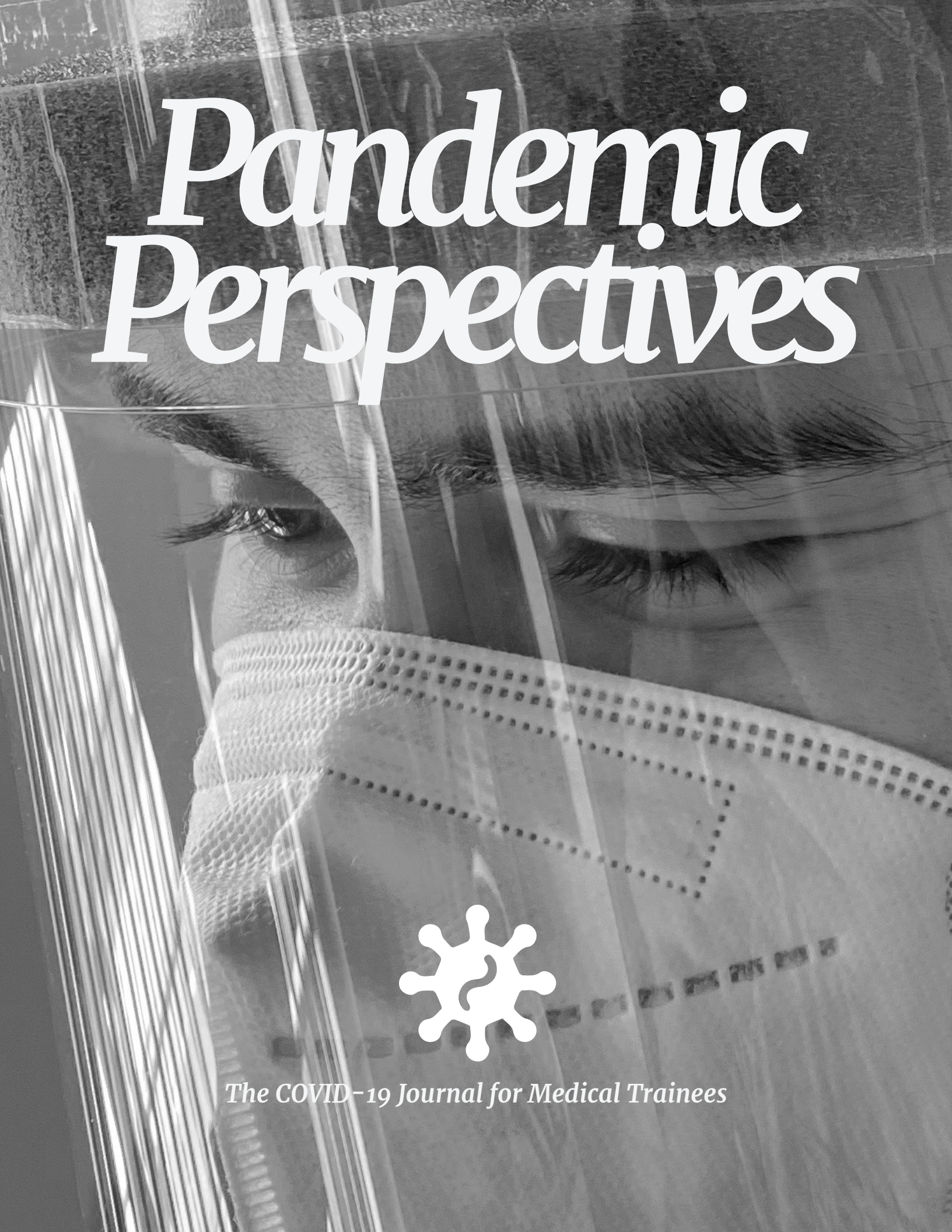

Pandemic Perspectives

The COVID-19 Journal for Medical Trainees

About the Journal

The idea for Pandemic Perspectives: The COVID-19 Journal for Medical Trainees was formed in the early weeks of March 2020. At this time Sarah Hill was a first year medical student at the Albert Einstein College of Medicine in the Bronx and Dr. Emily Hoffman was a third year Internal Medicine resident at Montefiore Medical Center. The reality and enormity of the coronavirus pandemic was settling in as the numbers of cases and deaths rose in New York City. Hill and Dr. Hoffman met in the fall of 2019 through Dr. Hoffman's newly formed Montefiore-Einstein Infectious Disease Interest Group. In the wake of the outbreak, Hill reached out to Dr. Hoffman with the question of how medical students or those with limited clinical exposure would be able to help in the unprecedented times ahead. The idea for a journal, where medical students, residents, and other health professionals in training would have a platform to express their thoughts and share their reflections about the pandemic, was born.

The hope is that this journal serves to connect the stories of medical trainees nationwide, and as a place to preserve our experiences from the COVID-19 pandemic. In the future, it will be a resource for those seeking to reflect on the uncertainties, challenges, and triumphs of the pandemic and as a guide forward as we face the inevitable changes that COVID-19 poses to our communities.

FRONT COVER
Pandemic Perspectives
Sarah Hill
Photography

Meet the Editors

Sarah Hill MPTHM

editor-in-chief

Sarah Hill is a Brooklyn native and BHSEC Manhattan alum who studied public health at Tulane University in New Orleans. She got her Masters of Public Health and Tropical Medicine from Tulane where she was involved with population health and neglected tropical disease research. These experiences guide her pursuit of a career as an infectious disease physician. She is interested in exploring how advocacy and health policy research intersect with clinical practice, and hopes to continue her engagement with creative and reflective writing throughout her medical career. In her free time she enjoys cooking and going on bike rides around the city.

Dr. Emily Hoffman was born and raised in New York and went to SUNY Downstate for medical school where she first fell in love with the field of infectious disease. She then began her residency training at Montefiore Medical Center where she is now the Ambulatory Chief Resident. During residency, Dr. Hoffman was one of the members of Montefiore's Medical Education Pathway. She is passionate about teaching and involved in various teaching opportunities within the medical school and residency program. After her chief year she plans on pursuing a fellowship in infectious disease and looks forward to continuing to work and teach in an academic setting.

Emily Hoffman MD

editor-in-chief

Jordan Berka

creative director

Prior to medical school, Jordan, also a Brooklyn native, studied English at the University of North Carolina at Chapel Hill. Seeking, sharing, and discussing narratives, both medical and non-medical, has been an integral part in his journey so far to becoming a physician. He has previously worked with *Ad Libitum*, an Einstein student run Literary and Arts Magazine, as a writing and layout editor, and *Pulse-Voices From the Heart of Medicine*, an Einstein affiliated website that like Pandemic Perspectives aims to share reflections and art about medicine. He is interested in a career with continued engagement in the dynamic intersection between writing, art, medicine, and science.

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To be the Virus

by Jonathan Su
CUNY School of Medicine
June 8, 2020
Brooklyn, New York

As COVID-19 continues to spread and the entire world takes necessary precautions to stay healthy and safe, an unfortunate reality has emerged – an increase in expressions of xenophobia and racist anti-Asian sentiments, especially targeting the Chinese community. There are unfortunately countless examples on social media depicting the kind of anti-Asian violence and discrimination affiliated with the global pandemic. From the hateful vandalization of Asian-owned businesses to physical harassment, the social fallout has taken a major emotional and mental toll on the livelihood of Asians not just in the U.S. but in various parts of the world, including the United Kingdom, Italy, Spain, Greece, Germany, and France.

Anti-Chinese and anti-Asian rhetoric (particularly against those who look East-Asian) has also been spewed by people in power, including senior officials, governmental leaders, and other political figures. For example, President Trump has on multiple occasions called the coronavirus "the Chinese virus," rejecting the World Health Organization's advice against using geographic locations when categorizing illnesses. It is not the first time in history when dehumanizing labels have been used as scapegoating against particular groups of people. After 9/11, American Muslims, Arabs and South Asians in the United States became victim to societal stigma and malicious xenophobia. When the number of Ebola cases had increased in 2014, increasing incidences of racism were inflicted against those of African descent. Ignorance and fear are a very dangerous combination and have only catalyzed the spread of falsehoods and mistruths. As future and current physicians, we must not subject ourselves to misinformation.

Still, the prospect of anti-Asian rhetoric becoming a part of mainstream American dialogue concerns me most. As an Asian-American, it saddens me to see the indiscriminate nature of racism manifest. It does not matter whether we are from Burma, Thailand, or Korea. Certain Asian groups that bear even the slightest resemblance to each other are being carpet-bombed with hate speech and insensitive racial slurs, and according to the model minority myth that in itself is a socially engineered stereotype, we are supposed to remain silent. From the xenophobe's perspective, we don't just have the virus. We are perceived to be the virus.

It is imperative that all medical students, current physicians, and other medical caregivers remain cognizant of social justice concerns. All educational institutions across the nation, including medical schools, should provide anti-discriminatory resources in the form of counseling and community/departmental outreach, even if such forms are virtual. These kinds of resources are important interventions that hone in on human rights issues which illuminate the direct need to protect our Asian brothers and sisters. This need is also a testament to our aim to protect all immigrants and to disengage ourselves from potentially harmful social behaviors. Our social belonging in the U.S. must not be rendered conditional; our liberty to live and simply exist as who we are is an unconditional human right. As future and current physicians, we need to continue to stand in solidarity with those who undergo categorical marginalization, prejudice, and stigmatization. Furthermore, we must continue to treat members within our communities and beyond with care and empathy. It is imperative that all of us work toward building a safe, supportive climate, free from racial hostility for all members of our community, particularly during these challenging times. And at an international scale, all governments should expand upon existing anti-discriminatory legislation/aid and adopt new actionable plans to address the upsurge of discrimination and xenophobia tailored to these changing and particularly challenging circumstances.

Keeping the Lost Alive Through Memory

by Rie Seu
Albert Einstein College of Medicine
June 17, 2020
Bronx, New York

I sat at my usual table on a morning in early March. The school library was only partially filled, as students began socially distancing themselves. In the hushed library, my phone vibrated. My aunt broke down and told me that my grandfather passed away.

My grandfather had been in hospice for a couple months prior to his death. Despite the ingenious engineering of our human body, the decline could be so rapid. The last month of his life was excruciating to watch – seeing my once energetic and stoic grandfather become so emaciated and fatigued. However, I was grateful for every minute I was able to spend with him. The weekend before his death, we took him to his favorite Mexican restaurant that he used to frequent when my mom and aunt were children. That night, he wanted to take a bath; my aunt and I carried him up to the second-floor bathtub so he could soak himself in hot water while sipping a mimosa. The next day, we went through the family tree; he read names of people I hadn't known existed – who lived across continents and were connected by our family name. A few days later, he passed away peacefully at home with my aunt and grandmother holding his hands.

When I read articles on how people with COVID in the emergency room take their last breaths without their loved ones in a sea of beeping noises, raised voices and labored breathing sounds, my heart shatters. I wonder what their last thoughts were – did they feel scared…frustrated…lonely? I dwell on the pain the families feel on the uncertainty of whether they will ever see their loved ones again, once they are taken away by ambulance.

My grandfather's death and COVID have taught me the importance of the quality of one's life particularly during the last months. Although my grandfather had probably been in pain for a long time, he was always surrounded by family members and, in the last month, nurses who eased his pain through medications. He wanted to lie in silence, eat bites of my grandmother's delicious food and have his feet massaged. During my last meal at my grandparents' home before his passing, he wished to sit with me at the kitchen table and told me stories of his childhood during WWII. I will forever cherish these last invaluable and beautiful moments with my grandfather. Medical professionals are often concerned with elongating life; however, it is also crucial to know when to draw the line so that loved ones can continue to create memories and the dying can leave this life peacefully and comfortably.

During the months of April and May, the news was filled with articles on isolated elderly in nursing homes and funeral homes that were not able to keep up with the death count. If my grandfather had his last days during the peak of COVID in New York, would I have been able to visit him without worrying about unknowingly infecting him? Would there have been nurses to take care of him given the shortage of medical supplies and staff? Would it have been possible for my parents to fly from Japan for his memorial service? My family was fortunate – we were able to say goodbye to him together and the funeral home came that night to prepare his body for cremation.

A friend who lost his father a few years ago once told me, "When I dream one of those dreams set in the real world, I feel in my heart that he is alive. In a way, he is. Even if my mind was the only one he existed in, there, he still exists. The parts of him I never knew, the facts that made him who he is, those exist too. They are in the minds of the various people who know him. That gives me great comfort." My grandfather enters my thoughts on a daily basis; I reflect upon our time together and hope that he is traveling the world and enjoying hot baths, two things that gave him great joy, in heaven. I ponder about others, whose lives were cut short by this cruel virus. I continue to read the New York Times obituaries and have attended online vigils for people who passed away from COVID, in hopes that parts of them continue to live in this world through people's memories. These lives disappeared from this world too fast and without enough recognition, but it brings me solace to think that my, along with many others', memories and thoughts continue to maintain their presence on this Earth.

A Lonely Battle

by Alice
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May 24, 2020
Staten Island, New York

I rushed to my grandparents' house after 3 weeks of leaving them in social isolation in an attempt to prevent exposing them to coronavirus. After weeks of insisting everything was fine, my grandma finally admitted my grandpa had stopped eating and he was too weak to check his blood pressure or take his medications. He was falling a lot, and complained his hips were giving out from underneath him. I found him sitting at the dining table, relieved to be reunited and to see him sitting upright. As I proceeded to check his vital signs, his arms were heavy and he could barely remove his layers of clothing for me to put on the blood pressure cuff. He had a fever of 100.7F. I hurriedly gave him some Tylenol and spooned Pedialyte into his mouth, for his own hands shook too much to hold a cup. His lung sounds were clear and he denied having a cough or trouble breathing. I was so relieved. The former pediatric nurse in me worried he would get more dehydrated throughout the night. It took me three tries to insert a 24 gauge catheter in his hand to start gentle IV hydration.

The next day I got my hands on a pulse oximeter and my heart sank to see my grandpa was only satting 87%. I called my sister, who was a medical resident in Texas. She began making phone calls to see which hospital I should take him to. I spoke with my grandpa's doctor via FaceTime to ask if I could get an oxygen concentrator at home, and he insisted I had no choice but to take my grandpa to the hospital if I wanted to give him the best chance at recovery from what he believed to be a very serious case of covid19. I burst into tears, then began packing a bag for my grandpa, who was clutching his head in fear and panic. My dad arrived to help me dress my grandpa and we carried him down the stairs and to the car together. As my dad drove, I watched the pulse ox waver between 84-87%. My grandpa was quiet the whole time. As we approached the ER entrance, my grandpa hesitated and so I sat on a nearby bench with him. He asked if he could come back home with me after they did the testing they needed to do. My heart broke, knowing he would likely be admitted with little chance of coming back home. We shuffled together into triage, me holding him up by his pants and him hanging onto me tightly. He sank into a wheelchair as the nurse checked his vital signs. His O2 sat was now 79%. She quickly placed him on a nasal cannula and started to wheel him away. I stood there in panic with my heart in my throat, took a few steps, then called out: "Am I supposed to leave now?" She turned, forgetting I was there, and said, "Yes." Tears were racing down my cheeks as I handed her my grandpa's cane. I put his bag on his lap and showed him his phone. I told him not to worry, I would call him and the doctors often for updates. I still feel the warmth of his face on mine as I cherished that moment, fearing it might be our last hug.

