Family Doctor

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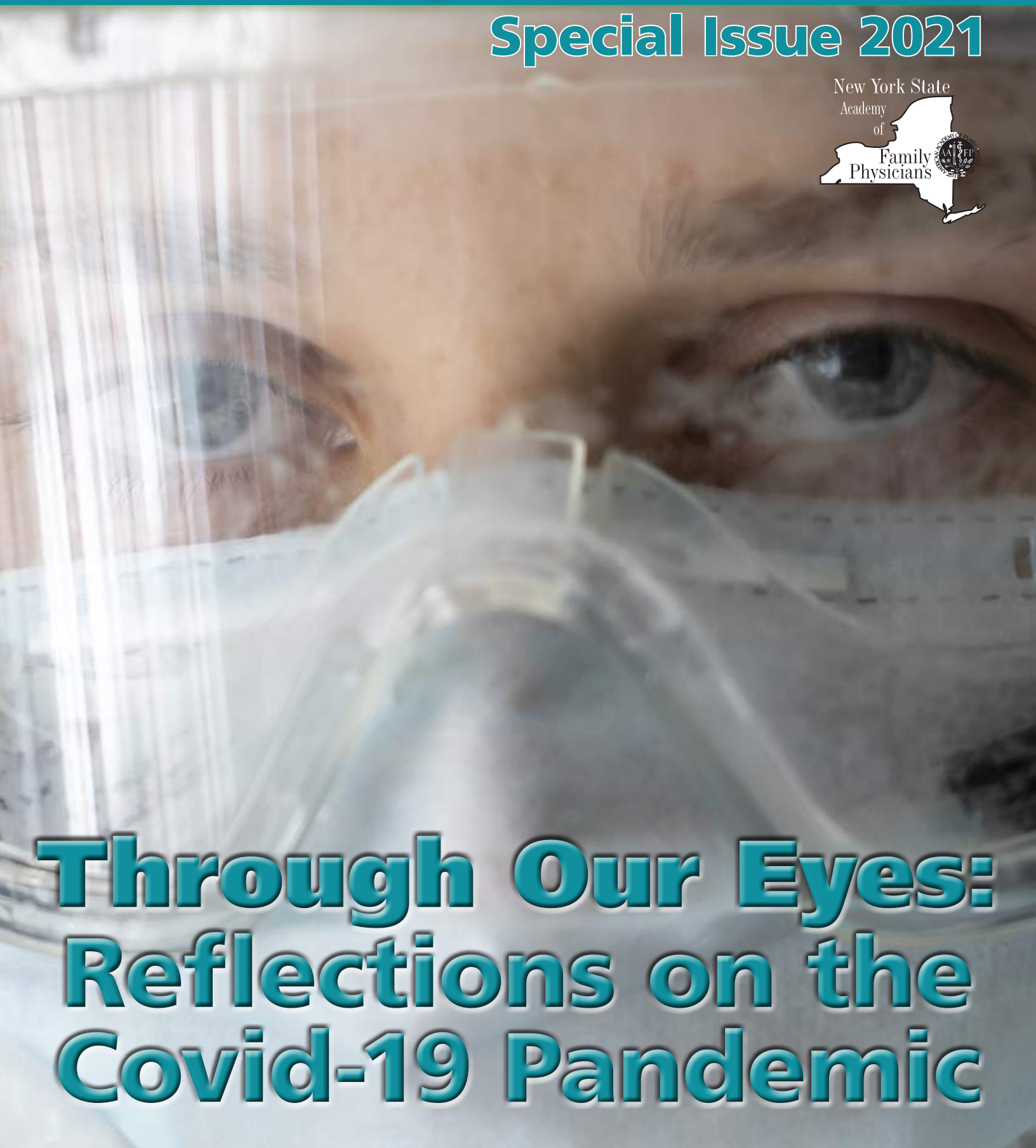

Through Our Eyes: Reflections on the Covid-19 Pandemic

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Articles

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From the Editor:

Throughout the last fifteen months, we have received numerous written pieces from our members documenting their experiences during the COVID-19 pandemic. For many, writing has served as a way to process emotions and make some sense of these tumultuous times. Whether working on the front lines of this pandemic in a hospital setting, pivoting to see patients via telemedicine, or attending medical school remotely, all of our members have experienced unprecedented changes to their roles as family physicians.

We are grateful for their hard work, for their creativity and resiliency in practicing family medicine and first and foremost, for their dedication to their patients. On the following pages, you'll hear some of their stories.

"…I am also grateful for the field of family medicine, where our various skills that led COVID units in the hospitals, started respiratory and COVID vaccination clinics, comforted and counseled our patients via telemedicine"

"…if you see us working without complaining or fearing for our lives and wonder why we do it, realize it's nothing new for us or our families"

"It is frighteningly clear how rapid the virus could spread among families in apartments and crowded homes, where isolation simply isn't possible"

"This past year has both taught me a great deal, and allowed me to recognize exactly how much I still have to learn"

"… the most taxing moments were when I had to wake up the countless family members of deceased patients, to break the news that their loved one, whom I had barely gotten the chance to know, had died, and the loved ones were restricted from visitation"

"After receiving his vaccine, he reached for his cane and said gently, 'Thank you for your service in giving me the vaccine'"

"My MCAT was cancelled during COVID-19 and like everyone else, I was left clueless on what would happen next"

"…. I witnessed the hurt and resilience of health care workers, patients and loved ones, which taught me the strength of human connection"

"It is heartbreaking to think about people who suffered and died alone for fear of exposing other family members"

"…. I never would have imagined I would be holding a critical patient in my arms – gasping for air – amidst this COVID-19 pandemic"

Covid at Home

By Jennifer Baker-Porazinski, MD, May 2021

At a recent office visit, a patient asked me "off the record" about whether I thought the medical community was "taking it a bit too far" and "overreacting" in wearing face shields and masks. I was grateful that my protective gear hid my shocked expression. I worried every day about contracting the virus and spreading it to my immune-compromised patients or bringing it to the nursing home where I care for the elderly. Or, to my family.

As it would turn out, my family brought it home to me.

The day after Christmas, my husband Paul developed a fever, chills, and cough. On Sunday, he tested positive. He probably got sick helping a family member, but we'll never be certain how the virus invaded our home, rendering us hostage for weeks.

Since I wasn't sick, I tried working from home. In between patients I'd peek in on Paul, trying not to disturb him, piled under blankets. He groaned as he changed positions. When I asked how he felt, he'd reply in barely audible grunts that I interpreted as "leave me alone." So, that first week, I did. He mostly slept.

Doctors like to fix things. I convinced myself there was nothing to do – it would run its course. Besides, it would be unwise to sit by the bed and risk infection from his sudden, forceful coughs while I watched his fitful sleep. I didn't like to see him so vulnerable. He didn't really need me.

I'd soon find out I was wrong.

One day, after finishing telemedicine, I removed my noise-cancellation headphones and heard spastic, unremitting coughing. I ran to find Paul, pale and exhausted, eyes full of fear. When I

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suggested we consider going to the ER, he balked. He was afraid he'd end up on a ventilator – a thought that never crossed my mind.

I realized then that Paul needed my medical knowledge. Because he was healthy, he simply couldn't make sense of his severe, persistent symptoms and presumed the worst. I reassured him that I didn't think he would ever require that level of respiratory support. I explained what I'd learned about coronavirus infection and that his symptoms, although severe, were expected. I wished I'd done this in the beginning of his illness, as I naturally would have if he were actually my patient.

Paul took ibuprofen and acetaminophen around the clock. Despite this, fevers spiked above 104. His body aches were so severe, they scared him. I overheard him describing them to his sister on the phone as his "worst nightmare." My own sister, a hospital nurse, told me that her COVID patients lay very still, unmoving. Any shift in position made the pain unbearable.

I wore a mask around the house and a medical respirator when I was in direct contact with him. When his cough worsened, I tried to listen to his lungs. I couldn't hear anything with the noisy respirator so I made him go outside in the snow so that I could remove it. Paul couldn't inhale without coughing and wincing in pain. I put my stethoscope to his bare back and heard crackling. I called the on-call doctor, something I hadn't done in 20 years. He started Paul on antibiotics.

I realized that even more than medical expertise, Paul needed my loving presence. I failed my unwaveringly supportive husband the first week, but I'd change that. Since I was home, I'd deceived myself about my availability. I took a break from working to become his devoted caretaker. He tearfully thanked me. I thought I'd left him alone to recover, but he just felt alone. I'm ashamed now that in his time of greatest need, I'd abandoned my constant source of support, my greatest cheerleader, my safety net and my biggest fan.

Paul's symptoms fluctuated wildly. He couldn't keep up with his fluids – everything passed right through him. He threw up what little he ate. On day 11, he still had high fevers and diarrhea. He left bed only to stumble to the bathroom. I took him to the ER for IV fluids and waved as they whisked him away, suppressing the fear they might keep him.

I sat in the parking lot updating family members. After an hour, Paul texted from his negative pressure room to suggest I go home for a while. Knowing our bedroom-turned-sickward was in much need of cleaning, I agreed.

I slipped on the respirator and gloves and tore the sheets off the bed. I opened the windows and ran the vacuum. I'd barely finished washing the sheets when Paul texted me that he'd be discharged in 20 minutes. I dropped everything (the hospital was 25 minutes away).

When I was still 10 minutes out, Paul texted he was heading toward the exit. I drove as fast as I dared, not wanting Paul to wait outside in below-freezing weather. As I neared the hospital, I had to shift lanes to avoid a man shuffling alongside the desolate road. It was Paul.

I did a U-turn. He got in, coughing and wheezing. I thought: *"What were you thinking? You just left the ER with pneumonia!"* One look at his face, though, turned my outrage to concern as he explained. There were three people in the waiting room. He didn't want to risk exposing them. When I pointed out he was nearly a mile from the hospital, he admitted his judgment might be a little impaired.

Two days later, Paul's oxygen dropped to a worrisome 77%. His doctor arranged for oxygen delivery. I will be forever grateful to the oxygen delivery driver who braved our rural dirt road late one bitter Friday night, likely preventing hospitalization.

The supportive "treatment" of COVID is exhausting, chasing symptoms before they rage out of control, waiting helplessly for interventions to work. Two weeks into his illness, Paul still needed fever-reducing medicine every four hours. Attempts to decrease dosing caused high fevers. He took a pill for nausea and one for stomach protection. He took guaifenesin to loosen his congestion. He took an antibiotic twice a day for the pneumonia and prednisone for bronchospasm. At dinner, he took an aspirin and two routine medications. I made a spreadsheet for this complicated regimen – almost 40 pills daily. I couldn't fathom how people managed who weren't medically trained.

Paul gradually improved. On day 19, we took a slow, short walk. His oxygen level (which in healthy adults is above 95%) dropped to 80%. In my office, I'd have called the rescue squad for a patient with a level this low. Just before heading back inside, I tucked into his arms for a few seconds. We hadn't hugged in twenty days, not that I was counting.

Finally, the next day, Paul was released from quarantine. I hugged him for real.

