident and fellow education. First, they suggest an online discussion forum among residents, senior consultants, and professors to supplement the surgical laboratory. We agree that this fantastic strategy would ensure that there is an open stage for residents to receive input, technical tips, and constructive criticism from those who have more experience. While it is a good platform for hosting lectures and grand rounds, one downside of virtual learning is that it is often less interactive and residents receive less direct feedback. Having a dedicated forum that enables these conversations would perhaps mitigate these limitations. With the addition of virtual technologies, both residents and faculty would post photographs and videos of their dissections.

Second, they suggest the idea of "breakout rooms" in Zoom meetings, enabling further discussion and perspectives on a topic. This useful strategy would be utilized for in-service studying, journal club, or team-based learning exercises. With smaller groups expected to discuss a topic, participants are more likely to engage and share their perspective than in a typical didactic lecture.

Finally, a third important point is made about cybersecurity, to ensure that medical information shared over the meeting platform is protected.² Security threats are an unfortunate reality of information technology and the Internet. Zoom and similar platforms have become aware of the need to upgrade their security measures due to the significant uptick in their use. Nevertheless, the risk will remain, so it is important for each of us to always protect our patients' private information during conferences and presentations.

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DISCLOSURE

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The COVID-19 Pandemic: Implications for Medical Students and Plastic Surgery Residency Applicants

Sir:

We read with interest Raj et al's article¹ on the implications of coronavirus disease of 2019

(COVID-19) on medical students and plastic surgery residency applicants. Although the training structure differs in the United Kingdom, the problems arising from the pandemic appear similar. Across the pond, the pursuit of a career in plastic surgery is prolonged. In contrast to U.S. students, U.K. medical students must complete 4 years of postgraduate training before applying for higher specialty training [2 years in foundation training (intern equivalent) and 2 years in core-surgical training]. The main roadblock to entry into plastic surgery is the interview for higher-specialty training at the end of core-surgical training. Prospective plastic surgeons have been disadvantaged by COVID-19 at every stage.

The pandemic caused widespread disruption to medical training in the United Kingdom. Senior students had final examinations and electives cancelled and 80 percent² volunteered or were drafted into clinical work. These student-cum-doctors were employed on COVID wards and in emergency departments, in a physician's assistant capacity for most.^{2,3} In a specialty already underrepresented in undergraduate curricula, reduced exposure to plastic surgery through cancelled elective placements may now reduce its popularity among budding surgeons.

Foundation doctors work in six posts throughout 2 years. The pandemic called for cancellation of the last rotation, and doctors remained in their fifth post for an additional 4 months. For some, this eradicated their only exposure to plastic or any surgery at a postgraduate level, potentially diminishing success at core-surgical training interviews and reducing surgical decision-making and practical skills. For those who stayed on a surgical firm, some 20 percent to 50 percent⁴ were also redeployed to COVID wards, emergency departments, and intensive care.

Core-surgical training involves semispecialized rotations, designed to prepare doctors for entry into higher-specialty training. Similar levels of redeployment were observed.⁴ In our experience, 100 percent of the core-surgical trainees were redeployed, leaving nontrainees and foundation doctors to make up the surgical skeleton rotation. For those remaining on plastic surgery, the operative opportunities were severely reduced through cancelled elective work, increased on-call duties to cover for redeployed colleagues, and the introduction of two-consultant operating.⁵ Consequently, indicative operation numbers required for entry to higher-surgical training became unattainable.

At the pinnacle of pressure to attain a training post, trainees were swept into rapidly changing tides as higher-specialty training interviews were cancelled at 2 weeks' notice, with entry judged on self-scored portfolios only. This bred discontentment among many prospective and current plastic surgeons.

All of the above changes were necessary, and prospective plastic surgeons rose to the challenge in

order to turn the tide on the pandemic. The challenge herein lies with leveling the playing field for those disadvantaged by COVID-19. It will not be possible to recover lost time, and it is unfair to penalize the ill-fated. As the swell settles following the second wave of COVID-19 in the United Kingdom, the problem prevails, and creating novel and fair solutions will be essential.

What will this mean for the future of our specialty? May they be lesser trained, lesser prepared, or will their unique experiences turn them into formidable leaders? Time will tell.

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