It has been about a month and a half since he passed away. He was never intubated as he was able to maintain his oxygenation on a nasal cannula and non-rebreather. But he suffered a massive stroke on his fourth day in the hospital, which I noticed via FaceTime. He had appointed me as his healthcare proxy that same morning. A few days later, he went into atrial fibrillation. He slowly slipped into a coma as I watched him deteriorate over FaceTime. I watched him and his Cheyne-Stokes respirations, fearing what he must be feeling. His pain and suffering was my pain and suffering. The heartbreak from losing my darling, sweet grandpa to such a lonely battle will never go away

Telehealth and The Elderly Community

by Julia Barsoum
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May 20, 2020
Washington, D.C.

The idea of telemedicine is not new. In 1879, an article was published in the Lancet that talked about using the telephone to reduce unnecessary office visits. In 1925, a cover of Science and Invention magazine showed a doctor diagnosing a patient over the radio. Since the 1920s, the radio has been used to give medical advice to clinics on ships (1). Zoom and Webex appointments may be new, but the idea of telemedicine is not.

The COVID-19 pandemic has skyrocketed progress on telemedicine, in part thanks to the swift passage of insurance coverage for video and non-video calls. This has been beneficial for many specialties, from infectious disease, to hematology and oncology, to therapy appointments as well as to programs like Alcoholics Anonymous. Those who previously had to travel hours to get to their physician wouldn't have to anymore. Those who are at an increased risk for complications of SARS-CoV-2 do not have to put themselves in unnecessary danger.

In the field of Hematology–Oncology, telemedicine has been extremely helpful; our patients are often some of the most vulnerable to COVID related health complications. Many of the oncology patients are over the age of 65 and those who have a cancer diagnosis are generally considered to have a lowered immune system. In addition, those who are actively taking chemotherapy agents often have no immune system at all. Any excuse to stay at home and not put themselves at risk is seen as an advantage.

However, this technology is new for many and pushes a lot of patients and physicians out of their comfort zone into uncharted territory. In my experience assisting patients and physicians with Zoom telehealth visits, I've recognized that most of our patients are in their 60s and above. My most recent patient was 96 years old. Most patients have been able to set up their conference with no issues, but many are still not used to the technology and experience many challenges.

I have spent over a half an hour on the phone with some patients before their visit to walk them through the steps of setting up the call and making sure they have completed the necessary consent forms. Occasionally we are not able to set up the call and have to do the visit over the phone or not at all. Without the help of medical students like myself and medical assistants, many patients may slip through the cracks. In addition, many of these patients are isolating at home alone without family or friends that would normally be there to help them. Even with our help, some are not able to participate. With the high-stress environment of the medical field right now and many people working from home, there may be no one available to check-up on them.

As we continue to use telehealth and this becomes the norm, more and more patients will become comfortable with this technology. We are already seeing this start to happen. But for now, there are still many patients that are being lost in the hustle and bustle, especially in the older populations. As a medical student this is frustrating, because I see many practices not helping these patients and I feel useless in my ability to help. So I continue to help in the way that I currently am - one patient at a time.

1) Board on Health Care Services; Institute of Medicine. The Role of Telehealth in an Evolving Health Care Environment: Workshop Summary. Washington (DC): National Academies Press (US); 2012 Nov 20. 3, The Evolution of Telehealth: Where Have We Been and Where Are We Going? Available from: https://www.ncbi.nlm.nih.gov/books/NBK207141/

Reflections From a Med Student Without Her Hospital

by Vanessa Yu
Tufts University School of Medicine
May 22, 2020
Boston, Massachusetts

As the final rotation of my third year comes to an end, I look back on the past twelve months with many fond memories. After two years of sitting in lecture halls, I was more than ready to drape that stethoscope around my neck and saunter down the hospital hallways in a pair of blue scrubs. Finally, I felt like a doctor – like I was actually going to do what I had come to medical school for. And for the majority of my third year I was lucky enough to continue feeling this way, thanks to the residents and attendings who made it a priority to include me as a part of my patients' care team.

On the morning of March 16th I rounded on a patient with chronic pancreatitis, apologetically waking him up at 6am to push on his belly and carefully combing through his past medical history before scribbling out my differential on the back of my patient list. I was ready to share everything I had uncovered, and more importantly, I was ready to make this guy feel better.

But by noon, none of this mattered anymore. All third year students had received an email telling us that we would be taken out of the clinical setting for the rest of the year. I looked at my list with vitals and labs scribbled all across the edges and tossed it in the trash, and as I walked away from the hospital I couldn't help but feel disappointed. I wasn't going to be there to round on my patient. I wouldn't be there to let my team know that he had reported two episodes of non-bilious emesis at home which had resolved since admission. And then it dawned on me: my patient was going to be completely fine. Whether or not I was there to report his change in bowel habits, my patient was going to get the same care he would have otherwise. I began to wonder: what had I been doing this entire year? And did any of it really matter?

I realize that many of these thoughts are likely amplified by the fact that I have been pacing around the same 800 square feet for the past three weeks with little to no social interaction. Of course my third year mattered – after all, I had learned more about medicine and patient care than I ever thought imaginable. However, the role of a third year medical student in the time of the COVID-19 pandemic has been extremely humbling. One day you are an integral part of the care team and then suddenly you are sitting at home in your pajamas while the hospital continues to run as it always has.

Although the hospital continues to run smoothly without its medical students, I'm not positive the same is true the other way around. My first day away from the hospital was filled with uneasiness. I spent hours flicking through Netflix with this feeling that I was supposed to be doing something. Wasn't there a patient log to enter or a rare disease to be looking up? What was I supposed to do with all this time?

This uneasiness lingered throughout the first week away from the clinical setting, but I have since started to make some sense of it all. While the past three years of medical school have been some of the most educational, fascinating, and fondest years of my life, they have truly been all consumed by medicine. I have been 100% a medical student, living and breathing the mantra of "life-long-learner." There has never been a time where there was not a patient to check up on, a shelf exam to study for, or a presentation to prepare. All these tasks went away when COVID-19 emerged, and I was faced with what my life consisted of when I didn't have medicine – it wasn't much.

Before medical school, I had many interests (perhaps too many). I loved music: playing the violin with my sisters, attending Broadway shows with friends, or grooving to classic 2000s R&B on a Friday night. I loved anything that involved getting my hands dirty and could spend hours in a pottery studio molding a block of clay or in the kitchen throwing together whatever leftovers I had in the fridge. I loved learning languages, being outdoors, and crafting handmade birthday gifts. I suppose these are all little things, but together they gave me some sort of identity. These past three years my identity has been "medical student" and, unfortunately, I have lost touch with these other parts of my life that were once important to me.

Being a medical student is a privilege. We are gifted the knowledge of how to make people feel better, and in return patients let us into their lives on a level that requires incredible vulnerability and trust. This is not something I take lightly, and I believe that becoming a doctor is worth the personal sacrifice. However, the changes brought on by the COVID-19 pandemic made me realize that perhaps things do not have to be so black and white – after all, life is unpredictable and sometimes too short. I am not sure that I have completely figured out how to balance the demands of being a physician with the need for nurturing personal interests. But these past three weeks I have slowly started to add some non-medicine activities back into the mix – picking up my violin for a few minutes, reading a book before bed, and taking the time to check up on old friends. And at least that's a start.

Marked by the Oath

by Belicia Ding
Montefiore Medical Center, Internal Medicine
Painting

Primum non nocere: First do not harm. We swear it for patients, but what of the harms to us?
We carry its ideals, our efforts Sisyphean.

The 5 Stages of COVID-19: As Told by a NYC Resident Physician

by Neha Gupta MD
Lenox Hill Hospital, Internal Medicine
May 15, 2020
New York, New York

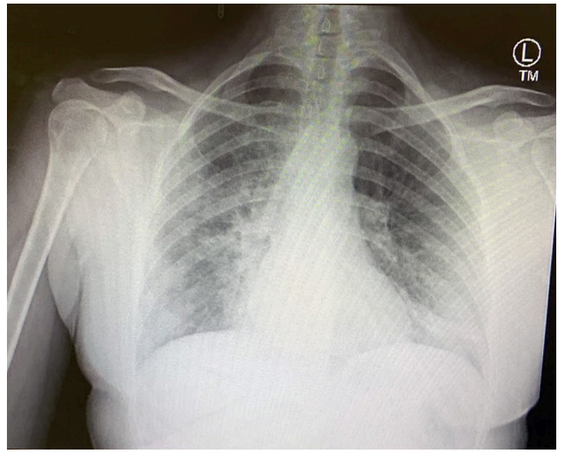
1. Denial (March 25-30)

Body aches, fatigue, excessive sleeping… all of those symptoms had to be from being overworked, right? I was entering week 4 of 4 in the medical intensive care unit with only 3 days off in 22 days! Two of those weeks had involved caring only for patients suffering from the novel coronavirus. Our hospital was blessed with sufficient PPE and a wonderful support system, so how could I have contracted the virus at work? I was adamant that I was burned out and just needed a day off from work to catch up on my significant sleep deprivation. After sleeping at least 20 hours, taking Motrin for my body aches, and foam rolling the heck out of my muscles, I geared up to return to another day in the MICU. I worked that Friday, almost normally, and told myself I was okay – ignoring the muscle aches and mild fatigue that persisted. I went home that evening and ordered dinner in with a friend who was also working on a COVID telemetry unit.

I went to sleep that night relaxed and happy that I had another day off to further rest and recuperate. Saturday morning I woke up still feeling tired and ache-y, which was odd. I continued to relax and doze for the remainder of the day. My sister, a pulmonary-critical care fellow in PA, thought it was unusual for me to still be tired after catching up on sleep for over two days by this point. She didn't voice her concerns yet, however, simply told me to continue taking it easy. By that evening, my aches had worsened and I started to feel chills – I took my temperature and to my dismay it was 99.1°F. To be fair, that's not a fever, but it's also not a "normal" temperature for a healthy 27-year-old that had been working in a MICU overrun with COVID. My options were: continue to tough it out until it truly presented itself, listen to my body and call out sick for work the following day and continue to monitor my symptoms, or be smart and call out sick to avoid exposure to other individuals and go to an urgent care center to get tested. In choosing the last option, I was sure that I would assuage my (and my family's) fears and provide myself with an answer within a day or two, allowing me to return to work knowing that I was just burnt out.

2. Acceptance (March 30-April 1)

After being swabbed, I was told to self-quarantine, continue checking my temperature, and to expect test results in 48 hours. During this time period, I continued to have fevers up to 100.5°F in the evenings. On Monday, the day I was waiting for my results, I was feeling a little better and hyping myself up to return to work. Speaking with my co-interns, I was acutely aware of how busy the hospital was and how necessary it was for me to return to work. I was certain that my test results would be negative, but I called Urgent Care that evening and was greeted by a kind nurse on the other end of the phone. After going through the usual questions (name, birth date, etc.), the nurse placed me on a brief hold and a doctor returned to the line – "Dr. Gupta, I'm sorry to tell you this but your results were positive for COVID-19." The rest of the conversation was a blur, and I finally understood how patients feel when they get medical news that they are not expecting. I vaguely recall being told to notify employee health services and to isolate for 7 days and only to return to work after that period as long as I had been asymptomatic for 72 hours. I video called my parents, immediately, nervous for their reactions. "I love you daddy, I'm positive".



My dad was initially confused by this declaration and I watched as understanding set into his face. My mom was not surprised at all; she already knew it would be COVID. I was the only one in denial. My mom told me they were prepared for this news and that my sister had discussed with them the likelihood of being infected. I notified my chief residents and co-interns and prepared to buckle down at home, ready to fight the battle of a lifetime. This was the beginning of what was arguably one of the most heart-warming experiences of my life. Friends, family, colleagues, fellows, attendings…everyone started reaching out, offering Tylenol, groceries, food, and emotional support.

I lost my sense of taste on March 31, something I didn't notice until I tried to eat some ice cream. My energy levels were decreasing and my appetite diminishing, as I tried to find higher calorie options for nourishment. Looking back, I don't even know when I started to lose my sense of smell – such a strange symptom that a large number of COVID patients suffer from.

I continued to rest at home, napping, video calling family, and sometimes watching TV. As I mentioned before, my sister is a pulmonary-critical care third year fellow at the cusp of graduating to attending status. Her husband is a gastroenterology third year fellow as well; both, usually incredibly busy and minimally available. During this time period, PA had not been hit as hard and their hospital had requested they work from home until needed in the hospital. Because of this, they were video calling me multiple times a day to check in on me. My biggest cheerleader to health was my five-month-old nephew, who would join in on their video calls and giggle with me for what felt like forever.

3. Fear (April 2-5)

As family and friends continued to shower me with love, surprising me with packages of gourmet popcorn, chocolate truffles, and food deliveries, I continued to worsen. I watched as my muscle aches gave way to a persistent cough and higher fevers along with a new intermittent sensation of lightheadedness and anxiety. I had never chosen to invest in a pulse oximeter, a portable device that measures the amount of oxygen in your body (normally 98-100% in a healthy individual). A wonderful friend offered to drop hers off at my door so that I could assess my body's oxygenation and monitor for the clinical deterioration I so feared. My baseline saturation at rest at that point was 94-95%, a surprising awakening.

On Friday, my cough was so severe that I could no longer talk without setting off a coughing spell. My PCP's office happened to call that morning to check on me, apparently they were notified that I had been swabbed for COVID – I thanked them profusely for checking in and asked for help with my cough and was told they would get back to me. As busy as I'm sure they were, I waited until 4pm for a call back, after which I couldn't wait anymore. I contacted one of my attendings and explained that I was COVID+ and needed something desperately for my cough. I couldn't imagine getting through the weekend with only my minimally helpful OTC Robitussin. He was a lifesaver and sent in prescription strength cough syrup to an amazing pharmacy that delivered the medication to my doorstep for free!

Over the weekend, my fevers continued to worsen even on a standing regimen of Tylenol every 6 hours. Saturday evening my temperature hit a max of 102.5°F – I tried taking a cold shower to no avail and ultimately had to take the feared medicine, Motrin. My cough persisted and I started to experience some shortness of breath with activity, with my saturation dipping down to 92%. In the last week, I had transitioned to sleeping on my couch with 2 cushions, as I could no longer tolerate or find comfort in my bed. I also began video chatting my parents at night, leaving it on so they could hear if my cough was worse and check on me when they woke in the morning.