I know I'm lucky. I never worried I'd be fired and we'd lose health insurance. I never felt alone, thanks to the support of friends and family who waved and blew kisses through the door as they dropped off food and necessities. And, I tested negative three times – boosting my confidence in mask-wearing, hand-washing, and social-distancing. I am now fully vaccinated, too.

I'd spent the previous nine months imagining how people coped with the horrible scenes depicted on the news, like people dying alone in overcrowded hospitals. I was sure that many of my patients wouldn't be able to care for moderately sick relatives at home, though, especially if they were also sick. Caring for Paul made it painfully evident to me how a family with minimal resources might easily succumb to this virus. It is frighteningly clear how rapid the virus could spread among families in apartments and crowded homes, where isolation simply isn't possible. It is heartbreaking to think about people who suffered and died alone for fear of exposing other family members.

Jennifer Baker-Porazinski, MD *is a family physician in rural upstate New York. She occasionally blogs at "Pound of Prevention" (poundofpreventionblog.wordpress.com), and is currently writing a book about her experience as a family doctor dealing with the challenges of our health care system, which includes a section on the pandemic and her husband's story. Her husband Paul, appears to have fully recuperated.*

Humans of BxCHL
(Bronx Community Health Leaders) A Reflective Writing Project by Premeds about COVID-19 and Family Medicine

We all began there, yet many of us are too busy to remember, what life was like as a pre-medical student. During these challenging times of COVID 19 and structural racism reform, we are reminded about the importance of having future family medical leaders that look like our patients and whose public health commitment comes first. The stories presented below are just a snapshot of members in BxCHL, the future medical leaders we need in this time. In these stories, pre-medical and pre-health students (some who are now in medical school), an often hidden voice in medicine, highlight struggles, remind us of inequities in applying to medicine, and inspire us to create change towards a more just and equitable journey into medicine.

– Miguel Rodriquez, MD, MPH

Story 1
May-June 2020: Life Without Control
By Tenzin Jigme

> ***"Nonetheless, I had to sit in front of my desktop screen and refresh the page almost every second. At this time, I couldn't go away from the laptop to use the bathroom because the site could open that time and I'd lose the chance to sign up quickly."***

As someone who grew up in Nepal, where your exam score is the only factor that decides if you proceed to the next grade, I understand the life-determining importance of the MCAT. I grew up looking at a notice board next to the black board displaying everyone's exam scores for the whole class to see.

Moreover, individuals who excelled at first, second, and third positions were awarded prizes in front of everyone to celebrate their accomplishments.

My MCAT was cancelled during COVID-19, and like everyone else, I was left clueless on what would happen next. The MCAT website was still unavailable. Others were sharing how the website opened and then crashed within a few minutes. No one was able to get an exam date. Updates from AAMC: "They were working on a solution", with roughly 60,000 students just eagerly waiting. AAMC announced "system running by afternoon." I started feeling a bit of hope – there was a deadline until afternoon, and after that I could resume my already inundated day with activities and studying. Nonetheless, I still had to sit in front of my desktop screen and refresh the page almost every second. I couldn't go away from the laptop to use the bathroom because the site could open that time and I'd lose the chance to sign up quickly. Now, I had reached about the ten-hour mark with minimal sleep and feeling drained. As it hit 12PM, the website still didn't work.

During this global pandemic, and this MCAT situation, I feel discouraged to apply to medical school. I had planned to shadow and gain more clinical exposure in spring and summer, which cannot happen anymore. I did not envision sending my application late because of the MCAT, it's cancellation, and its effects on various other parts of my application.

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Story 2

May 2020: Black Woman Epistemology

By Crystal Nnamezie

> ***"When our youth of color, the people aspiring to fill these roles, fail to see any healthcare providers and physicians that look like them, while simultaneously acknowledging the elitism culture that surrounds medicine in this country, how could they not feel it is extremely unimaginable for them to enter medical school?"***

Let's break down this impossible feeling of getting into medical school. I realized it's not that I felt I couldn't get into medical school, but that medical school was portrayed (in the media, academic spaces, public figures, peers, and so forth) as something incredibly difficult to achieve and that only the best of the best would be able to succeed. Is this concept inherently corrupt? No! It is reasonable, rational, and socially acceptable to only want the best of the best entering medical schools. But what do we as a society define as "the best of the best"? When our youth of color, the people aspiring to fill these roles, fail to see any healthcare providers and physicians that look like them, while simultaneously acknowledging the elitist culture that surrounds medicine in this country, how could they not feel it is extremely unimaginable for them to enter medical school? Why? Are they not part of the best of the best? Do they lack the potential and capacity to excel in these spaces? No! Statistically the unfortunate and current reality is a systematically and unbelievably tiny percentage of lower income students and students of color are accepted into medical school and fewer even are working in the field. When almost no-one looks like my peers and me, our confidence in ourselves, our second guessing, not because we are less capable but because we lack a reinforcing and encouraging environment.

The biases and barriers I notice impacting students' acceptance into medical school are issues present in everyday life: racial barriers, socioeconomic barriers, and more. These added battles are a lack of support, poor navigation, few peers, isolation, financial stress, and constantly being underestimated.

Let's acknowledge that these issues exist. Let's remove contra-indicative programs with established implicit biases, such as legacy programs and impossible to cover tuition pricing. Let's hone in on the formal and informal traits, skills, knowledge, and passions that people from underrepresented communities bring to the table. Let's offer them environments with mentors where they can take ownership, thrive, invest in their careers and their peers' careers, and give them a platform to vocalize the issues that impact them. As the success of BxCHL has shown, when students who are passionate about medicine are given the opportunity to work hard in the environment they care so much about, they thrive.

If we fail to address these obstacles, the cycle will only repeat itself. It's not our job to put bandages on bullet holes in a system that was meant to hold certain people back. The only appropriate course of action would be to dismantle the systemic practices that allow these social barriers to exist. My work through interviews of my peer premedical students is to alleviate that stress of "impossibility," spread awareness of the obstacles students face to get into medical school, and how possible it is for people like us to excel in these spaces.

Story 3

March 2020 – March 2021: Corona Neighborhood, Queens

By Jessica Juarez

> ***I also recall….. when our waiting area echoed with never ending coughs, overflowing with patients slumped onto the chairs, many with shortness of breath gasping for air. I remember, when multiple patients would be transferred to ER daily, afraid and alone, or even refuse ER transfer for extreme fear of the hospitals.***

"Rush back in room 4! Rush back in room 4!" I hear from the hallway.

A 67 y/o man comes in with shortness of breath in respiratory distress. I rush to room 4 to perform vitals on Mr. R. The pulse-oximeter reveals a deadly low oxygen saturation of 63%. Without a second thought, I sprint towards the oxygen tank, meanwhile, the doctor comes into the exam room. We administer oxygen at the highest level using a non-rebreather mask, only bringing it up to 70%. We have to call EMS.

"You're going to Elmhurst hospital." Saying this has become a routine, where we call EMS before, in case they refuse to go. While waiting for EMS, I talk to Mr. R's son, who tells me his father is visiting from Colombia. He tells me, his father has visited all of NYC and his favorite spot is Times Square. His father was ready to go back to Colombia but cannot because they just shut their borders. Our conversation is cut short when EMS arrives. The son is informed he cannot accompany his father to the hospital. I stand in the room and witness his son sobbing "Please let me go with my father. He needs to take his medications. He doesn't have a cell phone, he doesn't speak English! How will I contact him!?" EMS responds "No visitors are allowed in the hospitals, you can call Elmhurst Hospital if you want to talk to him."

Everything happened so fast. As EMS reels the patient away, Mr. R stares into me, and thoughts rush through my head "Is this the last time he will see his father? "

I ask the doctor: "Do you think…. he'll make it?"

"He's gone," he says, with defeated eyes.

This is the 5th EMS transfer we've had today. Overwhelmed, I retreat to the break room and immediately start tearing.

I'm not prepared for this.

I'm not a physician, physician assistant, nurse, or medical assistant. I am a medical scribe at an urgent care center. I was excited to be a medical scribe and thought it was a "cool" way to gain clinical experience during my gap year while applying to medical school. Fast forward to April 2020, I never would have imagined I would be holding a critical patient in my arms – gasping for air – amidst this COVID-19 pandemic. Working during the peak of this pandemic, the city had shut down, subways were empty, doctor offices were closed, streets were left empty, and we were seeing upwards of 120+ patients daily with COVID-19 symptoms.

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Working as a medical scribe has unveiled the layers upon layers of health disparities that manifest in our communities. I worked in extremes of both socioeconomic spectrums from the affluent Upper East Side (UES) in Manhattan to lower-income Corona, Queens. I witnessed vast differences in upbringing and quality of life of the UES versus Queens. By mid-March, the wealthy have temporarily retreated away from the city whereas the outer borough residents were forced to continue to work. They struggled with the cost of services and delays in seeking medical care – a reflection on the numbers and figures in the NY Times. Corona, Queens (Zip code: 11368) was at that time, the zip code with the highest COVID-19 case and death count. I kept thinking: *Why does your zip code define your own health? Why is it that if you're financially well off you have a fast track to treatment? What are the solutions for the healthcare system being inadequate for the low income, uninsured, and undocumented?*

I also recall the times when the building would be wrapped around with patients before opening. When our waiting area echoed with never ending coughs, overflowing with patients slumped onto the chairs, many with shortness of breath gasping for air. I remember, when multiple patients would be transferred to the ER daily, afraid and alone, or even refuse ER transfer for extreme fear of the hospitals. As part of the healthcare team, we rationed our N-95 masks, fought for our gowns, experienced shortages of gloves, and each night stripped our clothes before entering our homes while questioning *"Will Mr. ___ make it?" "Am I going to infect my family?"*

A week after her 84th birthday, I received a call that my grandmother had lost the battle to COVID-19. Shortly after her death, my grandfather also lost his own battle to COVID-19, facing a very similar trend of fevers, coughs, and stooping oxygen levels. These events are the reason why the topic of loss and grief is something that hit particularly hard this year. It is the closest to death I have ever experienced since the loss of my uncle in 2015. Working at an urgent care clinic in Corona, Queens during the peak of the pandemic, I've witnessed many unforgettable and tragic losses. It was common to hear patients' stories of food insecurity, concerns of eviction, and enduring loss of loved ones. I listened to their stories: how they do not qualify for unemployment and have resorted to collecting cans, how entire families were left starving, to those who had to grieve for the death of their loved ones without a funeral, how they feared for their own lives as most were considered essential workers and could not work from home. I was not prepared for how to properly react to these situations.

As I now approach the end of my first year of medical school, I look back at how healthcare demands have shifted immensely, and how the role of a medical scribe transformed. I believe we have moved forward from the time where everything seemed isolated and uncertain. Cases have now markedly decreased as a result of our ongoing combined effort of social distancing, expanded testing, and contact tracing. Finally, it appears that we are seeing light at the end of the tunnel. We have multiple vaccines rolling out, cities reopening, and people being able to come together safely once again. Yet, inside of me there is still a sense of urgency to facilitate access to social resources and services for underserved communities at large, for my communities and for my family. An urgency driven by witnessing the destructive impact of this COVID-19 pandemic on the lives of ethnically diverse minorities and those of lower SES. I also reflect on the pain and loss that we as a global community have endured these past months testing our strength and resiliency. Loss has been a common theme for everyone this year, and I realize that loss and grief is an unavoidable part of practicing medicine and we must be prepared to cope with these experiences.

