Being a Fellow in the Time of COVID-19

By Kartik Kalra

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In mid-January 2020 I first heard about COVID-19. At first, it came across as yet another respiratory viral disease that had moderately higher infectivity compared with previous viruses. I never imagined that it was just the beginning of what would become a pandemic and that later case numbers would be staggering and overwhelming. COVID-19 has taken a toll not only on patients but also on healthcare systems, their workers, and the economy.

Sooner than I could comprehend the full extent of the damage, I found myself engulfed in the midst of this pandemic. It now feels like *Game of Thrones*, where the great battle has begun. I echo the sentiments of series character John Snow about getting all the houses together and asking for help irrespective of differences, trying to highlight his point that "the only war that matters now is the war for survival." The major difference here is that we are fighting an invisible enemy. The only weapon we have is hope and a belief that despite everything, humanity will prevail.

The world is watching and looks up to us as healthcare workers during this pandemic, and I believe this is a time when we as a community can grow stronger. Years of medical school, residency, and fellowship have cultivated our art of listening and delivering news to our patients, acting in their best interest, and always advocating for their wishes.

As a member of the medical fraternity, I am humbled to see that despite the stress and anxiety, healthcare professionals are valuing each other as never before. They are pitching in and helping out in any way possible. A hospitalist friend in New York City told me his team includes himself, an orthopedic attending, and two psychiatric residents, each of whom manages the treatment of COVID-19 patients. Never before in medicine have I seen such unification of disparate fields and such abandonment of existing hierarchies.

What can we do as nephrologists? We need to remind our patients and families to have hope and stay positive, and we need to educate and update them as new information becomes available. We can help patients broaden their understanding of COVID-19 and be extra considerate in addressing the smallest of their doubts. We can discuss ways to minimize contact. And we need to keep in mind that our dialysis nurses and technicians do not have the luxury of minimizing contact and are equally involved in this war, if not more so. The least we can do is to be overwhelmingly appreciative of their work.

My apprehensions as a fellow

Fear grips me every time I examine a patient being admitted with COVID-19–like symptoms—fear that I will infect my patients, family, and colleagues. But have I not already seen infected patients? Have I not felt this fear every time I have entered a room with precautions? Not necessarily. There might be a moment of reflection in these cases, but it soon passes.

As healthcare advocates, we often are so consumed by the infections and pathologic conditions we see that we often forget the emotional baggage our job carries. We become immune to, or many times forget, that we are in the middle of a pandemic, and that some of us may not survive. We try to maintain our composure as we see the growing number of cases, as we talk to another friend or colleague who is currently infected or recovering from the illness.

My worries

I worry about my family in India, where the number of cases is increasing by the day.

I wonder if I will be able to start my new job on time, given the visa situation during the pandemic. I am on a work visa, and the US Citizenship and Immigration Services currently has suspended all visa renewals and premium processing, leaving many of us in an immigration limbo. Like many other physicians, I want to offer my services but cannot because of visa restrictions.

The COVID-19 situation here in Pittsburgh is still under control and flattening out, if you go by the numbers, but it is just a silent wait before the storm. A daily flurry of emails from hospital administration and staff update us about changing policies. Our department updates us about any new innovations or changes in guidelines. We try to review the latest scientific literature, and thanks to #FOAMED and academia using social media, we have updates from experts. Everything progresses quickly, leaving us hardly enough time to catch up.

The emotional and psychologic toll on healthcare workers is worsened by the lack of personal protective equipment (PPE) and a constant fear of infecting loved ones. I fear that this will eventually lead to burnout and mental breakdown. The idea that doctors are indispensable and are equipped to face any circumstance is complicated by these fears. Our community at large is fighting for PPE so that we can minimize the risk to our lives and save other lives down the road. If this is a war, PPE is the armor we need.

Has our practice changed since the beginning of the outbreak?

The epidemic has had a large impact on clinical practice. Many elective procedures have been canceled to limit patient exposure. Telemedicine and video visits have replaced office visits to a great extent (Figure 1).

The Centers for Medicare & Medicaid Services, which decides on reimbursement and billing strategies, as of March 6, 2020, reimburses for office and hospital telehealth visits. Payment for telephone visits now matches payments for similar office and outpatient visits.