The turning point of my illness was on Sunday, when I woke up to a coughing spell and discovered my resting saturation was 88%. This was startling. I continued to nap throughout the morning. Little did I know that behind the scenes, my family was discussing the need for me to be evaluated in the ER. In the afternoon, I reached out to one of the pulmonary fellows at my hospital who recommended being evaluated. My best friend in residency turned out to be an angel – she insisted on coming to my apartment in full PPE to evaluate me. She noted poor inspiratory effort and crackles in the middle lobes of my lungs. I was scared and didn't know what to do and she didn't give me much choice. We were going to the ER.

4. Recovery (April 5-14)

In the ER, I had a chest X-ray done that showed bilateral pneumonia. Again, I was in denial and shocked that I had developed such a complication. I am 27 and have no significant past medical history, how could this be happening? Initially resistant to be admitted to the hospital, Alex and a wonderful ER physician assistant convinced me to stay for treatment. They noticed I was having difficulty speaking in full sentences and felt that my chest X-ray was worse than expected. Alex went above and beyond and called my sister and reasoned with her, explaining why it was important that I not go home. My sister agreed and called me, telling me it was time to let them take care of me. In that moment, a weight lifted from not only my shoulders, but also my family's shoulders – they no longer had to constantly check on me and worry, I was in good hands.

I received the COVID-19 cocktail and remained in the hospital for 3 nights, after which my fevers resolved and my cough began to improve. It was interesting being on the other side of the hospital, as a patient instead of a physician. Though technically alone, I felt surrounded by family. The nurses were familiar, the attending on service was my residency mentor, and my co-interns and residents all checked in on me constantly. They brought me Gatorade and snacks and stories and smiles. My attending called my sister daily to update her on how I was doing. When it was finally time for me to go home, the nurses of the floor gifted me a "Thank You" note, covered in multiple heartwarming messages all telling me to hurry up and get better so that I could come back to work alongside of them, in a normal setting! What had once been "just a job" had turned into a family experience. Not once in my hospitalization did I feel "alone" or aware that my true family was not present.

When I got home, I nestled back into my makeshift bed and set up all of my "gifts" from the hospital – remaining medications and cough syrup. I caught up with family who cheered me on for being home. I spent the rest of this period sleeping 18+ hours a day, making up for my significant sleep deficit from the past couple of weeks. And I celebrated internally – I had made it back home, safe and sound.

5. Guilt (April 15-19)

Wednesday was my first day truly "awake", i.e. I didn't sleep 18 hours! I had completed my isolation on Monday, but it was raining and I still didn't feel like emerging from my safe cocoon. On Tuesday, I grocery shopped for myself for the first time in almost three weeks. I walked 1.5 blocks with my pulse ox on hand (ha!), walking slowly and deliberately, testing my recovering lungs. My saturation was 92-93% walking, not so bad, but my heart rate was in the 150's – I was definitely deconditioned. Walking home with my groceries was a little more challenging than expected, and I was thankful for a break at the pedestrian walkway near my apartment. I was very tired afterwards and napped for a bit. The following day, I did laundry – I walked half a block to the building that houses our washer and dryer, a feat that required 3 trips in all to bring clean clothes home. I was significantly short of breath carrying my laundry bag such a short distance and after all was said and done, napped for 3 hours to recover!

On Thursday I had a telemedicine appointment with my primary care physician who wanted to check in on me, having been 1 week post-discharge from the hospital. I told her about my fatigue and my heart rate and saturation with minimal activity. She wasn't surprised – studies were showing that COVID pneumonia patients were suffering from a 20% decrease in lung function for 6 weeks post-infection! SIX WEEKS! What a cruel, horrible virus. How can such a small thing do so much damage to a healthy, young, fit, 27-year-old?! This was astonishing to me, but it was consistent with how I felt. I told her that I felt guilty still being out of work, aware that I was limited by my tired body but frustrated because at rest I was awake and able. She sympathized with

me and showed me a different point of view, where other physicians who were still on the frontlines battling war were healthy and unaffected, unlike me. She reminded me, as had my family many times before, that no one would wish to trade places with me, and that it was important I recover a little more before going back into the fight. I was cleared to return to duty the following Monday and was told I would be returning to the floor I had left behind, this time on the medicine telemetry unit, which had mostly been converted into a MICU – working with, you guessed it, Alex. I was elated to be returning to the wonderful pulmonary-critical care department, to be surrounded by the people who essentially helped save me from this horrible virus.

I decided to use my last days off to continue to sleep, eat well, walk outdoors (with my mask!), and video chat with family. I was finally able to enjoy and appreciate flowers my parents had sent me on Easter Sunday. And I wrapped this experience up again, with Alex. My family treated us to a dinner delivery of tapas and we watched a beautiful tribute to healthcare workers on ABC. I spent my last day, Sunday, reflecting on this entire unbelievable 3-week experience. I'm very aware of how lucky I was to have had such a wonderful support system of family and friends. I was lucky to be evaluated in the ER so quickly and to have received the COVID cocktail. I was lucky to have been treated by an amazing attending that truly felt like an older sibling of sorts, similar in age and personality to my sister. I was lucky to have such wonderful nurses who cared for me tirelessly, who helped assuage my fears when I felt short of breath or was struggling with a coughing fit. I was lucky to have an understanding residency program that gave me the time I needed to recover. I was just plain lucky in every aspect possible.

And these are all the memories that I will be carrying with me as I re-enter the hospital, ready for action.

Mental Health & Telehealth in the Times of COVID-19

by Michelle Nosratian
Albert Einstein College of Medicine
May 16, 2020
Bronx, New York

We call them the healthcare workers on the "front lines" in this "battle" against coronavirus. I am not sure who first used this decidedly militaristic terminology to describe those involved in "fighting" the COVID-19 pandemic—whether it was the news media, social media, or whether it has always been in our lexicon to refer to viral epidemics in this way—but it is apt. The "front line" in military parlance is the position closest to the conflict zone. If the battlegrounds are our hospitals, our ERs, and our ICUs, then our doctors, nurses, and allied health professionals are the infantry.

Mental Health of the Frontliners

Just as Post Traumatic Stress Disorder (PTSD) affects our combat veterans in staggeringly large proportions, hospital administrators are expecting an analogous surge in mental illness among frontline veterans of the COVID-19 pandemic. "As many as 20% to 25% of healthcare workers in hard-hit areas are likely to develop disorders such as anxiety, depression or post-traumatic stress – a rate similar to what is reported in soldiers returning from combat," the Los Angeles Times reports (1).

We are currently still very much at war, and all is not quiet on the COVID front. Just last month Dr. Lorna Breen, an ER physician in Manhattan, took her own life. Healthcare professionals on the front lines are witnessing mass casualties accompanied by no proven treatments or cures, a sense of powerlessness, and fear of bringing the virus home to their loved ones. Additionally, they are thrust into deep intimacy with some of their patients, as they may be facilitating video calls with family members and may be present in their dying moments. All of this augments the already high rates of stress, burnout, depression, addiction and even suicide among healthcare professionals.

Mental Health of COVID-19 Survivors

There is also concern that depression, anxiety and PTSD may affect COVID-19 patients upon discharge from the hospital. The emotional toll of time spent battling life-threatening infection, and suffering the stressful and unpleasant experience of being kept alive by mechanical ventilation for days or weeks, puts patients at increased risk for psychological problems in the future. In one study of more than 700 COVID-19 patients in Wuhan, China, 96% of respondents met the cutoff score for probable PTSD (2). It is also possible that the virus itself may cause psychiatric problems, though little is known at this time.

Effects of Quarantine on the Otherwise Healthy

Among those of us who are doing our civic duty and abiding by stay-at-home orders, quarantine has exacted its own psychological toll. In preliminary findings from researchers at San Diego State University and Florida State University, more than a quarter of American adults met criteria for serious mental distress and illness, a roughly 700% increase from pre-pandemic data collected in 2018 (3). The surge in mental distress is evident among all age groups, but was more pronounced among young adults and those with children under 18 at home. Unemployment, financial uncertainty, and social isolation present a new public health worry: an increase in suicide risk.

Lessons Learned from Mental Health Professionals in Italy & the Success of Telepsychiatry

The COVID-19 crisis has forced U.S. politicians and public health officials into a catch-22: risk re-exposing the public to the virus and experiencing a resurgence of infection, or continue lockdown and exacerbate financial and psychological hardship. Either way, I see it as an incontrovertible truth that people are suffering in the current moment, and public officials should invest resources into mental health treatment.

In a JAMA Psychiatry article, leaders from the Departments of Mental Health and Addiction in Lombardy, Italy discuss their main takeaways from the COVID-19 crisis. Among many lessons learned, they stress that healthcare systems need to invest in expansion of e-health technologies (4). I noticed myself that though I could see some of my providers via Doximity and Zoom, others were not well versed in this modality or were part of an institution that did not give them access to it. There is also additional concern about privacy and confidentiality when using these modalities. However, telehealth and telepsychiatry services are particularly critical for supporting those who live alone, those suddenly exposed to marked isolation, those living in households with high levels of conflict, and those who have children or other dependents with disabilities.

Researchers from the RAND Corporation interviewed 20 outpatient psychiatrists transitioning to telemedicine due to the COVID-19 pandemic. While most of them previously had only limited telemedicine experience with their patients prior to the outbreak of COVID-19, the new status quo forced them to transition to fully virtual practices. Findings highlight that although psychiatrists express some concerns about the quality of these encounters (i.e. reduced ability to observe nonverbal cues, privacy concerns), the transition has been largely positive for both patients and physicians (5).

What We Have Already Done & What We Are Planning on Doing

Back home in our own country, Congress has passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act, a $2 trillion stimulus package that includes appropriations for the Substance Abuse and Mental Health Services Administration and the Department of Health and Human Services. The Centers for Medicare and Medicaid Services (CMS) has made several changes that help mental healthcare professionals and organizations remain afloat, such as reimbursing for telehealth services in an amount equivalent to that of in-person appointments. In a bipartisan effort backed by the American Medical Association, the American College of Emergency Physicians and the American Psychiatric Association, lawmakers are pushing for the inclusion of enhanced mental health resources for health care workers in the next coronavirus aid package. They are calling for the establishment of a grant program within the Department of Health and Human Services (HHS) that will allow health care employers to confidentially assess and treat the mental health of frontline workers (6). Additionally, the group is recommending that Congress fund an HHS study to identify the factors that contribute to health worker distress and burnout, barriers to accessing treatment, ramifications for patient outcomes and the health care system, as well as ways to address the aforementioned problems.

Take Care of Yourself So You Can Take Care of Others & Plan for the Future

Physicians are often the leaders of the medical team. To use a military analogy, doctors are the commanders of a brigade containing other physicians, nurses, technicians and allied health workers. Thus, the physician's role is to plan for the future, anticipate further attack, learn from the mistakes and successes of the past, and implement new tactics and technologies that will enable us to conquer the enemy more effectively next time. But we must also remember that we, too, are vulnerable to infection, to depression, and to suicide. Recognizing these feelings in ourselves and in each other and normalizing seeking help from our mental health colleagues and support from each other can help ease the psychological burden.

We are also always advocates for our patients. Our specialized body of knowledge enables us to use our expertise to influence healthcare policy. If there is a need and the healthcare system is falling short of addressing it, it is our duty to organize and lobby for mental health funding, investment in e-health and telemedicine technologies, and contingency plans for the future.

In case you have not noticed by now, I aspire to be a psychiatrist. I am drawn to the field for a myriad of reasons: the fascinating pathology, the humanism inherent in psychiatric practice, and the ability to help give a patient their sense of "self" back. I have experienced the psychological effects of COVID-19 both through the lens of a medical student and as a patient. As medical students, my fellow classmates and I have been attempting to take care of ourselves and each other while we balance a virtual curriculum with quarantine and social isolation. I myself have turned to yoga and meditation as activities that I can engage in within the confines of my home to keep myself physically and mentally healthy. Leaning on my social network for support via Zoom happy hours and nighttime Facetime calls has become the norm. As a patient, I have struggled to conduct virtual visits with my own healthcare providers across the country, who were blindsided by the pandemic and forced to make rapid adjustments to their practice. This is the time for medicine to make the contingency plans. To think about questions such as "what interventions can be done virtually?" and "what will we do if the pandemic becomes episodic?"

My future role as a budding psychiatrist will be to treat the aftermath of the 2020 COVID-19 outbreak. The psychological trauma endured by health workers and laypeople alike will be present for years to come. My hope is that I and other medical students in my generation will take it upon ourselves to become well-versed in telemedicine as a modality for treatment delivery. I would encourage us to think of our expertise as not confined to the hospital or clinic, but to offer our services on a broader scale to those who may not have in-person access to us. In an increasingly globalized world, this pandemic is a potential opportunity for us to reconsider how to best maximize patient access to our services, whether that be because of a viral pandemic, or to overcome longer-term barriers like limited mobility or lack of proximity.

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Backstage in the COVID-19 Pandemic

by Alexis Corcoran
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March 30, 2020
Bronx, New York

As the ballet dancer in front of me steps on stage, I find my position backstage. I'm hidden in the wings, my tutu just inches behind a curtain, rightfully called the Tormentor Curtain, so the audience cannot see me or my costume. The three minutes I spend behind this curtain feel simultaneously like a lifetime and like mere seconds. Butterflies tumble in my stomach in anticipation as I watch the dancer take her final pose. Before leaving the stage, she performs a reverence, a grand gesture of respect in the form of a curtsy to acknowledge the teacher, pianist, orchestra, and audience. This is also my signal to step into the spotlight. My anxiety disappears as I take my position; I have solid training and countless practice sessions that have led up to this moment, and I am ready.

In a way, being a third year medical student during the COVID-19 pandemic feels a lot like standing behind that Tormentor Curtain. My training is solid, I've practiced enough to be relatively helpful in clinical situations, and I'm ready to step on that stage to do what I can. I feel confident in taking a complete history, performing a thorough relevant physical examination, presenting an assessment and plan to the medical team, and accurately documenting my findings in the medical record. I can assist in triage, perform nasopharyngeal swabs, take vitals, give oxygen, start intravenous lines, send labs, and perform arterial sticks. I have experience donning and doffing necessary PPE after taking care of multiple patients with TB, MRSA, or C.diff.

Even though I feel ready, I cannot join my clinical teams on this stage, as I do not have the right costume on. I look down and see hands uncovered by gloves and scrubs uncovered by a disposable gown. There is no shield to cover my face, nor mask over my mouth and nose to protect from infectious droplets spewed from coughs or viral particles aerosolized from suctioning and intubating. I am learning that this time, the Tormentor Curtain is not to block anyone from seeing me, but to block me from seeing the audience largely diagnosed with COVID-19. The team knows that as soon as I step out from behind this curtain, I am at extreme risk of exposure to SARS-CoV-2, and I may become more of a liability to the medical workforce than a help.