About BxCHL

The Bronx Community Health Leaders (BxCHL) is a service-based and longitudinal peer mentorship pre-health program for socioeconomically disadvantaged and underrepresented minority students. The program's home site is a federally qualified health center and overseen by Dr. Juan Robles, family physician and faculty at Einstein College of Medicine. Founded in 2014, the program has since provided peer support, community service and scholarly work opportunities for students in the Bronx community. In return, the students support a diverse patient population and target the prevalence of chronic diseases in this underserved community. As BxCHL continues to grow, we welcome the NYSAFP community to serve as mentors and speakers. Additional details about the organization can be found at www.bxchleaders.com

–Juan Robles, MD

Tenzin Jigme *is currently in the medical school application process and applied in 2020 amid the COVID-19 pandemic. He is a graduate of Hunter College studying biochemistry and works as a COVID-19 contact tracer for NYC Health and Hospitals. Tenzin has been part of Bronx Community Health Leaders (BxCHL) for over a year and has founded a podcast called "Hidden in Medicine" sharing stories about underrepresented pre-med students. Additionally, he has created and hosts "Behind The Peaks Podcast," where stories of Himalayan professionals in America are celebrated. Tenzin enjoys playing soccer on the weekends and learning something new every day by listening to various podcasts or reading books.*

Crystal Nnamezie *is a public health advisor, public speaker, writer, and pre-med student. She is aspiring to become a mental health epidemiologist. She hopes to get her MPH in epidemiology and develop initiatives to improve mental health and well-being for youth in low income and underserved communities. Crystal was chief editor of the BxCHL newsletter, served as a mental health crisis counselor, and was a public health community engagement specialist during the Covid-19 pandemic. Her passions include utilizing arts advocacy to creatively highlight social justice issues within healthcare.*

Jessica Juarez *is a graduate of Hunter College where she earned her bachelor's degree in biochemistry in Spring 2018. She is completing her first year at Albert Einstein College of Medicine, class of 2024. As a previous coordinator of Einstein's pipeline program, the Bronx Community Health Leaders (BxCHL), she has become knowledgeable of the platform that a healthcare provider holds in these under-resourced communities. Growing up within a family of undocumented immigrants, she has gained awareness of the fears and barriers that limit immigrants from seeking asylum and healthcare and hopes to serve as a resource to her peers and patients as she shares her mentorship journey with students.*

Now You See Us

By Joe Debrah, MD, June 2020

"A passion dependent on the acknowledgement or approval of others is sure to fail, for true service to humanity is done out of love"

Each morning we set out long before daylight. We smile at our children and gently kiss our spouses as we quietly sneak out of the house, lest we wake them. Without knowledge of how our family is doing throughout the day, our minds promptly shift to our patients, colleagues and the supervising members of the care team. What can we do to make a patient or family smile today? To get a nod of approval from our attending? Ensure that we are learning from our experience?

We walk swiftly through the hospital halls knowing that our patients' health and bed-flow depend on the accuracy and timeliness of our decisions. Our attendings review our work, ensuring that management decisions are meticulous. We work together to discharge our patients in a timely fashion but make no mistake, we are very much present for all of our patients; that's what residents do. We are with the critically ill patients whose hope of seeing loved ones again depends on urgent dialysis, the correct ventilator settings or a stat ICU consult. You grab the phone to clarify the orders with pharmacy, but then your cell phone chimes. Before you can unlock the screen, the pager beeps and your heart jumps: 'Case management needs stat discharge orders for group home patient.' So you pull up to the computer to do a final review of the patient's hospital course. Orders are set but you have admissions pending so you try to review the outpatient records. Ah! The text message. You unlock your phone and realize it was a text from your partner: "Good morning! Don't forget to eat breakfast." But its 2PM you say, third cup of coffee in hand. Maybe you'll grab a muffin from the lounge enroute to the emergency department for new admissions. This is us.

So in the midst of this pandemic, if you see us working without complaining or fearing for our lives and wonder why we do it, realize that it's nothing new for us nor for our families. Our lives are always on the line, because we care for our patients until we are the patients ourselves. Welcome to the front-row of a resident's life – do you see us? To us, medicine is not just a profession; it is one of our earliest loves, our passion, our life's calling. Most importantly, it is our duty to humanity.

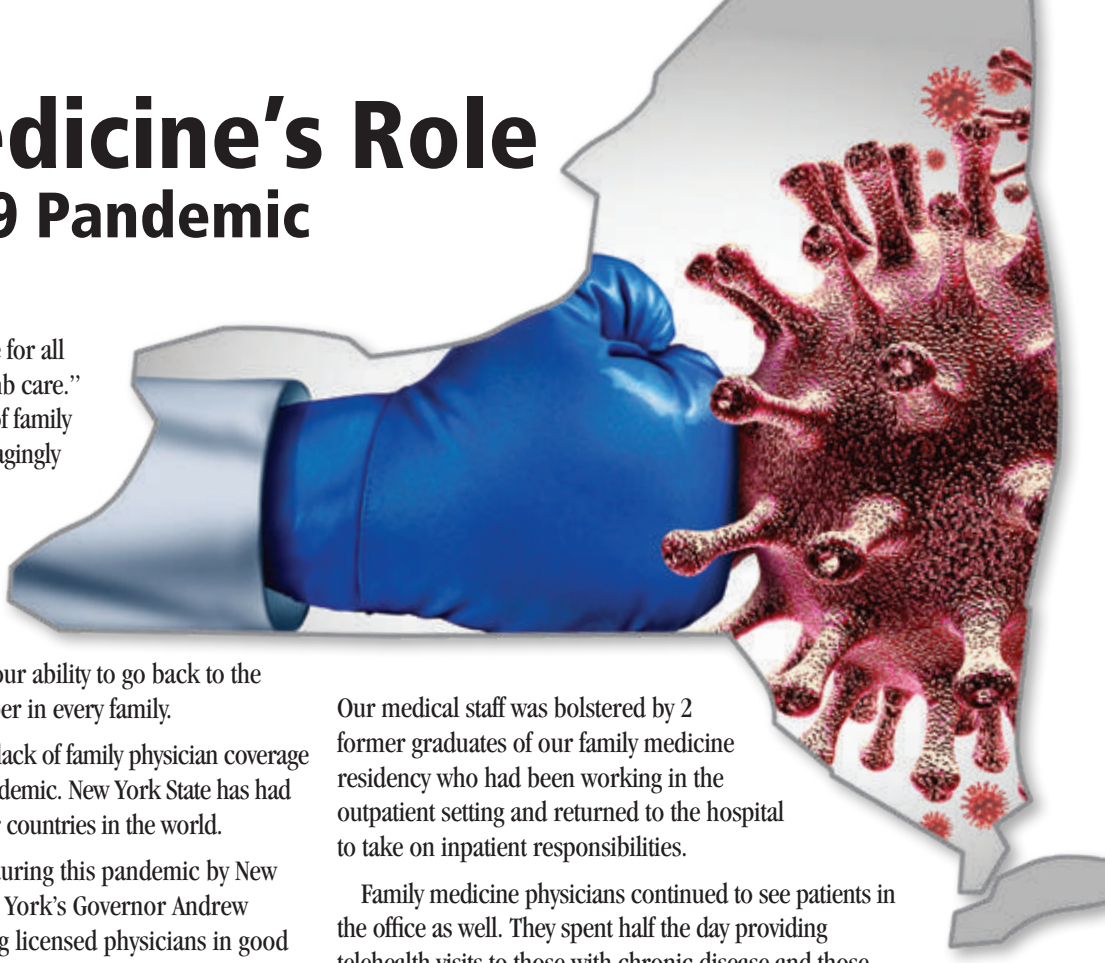
We will continue to rise at dawn and return home into the night. We will find ways to keep our families safe through and beyond this pandemic. And when our neighbors call to ask if we're okay because our car is home much earlier than usual, we will smile and give thanks for a few fleeting hours to spend with our loved ones.

So thank you for checking on us. We realize – now you see us.

***Joe Debrah, MD** is a family medicine resident at the Mid-Hudson Family Medicine Residency Program in Kingston, NY.*

Family Medicine's Role in the COVID-19 Pandemic

By Samuel Sandowski, MD, April 2021



"Jack of all trades, master of none." "Care for all from the cradle to the grave." "Womb to tomb care." All phrases used in describing the specialty of family medicine. Family physicians are even disparagingly referred to as "traffic cops, who just direct patients to other specialists."

In reality, we are a differentiated group of undifferentiated physicians. We are the stems cells of medicine, able to specialize to meet the need while retaining our ability to go back to the basics of holistic care for each family member in every family.

The COVID-19 pandemic has exposed the lack of family physician coverage in New York, the world's epicenter of the pandemic. New York State has had more cases and more deaths than most other countries in the world.

Calls for health care workers were sent during this pandemic by New York's administration. In March 2020, New York's Governor Andrew Cuomo issued an executive order permitting licensed physicians in good standing anywhere in the U.S. to come and help New York, waiving the requirement that they be registered to practice in the state. On April 7, 2020, he issued another executive order allowing any U.S. medical school student who had graduated and been accepted into an Accreditation Council for Graduate Medical Education Program, to practice in any hospital under licensed physicians. On April 16, 2020, the Governor followed with yet another executive order allowing licensed health practitioners from Canada to practice in our state.

The undifferentiated family physicians at Mount Sinai South Nassau (MSSN), and especially its residents, met the COVID battle in hospitals. They created two cohorts of patients, each managed by a separate family medicine team of attendings and residents. Patients ranged from moderately ill to critically ill, requiring transfer to the intensive care units. Family medicine residents have been covering the ICU on nights and weekends under the guidance and supervision of critical care specialists. They complemented and integrated with pulmonologists and intensivist subspecialist teams during the crisis. Other family medicine residents were redeployed to work with the hospital nocturnist in covering all emergencies and to assist with admissions. And it was the family medicine resident that would run all cardiac arrests and rapid response calls, averaging about 40 a day during the peak of the COVID-19 patient surge. New teams were built, with family medicine being an important part of those teams.

The family medicine physicians always felt prepared – or at least as prepared as any other healthcare professional on the team. They are trained to care for the outpatient as well as the hospitalized patient. They know how to respond to emergencies, patients crashing, ventilation changes (including how to keep patients off the ventilators as much as possible). Inpatient work didn't and doesn't intimidate them. Geared with personal protective equipment (PPE) and working alongside experienced specialists, they were prepared to meet the specific needs of each patient. Our medical staff was bolstered by 2 former graduates of our family medicine residency who had been working in the outpatient setting and returned to the hospital to take on inpatient responsibilities.

Family medicine physicians continued to see patients in the office as well. They spent half the day providing telehealth visits to those with chronic disease and those with acute, but non-COVID-19 related illness. They devoted the other half of the day to "ill visits." These patients, who might have the coronavirus, felt ill enough to need a physician, but would not go the emergency room out of fear, out of not wanting to be separated from family, or out of not wanting to join the apparent chaos there. All visits were prescreened, and patients were either invited to the office or cared for virtually. In treating these hundreds of patients each week, the strain on the emergency room was reduced. Practices were seeing newborns, pregnant women, the elderly and all in between in true family medicine fashion.