Overall, I believe this is a major change to our clinical practice, and clinicians are becoming more comfortable with the idea of video and telephone visits. So far, I have observed better patient satisfaction and a lower no-show rate, likely attributable to lower risk of infection, travel-related issues, and scheduling of multiple other appointments. Various platforms compliant with the Health Insurance Portability and Accountability Act are currently in use by each institution (e.g., Zoom, Skype for business, Microsoft Teams). At our institution, Vydo software is integrated with our electronic health records. The overall idea is to expand the use of this technology to maximize patient care and minimize patient risk, thereby limiting the community spread of COVID-19.

How has the fellowship program adapted?

A standard 2-year nephrology training program can be divided into core consult rotations (e.g., critical care nephrology, transplantation, outpatient dialysis); electives (e.g., glomerulonephritis, onconephrology, specialized clinics); and outpatient experience. Different programs divide these rotations according to their fellowship structures. Most of the core rotations at my program are in the first year, leaving the second year for electives and scholarly activities. Keeping social distancing in mind, our program leadership decided to cancel all in-person conferences and quickly transition to the model of virtual learning through Microsoft Teams. Initially we had a few hiccups, as one would have while adapting to a new platform. Currently all our conferences, journal clubs, resident lectures, and weekly updates on COVID-19 are held through Teams. It is interesting that the Glomerular Disease Study and Trial Consortium has had the same model for more than 2 years and is at-

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Figure 1. Summary of Medicare telemedicine services

Type of Service	What is the service?	HCPCS/CPT CODE	Patient Relationship with Provider
MEDICARE TELEHEATLH VISITS	A visit with a provider that uses telecommunication systems between a provider and a patient.	Common Telehealth services include: • 99201-99215 (Office or other outpatient visits) • G0425-G0427(Telehealth consultations, emergency department or initial inpatient) • G0406-G0408 (Follow-up inpatient telehealth consultations furnished to beneficiaries in hospitals or SNFs	For new* or established patients *To the extent the 1135 waiver requires an established relationship, HHS will not conduct audits to ensure such a prior relationship existed for claims submitted during this public health emergency
VIRTUAL CHECK-IN	A brief (5-10 minutes) check in with your practitioner via telephone or other telecommunications device whether an office or other service is needed. A remote evaluation of recorded video and/or images submitted by an established patient.	• HCPCS code G2012 • HCPCS code G2010	For established patients
E-VISITS	A communication between a patient and their provider through an online patient portal.	• 99421 • 99422 • 99423 • G2061 • G2062 • G2063	For established patients

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tended by trainees and physicians the world over. (I wonder whether we should have adapted to this learning model earlier.) Any non–COVID-19 discussion is healthy and keeps the mind diverted, restoring some normalcy.

At present, during the case surge in Pittsburgh, we have not been deployed to cover COVID-19 patients or rotate in the critical care unit—although if cases start to peak, fellows might be redirected to cover COVID-19 services. Again, this is an unprecedented situation. Desperate situations require desperate measures. Patient care cannot be compromised.

Coping mechanisms

As a result of social isolation and the need to "shelter in place," many of us are anxious. We as healthcare workers are particularly vulnerable to stress and anxiety as we strive to strike a balance between personal and professional well-being. Fortunately, our program at Pittsburgh has aggressively adapted to this challenging situation by identifying trainees involved with electives and nonessential services and excusing them from coming to the hospital unless they are needed. I personally recommend Headspace; virtual happy hours with colleagues, other fellows, and friends; and a daily exercise regimen to help cope. We need to be eminently prudent about the well-being of healthcare workers in the fight against COVID-19 [https://www.ama-assn.org/practice-management/physician-health/covid-19-front-line-mount-sinai-keeps-physician-well-being].

Living history

The direction of this pandemic is not driven by political whims and fancies. We don't decide the course; the virus does, as National Institute of Allergy and Infectious Diseases Director Anthony Fauci reminds us.

Writing in a blog post for NephronPower, New York nephrologist Kenar Jhaveri, MD, said, "Not only is the virus infecting people, it's infecting the hospital itself. It's pushing out everything else."