Although my desire is to join in the fight anyway, my sense of reason and realism keeps me on the sidelines. I have learned, though, that I am not useless here. I've started answering the Occupational Health Service Hotline to ensure medical staff have clearance to continue working, and I'm watching children of medical providers who pull multiple shifts. My fellow medical students and I are building PPE from scrap materials donated or bought in local stores in the Bronx. I'm also trying to prevent my community members from becoming part of the chaos by shopping and completing errands for the elderly and tutoring children virtually. Through social media and personal messages, I'm educating those around me about the benefits of social distancing and self-isolating with any concerning symptoms in an attempt to flatten the curve and decrease the burden on the healthcare system.

If and when the curve flattens, I know the clinical teams will have the most spectacular reverence seen thus far in our lifetimes. Acknowledgement will be given to every healthcare provider, every employee of essential businesses, every community member who practiced social distancing, and every celebrity or politician who used their platform to fight for access to PPE and ventilators. The clinical teams and community will also give the utmost respect to those who lost their lives in the pandemic, those who lost family members or friends to SARS-CoV-2, and those who had their lives turned upside down by pay cuts and layoffs.

After this pandemic is over, I will not forget how it felt to be trapped backstage due to lack of resources. Medical students, medical providers, politicians, celebrities, and community members alike need to advocate for sound disaster plans and improved funding of medical care with a larger focus on medical research. That way, if another pandemic were to occur, those who are trained can take their places and perform as they have practiced.

When the Hurricane Hits

by Steven M. Henick
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March 24, 2020
Bronx, New York

It was a Tuesday afternoon in October of 2016. An announcement had been made over the PA system in the middle school where I taught, calling for the closure of school for the next three days in preparation for Hurricane Matthew. We, the teachers, instinctively banded together to instruct our students to take their school-issued Chromebooks home with them, maintain order in the hallways until the last bus was dismissed, and lock up our classrooms. It was hurricane season in South Carolina, and although our school was located 30 minutes inland from Charleston, all the teachers and staff had been receiving news updates over the previous few days that this storm was barreling up the East Coast and that the predicted trajectory covered the area of our school. We were nervous about our students' and their families' safety, yet we were prepared for what might transpire over the next few days: overcrowding at supermarkets from Trader Joe's to Publix, exceedingly long lines for gas stations when there normally were none, boarding up windows in houses and apartment complexes, and the mass exodus of cars on I-26 westbound. Whether bunkered down at home bracing for the worst or fleeing towards loved ones elsewhere in the country, there seemed to be an air of calm and assurance about what to expect and how to manage even without knowing what the aftermath would entail. Thankfully, school was re-opened the following Tuesday with teachers picking up where they left off in their curricula and students ready to learn.

What we as a global community are experiencing with the current pandemic is dissimilar to what most individuals and families went through when preparing for Hurricane Matthew. Whether in casual conversation or in the columns of major publications, it is clear that there is a pervasive lack of certainty and unity, and there is not likely to be any change on that front for weeks or months. We do not definitively know when all workers can resume life as before and what will happen to those who have lost their employment and health insurance during this trying time. In particular, we do not know when we, as medical students, can share in our patients' struggles and care for them in person again.

During the weekend that Hurricane Matthew hit, it was a matter of living from one daily voicemail to the next from the school district informing teachers, staff, and students when to return. Now, we are all living email-to-email and one news article to the next from multiple outlets detailing differing opinions on the potential for containment and mitigation with no mention of when we can sit in lecture halls within two seats of each other without breaking out into a nervous sweat. When can we choose food from the school cafe without wearing disposable gloves or high-five our classmates without offering an elbow instead?

The seemingly temporary reality of constantly checking phone notifications from GroupMe and glaring at the background window with Outlook on the computer for updates while pretending to do Anki may become our new normal. What is so hard about all of this is the indefinitely prolonged period of uncertainty and anxiety that has enshrouded all of our existences. We are not just in a transient crisis mode weathering one storm: we are running to and from supermarkets and stockpiling resources for an unknown period of time. When will the eye of this hurricane hit?

As future healthcare workers, we yearn to be a part of something greater than ourselves. With that said, being applauded for staying home, away from people in need, simply does not live up to the classroom and professional expectations of, say, taking part in a code to resuscitate a patient. We are being told to socially distance ourselves from our loved ones whether we feel healthy or unwell instead of being encouraged to offer in-person support to our neighbors and the elderly as is done during hurricane preparation.

For all that social media has done to bring us together virtually, we may begin to feel much more isolated in this day in age if we spike a fever or develop a cough and forcibly self-quarantine for weeks. We are spreading hashtags in isolation for flattening the curve while each of us helplessly watches our identities and sense of agency morph before our eyes.

COVID-19 does not hit as hard and fast as a Category 5 storm, and in the months that it has taken to reach and wreak havoc on New Yorkers it has also allowed more time for fear to set in. For all the virtues of an increasingly globalized world, we are witnessing greater connectivity leading to greater epidemiological risk and uncertainty. Unlike any hurricane or other weather catastrophe, uncontained and deadly viruses have even greater potential to tear through our physical connections with other people within our community. This ongoing crisis will continually question our resilience and our willingness to rally around those who need our support. In the months to come and in the inevitable pandemics to follow, as medical students and professionals we must reach out to each other to check in and offer a helping hand however possible. We must remain driven and motivated to get out of bed every morning and be willing to find ways to join efforts that change others' lives for the better inside and outside of hospitals.

The Pier

by Richa Sheth
Albert Einstein College of Medicine
Photography

Intrinsic and Extrinsic

by Kailey Singh
CUNY School of Medicine
May 11, 2020
New York, New York

Being a doctor during this pandemic must be scary.

That's what I think, as I hear stories of hospitals not having enough PPE, or people having to fight for hazard pay as they see hundreds of COVID-19 patients every day.

That makes me think: Could I do it?

I learned in my high school psychology class that there are 2 types of motivation: intrinsic and extrinsic. Intrinsic motivation is deciding to pursue something because it is interesting to you and brings you satisfaction. Extrinsic motivation is doing something based on external factors, like wanting a reward, or avoiding other bad circumstances. As a high school student, it sounded like intrinsic motivation was obviously better. If I didn't truly love what I was doing, how could I push myself to keep doing it?

My intrinsic motivation for being a doctor is quite personal to me, and I don't see that motivation ever changing. However, this pandemic has made me question the validity of extrinsic motivation. Maybe basing your motivation on external factors isn't the best thing, but we can't deny it is necessary to consider them. People often watch the news and say, why do doctors want more money? Why do they want hazard pay? Why don't they want to work?

The general thought is this: being a doctor is a privilege, so clearly you don't respect the profession or want to help people if you don't want to work.

This couldn't be further from the truth, and this is where extrinsic motivation comes in. Because for all the love we have for medicine, and for all the empathy we have for others, nothing can override the stress of dealing with a pandemic.

I spent 7 months of my first year of medical school on crutches, due to a bad knee injury. I know I'm going to have a bit of trouble with it for the next few years. When I spoke to one of my professors about my fear of rotations, she told me not to worry. "We can always figure out a way around it, the staff will make it work for you", she had said. I'm glad I attend a school where the faculty cares about your well-being, but is this the same for healthcare workers on the front lines?

I want to work in an environment where my health and wellbeing won't be put at risk unnecessarily, and this shouldn't be an unreasonable request. We deserve to be protected and we have the right to want to protect ourselves, and our families. Yes, these are all factors that play into our extrinsic motivation. But extrinsic motivation plays a role just as important as intrinsic motivation in influencing what decisions are best for us. We want to be doctors because of our intrinsic motivation, and hearing people question that is disheartening. I can only hope that people will continue to empathize with all the hardworking doctors we know putting their lives at risk. We have to provide better support for those who are working tirelessly for the greater good.

I Am Broken

by James Lioi
University at Buffalo School of Medicine
May 13, 2020
Buffalo, New York

How can I focus when those in power do not care about my existence?

They delay relief because we are abominations. How do I get out of bed? I cannot donate blood. Yet I'm supposed to remember that IV drug users are at risk for tricuspid valve endocarditis. Their greed indiscriminately murders people around the world. But recall that IL-12 stimulates T helper cell 1 production. We would rather buy a gun than ensure the person next has a can of beans. However, FEV1/FVC increases with restrictive lung disease. I am broken.

Don't forget, the mitochondria is the powerhouse of the cell.

Please stay home for us, so we can work for you

by Seda Tolu MD
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April 4, 2020
Bronx, New York

My first solo, socially distanced, half marathon down the empty streets of NYC. I left planning to do a short jog, take advantage of the nice weather and my day off, but for some reason I kept running... and running. I was running away from my stress, my anxiety, and my mental pain; the repercussions of what healthcare workers are experiencing on a daily basis in our city. I ran past the USNS Comfort with tears in my eyes, the empty streets of Times Square filled only with echos of ambulance sirens, the Statue of Liberty without a single visitor, and the Brooklyn Bridge, barren without pedestrians. I ran until my feet were burning and mind was numb. Yet, this is a fraction of what we experience every day in our hospitals. The empty calm streets of NYC are a stark and disturbing contrast to our overflowing chaotic hospitals. I'm forever indebted to my courageous colleagues, my support system, and most importantly my patients whose pain and suffering will always remain ingrained in my memory. To those who's loved ones are suffering or lost, my heart goes out to you a millions times over; this system has failed you on so many fronts. We are all in this together, and we will get through this together. Please stay at home for us, so we can work for you and your loved ones where it matters.

Norway

by Kiran Bhutada
Albert Einstein College of Medicine
Photography

I Remain Watchful

by Kathleen Grene
Tufts University School of Medicine
May 13, 2020
Atlantic Beach, New York

When I read stories about the frontlines of this pandemic I feel like the person who didn't get the party invite. Like emergency responders, a lot of physicians sign up to practice medicine because their vision of how they want to treat patients includes and is not limited to pandemics. I am one of those people.

"Thank God you're not there" my husband said when we finished reading an article about a hospital in Manhattan. We are twenty miles away, on the sidelines. From here, if you made your world one without news you would not understand, but feel grateful for, the sudden peace and quiet in your neighborhood. Deep in the abyss of sheltering in place I start to wonder, as much as I want to help, and I wish I was further along in my training to treat patients directly, how would I feel if it became a job requirement?

I'm ashamed of my new normal and how easily I adjusted. I was required to move out of on-campus housing which landed me back at my parents. We sleep with the windows open and I wake up to bird songs. In-between lecture recordings I work on puzzles, read. I have the luxury of being able to be patient, and I will continue to be for the safety of those who are most vulnerable to this new strain of coronavirus. When I was eighteen my dad suggested that I learn how to become more comfortable with being alone, and I did. I am not alone now, but my daily life is much more solitary than living on the 4th floor of graduate student housing, where the kitchen was a reliable source of conversation at pretty much all hours of the day and I shared a bathroom with ten other women. I have not been in a live conversation with more than three other people for two months, which even while writing it down is glaringly minor compared to the suffering and sacrifices of millions of people in our country. I signed up for a career in medicine to help, and being asked to sit on the sidelines is, physically speaking, easy, but I feel guilty for finding that I enjoy parts of this unanticipated extra time with my husband and our parents. I touch base with former supervisors to see how they're doing, check-in on co-workers, eager to hear how they are holding up, how patients are doing, and how the health system in general is doing. I hear that it's like a war zone, that the ICU beds were maxed out over a week ago, that one of my favorite patients died, and in some instances they are so busy I hardly get a response at all. This is going to be awhile, and my role is now clear - wait it out. I pick up a book I've told myself I'd read, open it up to the first page and begin reading, painfully aware of how inconsequential my actions currently are.

I participate in a phone bank to organize volunteers who recovered from COVID-19 and want to donate blood to check for antibodies. Their eagerness to participate in the research process to create a vaccine was the dose of humanity I needed. This summer I will be joining the medical field for a little while. I will be researching both what value the technology that continuously monitors BP can provide to the management and treatment of hypertension, and the connection between hypertension and COVID-19.

I can hear and feel the mounting impatience with sheltering in place when I talk to others, read articles, and watch the news. But to ease up on restrictions prematurely will only continue to devastate the most vulnerable, who are already disproportionately suffering from the health and economic impacts of COVID-19. I explain that people with comorbidities will inevitably be pressured to return to work, and disability payments are generally less than your income when working full-time. Thankfully, being in medical school lends you some credibility: you are studying this stuff, you must at least have a better general understanding of this. I stress that it is not until we have a vaccine that can be administered on a nationwide scale that we can safely establish our society's concept of a "new normal". When you hear an idea that you know is unfair and would disproportionately impact populations, push back and speak up. COVID-19 can only be beaten by thinking of people other than ourselves, which many career tracks, including becoming a physician, expect us to do. But I am worried about the decision-makers and their motivations. I fear for our society's stability, I am hopeful for a vaccine as the solution, I am desperately eager to help, and I remain watchful of the key players, not so patiently, from the sidelines.

Yoga in the Desert

by Carolina Gutierrez Garcia MD
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May 4, 2020
Mexicali, Baja California, Mexico

After the 2020 match results, I shared the unparalleled blissful news to my patients in Mexicali, a tiny desert city in Mexico, with the promise of acquiring the wisdom they deserved. Before moving to the US, the clinic list was composed entirely of HIV positive patients with whom our biggest challenge was lifestyle changes.

A patient reached out weeks later due to concerns of hypertension control amid isolation, what resources could I recommend for exercise now? Before this contingency, the arsenal of options included limited resources, few of them free, or limited by the typical high temperatures. Still, whenever patients disclosed their work schedule, the available options were reduced to none, it was a dead end.

Thanks to the migration of all engaging activity to videos now, the free options worldwide have expanded, or becoming widespread and known. Now a plethora of guided strength training, ballet, yoga is part of the recommendations I can provide to my patients with whom I would be apart from in the first place by moving to Texas for Family Medicine Residency. The barrier has been breached for patients outside of the country to my home.

I feel guilty for discovering these opportunities while those in the hospital are limited. But simultaneously think that this is my work for them; to take care of those outside. We will prepare the healthiest environment for patients, doctors, and workers to go back to after the storm is over.

And then the Pandemic Hit

by Destiney Kirby
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March 22, 2020
Bronx, New York

The personal witnessing of health disparities was what first drove me to a career in medicine during my college years. I saw how the inequities I faced impacted my own life and saw the same of many others in the communities I cared about. I wanted a life defined by service to others and the ability to make tangible changes that would create a better future for marginalized groups. Even as I began my medical school career, I continued this pursuit both inside the classroom and outside of it. And then, the pandemic hit.