Family medicine strongly promotes preventive care and early intervention in the office. Whatever the results of the clinical trials assessing immunizations and early medical treatments, family doctors are at the forefront of this battle, especially if we can keep the battle in patients' homes and our offices, and away from the hospitals.

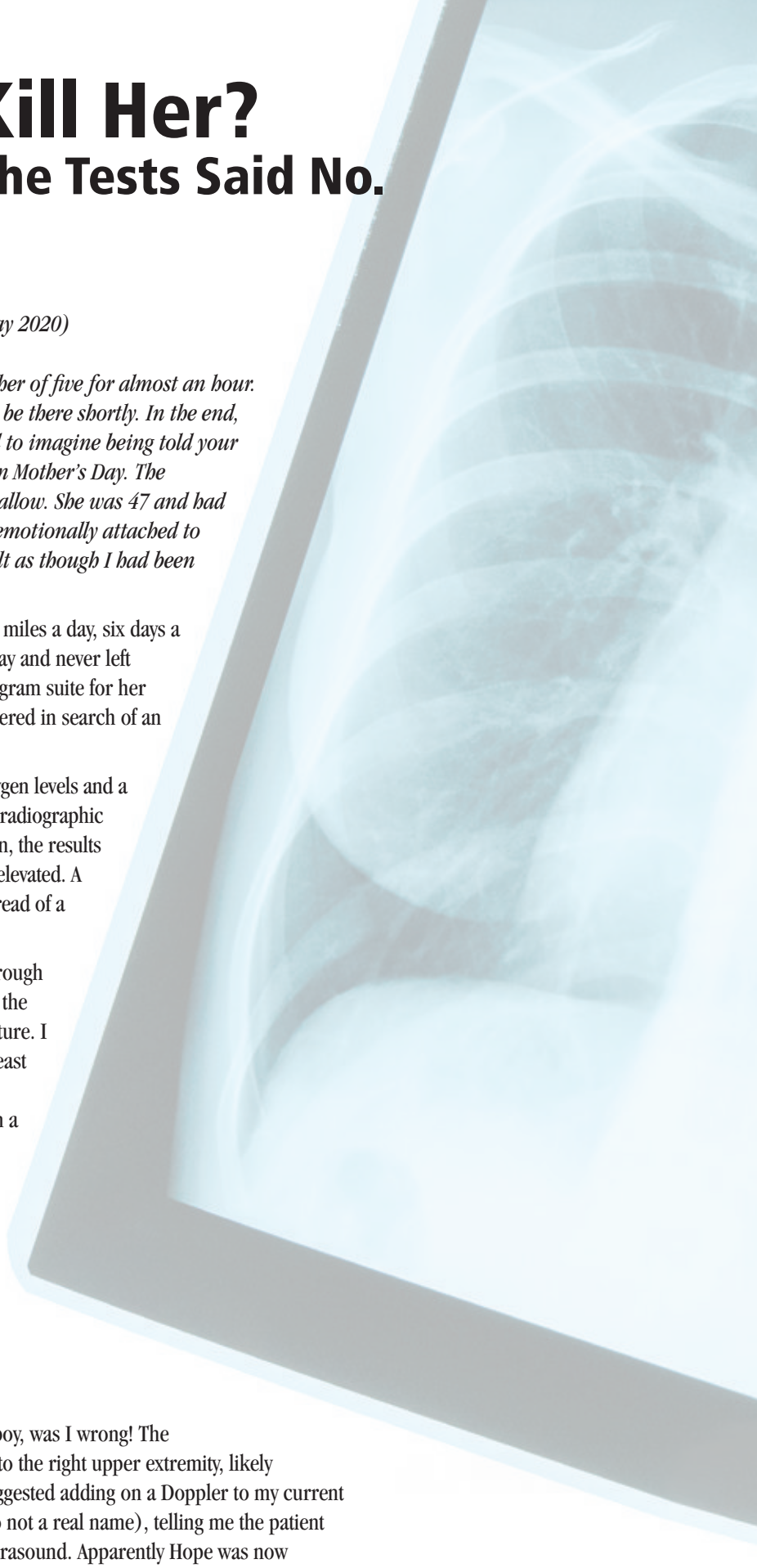
I believe every physician and every resident in every specialty is giving a 100% effort. But the effort for family medicine doctors is unique and ubiquitous. They care for everyone: "womb to tomb," office or hospital, the stable and the critically ill. Before the specialization of medicine and the American Board of Medical Subspecialties (ABMS) came about, less than 90 years ago, doctors were "doctors." Family physicians might be a "jack of all trades", but in reality they are the masters of being the quintessential doctor.

Samuel Sandowski, MD *is Vice President, Medical Education and Chair of Family Medicine at Mount Sinai South Nassau. He is Professor of Family Medicine and Professor of Medical Education at Icahn School of Medicine at Mount Sinai.*

Did Covid-19 Kill Her?

Symptoms Said Yes, the Tests Said No. We'll Never Know

By Paul Rollins, MD, May 13, 2020
(Reprinted with permission from La Voce di New York, May 2020)



We worked tirelessly attempting to resuscitate this mother of five for almost an hour. Her husband was called, and he notified us that he would be there shortly. In the end, our heroic measures were simply not enough. It is fearful to imagine being told your wife and mother to your five children is no longer alive on Mother's Day. The uncertainty of what killed her is a tough pill for me to swallow. She was 47 and had five kids. Like any medical professional, I rarely become emotionally attached to the patients I admit to the hospital, but this one hurt. I felt as though I had been her strongest advocate.

A healthy 47-year-old woman who ran at least three to four miles a day, six days a week, was taken to the emergency department on Mother's Day and never left Room 14. Correction, she was briefly transported to the sonogram suite for her venous and arterial Dopplers as part of the workup I had ordered in search of an alternative etiology for her bizarre presentation.

On presentation, my patient was breathing fast, with low oxygen levels and a fast heart rate. The coronavirus test returned negative, but the radiographic and laboratory findings did point towards Covid-19. In addition, the results of a lab test that coincides with blood clots was tremendously elevated. A CAT scan of her chest revealed bone lesions suggestive of a spread of a primary cancer to the bone.

She was healthy for Christ's sake, and a runner! After a thorough history workup and physical, I stood tall and informed her of the radiographic finding of the bone lesions and its suggestive nature. I circled back to my review of systems and was notified of a breast lesion found a few months prior that was currently being surveilled with mammography, the next one due to be done in a mere six weeks. Her only symptoms were back pain, which made sense with the current bone involvement.

Hope – let's call her Hope – had so many questions. The previous doctors had failed to mention the concerning radiographic findings to her. Her first question was: "Can it be cancer?" I was caught off guard. My retort was, "What led you there?" Was there something that had not been shared with me? I did my best to reassure and educate her at the same time.

I assumed Hope was neatly tucked away for the night, but boy, was I wrong! The first phone call came, to inform me that there was a swelling to the right upper extremity, likely related to the arterial blood gas. John (not his real name) suggested adding on a Doppler to my current work up. An hour later the second call came from Mary (also not a real name), telling me the patient was now extremely short of breath after returning from an ultrasound. Apparently Hope was now working extremely hard to breathe. To recap, Hope had had a critical care evaluation, but was deemed stable for the hospitalist service. Might it be time for another evaluation by the intensivists? She did not look good and I grew concerned.

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So many thoughts and emotions ran through my mind. Should I call the intensivists again? How much of a sales pitch will I need to convince them in the era of Covid-19 that she was worthy of a highly coveted ICU bed? Her oxygen saturation was maintaining on the supplemental oxygen, but for how much longer? Was she overloaded with fluid? No. Her lungs were clear and her saturation was fine, so let's hold off on the Lasix. Buy time. Think and buy time. Let's try 2 mgs. of morphine. "Hope, I'd like for you to take slow deep breaths." She did not look good. How long can she possibly last at this rate? Change of heart. Let's try the Lasix, but first recycle her blood pressure. Hope is now transiently hypotensive. There goes Lasix. This buys her a spot in the ICU. Or so, I thought… But things escalated at a blistering pace. Life is truly fleeting. I presented Hope's case to the critical care team, who agreed to do a re-evaluation. A repeat blood gas was requested. Though essential in theory, I had my reservations in light of the profound edema/contusion/phlebitis of both upper extremities where previous arterial sticks had been done.

The critical care team informed me that Hope would be taken under their service. I felt relieved, but this feeling was short-lived. Five minutes later I overhead the intercom bellow, "Anesthesia to the ER, stat!" Somehow, I knew it was Hope. I raced to the emergency department. No point in waiting for a phone call or a follow up page for a rapid response or code blue.

My suspicions were right. Hope was profoundly short of breath and drenched in sweat. Her last words were an agonizing, "I can't breathe" before going limp. My mind raced with more scenarios than I care to share. What could I have done differently? Did I give Hope my all? What did I miss? The test said no Covid-19 but everything told me that she had Covid-19! The tests also suggest that she did not have a clot in the lungs or the most likely source, the deep veins of her legs. Why is her D-dimer as high as it is?

We worked tirelessly attempting to resuscitate this mother of five for almost an hour. Her husband was called, and he notified us that he would be there shortly. In the end, our heroic measures were simply not enough. It is fearful to imagine being told your wife and mother to your five children is no longer alive on Mother's Day. We may never know what truly caused Hope's demise. Was it a large clot to the lungs? DIC?

Can Covid-19 be held responsible for the constellation of clinical mysteries that snuffed out the life of this young, otherwise healthy mother? We may never know. The uncertainty is a tough pill for me to swallow.

Paul Rollins, MD *is a nocturnist in the Northwell Health System and is an Assistant Professor at the Zucker School of Medicine at Hofstra/Northwell. He was born in Guyana but raised in Brooklyn. Writing has always been a passion, but due to the demands of the medical profession, it has since taken a secondary role. Self- described as stoic, Paul's writing has allowed for introspection and emotional vulnerability.*

THE INSTITUTE FOR FAMILY HEALTH

To the Physicians and Staff of the Institute for Family Health/ Mid-Hudson Family Medicine Residency Program,

Thank you for your tireless efforts in caring for our patients during the COVID pandemic. You all rallied together during this unprecedented time and I am grateful to call you colleagues and friends.

Eternally grateful to be vaccinated and well on our way to brighter days.

With gratitude and respect,

Mark Josefski, MD

The Impact of COVID-19
on My Life as a Medical Student

By Josh Samuel, MD, May 2021

News about COVID-19 started to emerge during my internal medicine rotation at Coney Island Hospital. It then became a daily topic during morning rounds in my subsequent core rotation in psychiatry. I will never forget when we received the official notice from our school that our on-site medical training had to stop due to the lack of protection we have from this virus. This notice was the beginning of a series of changes that that affected me both personally and professionally.

