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Opinion paper

COVID-19: Neurology residents' perspective

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ABSTRACT

Throughout this pandemic, neurology resident education and service has, and will continue to be, affected during this unprecedented time. Balancing the safety of our residents as well as the anticipated inpatient service demands, we have, and continue to, make changes to meet the needs of our community. Education certainly has been affected but we have made great effort to maintain normalcy. We are leveraging web-based technologies to continue formal didactics. The American Academy of Neurology has provided program directors with various tools to share to provide high-yield academic education. AAN Synapse, distance learning modules, and podcasts are a few examples. Each residency training program will likely face different challenges depending on location and community structure. We have an obligation to help all of our colleagues in the hospital in providing quality and compassionate care during this time of need. Our training and education will only benefit from this experience teaching us lessons on adaptability, the importance of teamwork, and self-sacrifice.

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First detected in December of 2019 in the Wuhan province of China, 2019-nCoV (COVID-19) has since spread rapidly across the globe, reaching the United States on January 19, 2020 [1]. As of today, there are over 2,000,000 confirmed cases worldwide; over 600,000 cases in the United States [2]. The World Health Organization officially declared the pandemic an international public health emergency [3].

While effort is being made on all levels of the healthcare system, health care workers including residents and trainees, remain on the frontline. Universities and hospitals have undertaken drastic measures implementing real-time policies to minimize exposure risks and meet the anticipated surge in clinical demands. Throughout this process, neurology resident education and service has, and will continue to be, affected during this pandemic.

Each residency training program will likely face different challenges depending on location and community structure. As a smaller-sized neurology residency program, staffing a busy, 371 bed, urban hospital as well as a 175 acute bed Veterans Affairs hospital, we are prepping for the impending influx of inpatients. Balancing the safety of our residents as well as the anticipated inpatient service demands, we have, and continue to, make changes to meet the needs of our community.

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We have downsized the structure of our ward teams to the minimum number of residents needed to safely care for our inpatients. We temporarily closed our outpatient continuity and non-urgent subspecialty clinics. Our program is operationalizing Telemedicine and the ACGME is favorable to neurology residents using this unique tool to take care of patients. We now work in discrete shifts, 7 days on and 7 days off, with a goal of limiting exposure and allowing for multiple, healthy, back-up residents in case of illness or need for quarantine. Time on the service is more intense given larger individual resident workload but manageable. End of shift handoffs are now done remotely to reduce the potential spread of infection. We have limited the number of individuals in our workspace to maintain social and physical distancing.

Education certainly has been affected but we have made great effort to maintain normalcy. Cancellation of weekly in-person academic conferences is the most obvious cause of education compromise. We are leveraging web-based technologies to continue formal didactics, case conferences, and journal clubs. Structured self-learning and self-study with online quizzes helps to consolidate information and provide feedback. Closure of non-urgent outpatient clinics has reduced our hands-on experience in our continuity clinic and outpatient sub-specialty clinics.

The American Academy of Neurology has provided program directors with various tools to share to provide high-yield academic education. AAN Synapse, distance learning modules, and podcasts are a few examples.

The ability to meet all rotations required for graduation has been a real concern. Programs have to balance resident safety with

continued high-quality education. In a recent letter, the ACGME outlined flexibility in training, suspending accreditation related activities and allowing individual program directors to assess the competence of graduating individuals. The extent of these changes cannot yet be known but changes are needed.

Undoubtedly, this crisis has affected neurology residents on a personal level. Suspension of work-related travel and discouragement of personal travel limits our ability to visit our loved ones. Cancellation of social and wellness activities disrupts normal stress-relieving support outlets. Graduation and other ceremonial gatherings are sure to be postponed. The individual fear and anxiety around exposure to the virus or exposing loved ones weighs heavily. Resident safety is paramount. Program leadership has and should continue to support residents working in this pandemic fight. A lower threshold to call in sick in anyone displaying URI symptoms should be encouraged and hospital-based protocols for SARS-CoV-2 testing should be followed closely. Support resources and counseling should be made readily available given these stressful times.

Here on the frontlines, even as neurology residents, we have a chance to make a difference for our patients and communities affected by COVID-19. We have an obligation to help all of our colleagues in the hospital in providing quality and compassionate care during this time of need. We have an obligation to learn as much about this pandemic and how it impacts our patients with neurologic disorders. Our training and education will only benefit from this experience teaching us lessons on adaptability, the importance of teamwork, and self-sacrifice.

Author contributions

Mohanad AlGaeed is responsible for article concept and drafting the manuscript.

Manjot Grewal is responsible for drafting the manuscript.

Perry K. Richardson is responsible for drafting and revising the manuscript.

Christopher R. Leon Guerrero is responsible for drafting and revising the manuscript.

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Mohanad AlGaeed reports no disclosures.

Manjot Grewal reports no disclosures.

Perry K. Richardson reports no disclosures.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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