After the early encouragement of many loved ones, I made the difficult choice to leave New York City and continue online classes in Phoenix, Arizona. I thought it would be best for my own physical and mental health, as I have many underlying conditions that would put me at a higher risk if I were to contract the virus. I would have better access to healthcare and be in the hands of a system experiencing much less pressure than that of New York City. I would be able to easily exercise outside in the desert and move around the area while maintaining distance from others. It was a better decision for me, but it does not stop the guilt I feel for leaving in the first place. While I was able to easily leave, there are many other students that have nowhere to escape to. More importantly, there are thousands of families in the Bronx that have no choice but to sit while the city turns to chaos, the families I said I wanted to serve. As of now, I do my best to support the efforts by offering free tutoring to the children of healthcare providers but it still doesn't feel like it's enough.

Realistically as a first-year medical student, there are only a limited number of things I could do to help the efforts of the medical community. I try to look at it from a utilitarian prospect: How much good could I truly produce if I were to be in New York City, in person, right now? How much of a burden would I be on the healthcare system if I were to contract the virus and use some of the few resources our hospitals have to treat patients? I don't know if I chose the right decision. All I can do for now is sit on video calls with some kids a couple of hours a week, post a few virus related infographics on social media, study the Urea Cycle for my test tomorrow, and hope for the best.

Untitled

by Kiran Bhutada
Albert Einstein College of Medicine
Painting

Diary of Errors

by Brian Jang
Tulane University School of Medicine
May 9, 2020
New Orleans, Louisiana

July 10, 2019

My friends were coming back from Costco when a surge of water quickly rose and inundated their Honda Accord. Did they need help? I asked. A tow truck would be coming a few hours later, and they would be fine.

“It’s a smart idea to get out of town, “ they told me.

There was no evacuation order, but Hurricane Barry was on target to arrive in New Orleans by Friday. The bad omens began the day before when flash flooding swept across the city. In Mid-city another friend of mine had his car flooded out for the second time in 3 years. The news predicted that the Mississippi would overtake the levies.

I was set to start my Family Medicine rotation in Deridder, a small town 6 hours away. It seemed sensible to leave early. Two blocks from my house a long line of cars had already formed. Napoleon Avenue was a strip of high ground, beside which flooded streets were lined by sunken cars. At the corner of Claiborne and Napoleon, Ochsner Baptist Hospital, formerly Memorial Medical Center, sat in a few feet of water. I passed Jefferson Davis Parkway, by then an urban bayou. A news team fixated on the roof of a hatchback Subaru that jutted a few inches above the water line. The image of that car circulated on the Washington Post.

Everything felt like a moment in history that I’d be remembering, when escape was still possible and disaster could be sidestepped. For the next few days in a rural hospital I was glued to the Weather Channel’s 24/7 coverage. The storm grew weaker and moved away from New Orleans, hitting Baton Rouge instead.

Few people will remember Hurricane Barry, or rather it will be remembered as a nuisance. In the story “The Boy who Cried Wolf”, the villagers make both type 1 and type 2 errors, in that order. I made a type 1 error.

Early March 2020

That morning I wondered out loud why no cases had been reported in Louisiana when Texas and Denver had dozens. By 10:00 am we received news that Louisiana’s first case was reported at the VA. We glanced out toward the VA from the gynecology clinic. It was so close now.

Five of us, all students, walked from clinic to eat lunch at a pho restaurant before grand rounds. A Blackhawk helicopter took off from the roof of the hospital before sailing off. Then a woman in a passing car spotted our scrubs, screamed something unintelligible about hand sanitizer, laughed and drove on by. We chatted about the virus.

“You’re definitely playing this up the most,” my classmate told me.

“I’ve had coronavirus before. It’s not that bad.”

Of course we all have, I thought. CRAP viruses were responsible for viral URIs. Coronavirus, rhinovirus, adenovirus, and paramyxovirus. But the reports from Washington state were alarming. In 2003, 17 medical students in Hong Kong contracted SARS from a single patient with GI symptoms. The mass casualties in Italy wouldn’t make news for a few more weeks.

At the restaurant, I glared at a man who coughed three times without covering his mouth. Then I ordered a beef noodle bowl, the last thing I ever ate at a restaurant.

One Week Later

Monday was my first day on Labor and Delivery and I met with a student who completed an overnight shift.

“Does admin know about this list?” she asked, pointing to a spreadsheet disseminated on Reddit. The spreadsheet showed a growing color-coordinated list of medical schools and their response to the pandemic. Red meant clerkships were postponed. Green meant no change.

Before the weekend my friend from the University of Pennsylvania told me that UPenn students were being removed clinical rotations. UPenn is part of a consortium of Ivy League schools, and other schools soon followed. In New Orleans, students were still essential healthcare workers. All green. A type 2 error.

I shrugged. The school’s admin hadn’t offered us guidance beyond the CDC’s recommendation to be 6 feet apart. I ran off to follow an intern check in with a patient before a C-section. I returned to the office where students congregated only to be told to find a different room. The attending came by to keep students 6 feet apart. I found a lounge to study until the end of my shift.

At around noon we received the email. All clinical duties were suspended. A single day on L&D and 3rd year was essentially over.

Later that Week

I joined with a group of other student leaders in a conference room at school for a Zoom meeting with the admin. Information was sparse, but we listened intently to the preliminary plan. We’re to finish 3rd year by Zoom and hope for the best in returning by the summer.

“Can we get guidance on whether students can travel home?” I asked. No, the school wasn’t able to make recommendations. I fired off a quick text to a classmate that the school was not restricting travel, and they promptly hopped on a flight to fly home.

After the meeting, I walked back to the parking lot with a 4th year student. What a crazy end, we thought. “Since this will probably be the last time we see each other,” I said, “I wish you the best in residency and life. You’re going to be an amazing doctor.”

She laughed. I was wrong, she said. “We’ll see each other again.”

We haven’t and we likely won’t.

Day 1 of Self Isolation

I received an email telling me I’d worked with an attending in gynecology clinic who was ill and tested positive for CoVID-19. I was officially under 14-day quarantine. I checked the email’s recipients list and realize half of the other students in my rotation are CC’ed, including a classmate I told to fly home the previous day. They needed to be with family, they argued. They had grandparents to care for.

There is No Such Thing as a Trivial Result

by Donald D. Chang
The University of Queensland - Ochsner Clinical School
May 10, 2020
New Orleans, Louisiana

From March to April, during the peak of the pandemic in New Orleans, I helped run the COVID-19 diagnostic tests at my hospital, Ochsner Health System. In our hospital we have three different testing platforms. The one I worked on utilized a technique called Reverse Transcriptase quantitative Polymerase Chain Reaction (RT-qPCR) and of all the testing options at Ochsner, this had the greatest capacity for large volume testing as it was high-throughput (up to 96 samples per run) and also had the highest level of analytical sensitivity and specificity.

Interestingly though, while the need to roll-out accurate high throughput COVID-19 diagnostics was self-evident, the pathway for medical student involvement was not.

The personnel who typically run laboratory tests, Medical laboratory Scientists, are post-graduate trained researchers who need to pass a rigorous set of state-mandated requirements. In the hospital, they are responsible for accurately resulting out the lab test of hundreds of patients each day. When 70-80% of medical diagnoses are based on laboratory results, one can appreciate the need to have regulatory processes in place for staff recruitment.

Medical students fall in a gray area. Many of us have extensive research experience and a few, including myself, have doctorate level training. However, none of us were Clinical Laboratory Improvement Amendments (CLIA) certified – the official stamp of approval to work in a medical laboratory. Normally, this certification process takes weeks to process.

But we were not in normal times. Behind the scenes, Ochsner leadership was communicating directly with the Louisiana State Board of Medical Examiners to grant emergency licenses, an initiative which ultimately passed – an extraordinary display of collaboration that underscored the state of urgency Louisiana was in at the time.

The end result was that I was allowed to assist in the frontline efforts of COVID-19 diagnostic testing during the peak crisis days.
My role evolved over time. At the beginning, it was hands-on work. There was no shortcut for pushing a sample through the testing process. SARS-CoV-2 was sweeping across New Orleans at an alarming rate and we needed test results yesterday. We worked around the clock, picking up samples at specimen processing, loading them on the machine, troubleshooting, and then resulting it out, often late at night. At the same time, we helped train some of the newer staff, spreading out the workload so that together, we could pull ahead of this pandemic. Eventually, we caught up and that's when our roles shifted to a more analytical role. It turned out that due to the breakneck pace of testing samples, we had not actually had time to shift through the mountain of data that we had collected. Currently, our involvement is primarily analyzing our data and interpreting its clinical and epidemiological significance.

Of the many lessons I took away from this experience, there are two that stand out: Learning to adapt.

The arrival of COVID-19 did not come with a manual or a syllabus. Yes, we had the equipment which came with instructions. But to think that was enough to start testing right is naïve. There was a laundry list of challenges we faced. How would we ensure we had the proper negative pressure airflow in the testing center? How would we ensure safe handling of the COVID-19 nasopharyngeal swabs? What's the best way to approach sample tracking? How do we train staff?

Despite the overwhelming number unknowns, we were able to adjust our approach and organically adapt our workflow to where we started with a few hundred to over 1,500 sample testing capacity – and do it same day was well.

The Clinical Significance Behind a Laboratory Test.
While it was easy to get lost in the routine pace of laboratory work, the results we handled were life-changing and as physicians, we must never forget the weight that comes whenever we interpret a diagnostic test. I'll never forget how at the end of a long workday, probably near midnight, we were reviewing our last RT-qPCR run which, by all accounts, was a "good" one – meaning it had no errors. However, as we were releasing out all the COVID-19 positive results, our lead pathologist solemnly said "Too many positives…". Through the fogginess of many sleepless nights and long laboratory workdays, his comment sliced through and hit me. I was not doing a bench experiment or research. Our work would be the reason why tomorrow morning there would be tears shed and lives changed. As clinicians, we must respect the weight behind every diagnostic we order as there is no such thing as a trivial result.

My experience here went beyond just the lab. Through connections made between the medical school and Pathology department, we were able to set-up integrated Pathology days, a new experience that was inspired by our interactions with the medical laboratory department. This new initiative involves medical students on Internal Medicine Clerkship spending one day with the Pathology department and touring the Anatomical and Clinical Pathology areas. This allows students to develop a deeper appreciation of the background process behind a diagnostic test while simultaneously enabling them to learn basic principle of pathology. I'll never forget the call I received from the Pathology Department chair when he first told me about the lab and our mission objective: to become one of the lead testing centers in Louisiana. It was a mix of excitement, nervousness, and at one point, self-doubt. "Could I do this? Am I good enough?" The answer, in hindsight, was a resounding yes. When the calling came, our clinical training and mental fortitude kicked in. There was no hesitation – just doing. As physicians-in-training, we will have to someday make decisions that can change a patient's trajectory forever. It is something every medical student is nervous about. Yet this experience instilled in me the confidence that I not only had the skill set to execute such decisions, but that I have the training to fulfill that responsibility.

Awaiting a Test Result

by Shilpa Ghatnekar
Tufts University School of Medicine
May 10, 2020
Boston, Massachusettes

I had heard about coronavirus once prior to the COVID-19 pandemic. I was studying for Step 1 and was watching SketchyMicro – the infamous medical student cartoon study aid. The sketch "Kingdom of SARS" opened with the narrator saying "Coronavirus, it's not a super high yield virus". If only the creators knew that this non-high yield virus would end up changing the world.

In late February, after the Biogen outbreak in Boston, local hospitals diligently prepared for patients and everyone's anxiety levels skyrocketed. As an MS3 on the Infectious Disease service, I was terrified. The only things I knew about coronavirus came from that Sketchy video and a few articles I had read. I had heard that people were dying and grew fearful because I now found myself on the front lines of this disease.

After a stressful week on the ID service, I made it to my last day and was ready to leave when my attending asked if I wanted to see one last consult. I obliged and went to see a patient with suspected aspiration pneumonia. We spent about 30 minutes together with his family and towards the end of the visit, the patient's daughter asked whether he could have coronavirus. She and her daughters had just arrived from China a couple weeks ago and then her father became ill. It was in this moment that I felt my stomach in my throat. I thought to myself, "Did I just expose myself to coronavirus because I wanted to suck up to my attending?" My attending reassured everyone that this was an unlikely scenario. However, I couldn't get the fear out of my mind. We left the patient's room, discussed the case, and I left the hospital.

On my way home, I stopped to get groceries and received a call from my senior resident. He informed me that the patient I had just seen was being tested for COVID-19 and that I needed to immediately go home and self-quarantine until his results returned. During this time, the hospital was still sending specimens to outside labs and results were not expected for 4-7 days. I tried to hide my panic; I was in a crowded grocery store and could have exposed hundreds of people to this deadly disease. I abandoned my cart and immediately went home.

I stayed home googling coronavirus for five days until I finally received the good news that the patient had not tested positive. My experience made me realize that so many patients feel this way every time they're awaiting a test result. They're scared, curious, and anxious, and we as healthcare providers often forget to acknowledge this uncertainty. Although I wish I had never experienced this scare, I feel that I'm now able to better empathize with my patients. Hopefully, by being able to validate their feelings, I will be able to gain their trust in not only the healthcare field but in me as their future physician.

COVID-19 Shines a Light on Health Disparities

by Fatma Shalan
CUNY School of Medicine
May 10, 2020
Brooklyn, New York

People fear what they don't understand and hate what they can't conquer. Denying the existence of health disparities denies the existence that minority communities have disproportionately faced increasingly alarming health disparities. These health disparities are attributable to being historically disadvantaged in society.

Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities related to economic, social, or environmental disadvantage that are experienced by socially disadvantaged populations. Physicians and scientists have noticed and studied health disparities for a long time. In fact, recent studies have suggested that "200 black people die every single day in the United States who would not have died if the health experience of African Americans was equivalent to that of whites." It is important to emphasize how the recent COVID-19 pandemic has shone a light on health inequality and how this virus has disproportionately impacted socially disadvantaged populations most.

My first experience with health disparities began upon my admission into the CUNY School of Medicine BS/MD program, where I first learned what the term meant. From then on, I started to notice how health inequities impacted several minority groups and neighborhoods around me. Living in NYC, health disparities existed within just walking distance from one district to another. Doing fieldwork and shadowing in clinics in the Bronx, I noticed how African-American and Latino populations were more susceptible to disease due to a lack of access and barriers to care. It was evident during my field work, that certain races and ethnicities tended to have higher rates of disease due to structural barriers and access to care related to the social determinants of health. It is unfortunate that although health inequities have existed for a long time Covid-19 has shone a light on just how severe these disparities are.

According to the NYSDOH, as of May 8th 2020, Hispanics and Black people are impacted the most by coronavirus in NYC with the highest fatality rates. Covid-19 is desperately emphasizing the health disparities in minority communities and the need to establish a public health system for minorities. Although some may argue that this could be due to African Americans and Hispanics carrying comorbidities such as diabetes and coronary artery disease, this could be attributed to the institutional barriers that minority communities face historically. Minority communities can be settled in areas where there are food deserts and access to healthy food is scarce or expensive compared to the cost of living.