What came next was uncertainty. What is going to happen now? Will I get to finish my rotation? When will I go back to the hospital and learn medicine? Am I going to graduate on time? While I was struggling with these questions, more significant concerns started to develop in the world around me. The stock market plummeted, friends got laid off from work, family members got sick, and hundreds of thousands of people died. Like most medical students, I wanted to do something about this pandemic. I went into medical school to help people, and I felt like I was not very helpful sitting at home. Watching the news, I found how dire the current situation was in the Brooklyn hospitals and how it became a hotspot in the country. After contacting several people on the administrative side within the hospital, I got the authorization to volunteer at Coney Island Hospital.

Coming back to the hospital, in April 2020, now as a volunteer – so much has changed. Hospitals had increased security to make sure only those who had appointments came in. This was the first time I ever had a temperature check at the entrance of the hospital. Going onto the medicine floors, I saw many new faces – most were workers who were travel agency nurses that were here to fill the demand from a shortage of nurses. The residents who I used to work with looked tired and worn down. The floors were packed with patients to the point that dedicated areas initially used for other services, such as ultrasound, were now being used to take care of patients. Protective gear was scarce for employees, and this created more stress. In addition, auxiliary services were minimal because of the shortage of employees, which gave more work to the residents. I tried to help as much as possible by monitoring patient Sa02, titrating their oxygen levels, and performing blood draws, ABG's and EKGs. Every day I was at the hospital, multiple people died on our floors – a lot of these patients were patients I had seen the day before. This was the first time I dealt with death as a medical student, and unfortunately – it was constant. Stress levels at the hospital were at an all-time high, and it was affecting me.

Coming home at the end of the day, I would feel emotionally exhausted. One of the things I realized was that it was essential to take care of myself during this time. Although gyms were closed, I would still go out for a jog and talk to my wife and friends about how I was feeling. Doing this helped me process my emotions and helped me keep going for another day and continue volunteering. It also gave me more reasons to be grateful for what I had in my life.

Eventually, although the pandemic continued, the peak in deaths has passed and things started to become a little better. Thankfully, my medical school officially resumed again, and we were allowed back into hospitals to continue our medical training. Due to the unexpected turn of events due to COVID-19, my third and fourth-year trajectory has changed. For the first time, clerkship exams were proctored online, which was weird and nice at the same time because we got to take the exams in the comfort of our homes. The fourth-year electives that I had scheduled were canceled until further notice, which was frustrating because these electives were so hard to schedule in the first place. My Step 2 CS exam, a test that I have spent months studying for, has been canceled, and we were told that our graduation from medical school might be virtual.

But here I am now, ready to graduate in a few short weeks and become a doctor. When I started medical school, I never realized I would have to deal with all of these experiences. And honestly, I am not sure what my future might hold. The best thing I realized and would tell a younger medical student is to take things one day at a time and try to do your best. If you see an opportunity to get involved and help someone, do it. This is why you went to medical school in the first place. Who knows, maybe when you are ready to graduate from medical school and reflect on your medical school experiences, you will see that it made you a better doctor. It did for me.

Joshua M. Samuel, MD *was a medical student when he wrote this article. He recently graduated with a medical degree from St. George's University School of Medicine. He will be starting a 14 month MBA in administrative health in August 2021, and will be applying to residency programs this year.*

How COVID Has Shaped Us...Forever?

By Richard Mittereder, MD, FAACP, April 2021

COVID -19 did a personal number on me. I am now mostly as normal as I'm going to get at 67 years old, but it's been a bit of a long road to recovery. I want to put this into some context by asking us to think about liminal time, loneliness and love in the context of our medical profession: how COVID has shaped us… forever?

First, my Christian faith has always been the rock that forms the foundation for me to perform my job as a medical doc. In my journal entry of July 12, 2020, I had entered a poignant note that reflects on the space that COVID has put us all in. I had just come home from the first Sunday mass service permitted at our church during the pandemic. I wrote: "Entering into this liminal time and space of getting to celebrate mass in person and receive the Holy Eucharist in my hand once again moved me to tears. At the end of mass, I helped four other masked parishioner volunteers clean the church in compliance with COVID-19 practices as recommended in the CDC guidelines. It seemed to me like a liminal time and space action – surreal in its historic significance much like the early Christians who had to secure their space to avoid detection and persecution. Since that time, I am still so grateful for this special event, as I felt especially blessed to have made it through the illness of COVID-19. Many of my peers in the health profession have not been so fortunate and have died or had serious complications.

For my part, I am a victim of "long COVID" (PASC). It has left me with incredible, career-changing fatigue and daily limiting GI symptoms. Whereas, I used to do 12- hour shifts in the ER and a full day of office practice with quick trips sandwiched around office hours to the hospital or SNF, I am now a telemedicine doc with shortened hours of time where I'm 'on'. What this means personally and how it has transformed me in terms of my identity is worth contemplating, as I am sure that I am not the only one finding himself with this fate. However, this requires an understanding of liminal time.

Liminal Time

Liminal space and time, according to Franciscan contemplative friar, Richard Rohr, can put some context around all of this. "Limen" is the Latin word for threshold, which can also be translated as brow, edge, portal, or gateway. In all cases, the connotation is that we are leaving one state of being, or place/time, and about to enter something entirely different or new. We are betwixt and between when we are in liminal space and time, and we undergo a unique kind of waiting before the new space and/or time is entered. If we do not enter a threshold, not much new is going to happen on the other side. For archaic and native religions, this liminal movement takes the form of journey or pilgrimage. Always, there has to be a leaving and learning or there will be no finding.

A Transformative Process – Not Magic

Rohr talks about this as a transformative process. In the context of the Christian church, this often includes rituals such as sacraments. It involves an outward sign, place or object which comes to symbolize and thus validate an actual inner spiritual experience. In fact, it is all based on a very solid Christian understanding of incarnation – that spiritual happenings need physical counterparts to convey their message.

And, if it is a well matched sacramental moment or symbol, it will naturally lead us into liminal space which is always transformative on some level in body, mind, soul and spirit. If it does not, we must be honest and admit that it is merely magical thinking, similar to an amulet to protect us from the bad, or a talisman to increase goodness.

Pandemic Doorway

We are now in a reality created liminal space, a huge one, with the pandemic surpassing all the usual boundaries. It has rearranged our world overnight. It will surely take the rest of our lives to recognize what has been happening in this time. We have been thrown unwittingly into a place and time where we would rather not go, and now have no choice but to submit and learn whatever good lessons are to be learned. We have no idea how long this will last. In a way, it is a global initiation rite, says Rohr. And, nothing less than a pandemic can begin to re-educate us in such a cold, divided world where the sacred has been almost entirely lost. We need a new "doorway" and we are being ushered through it, virus and all.

Loneliness in Liminal Space and Time

Liminal time also leads to loneliness. We all feel, to some degree, this loneliness at this time, and that is why we reach out to each other in our need for human connectedness. Dr. Vivek Murthy, US Surgeon-General, wrote a book entitled *"Together: The Healing Power of Human Connection in a Sometimes Lonely World."* He wrote this in 2014 during his earlier tenure as the 19th Surgeon-General, in which he described the terrible loneliness that the opioid epidemic perpetrates on its victims. Little did he know that his book would have such poignancy again today as we face the unknowns of COVID-19 together, but separately, partly out of the necessity to contain its dreadful spread. Everyone, he writes (and I paraphrase), at virtually every stage and station of life, needs friends. Friendship, in essence, is the social glue that keeps couples, families, kindred spirits, and communities together. It is fundamental to successful professional, as well as personal relationships. Yet, some people have more difficulty than others when it comes to making and keeping friends, and this obstacle can raise the risks of loneliness.

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A Friend Who [Truly] Cares

We all need friends and family around us to keep us human. If we don't have this in our armamentarium, we inevitably succumb to loneliness. According to a 2018 report by the Henry J. Kaiser family foundation, 22% of all adults in the US say they often or always feel lonely or socially isolated. This is especially evident during times of stress, such as the liminal space and time of the pandemic in which we currently find ourselves. So, it begs the general question: are we beings fueled to connect and love others by what we say and do?

To answer this rather vague query, here are some more exacting questions that are worth pondering during this time in the pandemic:

- What exactly has led to the fraying of relationships and communities and resulted in such high levels of loneliness?
- What other aspects of health and society are affected?
- How can we overcome the stigma of loneliness and accept that all of us are vulnerable?
- How can we create stronger, more enduring and compassionate connections in our lives and a more unifying sense of common ground in our society?
- How do we shift the balance of our lives from being driven by fear to being fueled by love?

To help answer some of these queries and provide relief from loneliness, some organizations are creating innovative ways to interact. In Chicago, the 'friendly caller' program, initially targeting seniors, will expand to primary care and pediatric practices, and will continue even when the pandemic subsides, according to social worker Eve Escalante, Manager of Program Innovation at Rush University Medical Center. University of Texas researchers tested a similar 'friendly caller' program with adults involved in a 'meals on wheels' program. They found meaningful improvements in loneliness, anxiety and depression after four weeks. Several health centers have contacted the researchers to learn how to launch similar programs. Even health insurers are paying attention. Humana Inc. has posted an online loneliness screening tool for doctors that includes links for referrals to programs to help affected patients. The insurer also created a 'Far from Alone' campaign for older adults with online links to free virtual programs including exercise classes, cooking lessons, and how-to courses on gardening and journaling.

Final Thoughts

'Loneliness won't vanish even when the pandemic ends', writes psychologist Benjamin Miller, a health policy analyst with Well Being Trust. Some people may still fear interaction and Miller suggests that programs to help will be needed more than ever. As primary care providers, we will need to step up our game. However, for me as a FP doc, this will be in a limited role. I was practicing in a South Chicago urgent care center until March 2020. That's when COVID-19 hit me and took me out of commission. Given my age then, at 66, my younger colleagues took the rest of my shifts for that month… and the next… and, well, I never went back. I am trying my hand in telemedicine now, but miss the in-person work that COVID-19 took from me as I try to continue my recovery. My hat is off to all of you still on the front lines. Godspeed!

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Richard Mittereder, MD, FAACP *currently resides in NE Pennsylvania and is a semi-retired physician performing telemedicine. Before the pandemic, he worked in South Chicago emergency rooms for 2 years after a 25-year career in family practice/geriatrics in Rochester NY, where he had a full time practice and was Chief of Geriatrics for Unity Health System. His non-medical areas of interest include spiritual development, gardening, hiking, traveling and visiting his 2 adult sons with his wife of 42 years, Virginia.*

Pandemic and Beyond:
Family Medicine Perspectives

By Michael Raghunath, MD; Danielle Ferstler, MD; Eleni Efstathiadis; Joyce Robert, MD, FAAFP and Anubhav Agarwal, MD, CAQSM, May 2021

It goes without saying that the COVID-19 pandemic has affected the entire world of medicine. New York and the greater New York City (NYC) area were especially impacted in March and April of 2020. For many family medicine physicians, outpatient practices had to incorporate telemedicine. Others' roles and responsibilities shifted to inpatient medicine as the hospitals were overburdened. Personal lives were filled with anxiety due to the uncertainty of the present. Front-line workers' lives were often uprooted from their families. Medical schools as well as residency programs needed to be innovative with their methods of educating both students and residents due to halted clinical rotations and new demands. Below are five perspectives through the lens of family medicine from a medical student, two family medicine residents, and two faculty attendings from Mount Sinai South Nassau, located in Nassau County, NY, which recorded the 18th highest cumulative number of confirmed cases in the United States as of April 17, 2021.[1]

Medical Student III

I was in the last semester of my second year of medical school when COVID-19 emerged in New York, and my campus closed "until further notice." Our case-based learning program was moved to a virtual platform. My peers and I could no longer sit around a table during discussions. Instead, we were little boxes on a screen. Conversations did not flow the way they once did because it was difficult to discern who was speaking, leading to frequent interruptions. We could no longer draw on a whiteboard when working through challenging questions. As a visual learner, this was a challenge. Clinical skills workshops were also cancelled. Since I did not have the opportunity to physically practice on standardized patients, I had to learn how to conduct specialized clinical exams by passively reading textbooks. In addition, school clubs were cancelled, halting much of the important work that we were doing to improve the community.