We are living history. Nothing has prepared us for this. Soak it in. I hope that 40 years from now we will be telling our grandchildren how we served on the front lines of the great 2020 pandemic. We may never again have the opportunity to be involved in something more meaningful. ■

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Transplant Centers Adjust Policies, Take Precautions during COVID-19

By Karen Blum

As COVID-19 started to take hold in countries like China and Italy, Marian Michaels, MD, MPH, thought the transplant community in the United States and Canada would benefit from having information about the then-rising epidemic so they could establish solid plans for their patients and programs. She had no idea how prescient that decision would be.

Michaels, a pediatric infectious diseases physician at UPMC Children's Hospital of Pittsburgh, gathered fellow infectious disease transplant experts to publish a framework for keeping patients and hospital staffs safe during an outbreak of COVID-19 (1). Michaels noted that individual transplant centers may be affected by COVID-19 differently depending on the amount of virus in their institutions and their patient populations, so each must regularly update protocols regarding how they can continue to perform transplants safely and when they may need to slow things down.

- Targeted, screening of patients and visitors, and for OPOs, of potential donors.
- Plans for placement and evaluation of recipients with risk factors for the pathogen when they are sick and require evaluation.
- Backup plans for recipients requiring evaluation for other reasons if a transplant center is temporarily closed.
- Consideration for candidates to be listed at alternative centers for transplant if an epidemic is geographically confined.
- The ability to communicate with transplant recipients and potential living donors to keep them apprised of updated information and recommendations.

What has changed with COVID-19 are additional recommendations for transplant patients and their family members to protect themselves by wearing masks, practicing good hand hygiene, and physical distancing, Michaels said. Living donors also should self-quarantine before the donation so they are not exposing themselves prior to surgery.

Being able to say what your resources and capacity are and having educational tools ready to get to patients is going to put us ahead of the game more [in the future] than what we had for this pandemic.

"The emergence of COVID-19 is not the first time the transplant community has had to contend with emerging viruses, nor will it be our last," Michaels and colleagues write in the paper. "Consequently, we should learn from past experiences with novel viruses and put safeguards in place for transplant centers and OPOs [organ procurement organizations] to protect transplant recipients and healthcare workers … and to mitigate the impact of this epidemic on transplant outcomes."

Based on lessons learned from previous outbreaks of related viruses, such as the 2002 outbreak of SARS-CoV and the 2012 outbreak of MERS-CoV, Michaels said transplant programs should have the following protocols in place:

Uday Nori, MD, an associate professor of medicine and program director of the nephrology fellowship program at The Ohio State University Wexner Medical Center, agreed with Michaels that transplant centers are making decisions based on their own unique needs at this time. While Nori's medical center canceled elective procedures including living donor kidney transplants, for now, the program has actively been performing about two deceased donor kidney transplants per day.

"Other centers have been passing up organs so we started getting many more imports," he said. "I feel really good about it. We don't want to waste any donor organs because they're precious … and there's only a finite amount of time before they are discarded."

The program did add some extra precautions, Nori said. Every donor and recipient is checked for COVID-19 through testing from the National Kidney Registry. The medical center's transplant unit is maintaining its policies of restricting visits from children, as well as deliveries of fresh fruit or flowers. Nurses who work in the transplant unit have not participated in a float pool to provide backup help for other units that may have COVID-positive patients.

Additionally, physicians modified the immunosuppression protocol so those at high risk for COVID would not be as heavily immunosuppressed, and they are conducting more post-transplant follow-up visits by phone or video.

"I'm very optimistic," Michaels said. "I know this has been very hard on all of us, and it's been difficult watching our friends and patients hospitalized, but I've been amazed at the resiliency and also the ability of people to work together."

Nori said the volume of information pouring out about COVID-19 now is almost overwhelming. He estimates he spends about two hours a day sifting through updated information about the pandemic, including emails he receives through an American Society of Transplantation listserv called Outstanding Questions in Transplantation Research.

"It's one of the most valuable things I've seen for COVID, because people are sharing even unpublished manuscripts because they don't want people to be hamstrung by not having information on a daily basis," said Nori, a member of the *Kidney News* editorial board.

"When COVID-19 hit the US, I don't feel we had as many protocols in place for dealing with this as we have now," Michaels said. "Being able to say what your resources and capacity are and having educational tools ready to get to patients is going to put us ahead of the game more [in the future] than what we had for this pandemic." ■

References

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