As a future physician, with a goal to serve the underserved, as my school has instilled in me, I plan to work on making a change to provide these communities with quality care. I would like to give these communities a voice in which they are heard and a voice that allows them to speak out and give back to their communities as well. Although the Covid-19 has led to many unfortunate circumstances, it has exposed the health inequities minorities face and the need for change.

From Within

by Carter Pesson
Louisiana State University Health Sciences Center
May 5, 2020
New Orleans, Louisiana

The streetcar rattles the bars on our windows like a guard's baton on prison bars. Those same bars that kept us safe in the New Orleans heat now keep the world safe from us—from the virus we carry. Three medical students in a century-old Uptown house, quarantined from the world.

The days seemed to pass slower now. Later wakings turned into later nights. The mixer in the kitchen whirred more regularly than ever before, making bread to sustain and comfort the sick. Across the hall, you could hear wheezing. Breathing so strained it sounded like a sob. That night, her breathing became so strained that we went to the emergency department. Calling prior, asking for protocols, the emergency department had none. Hours waited without precaution, without heed for the well, for those without the virus. The physician administered no test, provided no relief, and sent her home with an inhaler prescription. Probably bronchitis, he decided. A pandemic was declared later the following morning.

Another day or so passed before we were able to get her a test. It was a forty-minute drive to the nearest facility. Forty minutes. They had protocols, asked a thorough history. The provider treated empirically for potential pneumonia, as he acknowledged test results would take around five days to return.

In the following days friends dropped off groceries on our porches. Video-chats were all too common and virtual classes began. They became more common than the texts we all too often send haphazardly. We cooked, laughed, cried, and waited. Waited, oh so patiently. The wealthy and famed received their test results. We did not.

A phone call. No test results yet. Maybe Friday. Friday came and went. No test results yet, likely within the next week.

Our household quarantine will be over by the time the results are returned.

Meanwhile, cases in our city—our beloved bowl—are running rampant. Tests are not available, even to those all too familiar navigating our healthcare system. Masks are lacking at our hospitals. Information is scarce. These abhorrent realities are surprising to none.

New Orleanians are accustomed to these types of disasters. Our freezers are well-stocked and there is always an abundance of wine in our cabinets. We joined the masses, our neighbors, on our porches. Sitting in the balmy, humid river breeze that smells of springtime pollen and hope. You can hear laughter and song among the old oaks; you can smell roux, cooked with love and boredom, on the stove.

All is still beautifully broken here.

The Saturation of Misinformation

by Daniel Rosas MD
University of Texas Health Science Center at San Antonio, Internal Medicine
May 4, 2020
San Antonio, Texas

Our ears as a glomerulus during a viral pandemic. Filtering the information.

"X drug is now the standard of care and mortality was drastically reduced!" We all are waiting to hear this statement, but at the same time, we've heard a variation of this phrase twice per week for the past few months. This is because of the vast amounts of information that are easily accessible, which leads to this kind of misinterpretation.

I will start my internal medicine residency in July. I wanted to begin my residency with all the information I could gather about the pandemic. I've been following all the virus information since December and I was part of the group of people that thought this was just a mild upper respiratory infection. In January I heard a podcast about an infectious disease doctor/epidemiologist agreeing with what I was thinking about the virus. This doctor said that the only thing the US had to worry about was to get the flu shot. He, I and so many more were very mistaken.

As soon as the WHO organization declared a pandemic, I began writing a manuscript for a potential treatment being studied. I spend most of my days gathering information on COVID-19. Wake up, scroll thru social media to see what nonsense was being said in there. I was able to follow the new studies that were being published. I even tried visiting clinicaltrials.gov to try to stay up to date on every single medication that was being tested, this was just not possible and honestly, I had to open my first aid book to look up some of them. I turned on the TV and watched the news for the number of new cases per country, new mortality rate per country, risk factors that increase mortality, potential treatments, etc. Driving my car and turning on the radio for the news to gather some more information, looking up the new articles that came out, listening to some good podcasts such as Plenary Session, The Curbsiders and Making Sense, to see how the great minds are discussing the pandemic, go through my texts and see the hundreds of pictures and links from friends and family either stating facts or asking questions, and last but not least going on the president's twitter page at the end of the day to see what information was being given to the public through this channel. The conclusion from all of these channels was the same, there is way too many misinformation.

The saturation of misinformation is a result of the amount of communication channels and how easy it is to spread information even if it's not accurate nowadays. This will only continue to grow. This is where we come in and make a difference. We are a very useful tool to filter the excess information. Our medical education gave us the useful tools such as public health, biostatistics, epidemiology and other tools to look up information, and analyze it to properly say what is true and what is not and hopefully end the spread of a never-ending cycle of ¨someone told we that …¨. The amount of the population saturated with misinformation contributes to the anxiety that this pandemic is generating, so impacting at this level can help control the next anxiety pandemic.

Isolated one and two

by Katherine Chemakin
Albert Einstein College of Medicine
Paintings

I painted these pieces during the pandemic. It was a reflection of the cold and almost daunting emptiness that the city was experiencing. I feel that the works are cold, isolated, confined and unsure, similar to what everyone was feeling.

Our Voices have No Outlet

by Dawn Zhao MD
Montefiore Medical Center, Internal Medicine
April 28, 2020
Bronx, New York

Because so many of my friends and family have been checking in with me to see how I am doing, I wanted to post a "status update". For those of you with whom I have lost touch, I am a currently working as a senior Internal Medicine resident in a major NYC hospital. This means that I am almost done with my training to become a doctor who can take care of adults in the primary care setting (clinic) as well as the general medicine wards in the hospital.

I was always proud of myself for being a positive, bubbly, and energetic person. If you were having a bad day, I would appear in the hallway ready to flash a wide smile and wave my hand aggressively at you with my signature wide, floppy style. If you asked me how I was doing, it was always "good!" Then it turned into "ok!" Then just a halfhearted "ok." Now, it just depends on how exhausted I am or how many of my patients are dying.

The hardest part about working in health care and taking care of COVID patients is that I don't have control. I can't control who will get sick or who will get better. We don't have a miracle cure, treatment, or band aid. If you crash and your lungs fail you, the best I can do is try to get you on a ventilator (if we have any left). Worst of all, is when a young person goes into cardiac arrest and there's nothing more you can do to bring them back, which is now happening more often than before. For those who are relatively stable—I don't feel comfortable about letting some of them go home because something feels off even though I know there's no good reason to keep them in the hospital—after all, they have no "inpatient needs". But the part that kills me is that there are people living in our country who have no sense of the gravity of the situation in NYC (or for what's coming...). Our government officials and media are either hysterical or falsely reassured, and healthcare workers can't just go on television to convey the honest truth because all hospitals have a strict no media policy. Our voices have no outlet while this virus rapidly spreads across our country.

After half my census turned into COVID patients, I found myself crying a lot. I go into the shower, and I cry. I sit on the train, and tears fill my eyes. I am on the phone at work trying to explain to someone with no medical background that I can't find PPE for whatever reason, and I have to stop talking for a few seconds so the lump in my throat can fade away. I know the surge, the peak, the rapid influx of sick patients is yet to come (even though they've been coming!), and I am trying to brace myself. I am scared for the patients I see; I am scared that my co-residents might get sick; I am scared my husband is going to catch it from me. I feel as ready for this as an ice cube walking the plank to Hell.

So when you ask me how I am, I will probably say that I am not ok. Nonetheless, I appreciate that you are checking in with me because you connect me to a world that is not filled with uncertainty or death. Even though our government has failed in protecting health care workers, I have friends sending me masks from across the country and uncles from China in the process of mailing me hundreds of items of PPE for my colleagues. I am surrounded by friends and colleagues who are working around the clock in the hospital (most of us have only had 3 days off since the month started). I may not be the same person as I was a month ago, but you remind me that I have made good friends in all phases of my life. For you all, I am thankful.

Reaffirmation During Times of Ambiguity

by Rachel M. Turner MA, MS
Tulane University School of Medicine
April 28, 2020
Houston, Texas

As a young impressionable child, the first time I made the connection between my dad's white coat and the way he spent his days in it forever changed the way I perceived what before was simply my father's work attire. This seemingly insignificant association became the most constant and perhaps most influential factor in my decision to pursue medicine, because it opened my eyes to the opportunities available to make a positive difference in this world. As I matured, that white coat began to take on different meanings. Throughout my adolescent years, the white coat represented ambition—a symbol of hard work and its rewards. But now, the white coat represents a broader idea. It represents a connection between science and the human condition, and most importantly my burning desire to be a part of that powerful connection.

The Merriam-Webster dictionary states that medicine is "the science dealing with the maintenance of health and the prevention, alleviation, or cure of disease." However, for me this definition is too finite and simple. There is more to medicine than what defines it. The field of contemporary healthcare is increasingly shaped by the realization that social, environmental, personal, and structural factors are just as essential as basic biological processes to understanding a patient's illness and suffering. Through COVID-19, the nation is seeing just how deep health disparities run. There are clear discrepancies between different socio-economic groups when it comes to housing instability, food insecurity, social isolation, and prejudice and discrimination. Ultimately, already-marginalized populations, including people of color and low-income communities, will witness disproportionate disruption to their lives. As future doctors, it is imperative that we recognize that one's health is a product of their interactions among biology, genetics, behavior, relationships, cultures, and environments.

This pandemic really hits home on why I wanted to be a doctor in the first place. Simply put, I want to help others. However, I find myself in constant limbo trying to balance studying and contributing where I can during this time. All you have to say is the word STEP 1 for any medical student or physician to understand the rigorous emotional and mental time commitment that comes with preparing for this exam. "Everything else can wait." Never in a million years could I have imagined a pandemic would happen during my dedicated study block. Some would think it's the perfect scenario. All you should be doing is studying, and now that's really all you can do. But for me COVID-19 has challenged my ability to keep my head down in the books for 8+ hours every day. I constantly think how could I be so upset about the uncertainty of an exam, when there is so much uncertainty about the lives of thousands. While my STEP 1 exam date has been delayed due to Prometric closures, I consider this to be a minor problem.

While I am eager to help, I recognize that where I am in my medical education limits that. I applaud my current institution, Tulane School of Medicine, and other medical students around the country for thinking of innovative ways to help. From creating and collecting PPE to assisting those populations most at risk, such as elders, with essential needs. There are ways for us to get involved. While we as medical students will continue to contribute where we can, I admire and appreciate all healthcare professionals on the frontline.

Thank you. Thank you for the sacrifices you make, your dedication, and your courage.

If You Take a Pill, You are at Risk

by Carrie Crook
Tulane University School of Medicine
April 24, 2020
Mobile, Alabama

A Personal Reflection on Health Information Dissemination in Black Communities.

As a medical and public health student quarantined at home with two physician parents and a new college graduate sibling, we are able to speak about the COVID-19 pandemic research, guidelines, and epidemiology around dinner with relative ease. Everyone in my immediate family has experience with interpreting research and data; in fact, my sister's first scientific paper was published in a journal a few months ago. In this way, because of our education levels, we are privileged. We can understand current recommendations; we can read the new research being produced daily; we can determine how best to alter our life practices to minimize our risk of contracting COVID-19. Living with an immunosuppressed mother, for my family shelter-in-place has meant nearly constant handwashing, disinfecting any and all groceries or packages that enter the home, quarantining my father to one side of the house whenever he sees patients. We know how to wear masks and to check for a proper seal. We know how to properly don and doff gloves after quick grocery store runs to prevent cross-contamination. Most importantly, we know how devastating COVID-19 to could be to our family, and we understand why we must take these strict measures.

Americans have had a near-constant flood of COVID-19 related information from daily presidential press conferences to statuses on every social media platform. Misinformation is abundant. My chapter of Alpha Kappa Alpha Sorority, Incorporated, has attempted to combat, this misinformation by creating a COVID-19 panel to present best practices, answer questions, and provide recommendations for our chapter members in Mobile, Alabama. Alpha Kappa Alpha Sorority, Incorporated is comprised of Black and African American, college-educated women who strive to achieve "Service to All Mankind." Even amongst my highly educated and capable Sorors, it was very clear that there has not been a consistent message tailored for the Black community on who is at risk and how can we best keep ourselves and our community safe. I was particularly struck when a physician on the COVID-19 panel in our chapter meeting summarized her recommendations with the statement: "If you take a pill for something, you are at higher risk." With that single phrase, every person on the Zoom conference understood the gravity of the pandemic.

While every woman in my sorority has obtained her college degree, we know that education does not fully protect us from all of the health disparities affecting Black women. Moreover, we all have cousins, grandmothers, siblings, aunts, uncles, and friends, who live in these low-income communities being hardest hit by the COVID-19 pandemic. This fact is evidenced by the "Condolences" section in our chapter newsletter, which has tripled in size in just a month, and our "Get Well Wishes" which have grown by an even larger margin.

Sure, Black families may have heard the surgeon general read data on health disparities in Black and Latinx communities on the news. We heard him tell us to wash our hands and take personal responsibility "for your big momma." What we have not seen is how our communities can do these things; how Big momma and them can stay safe from COVID-19 and while still managing her other comorbidities. The burden of "how" is placed on Black family members, who have the tools to interpret research, data, and guidelines. We are tasked to put this information into terms that all of our family members can understand with our regional dialects and vernacular. The responsibility falls on us to make sure that when our older family members leave the house, they place their mask on over their mouths and their noses, even though it is harder to breathe. We are tasked to stop chain text messages telling Black communities that taking future COVID-19 vaccines is akin to enrolling in the new Tuskegee Experiment. We are tasked with explaining what exactly a comorbidity is. And what happens to the families that are not as blessed as mine? What happens to the plethora of families that cannot call their niece, nephew, or cousin the doctor?

I pursued medicine because I have seen health disparities in my family and in my community firsthand. COVID-19 is making these disparities even harder for anyone to ignore. While, I feel motivated and energized to dedicate my career to achieving health equity in this country, right now, I also feel overwhelming fear. This pandemic has the potential to devastate my family, just as it has devastated Black families across the nation. But, I, too, feel some hope. Auto companies, streaming services, delivery companies, and insurance providers are flooding the airways, social media platforms, and radios with advertisements, tailored to reflect our new reality. These commercials, while bothersome, tell me that the United States has the media infrastructure available to provide culturally appropriate health education to the our Black and Brown communities. And just as my fellow sorority members were able to effectively explain risk and comorbidities in less than ten words, I am confident that the medical and public health community can create a cohesive, unoffending message to deliver to our diverse communities.

Bleeding Hearts

by Margot Gardin
Albert Einstein College of Medicine
Photograph

Lamprocapnos spectabilis, a flower also known as "Bleeding heart," blooms in solidarity in this image captured in Central Park at the height of the pandemic.

Cheating on Social Distancing and Other Health Concerns

by Lewis Wong
University at Buffalo School of Medicine
May 2, 2020
Buffalo, New York

My father has the biggest heart, but he wants to cheat on social distancing.