NBME and NBOME cancelled a bulk of board exams due to COVID-19. Even worse than having to reschedule my test was not having a structured, quiet space to study. The school library, study lounges, public libraries, and cafes were all closed. I was forced to study at home, which was not very conducive to productive studying. I was in a house with my parents who were now working remotely, and my loud, younger siblings who were learning remotely. I found myself rescheduling my board exam yet again.

During this clinical year, I had the constant worry that my rotations could suddenly be cancelled. Hospital policies were constantly changing, impacting the type of patients and procedures I was and was not allowed to see. I was dismayed to have been denied the COVID vaccine at multiple hospitals because I was not an "employee." This made me feel like I was not being looked out for, especially since I put myself at risk every single day seeing patients. Shouldn't all members of the healthcare team be given protection? Luckily, after some time and many phone calls later, I was able to get vaccinated.

As a prospective family medicine physician, I will be on the frontlines of health care. Throughout the past year, I have strongly felt the responsibility to stay informed with the most recent COVID guidelines, restrictions, and vaccination information. COVID has re-affirmed that health is a multidimensional construct that involves both physical and mental health. The primary care doctor is there to address the various needs of patients, while advocating for them, educating them, and preventing disease.

PGY-1

On March 16, 2020, I received two life-altering emails: first, my medical school pulled us out of hospital rotations due to the pandemic. Second, the NRMP reported I had matched. As I walked out of the hospital where I did my medical school rotations for the last time, I felt free and excited, especially in anticipation of where I would match. I lacked the forethought to fully grasp the significance of a pandemic. It was not until I found out I would be graduating early, without the pomp and circumstance I was expecting, that it hit home.

In April 2020, during peak COVID I volunteered at the COVID ICU of Mount Sinai South Nassau. Working under the intensivist, I witnessed the hurt and resilience of health care workers, patients, and loved ones, which taught me the strength of human connection. One Sunday afternoon, I overheard a FaceTime call between a patient and her family, which the nurses arranged daily. She was a 50-year-old woman who had been in the ICU for a week.

"Hello mommy! Open your eyes-we are talking to you!" her children began, as I charted,

"...COVID (+)...cardiac arrest likely due to hypoxia..."

"Move your hand!"

"....anoxic brain injury vs toxic metabolic encephalopathy...."

"Mommy we love you! We need you!"

"....poor prognosis for meaningful recovery."

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Tears welled in my eyes, I paused and took a deep breath. Then, completed my note. Still, this memory grounds me. It was easy to become mechanistic in the pandemic, sheltering ourselves from the death and despair that surrounded us. Witnessing moments such as this reiterate the human connection that can be lost in the daily grind.

With the backdrop of the pandemic there was exceptional pressure to serve patients efficiently and safely. In July 2020, I began residency, constantly doubting myself and not knowing where the pandemic would lead us. I did not feel like a healthcare hero. Many changes occurred in my program prior to my start date: we were virtually connected, especially for lectures, rotation schedules were adjusted, outpatient volume was restricted due to COVID precautions, and inpatient was as intense as ever. As the year progressed, I periodically reminded myself of that Sunday afternoon to reorient myself to what I value in medicine: the strength of human connection to support everyone through difficult times.

PGY-2

Since NYC was one of the earliest epicenters of the COVID-19 pandemic[1], the explosion of hospital cases rapidly changed both the landscape of medicine and the world around me. Resident rotations were halted as we were separated to prevent potential contamination from inpatient to outpatient settings. My co-intern said goodbye to his family and newborn son as they moved to his in-laws while he fought a global pandemic. The desolate streets felt almost reminiscent of an industrialized desert in juxtaposition to entering work in a relative medical war zone each day.

The emergency department was so overwhelmed with the influx of patients and admissions, that residents/interns managed entire hospital floors. During peak COVID, advance airway education and management was taught on-the-fly. It's hard to forget rolling up my sleeves to perform high quality cardio pulmonary resuscitation, watching mucous flying out of patients' faces, fully convinced that there was no way my N95, face shield, and gown could protect me. Other staff members reflected my sentiments as they crowded outside rooms, in validated-fear, so as to limit exposure.

This disease presented in ways my generation had never seen. Making the decision to intubate a scared, 54-year old male with no medical history, respiring with accessory muscle use at 50-60 bpm despite 100% saturation on BiPAP, was difficult. However, the most taxing moments were when I had to wake up the countless family members of deceased patients, to break the news that their loved one, whom I had barely gotten the chance to know, had died, and the loved ones were restricted from visitation.

After observing the differing public response to COVID-19 vaccines, I'm filled with both hope and exasperation for the future. I feel that depending on where we live, we are faced with a population of differing opinions, many of whom doubt science and medicine. This has reiterated the importance of public health and preventive medicine. Of the 5 core values of primary care[2]: compassionate care; generalist approach; continuity of relationship; reflective mindfulness; and lifelong learning, the continuity of the patient-provider relationship may remain the most crucial.

Academic medicine will continue to evolve now that we have become reliant on technology. Virtual meetings and telemedicine visits are more prevalent. It is vital that aspiring and rising physicians stay involved with family medicine advocacy, such as state and local immunization programs and outreach, education to help eliminate financial barriers to care, and primary care research.

Faculty Attending

March 16, 2020 was my birthday. Who knew that I would be celebrating the birth of a global pandemic? I had one last lunch with friends without masks, nor socially distanced before the world shut down the following day. Two weeks later I was asked to be first faculty attending to lead the COVID unit at the hospital. When I heard the news I was scared but knew that my energy and efforts were needed. The hospital was at capacity with COVID patients suffering and dying every day. I had a phenomenal team with me; 2 second year residents who were ready and willing to get down and take care of patients.

Even behind my N95 mask, surgical mask, a full face shield and plastic gown there was a small tingle of fear. Would I get COVID? Will I bring it back to my husband, kids and elderly parents? This thought came through many physicians' minds as we walked the halls of the hospital taking care of the sick. It was also very disheartening to see people of color in my community get hit the hardest with COVID at an alarming and disproportionate rate.

I discussed COVID-19 and healthcare disparities as a Grand Rounds presentation with my department and gave a follow up presentation regarding COVID-19 vaccines a year later. Now with vaccines out we can really help our vulnerable patients be able to prevent having this devastating virus. We are not out of the woods yet but I am hopeful. I am also grateful for the field of family medicine where our various skills that led COVID units in the hospitals, started respiratory and covid vaccination clinics, comforted and counseled our patients via telemedicine. While also being there for our own families and communities as valued leaders and advocates. The future is family medicine even more so post pandemic.

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Faculty Attending

While on vacation I received the following message: "Effective immediately, due to the current crisis, all vacation has been cancelled, you MUST report directly to work." I had been aware of the developing situation, but nothing could have prepared me for what we were about to face. The clinic doors locked, and our once thriving clinic turned into a ghost town. Socially distanced, everyone was wearing N-95s and surgical masks, and the tension was as thick as a rolling fog. We all knew our patients needed focused care, but how? We turned to technology, and as fast as the clinic doors locked, we went from in-person visits to virtual care.

The hospital changed overnight; the once lively chatter turned into complete social avoidance. The COVID-19 pandemic completely erased all clinical acumen I had built over all my years of training. Frankly, I was concerned and troubled, not only for my own well-being but also my patients, fellow staff members, trainees, and all of our families. They say, "Not all heroes wear capes," and I can certainly say none of us felt as such. We simultaneously felt a duty to serve and helpless in not knowing how to. Our charge became easier as time went on, hopefully terminating with the developed vaccinations.

For 3 months, I saw my family through a window. After all that we have gone through not only as a community but as a species, we owe it to everyone to get vaccinated and help support our vulnerable populations. Stay informed and get vaccinated!

Conclusion

Throughout these unprecedented times, people have faced profound loss, isolation, and hardship, with medical professionals on the frontlines testing, treating, witnessing, screening and preventing COVID-19. These perspectives reiterate the difficulties of the past year, but highlight how the values of family medicine physicians remain largely unchanged: to provide patient-centered, community-oriented, prevention-focused care. As the focus of the pandemic transitions towards prevention through vaccination, primary care physicians can advocate by providing equitable patient care with a focus on prevention through screening, vaccinations, and community outreach to help our patients and communities stay healthy for today and tomorrow.

Endnotes

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Danielle Ferstler, MD *is a first year family medicine resident at Mount Sinai South Nassau. She graduated as a part of the first class of the City University of New York (CUNY) School of Medicine on April 10, 2020. One of Dr. Ferstler's core tenets is to remember the human in medicine, which drives her patient care.*

Eleni Efstathiadis *is currently a third year medical student at NYITCOM and a graduate of Macaulay Honors College at Baruch. She is dedicated to community service initiatives and aiding medically-underserved patient populations.*

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Anubhav Agarwal, MD, CAQSM *is a family physician practicing academic medicine and currently is the Associate Residency Director at the Mount Sinai South Nassau Family Medicine Residency Program. Dr Agarwal believes that exercise and function are intricately related, and regardless of age, every person deserves an active lifestyle that promotes physical fitness.*

Pandemic Springtime

By Louis Rotkowitz, MD, May 2020

Never would I envision contracting a virus from a patient that could take away my life. As early spring approached, I was mentally exhausted and looking forward to celebrating the Jewish holiday of Passover. I was also looking forward to attending a pediatric emergency medicine conference and gaining from all the learning opportunities that it presented. The Jewish holiday of Passover commemorates the emancipation of the Israelites from slavery in ancient Egypt. The dangerous nature of COVID-19 enslaved my careers plans not only for the spring, but for the possible days ahead. All that I had planned for and hoped for was threatened with the possibility of never happening.

My career sacrifices included countless hours of studying, training and dedication. On March 28th the COVID-19 virus personally became part of my existence. Overnight tours in the adult emergency department can be very challenging for obvious reasons. Tonight, was going to be different. I was assigned by the department's director to the overnight tour of the newly assembled "Hot Zone" of our emergency department. It would be my job to direct and provide care for the sickest patients that would walk through the doors of our area. The PAPR (Powered Air Purifying Respirator) that I strapped around my waist was foreign to me and made me feel distant from my patients. At 9:16 in the evening I bid farewell to my colleague who had covered the daytime tour and found myself alone in this micro-epicenter of COVID-19. Professionally I quietly sought the challenge of handling the emergency area on my own even though the greater possibility of infection might occur. All my experience and training could not have prepared me for becoming so ill. No night will ever go down as being as humiliating and humbling as this night. The virus unleashed its fury before my eyes and completely crippled the operation of the emergency department. Exhausted, I struggled to maintain my role as team leader of the department. It was days later after another exhausting overnight shift, that I would become symptomatic. By April 1st, 2020, I was officially offline. SARS-CoV-2 was dangerously dismantling my body's physiology.

