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## Going Viral: Lessons from Disaster Medicine for the Neurologist in the Covid-19 era

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Moré et al.<sup>1</sup> are to be applauded for their article in this issue on disaster neurology and its relevance to the on-going COVID-19 pandemic. At first glance, the relationship between this pandemic and a natural disaster is not obvious. However, as countries struggle with limitations in medical resources and having to make difficult decisions about who should have priority in receiving medical care or vaccines as they become available, the skills needed to provide care in an austere environment become clear. In addition, as medical professionals who are experts in hospitalist and intensive care unit medicine become overstretched, it is natural that neurologists and neurology providers, who at least understand medical care and have been exposed to internal medicine at some point during training, will naturally become called upon to help take care of Covid patients. For example, during the Spring surge of cases which overwhelmed hospitals in New York City, the United States military responded, recalling to duty many Reserve physicians, nurses, and other healthcare providers and assigning them to support civilian healthcare operations. Neurologists, pathologists, pediatricians, and other specialists suddenly found themselves receiving on-the-job training to manage critically ill Covid patients.

Given the myriad of neurological complications from Covid, the authors highlight other areas where neurology expertise is critical to caring for patients who have become infected with the virus and the need to adjust practices to rapidly changing conditions. Challenges, such as delay of care by patients who do not want to come into the hospital or clinic because of fear of catching Covid, as well as the need for risk stratification in continuing immunotherapies for conditions, such as multiple sclerosis (MS), have added to the complexity of care facing neurologists. Furthermore, the expanded use of telemedicine, the need for residency and medical school training programs to adapt, as well as the requirement for additional care needed to protect patients and healthcare workers, along with ensuring proper cleaning of medical equipment, for procedures such as Botulinum toxin chemodenervation and neurophysiologic studies, all serve to add to the complexity of care. As Moré et al.<sup>1</sup> point out, we have learned a

great deal from the experiences in disaster medicine that we can deploy in adapting our care pathways during the current pandemic. However, pandemic medicine has some unique challenges not typically seen in natural disasters and which are more akin to serving in a combat/war zone. Most obviously, of course, is the fact that at least at the pandemic onset, not much was known about the biology of the viral pathogen. Moreover, the enemy is something of a moving target, and it is becoming clear that some mutant strains are more highly infectious than others. All of these factors will result in rolling changes that will affect how neurologists care for patients. The other problem facing clinicians, but not addressed by Moré and colleagues, is the speed at which the published medical literature is evolving; many publications are now appearing before peer-review is completed. We are used to treating patients using decisions supported by an evidence-base, but, for instance, our risk-stratification protocols for MS will need to be constantly tweaked by evolving knowledge from immunologic studies on the virus itself and emerging vaccines.

Nonetheless, this Commentary is an important addition to the medical literature for practicing neurologists as it provides a logical and superbly guided summary of the challenges in providing neurologic care during the SARS-CoV-2 pandemic while offering adaptations that neurologists and neurology departments can consider in their response. With incredible value to the reader, the authors underscore the essential workflow adaptations in both inpatient and outpatient settings. This work poses an important and timely topic for discussion and, importantly, highlights critical concepts and adaptations.

## **Reference**

1. Moré JM, Miller JA, and Etienne M. Disaster Neurology Update: Focus on the Covid-19 Pandemic. *Neurol Clin Pract* 2021;XX:xx-xx.

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