I know he has his reasons. As a young man, Dad was in the restaurant business, so to him, that meant that he was in the business of making people happy. Every day, he would wake up at the crack of dawn so that he could be at the market when it first opened. There, he would spend hours deliberating over the ripest fruits and vegetables, the choicest cuts of meats, the freshest fish, dreaming of his diners' smiles as they take that first bite. And my father didn't take this level of commitment to only paying customers: when it came to providing hot, freshly cooked meals to charity, he delivered his meals with the same gusto. Not content with purchasing, preparing, and packaging all the food for free, he would also pile the boxes into our beat-up old minivan, so that he could bring his feast directly to the people he was serving. He was famous for just bursting through the charity's door with an ear-to-ear grin, serving food and doling out handshakes and hugs for the people he loved.

The trouble is, though, my father still tries to carry on in his old ways, pandemic be damned. Although the restaurant is long gone, he still tries to arise at an ungodly hour to continue his daily pilgrimage to the market, although this time he's scouring the aisles for my mother's and my relatives' favorite foods, dreaming of the family meals he hopes to prepare. As his vision grows dimmer, he no longer drives all around the city to multiple different charities, but he still fills his car with boxes of meals to give to the local church, and wants to burst through that door, handshaking and hugging everyone.

In the end, it took me at least three heart-to-hearts over FaceTime – my medical education took me far from home - but I think he's finally catching on. In this uncertain pandemic-filled world, things are changing, and my father now knows that he has a responsibility to be mindful of his own health, if not for himself, then for the sake of those he loves, and those who love him. It is true that as recently as last year, he could spend oodles of time in public, and shake as many hands and give as many hugs as he wanted, but doing these things today could put him at risk of both catching and spreading disease. Many types of social behavior that he once considered basic social etiquette—previously innocuous things such as holding the elevator, kissing babies, and even opening the door for someone—could all be considered poor public health practice.

And I am catching on to a few things too. I learned that even as our panicked and disease-stricken society changes in new and scary ways, some things don't change, in particular our responsibility as medical students to pass on the knowledge given to us by our wiser and more experienced attendings. While as medical students, we are not full-fledged physicians yet, we still hold an ethical duty to our communities to help lead the way in safe health practices. Perhaps the hardest place to lead this way is with our own parents and families, who nurtured us and kept us safe as children; now it is our turn to nurture them and keep them safe. I thought I was years away from the most difficult conversations with my folks; prior to COVID, I had mostly exhorted them to get out of the house, to exercise, to socialize, to keep their health and their spirits up. Now I implore them to stay home and model doing so for them. To the same relatives I feared I'd have awkward political conversations with over a Thanksgiving turkey, I am now politely explaining via text message exactly what bleach does to the human body if consumed. To my friends – who are sheltering in place a half-mile away but might as well be a thousand miles away, as visits would be risky here in Queens – I think about how I choose to interact with them as I look carefully at my social media posts to ask if I'm really modeling good behavior. While I eagerly hope for the day this emergency passes, I know that this awareness of personal ethics and leadership by healthcare providers in public health will shape the physician I will be for my patients and community.

Of Triage, of Justice

by Emily Chase
Albert Einstein College of Medicine
March 26, 2020
Bronx, New York

A few weeks ago, I had an in-person class on public health disasters as part of my Masters in Bioethics. Now, I find myself holed up in my room for the past few days. My parents were supposed to fly in last weekend to New York and have now decided to stay home. Synagogues have been cancelled, weddings have been cancelled, schools have been cancelled. As I contemplate the thought of taking class online in the coming month, I think about what it means to be able to communicate on the computer in the midst of a pandemic. In the Fall of 2019, I had decided to take a gap year to pursue a Masters of Bioethics. Little did I know that these bioethical principles I was learning, of triage, of justice, of the fair allocation of resources, would soon become more than an abstraction. Watching the bioethical principles I have learned this year coming to life has been more terrifying than I could have imagined.

The COVID-19 pandemic has unfortunately provided ready material to write about for class on the application of bioethical principles. The question of the just distribution of limited testing resources, of limited ICU rooms, and, perhaps most importantly, of limited ventilators is a serious bioethical dilemma that physicians and nurses are facing in hospitals across the country. More recently, the shortage of proper protective equipment for healthcare workers brings up the bioethical question of how much healthcare workers should be required to risk their own lives in order to save others.

My course directors are working to head the ethics committee at Montefiore and create fair protocols to help deal with this heartbreaking crisis. For now, classes are on Zoom, while our instructors scramble to balance teaching classes with creating triage protocol for the hospitals struggling with limited resources. This experience has taught me the importance of being prepared for the unexpected and how crucial health care policy is in saving lives. It is always terrifying to watch unfortunate abstractions come to life, but when we are able to properly prepare and create an ethical framework and policy that is fair and just, this is the first step to moving forward. This terrible situation has made me want to be involved in creating larger policies that will help both in times of calm and in times of crisis.

You Might Save a Life

by Leah Naghi MD
Montefiore Medical Center, Internal Medicine
April 24, 2020
Bronx, New York

Unedited thoughts on COVID-19

3/30/2020. Home. Emails, you will probably be asked to work hours that are never deemed acceptable. You will do work that is substandard, it's not you, it's the circumstances. Forgive yourself now. Wow. I'm picturing myself as a bloody field surgeon described in Ret. Colonel Hackworth's South Korea War recounting, exhausted and numb, looking up at a camera with dead eyes and a butchers knife in hand. You will do work that feels wrong at times, just get over it. I will? I knew it in my heart but I still don't want to believe it. I'll deal with that later, honestly it's too upsetting to think about for now. I'll complain to some coworkers instead. Can you believe this? No. Conversation is left there because there's literally nothing we can actually do about it. Sleeping, finally. Comfortable. Warm. Dreaming. Waking. Wondering. Wandering? I'm at work. Someone needs me. No I'm not, I'm still in bed. What time is it? Phone says 1:40 am. Texts and emails have piled up again. Work group chat is frustrated, friends are chatting, mom is asking if I'm OK. I text her back, going back to sleep. Everything OK? It is. Love you. Love you. Toss and turn. Up at 5:30, makeup on the eyes because it's important to not look dead behind a mask. Mask has wreaked havoc on the rest of my face but at least no one can see that. Another reason to be good about wearing it all day… Entering the hospital, stopping by the hospital's conference center to see how non-patient areas are being converted into wards. This is wild… Rounding on patients. Some better, some worse. Some stable. Tired. De-gown. Need to go back into room, patient took off their oxygen in their delirium. Nurse can I have another gown please. Nurse rolls her eyes, you have to go to the middle nursing station. OK. Nurse can I have a new gown please. Nurse number two rolls her eyes. OK. She takes out her keys and unlocks a cabinet. Here's one. Oh thank you thank you. Back into patient's room. Mr. X, your daughter wants to call you. Where is your phone? This poor man will die alone. MR X YOU HAVE TO KEEP YOUR MASK ON CAN YOU HEAR ME. He will die alone. He will die alone. Should I stay and endanger myself or leave?

4/3/2020. Rounding on patients. "Mr. Y looks bad." My intern looks worried. I'll come see him with you. Mr. Y indeed looks "bad" he is breathing at a rate of 50 per minute and visibly using the muscles between his ribs to do so. Mr. Y is not over the age of 58 and I do not want him to die. Please don't die. Calmly, Mr. Y you look like you're working to breathe. We're going to get some extra help for you. Calm. Calm. Please do not die. Calling in the intensivists to intubate him. Reminding the patient to speak to his family quickly before we sedate him. Calm. Not telling him the thing that is on my mind, that this may very well be the last conversation he ever has with his family. Moving on. Because we must. As my attending remarked earlier today when I spent "too much time" on this dying patient, this is a marathon. Suck it up, buttercup. How are our other 11 patients? Ms. A is "chilling on room air" according to my intern, but everyone else is on some form of oxygen. Except Ms. M, who passed overnight. She did? Yeah, around 3 am. OK. Surgery-resident-turned-medicine-intern is looking at their phone, we got another email. What does this one say? New protocol. Some doctors in the hospital are finding that steroids help. So we're supposed to give them to pretty much everyone on nonrebreather now. Oh, OK. What's the evidence behind it? No, there isn't anything solid. But it seems to work so we're trying it. Well, I'm willing to try most things to avoid intubation, it makes sense per the mechanism of disease and I trust the attending this came from… so sounds good to me. I'll keep an eye out for more emails in case there are any other big changes to the way we treat the disease in the next hour or so. Lunch. Pizza, donated. Bless your souls.

4/8/2020. Home. Tested positive for COVID. My olfactory bulb has been attacked viciously and it better make a comeback. Ugh. Alone, tired, smell-less and taste-less. And this from working 90 hours. But you know what? Screw self-pity. My disease is indisputably mild. Good. I don't have anyone at home I am worried about giving it to. Good. I don't have an abusive partner at home making this even harder than it already is. Good. I don't have children at home I am worried about and whose education I am responsible for. Good. I don't have anxiety over job security. Good. I don't have elderly parents or grandparents at home or a fetus inside of me who I could give this to. Good. I don't have a chronic illness that I've been stressing over. Good. I don't have chronic pain or physical restraints that would make my job harder. Good. I do have a family who checks in on me regularly and makes sure I am intact physically and mentally, and respects my work schedule. Thank God. I do have a greater network of people through technology and social media who send much needed encouragement. Good. I do have the opportunity to work with a multidisciplinary team of doctors and nurses who inspire me every day. I am so blessed.

4/23/2020. Reflecting, I have been at home alone for 3 weeks. Not one single face to face conversation with another human, unless you count the grocery store cashier and my security guard, both of whom I flee from as quickly as possible to avoid hurting them. Online, people are asking for my perspective and it boggles my mind how different my responses are now than they were just a few weeks ago. I answered with such passion then, having seen patients just minutes or hours ago in the flesh, dying unnecessarily due to lack of known treatments and lack of manpower/equipment. Now I'm just another person under quarantine, figuring out how to amuse themselves in their apartment. I quote stats that I get from my hospital's town halls, but I don't have any new patient anecdotes or specific pleas for help. I don't even know what the most recent protocols are for patients. Apparently, we're not giving patients plaquenil anymore because the evidence is so weak? Many of us definitely saw that one coming, but I digress. Sniffing some cloves to "physical therapy" my olfactory bulb back into existence (there's a paper on it, alright?) (Also, I'm desperate), I contemplate how out of touch I am. I'm ready to go back, feeling like a Marine who was sent home but would rather be overseas taking fire to cover for her buddies. Ask me how I'm doing next week when I'm back in the ICU.

We will win. Just remember to reach out to the people you know, even… no, especially if you haven't spoken to them in a while. You might save a life.

Six Feet Away or Six Feet Under

by Charles Bradley
Albert Einstein College of Medicine
Photography

An Ode to the Stoops of the Bronx

by Julia Holber
Albert Einstein College of Medicine
May 12, 2020
Bronx, New York

I had never seen so many people together on their stoops.

That was the way I first described the Bronx to my family in Pittsburgh, inquiring about my new home, a week into medical school. I'm not sure I had ever used the word stoop before.

We had spent the first week of school learning about the dismal health statistics of the Bronx. The high rates of diabetes and hypertension, the structural racism, the poverty. There's no denying these facts and numbers. Especially now.

But the Bronx didn't greet me with health statistics. She greeted me with music thumping out of every car and every window, singing strangers, a beat in every step. She addressed me as "Hulia", with the Spanish Jota, not the English J and introduced me to her young daughters who sang songs to me, dressed up as Elsa, in the middle of nail salons. She asked me in Marshalls dressing rooms if a dress made her look fat and laughed with me when we realized the sleeves were far too long. She looked at me with sincere, tired eyes, when we talked in grocery store aisles, late at night, lamenting the lack of our favorite beer.

Most of all, the Bronx greeted me with crowded, vibrant stoops, communities within themselves. Walking down the summer streets, looking out the window of the BxM10 at dusk, on every apartment building, corner store, and school, the steps, sometimes crumbling, were filled with neighbors, friends, young and old, loud and laughing, heads tipped backwards, hands around shoulders, close together.

Months later, at the end of my first year of medical school, that closeness is lifetimes away. Now, the first place I go each morning is a Twitter thread by Einstein's Dr. John Greally, tracking the COVID-19 death tolls by borough. Each morning, this thread, with its simple colored graphs, jolts me awake, a new ratio waiting to be seared into my head.

His first post was on April 9th, weeks into the already raging pandemic. The Bronx led the five boroughs in deaths per capita, with 1 in 1,262. Yesterday morning, the Bronx still leads.

1 in 438.

Waking up to that number punches me in the gut, hard, no matter how predictable it is or was. My boyfriend and I, studying late at night in early March, he looks over at me, his dark eyes far away and deep in thought. "It's going to be really bad," he pauses, "when it comes here." We are only preclinical medical students, but we work at the free clinic on Saturday mornings, we meet the people working 3 "essential" jobs, not one of which offers health insurance. We take the multiple busses and trains to get just about anywhere, we know how sparse fresh produce can be. We shadow pediatricians and quickly learn that every kid has asthma here, in "Asthma Alley," surrounded by warehouses and major highways, whose construction in the 1960's and 70's abruptly uprooted 60,000 residents, decimating neighborhoods. So, we sit in silence, on that late night in early March, trying to grasp the enormity, the history, the weight of what is to come.

Those Twitter graphs force me to scroll and eventually, usually without my permission, lead me to images, videos of white men, angry, their families, dozens of guns, storming capitol buildings. Across the country, crowded parks, and funerals, and protests. I guess they don't wake up to colored graphs.

And when I stop scrolling, return from the typed words on my screen to the thoughts in my head, that Twitter thread brings me back to a conference last May, to a plenary session on anti-racism delivered by family physician and public health expert Dr. Camara Jones, who completed her residency at Einstein. So many of her points move me to tears, but I write down her most salient and think of them often.

"Racism saps the strength of the whole society through the waste of human resources." Now, replace resources with human lives. 1 in 438, from COVID alone. "The blinders of racism," she continues, "have made some folks think that there is no genius in the barrios or the ghettos or the reservations… but of course, there is genius in all of our communities."

There is genius in the Bronx, there are the hardest workers I've ever known. There is music, and resilience, warmth, and culture, and love. News headlines and social media posts distill this down to black and brown, minority communities, underserved areas hit hardest. Read these words, take them in, but don't forget that these losses have cost us genius. They have sapped the strength of our whole society. I am not from the Bronx, nor pretending to be, yet I feel lucky to have been a part of it before so much of that genius was lost.

As the BxM10 continues down into Manhattan, the summer sky turns to orange, the cooler evening sets in, and the people on the stoops disappear, turn into hurried walking and Airpods and urgent phone calls. I've been so many places where the pace is fast, the porches are big, the neighbors come and go, but the Bronx, she greeted me with stoops I had never met before, so many people on just a stair or two, vying for room, and closeness, and warmth.