My quarantine began immediately and stationed me at home. During the first week, I endured debilitating symptoms that increased as the week proceeded. While my body aches increased daily, I quickly realized that I had lost my sense of taste and smell. Sleep offered no relief and even my dreams were filled with feverish nightmares. By morning, 8 April 2020, my oxygen saturation levels were starting to become concerning. My breathing was starting to become labored and my body was rapidly enduring an unprecedented level of stress. Later that morning, a concerned friend would unexpectedly come to check on me and find my oxygen saturation level to be 78%. Later that afternoon, I would be admitted to New York University Medical Center (NYU) in critical condition requiring specialized high-velocity nasal insufflation, more commonly known as Vapotherm.

Throughout my 10-day hospital stay, I struggled to comprehend the course of events that had just transpired. My journey to becoming a licensed physician in the United States had been stressful every step of the way. Now my personal safety hung in the balance. My experience as a physician in charge of a hospital emergency room at the epicenter of this pandemic heightened my fear of possibly needing mechanical intubation for my own preservation. Having witnessed so many serious COVID-19 emergencies, I now feared for my own mortality. Knowing that intubation leads to near certain death, a new "frightful" reality stood before me. I had every bit of confidence in all members of the care team at NYU. Everyone was extremely concerned, compassionate and caring. This unique terrifying experience of the physician now being the patient was made that much easier by the NYU care team.

I would be released from NYU requiring supplemental portable oxygen. At this juncture my recovery process has all the hopes that my body will respond favorably and be restored to a decent level. Most times, I find myself exhausted and unable to concentrate on any tasks. As fragile as things may seem, each day I strive to make small recuperative steps. The NYU hospitalization left my body weak. My

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mental acuity is far from the degree of sharpness that existed prior to my infection from this virus. My spirit is crushed as I continue to mourn for my patients and lost colleagues such as Dr. Lorna Breen, who was the chair of the emergency department at New York-Presbyterian Allen Hospital. I look back fondly upon New York City Fire Department (FDNY) Emergency Medical Technician Gregory Hodge. Hodge, 59, succumbed to complications of COVID-19 on April 12, 2020. Greg was a 24-year veteran of the FDNY, a commercial pilot and a survivor of the World Trade Center. I had the honor of getting to know Greg some time ago, when I served as his physician.

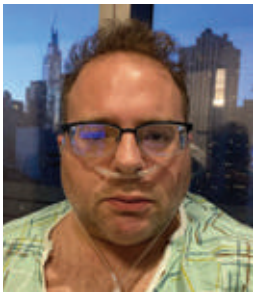
I have no idea what the ultimate effects of the corona virus will be on my body. Obviously, I am hoping for the best, but long-term health consequences are possible. My emergency medicine colleagues are already transitioning to other specialties. Some of them have begun the process of migrating away from New York. Returning to a full-time emergency department schedule is questionable. This experience has truly made me cognizant of the importance of my MPH credential and its utility in this new world. The accidental combination of my illness, the circumstances surrounding it along with the educational path that I have taken has certainly brought me to a defining juncture of my life.

The COVID-19 pandemic will likely bring about fundamental changes in all workplaces. Hospitals and all health care facilities are going to be financially pressured while enduring the loss of experienced staff due to fear, illness and exhaustion. As this health care crisis moves past the first wave, the survivors of pandemic areas will reevaluate their definition of work and their lives. I never envisioned that things would turn out quite like this. Healing includes processing the devastation and sadness that I witnessed. Life has been trying to remain optimistic that a cure or vaccine will become available while I process the role I played in all of this.

This unprecedented event will be an ultimate influencer in how we interpret our daily existence and our future goals. Dealing with this pandemic has led this professional to reexamine his career and begin to look toward a newer definition of each day. My new 5-year career goal will be about finding happiness and stepping into a lifestyle that is healthier for me. These defining moments of my career now lie before me.

***Louis Rotkowitz, MD**, is a COVID-19 survivor and a family physician, working in the emergency room in Queens, New York City.*

This image was taken the day I had been exposed to COVID-19. I had intubated multiple patients that evening.



This image was taken a week later when I was admitted into NYU Langone Health's intensive care unit (ICU) for nearly two weeks.

Pictured here is New York City Fire Department (FDNY) Emergency Medical Technician Gregory Hodge. Hodge was 59 when he passed away from COVID-19 on April 12th, 2020. Image Courtesy of FDNY.

Worthy to Serve the Suffering:
A Medical Student's Reflections on the Pandemic

By Blake Kruger, MPH, March 2020 – May 2021

The impact of the SARS-CoV-2 pandemic has been uniquely paradoxical. Across the globe, our nations, states, and communities have been relatively united in weathering the effects of the pandemic, yet we are physically isolated from one another. As a medical student, my personal experiences have, too, been paradoxical. My guiding principles to serve those in need by studying medicine have been at odds with my inability to provide care for SARS-CoV-2 patients on the wards. My desire to see my family in North Carolina and New Jersey has been lost to the responsibility I feel to prevent the spread of this deadly pandemic. As debate regarding whether it is appropriate to 'reopen' the nation continues, I felt that others may benefit from reading my reflections on our shared suffering. I intend to share my academic and personal experiences transitioning from my pre-clinical to clinical years, and provide my perspectives on how medical students could better serve during pandemics of the future.

Through the Looking Glass: A Year in Review

During my pre-clinical endocrinology module in early February of 2020, I began to read in earnest about a new infectious disease originating from Wuhan, China. The Jacobs School of Medicine and Biomedical Sciences (JSMBS) was in constant communication with students starting with a March 14th announcement to students via an online portal marking a *de facto* distance education transition. March 15th marked the end of all clinical contact across all years of medical education, and shortly thereafter our learning was moved completely virtual and I left New York to be with my family in rural North Carolina. After our midterm break, we 'returned' for our reproductive module on March 30th.

The weeks that followed were harrowing: the virus spread throughout California and New York, national media outlets began following the pandemic almost exclusively, and the nightly conversations I had with my wife evolved from, "Who do we know who has it?" to "Can we attend the funeral?" From April 27th to June 23rd, I studied for my STEP 1 board examination which was cancelled and rescheduled from June 17th to June 25th as Prometric and the National Board of Medical Examiners worked to ensure that individuals like myself could take our board examinations during the pandemic. Students whose STEP 1 examinations were cancelled received notification from JSMBS that our school would serve as a STEP 1 administration site on July 30th. On August 3rd, my clinical years began with a virtual orientation. On August 5th, I began seeing patients in the clinic in-person back in New York. Now, in May of 2021, I am finishing my last rotation of my third year, and preparing for STEP 2.

Mountains Beyond Mountains: Learning & Loss in Clinical Rotations

My clinical rotations have been a gift I am grateful for every day. The opportunity to serve and learn from others in their time of need is an immense privilege, made even more humbling by the pandemic. When I started each of my core rotations, I recall practices – germane to the pandemic – that would prompt reflection at the end of my day. In pediatrics, family-centered rounds would include our patient, the family, an attending, three residents, a pharmacist, and three medical students all in one hospital room. In obstetrics & gynecology, birthing suites would include our patient, the family, an attending, a resident, two nurses, a midwife, and a medical student. In surgery, we would come-and-go from the floors, to the emergency department,

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and to the operating room that contained our (intubated) patient, a surgical attending, a resident, an anesthesiologist, nursing staff, surgical technologists, and a medical student. In psychiatry, the Comprehensive Psychiatric Emergency Program and inpatient floors had pragmatically unenforceable mask requirements for patients. In family medicine, connecting to patients without the ability to read their facial expression was an immense barrier to engaging in patient-centered shared decision making. These experiences each raise what I believe to be reasonable debates regarding patient safety, care team safety, and quality of care,[1-3] yet across these scenarios I was shielded from much of the pandemic due to my status as a student and it took me until Spring of 2021 to realize how frightening respiratory pathology truly is.

While rotating through an inpatient internal medicine service in Buffalo, I assisted in caring for a middle-aged individual that was transferred to our hospital for management of Fournier's Gangrene. Prior workup included computed tomography which revealed pockets of air in the left groin. The patient was placed on antibiotic therapy, and surgical intervention was pursued and appeared to be successful in removing the pockets of necrotic tissue extending from this individual's groin to their lower abdomen. On the fourth day following the surgery, I walked into their room around 7:00am after seeing the other patients I was following for the day. We had a pleasant discussion, I collected information pertinent to my morning rounds presentation, and performed a physical examination which was unremarkable from prior days. Just over two hours later, this individual desaturated and fine crackles could be appreciated diffusely across their lung fields except for the lung bases. Chest x-ray and repeat computed tomography imaging revealed whiteout of the lungs bilaterally, which spared the lung bases. Workup to assess for underlying etiology was negative (including multiple SARS-CoV-2 polymerase chain reaction tests), and the patient was placed on mechanical ventilation, which was later withdrawn at the family's request. The patient passed away the same evening. In addition to losing individuals in my life to SARS-CoV-2, this was the first death of an individual I was responsible in helping care for – their loss likely due to acute respiratory distress syndrome secondary to an unknown infectious etiology. I still wonder if there was something I could have done to prevent the passing of this individual.

Overall, it appears that my third year clinical experience has differed in two major ways from the experiences of my peers 'pre-pandemic:' (1) students have been required to wear N95 masks and goggles when seeing patients, & (2) weekly medical education days have been made virtual. These differences, at least to me, seem reasonable. One frustrating aspect, however, was the difficulty in obtaining N95 masks while in the hospital, even after care teams let medical students know that supply was meeting demand at our hospitals. At JSMBS, students rotate through the Buffalo Veterans Affairs Medical Center, Buffalo General Hospital, John R. Oishei Children's Hospital, Millard Fillmore Suburban Hospital, Erie County Medical Center, as well as other hospitals and outpatient medical offices across Western New York. This changing in clinical venue meant that I had to be extremely cautious with caring for my N95 masks, and that asking healthcare teams at different hospitals for replacements when straps broke resulted in a variety of responses. However, now that I am fully vaccinated (I received my second dose of the Pfizer SARS-CoV-2 vaccine on March 5th, 2021) and masks are more readily available on the floors, this a learning opportunity for future pandemics.

Crucial Conversations: Service & Social Justice

From February of 2020 to May of 2021, I had a number of non-academic experiences which were shaped by the pandemic. With respect to service opportunities, UB HEALS, our unsheltered medicine project at JSMBS, was effectively suspended from April of 2020 to February of 2021. This has likely impaired the trust the unsheltered of Buffalo have with our organization, as we were disallowed from caring for them for nearly a year in a time of great need. The Healthcare Hotspotting collaboration to care for 'super-utilizers' between Erie County Medical Center, the University at Buffalo, and JSMBS has not yet returned volunteers to the wards, or to patient residences. Bench science research projects I was involved with were suspended to keep non-essential individuals out of the laboratory. These decisions, all made to stem the tide of the pandemic, were difficult and important decisions to be made. These decisions, too, have important repercussions for the health and wellness of our patients and I am looking forward to returning to these activities.

