COVID-19 Letter

COVID-19 and the Impact on Fellowship Education

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To the Editor:

Coronavirus (COVID-19, SARS-CoV-2) has caused rapid disruption of daily life along with significant morbidity and mortality on a global scale. The first case of COVID-19 was identified in Wuhan, China with the World Health Organization (WHO) being notified about the outbreak on December 31, 2019 (1,2). The United States confirmed its first case of the virus on January 20, 2020. With nearly every country affected, the WHO would move to declare the COVID-19 outbreak as a global pandemic on March 11, 2020.

The response strategy in the United States, and in much of the world, has included social distancing, early diagnosis, patient isolation, and symptomatic monitoring. Key components to these preventative and precautionary measures include the incorporation of telemedicine as well as the canceling of elective procedures and surgical cases. In concordance with the implementation of these measures to combat COVID-19, there have also been profound changes to the medical educational process of procedural and surgical based specialties at both the fellowship and the residency level alike.

To prevent healthcare systems from becoming overburdened, elective and nonurgent medical procedures were postponed until recently, and primary health care has broadened to include virtual appointments via telemedicine. A critical part of fellowship and residency training for procedural specialties is the hands-on learning opportunities provided in a supervised clinical environment. The motto "see one, do one, teach one" is fundamental to the learning process, and indeed to the art of medicine as a whole. With the discontinuation of elective procedures and surgical cases during the COVID-19 pandemic in many regions of the world, fellows and residents have had to significantly reduce their case numbers over the past several months according to state mandates set in the regions in which they are training. These restrictions on cases, while necessary, have hindered the learning experiences of many physicians in training. The experiences gleaned from operating and performing elective procedures is invaluable in the training of fellows and residents who are training in procedural and operative medical fields. Being unable to perform such procedures over the course of the ban on elective cases may have unforeseen ramifications in future attending physician procedural knowledge as well as in the technical aspects of the procedures themselves.

There are additional challenges for all specialties involved in direct patient care as clinical encounters are being increasingly transitioned to telemedicine appointments in order to reduce personal protective equipment usage as well as minimizing the risk of direct person-to-person transmission of COVID-19 between patients as well as to providers (3-5). Though necessary to protect vulnerable patient populations, these telemedicine encounters also interfere with learning opportunities by limiting patient interactions, physical examination opportunities, procedural opportunities, as well as altering the normal treatment algorithms for certain medical conditions. Furthermore, related to the recommendations for social distancing, including the 6 feet of separation between all individuals and the limitations placed on room capacity, the didactic portions of training programs have been considerably affected as well. Classroom learning opportunities have often been cancelled or shifted to online educational modalities. Though utilizing these online educational tools have been important to maintain continuing education for physicians in training, some learners may find these modalities to be less effective than in person opportunities and thus may miss out on key learning points (6).

These are indeed challenging times for healthcare workers and physicians in training worldwide. The authors want to emphasize that patient safety is of upmost importance and cancellation of elective procedures and clinical encounters have been essential measures to help ensure community safety from COVID-19. However, we also believe it is important to acknowledge the hardships that physicians in training are experiencing during these trying times.

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