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Any discussion of the past year would not be complete without remembering the killing of Breonna Taylor on March 13th of 2020 and the murder of George Floyd on May 25th of 2020. Their names join the list of 1,021 other individuals who lost their lives to an on-duty police officer in 2020, and sparked international policing and social justice protests.[4] Medical students across the nation marched with Black Lives Matter protests, formed White Coats for Black Lives, and advocated for systemic change in pursuit of greater equity through the Student National Medical Association and American Medical Association. I, like many others, will continue to support the long arc towards justice for underrepresented and underserved communities. This move towards greater equity helps to contextualize conversations regarding the equity of vaccine distribution in the United States where, as of May 17th of 2021, in the 56% of individuals who reported their race and have received at least one dose of a SARS-CoV-2 vaccine, white individuals have received a higher proportion of vaccines relative to their disease burden.[5] Additionally, those of lower social vulnerability have received a greater proportion of vaccines from December of 2020 to March of 2021.[6] While our professional discussions are expanding to global disease control through innovative vaccine distribution methodologies, continuing to improve equity in our local communities will remain of paramount importance, too.[7]

Conversations with Myself: Lessons Learned

The past year has both taught me a great deal, and allowed me to recognize exactly how much I still have to learn. As I continue to grow, I feel it important to provide some perspectives as to how we can continue to grow together. Given this, I believe the following are ways medical students could improve future pandemic response efforts:

1. Medical schools and hospitals should support medical students who desire to participate in the care of isolated or quarantined patients as members of the medical team, as intermediaries between the medical team of isolated or quarantined patients and their families, and as volunteer coordinators of video calls at isolated or quarantined patients' bedsides who cannot see their loved ones before passing.
2. Local health departments could benefit from designing 'opt-out' medical student public health response teams for future pandemics, such that students could contribute by conducting screenings of exposed individuals, scheduling appointments for those of whom need to be seen by a healthcare professional, helping coordinate at testing centers, testing patients that need to be tested, transporting samples to laboratories after collection, processing samples in the laboratory, communicating test results to patients, contributing to contact tracing efforts, communicating the need to quarantine to those of whom quarantining is a necessity, conducting quarantine 'check-in' phone calls with those who are quarantining, participating in mass media communications of new medical understandings and health policies, and contributing to charitable meal or pharmaceutical delivery services to those who are unable to leave their residences.
3. The future of medical education is changing and has a unique opportunity to improve for future generations of physicians to come. By actively partnering with medical students to design flexible curricula, medical schools could become more agile in approaching unforeseen circumstances in pandemics to come.

Medical students are trying to be worthy to serve the suffering, especially those who have previous education and experience in research, public health, social service, and medical spheres. Please help us serve, both now and in future pandemics.

"I hope ere long to see rise up amongst us, and may the Blessing of the Poor, and the Applause of the Good and Humane, be the Reward of (their) Assiduity and Labour."

– Samuel Bard MD, *A Discourse Upon the Duties of a Physician*

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Vaccinating in the Time of COVID:
Our Experience in the Inner City

By Ann Di Maio MD, FAAP and Pascal J. de Caprariis MD, FAAFP, May 2021

On January 21st, 2020, the CDC confirmed its first case of COVID-19 in the United States.[1] Although the initial infections were related to travel from China, by mid-February 2020 the US reported its first non-travel related infection. As the disease spread throughout the country, New York City diagnosed its first case of COVID-19 on March 1, 2020.[2] By the end of March, there were 30,000 cases and early April 2,000 deaths.

Pressure was mounting on the New York Department of Health to formulate a plan to prevent further spread of this infection while providing care for the infected patients. New York City had quickly become the epicenter of COVID-19 and Governor Cuomo declared a state of emergency. Over the following days systematic restrictions were implemented throughout the city and state to help mitigate the transmission of this highly transmissible virus and "flatten the curve." Guidelines were issued: avoid crowded buses, subways or trains, no events with 500 or more people, closure of Broadway shows, closures of public schools, bars and restaurants, all non-essential workers were ordered to stay home and face masks were mandated. The Governor then put in place an order for all New Yorkers to stay at home. We were told to stay in our homes and only leave for essential needs: grocery shopping, medicine, physician visits etc. Eventually a travel quarantine was instituted. Anyone who traveled into NYC from another country or a designated high risk state was required to quarantine for 14 days or take COVID testing.

Despite all these mandates and orders the number of cases and deaths continued to rise, and at one point NYC had more cases of COVID-19 than any other country in the world besides the US. Patients were still continuing to become infected and requiring hospitalization. The city's hospitals were overwhelmed and filled to capacity with COVID patients. ICU beds were filled. Operating rooms were converted into ICUs and pediatric ICUs began accepting adult patients. Subsequently, hospitals began running out of critical supplies including much needed ventilators and personal protective equipment (PPE). Hospital medical staff were working extra hours and extra shifts, and medical students were graduated early to assist in care of patients. NYC needed more beds, more staff and more supplies.

On March 18th, 2020 President Trump enacted the Defense Production Act that allowed the military to manufacture PPE and release ventilators.[3] He then worked with private companies such as General Motors to have them manufacture much needed ventilators. In addition, he ordered the deployment of the USNS navy hospital ship Comfort to NYC. The mission of this floating hospital was to assist in the care of NYC patients. Initially the USNS Mercy was going to take care of non-COVID patients from the hospitals, but by early April 2020 needs changed, and its mission expanded to the care of recovering COVID patients. The Javits Center had been converted to a field hospital staffed by multiple branches of the military. They also began taking care of recovering COVID patients. All this allowed the New York hospitals to provide medical care for the more acute and critically ill COVID patients and non-COVID patients.

New Yorkers did their part by continuing to wear face masks, social distancing and staying indoors most of the time. The days were dark during the pandemic. Any light at the end of the tunnel seemed to be only a flicker. During this time some strides were being made in the treatment of COVID-19, but the emphasis was still on preventing the spread of the virus. Hope was centered on a vaccine. In the past major clinical trial results were announced at major medical conferences, however all medical conferences were canceled. Physicians were now adapting to nonconventional methods of obtaining the latest medical updates such as press conferences and the internet. The initial reports on the efficacy of COVID vaccines were small rays of hope that burst into dramatic sunrise with the approval of 2 vaccines. As hospitals continued to care for admitted patients, the public health system now had to simultaneously initiate an aggressive campaign to vaccinate New Yorkers.

Prior national emergencies, including the 9/11 attack and the anthrax attack, had identified the need for medical organizations to assist in national disasters. During the 2002 State of the Union Address, President Bush asked all Americans to volunteer in support of their country.[4] This led to the formation of the Medical Reserve Corp (MRC) and the Citizen Corps.[5] The MRC consists of medical volunteers who are available to respond when there is a major public health emergency. MRC volunteers are either practicing or retirees in the medical profession: physicians, nurses, pharmacists, and EMTs. They volunteer their services with no monetary compensation for their participation. MRC now called its membership to help assist with NYC's vaccination program; volunteer vaccinators had the expectation that our time would help prevent the spread of COVID-19.

We are two cousins, both physicians, who wanted to share our positive experiences as MRC vaccinators at three inner city vaccination sites. The events described are from our personal experience based on the individuals who came for vaccination at three different sites in Brooklyn. All three inner city sites were located in Brooklyn high schools that were closed during the pandemic.

We both completed our online COVID-19 training, covering duties, reporting structures, and vaccine administration as prerequisites. Then our sites and dates were confirmed, and in February 2021 the journey began for the two cousins. To reach the sites, we had get up

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at 5 AM to arrive at the designated shifts, which began at 7 AM and ended at 7 PM. The pre-sunrise streets of New York were dark, cold and deserted as we walked to our vaccination site. Things were dramatically different when we entered the school's brightly lit entrance and hallways, where countless MRC volunteers were going through the initial checkpoint process to demonstrate that we were not infected with Covid-19. After screening, the onsite training began. The MRC staff received a detailed orientation of our duties, and we noticed the enthusiasm and comradery among the vaccinators who would also conclude their shifts in the evening. Entering a brightly lit gymnasium, at least thirty tables set up for the vaccinators.

A second orientation began on the screening process, administration of the vaccine and documentation of the vaccine that was given; we then gowned, masked and put on our face shields.

As the doors opened and individuals entered to receive their vaccinations, we raised a green sign which looked like a ping-pong paddle. It indicated the number of the table where a vaccinator was free to accept an individual for vaccination. Many of us had our name tags clearly visible or wrote our names on gowns so that we were not impersonal robots, but individual physicians there to provide care.

People were eager to get vaccinated, but many described their exacerbation with the byzantine process to register for an appointment via the internet system. It did not dissuade them from going online at midnight and again at 6 AM until they found an opening for an appointment. Nor were they discouraged if they experienced a longer than expected wait time, nor inclement weather while waiting in line during the unpredictable weather of February or March.

Backgrounds varied as criteria expanded. Initially we saw seniors who came alone, others with a grandchild or with a caretaker. Seniors were concerned about contracting the infection and wanted the protection of the vaccination. One 87-year-old African American man sat down slowly with the aid of his cane, and proceeded to tell us how the car service had left him at the wrong address. Unable to find a taxi or car service he stated "I almost gave up but with the aid of my grandson I walked 15 blocks to get to this vaccination site." He was determined to get his vaccination! After receiving his vaccine, he reached for his cane and said gently "Thank you for your service in giving me the vaccine."

As the criteria for the vaccination changed, so too did the demographics of the population entering the vaccination site. Essential workers came so that the public transportation sites would function. Health care workers, home health aides, teachers, restaurant workers, college students and immune compromised individuals came. People were well informed about the vaccine. It was surprising that many asked if they could take a selfie as we administered the vaccination. They then immediately posted it on Facebook or emailed their friends and family. It was gratifying to see their general acceptance of getting vaccinated and their appreciation for the vaccinators.

When we had our lunch break, both cousins were able to share our experiences. We found the vast majority of individuals where grateful and thanked us for our service. As physicians we often look for trends and similarities when treating patients. At the vaccination site we encountered a great range of ages, races, genders and professions. However, both of us were impressed with the overwhelming appreciation expressed to us for our time and work as vaccinators.

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Dr. de Caprariis is an active member of the NYSAFP/ AAFP and has published and presented extensively. For his work with the NYC Medical Reserve Corps during Hurricane Sandy, he was awarded the NYC Medical Reserve Corps Valued Responder Award.

Ann Di Maio, MD, FAAP *graduated from SUNY Downstate College of Medicine. She completed her internship and residency in pediatrics at New York Hospital Weill Cornell Medical Center and was an Associate Professor of Pediatrics and Director of the Pediatric Emergency Department at Cornell School of Medicine. She relocated to St. Louis where she joined the emergency department at St. Louis University Medical Center and was appointed Associate Professor of Pediatrics at St Louis University School of Medicine. She is board certified in pediatrics, pediatric emergency medicine, and child protection. She returned to NYC where she joined the NYC Medical Reserve Corps to serve as a vaccinator.*

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