I have come to feel a sense of relief on the subway, on the bus north from Manhattan, back to the Bronx, when the stoops become full again.

The stoops will become full again.

We'll reemerge, look around, we'll mourn who's missing, and eventually, I hope, we'll huddle even closer to fill the extra space.

Essays and Reflective Pieces

Untitled

by Jessica Zhang
Albert Einstein College of Medicine
Painting

We Will All Come Together Again

by Unknown
Albert Einstein College of Medicine
April 6, 2020
Bronx, New York

One year ago, my classmates and I were wrapping up our last preclinical courses before retreating to study intensely for our first national board exam. In that important time of our lives, all we could see was our computer screens, reviews books, and maybe a friend or family member for an hour here and there. We were completely consumed in the present, with very limited ability to tend to non-essential tasks that did not help contribute to our goal of performing well on the exam. There was no time to fully understand what our lives would look like after we sat for our exam and embarked on a new path as a third-year clerk. However, we did not stress about the unknowns of third year because there was a more essential task at hand, and we knew there was a plan for us moving forward. Others had been there before, and we trusted that we would follow their lead to continue on our journey to becoming physicians despite not knowing all of the nuances of the path that lay before us.

After sitting for the exam, we all congregated back on campus and entered a new period of individual growth that would change our person and begin to set the foundation for the way we practice medicine and hold ourselves as professionals. Day after day, night after night we have worked tirelessly to learn how to deliver care on the front line, and home in on a specialty that we love so that we can apply for a residency position. As the year continued on, the rate at which time passed appeared to accelerate. Here we are, one and a half months away from completing the most transformative year of our undergraduate medical education. Yet, we are all isolated and communicating over the internet. Very few people in the world were crazy enough to even claim that this type of event would happen in our lifetime, yet alone predict that it would happen right now.

Sitting on the other side of the onset of this unprecedented event, one can say it was obvious that this would one day happen. Given the velocity with which humans, goods, and services traverse the globe in the modern economy, we were due for such an event. While that may be true, one can apply the same argument to predict a plethora of events. Most scenarios will eventually play out, one day.

As I write this, I have a few thoughts that I would like to capture. First, let's all be thankful for our family, friends, and the experiences that life has granted us with. Times like these make us all revert to the survival mode, unable to see a way forward due to the seemingly insurmountable uncertainty of the present. Take a minute to breathe. Second, we should take a step back and realize that this type of event has happened before and will most likely happen again. However, the rate at which people can move across borders in the twenty-first century far exceeds that of any other period in recorded history, which presents a formidable public health challenge as we move forward. It is crucial that we first get through this wave of disease, properly care for those who are infected, and mourn those that we lose. As we move forward and restore some normalcy back into our lives, governing bodies must come together to develop protocols that assume we will face an entity leading to high morbidity and mortality rates that is completely unbeknownst to man, unlike anything we have seen spread to humans in the modern era. This may be a flavor of conventional pathogen but could also be another marvel of biology that we have not yet discovered. Just as our ancestors were struck by the plague before germ theory was discovered, we could be distanced from each other by an entity that we have not yet conceived, measured, or identified. Understanding how we will deal with such a problem at a global level is essential for borders to open unrestrained, as they were just four months back.

Ultimately, it is key for us, future physicians of the United States of America, to process the present and think about the saying "the only constant is change." As much as we grapple with the uncertainty of the remainder of our clerkships and final year of undergraduate medical education, we must acknowledge that those who came before us also dealt with change and uncertainty to give us the scaffolding that we stand on today. Consider this the first of many changes our generation of physicians will face and remember we can all grow immensely, helping to shape a better future where our successors can thrive and reach new heights. For one day, we will all come together again to face another unprecedented change.

What Keeps Me Going

by Zaki Azam MD
Montefiore Medical Center
April 21, 2020
Bronx, New York

This week I was called in to the Emergency Room to cover someone who was sick. Being on the front line of a global pandemic at a tertiary care center in one of the most populated cities in the world is not only surreal. It's scary. Not the type of scare you get from running out of groceries at the supermarket. I was scared of potential cases I was coming into contact with, scared that my mask wasn't fitting properly on my face, scared that I wasn't wearing the correct type of mask to begin with, that I would touch it with dirty gloves by mistake. My face literally hurts from wearing a mask 13 hours a day. My head hurts from trying to find a mask in the chaos of people frantically searching for it. I am physically exhausted because the personal protective equipment hurts my body, the constant use of sanitizer dries out my skin, wearing a gown over my scrubs makes it hard not to heat up. I'm mentally exhausted from all the confusion and disorganization that change how we practice just about every day, which expectedly occur when dealing with something we just don't know enough about. I am frustrated by the inefficiencies that have highlighted such a broken health care system in our country.

And I'm not alone in this. The doctors, nurses, phlebotomists, technicians that work tirelessly day & night risking their lives to look after the infected is what keeps me going and reminds me why I love doing what I do. For the new batch of doctors that find out where they begin training next week, let that be motivation for you too, that even in the face of difficulty regardless of where you end up, it's the care for people that brought us into this career and is what will keep driving us forward.

Lastly, please protect yourself. Wash your hands, cover your mouth and stay home if you don't have a reason to be out, it really is that serious. You may not feel sick enough to, but being a carrier to someone else can be far more consequential. At the end of the day, medical workers don't have the luxury of going home and quarantining, and that's alright. But if everyone does their parts, it makes it a lot easier for us to do ours, not just for a week but for a lifetime~

A Fragmented and Unjust Health System

by Sarah Hill MPHTM
Albert Einstein College of Medicine
April 23, 2020
Bronx, New York

The coronavirus pandemic has personally manifested as a torrent of both guilt and motivation. With that has come an overwhelming frustration with the greater structures that have influenced the destructive path of this virus. In many ways I have also been fortunate to form new connections and share in the strength and solidarity of communities around me. I've organized a research team of 30 Einstein medical and NYU law students to create a working database that outlines the legal implications and insurance coverage realities of providing reproductive health services including medication abortions via telemedicine during COVID-19. I joined a research response team from my alma mater working on compiling and developing contact tracing guidance for the WHO's Global Outbreak Alert and Response Network (GOARN). I launched this journal too. By now I've accepted more readily that my reactions and feelings will vary throughout the course of this pandemic. I've also recognized that to experience all of these things is okay.

And with these ruminations, I have also been constantly considering my privilege. To have the ability to socially distance and to be in good health. To return home to my family and to have a network of friends and colleagues to connect with virtually. To be financially secure and to have good health insurance. To have running water and a roof over my head. This is what it looks like to have great privilege in the time of COVID-19. Yet many of the communities around me, many peers and close friends, patients in the Bronx and those from New Orleans do not. As such, the current coronavirus outbreak has strengthened my convictions to pursue a career as an infectious disease (ID) physician in a world with universal healthcare.

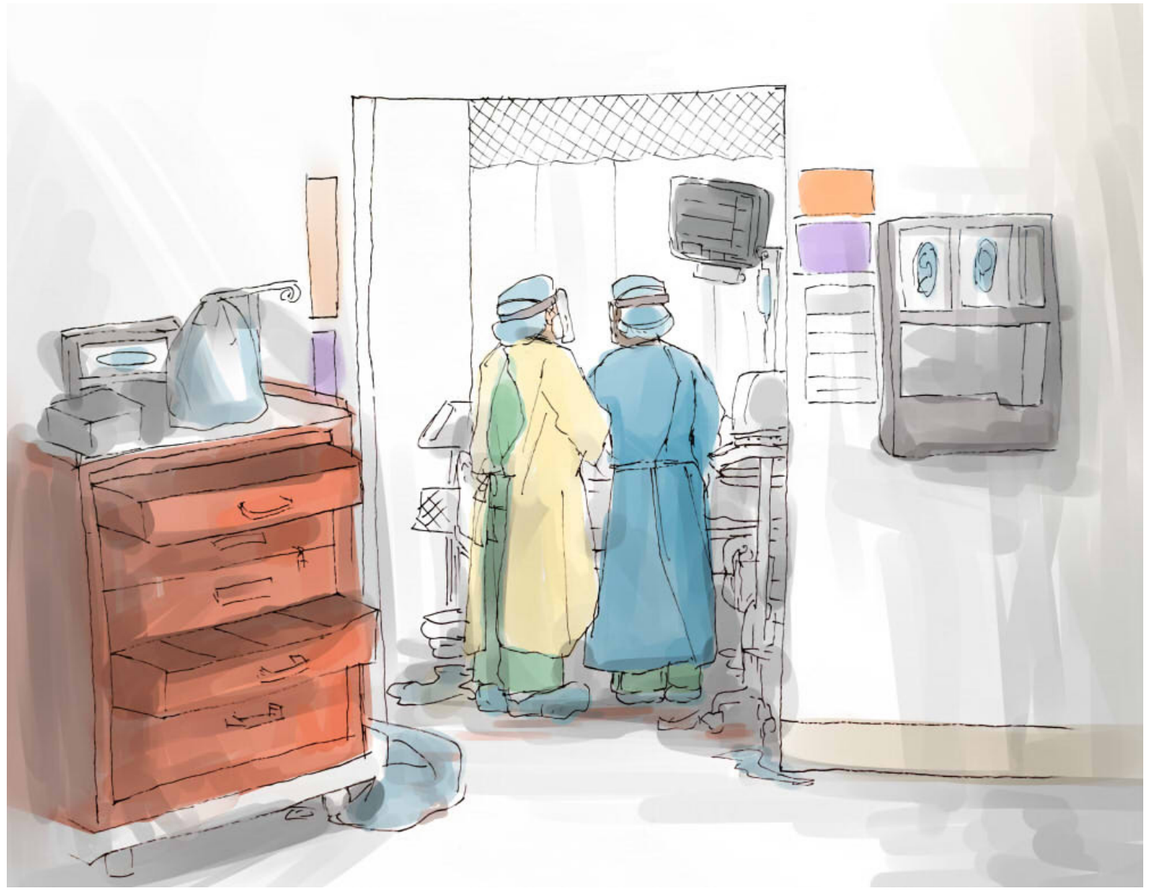
Before starting my first year at Einstein, I completed a Masters of Public Health and Tropical Medicine at Tulane University. The belief that healthcare is a human right has guided over five years of ID research on neglected tropical diseases and population health research on health disparities. When I came to Einstein, I saw an opportunity to turn this long-held conviction into substantive action, and I became involved with the organization Students for a National Health Program (SNaHP). Through organizing and direct action we advocate for a comprehensive single-payer national health program in the United States, such as Medicare-for-all.

The coronavirus pandemic has exposed the frightening reality of a fragmented and unjust health system that millions of under and uninsured Americans contend with every day. It has in many ways confirmed the harmful truth that health is not a human right in the United States. In the face of this pandemic, the shortfalls of our current health system are exacerbated by the lack of universal sick pay, the uncertainty and obstacles that undocumented immigrants face when accessing care, as well as the inhumane conditions experienced by those who are incarcerated. Considering the long history and persistence of institutionalized racism in the US, the early statistics that show us COVID-19 morbidity and mortality disproportionately affecting communities of color are not incidental. A constant phrase I have heard throughout the pandemic is "when this is all over…". However, the disparities that have led to the exacerbation of this virus's spread and growing death toll did not occur because of the pandemic and will not be "over" when the reproductive rate drops below one, a vaccination or effective treatment is developed, and robust contact tracing teams are rolled out.

This pandemic has unified my public health, infectious disease, and universal healthcare pursuits. Ed Yong wrote in the Atlantic, "After COVID-19, attention may shift to public health. Expect to see … a surge in students applying to public health programs … 'Regular people who think easily about what a policewoman or firefighter does finally get what an epidemiologist does'". This has made me grateful for my background in public health and for the professors and classmates who have trained and taught me. I am also left with a sense of urgency to put my convictions into action and engage with health policy. In my future as a physician I will have the responsibility to address how systemic inequities and health disparities impact the ability of my patients to be healthy and to access care that is right for them. The role of a physician must reach far outside the walls of a clinic or hospital. Physicians will have a responsibility to be active advocates for their patients' fundamental needs and rights. This includes the human right to access free and comprehensive universal healthcare. Ultimately, I hope that experiencing the COVID-19 pandemic impresses upon my peers and society at large the necessity to stand up in the face of injustice not only during times of crisis, but where and whenever injustice occurs.

After a Code

by Belicia Ding
Monefiore Medical Center, Internal Medicine
Painting



Still I hear the echoes of CACs and Rapid Responses called overhead

Creative Writing and Poetry

Safety

by Sarah-Pearl Singanporia
University of Queensland - Ochsner Clinical School
June 16, 2020
New Orleans, Louisiana

United we stand, divided we fall.
But in 2020, it's division, that means safety for all.
Theoretically.
Safety,
I have lost all sense of the word this year,
Just as I have lost all sense of the known.
I don't know, and no one seems to have an answer.
So we're forced to find a new norm,
A sense of safety in a world full of uncertainty.
Uncertainty.
As a black woman, I am all too familiar with that concept.
My mind has been traveling at 100 miles an hour lately.
Trying to work out how to use the power in my voice.
I want to link arms with my brothers and sisters.
To actively reject the world we are forced to live in.
But safety,
The virus has already wiped us out disproportionately.
So united we will stand. But it seems united we will fall.
It makes some wonder why we go out to march at all?
But safety,
It's the luxury we don't have.
So just like our lives to the world, it doesn't matter.
Because the sad truth is we are not safe anywhere.
Not in our homes, not in the streets,
Not when we bird-watch, not when we sleep.
No safety.
So, I will sing it from the rooftops if I must,
Till I am six feet under and covered in dust.
Black lives matter.
Thank you.

We Bought a Table

by Tyler Clay
UNC School of Medicine
May 27, 2020
Asheville, North Carolina

Nothing adheres to the stainless steel table
Oil shicks off, no dough too sticky to clean
New space, kneading space, leaning space
4 more feet of kitchen, the hearth grows
And with it: room for my partner, cooking side by side
I don't have to duck to see her smile
She'll be here a while

Together

by Connor Orrico
University at Buffalo School of Medicine
May 18, 2020
Buffalo, New York

Along rural roads,
at crowded city corners
and from freshly painted fences,
we are a poignant striving,
a panegyric heartbeat of enduring.

Cautiously Optimistic: Medicine in the Time of COVID

by Tammy Tavdy MD
Montefiore Medical Center, Internal Medicine
April 29, 2020
Bronx, New York

I never hesitated to run into a patient's room in the "pre-COVID era." I knew how to ease families into difficult goals of care discussions, and had time to think critically about ventilator settings and pressor adjustments. Now, it's my safety and well-being that comes before a patient's critically low blood pressure. I must safely don PPE before adjusting the drip rate and checking the pulse oximeter. I aggressively address goals of care with family members who cannot be there in person, and commit the ARDSnet protocol to a close memory so that oxygen adjustments become second-hand in nature. Most difficult of all, I have never been so cautious to be optimistic.

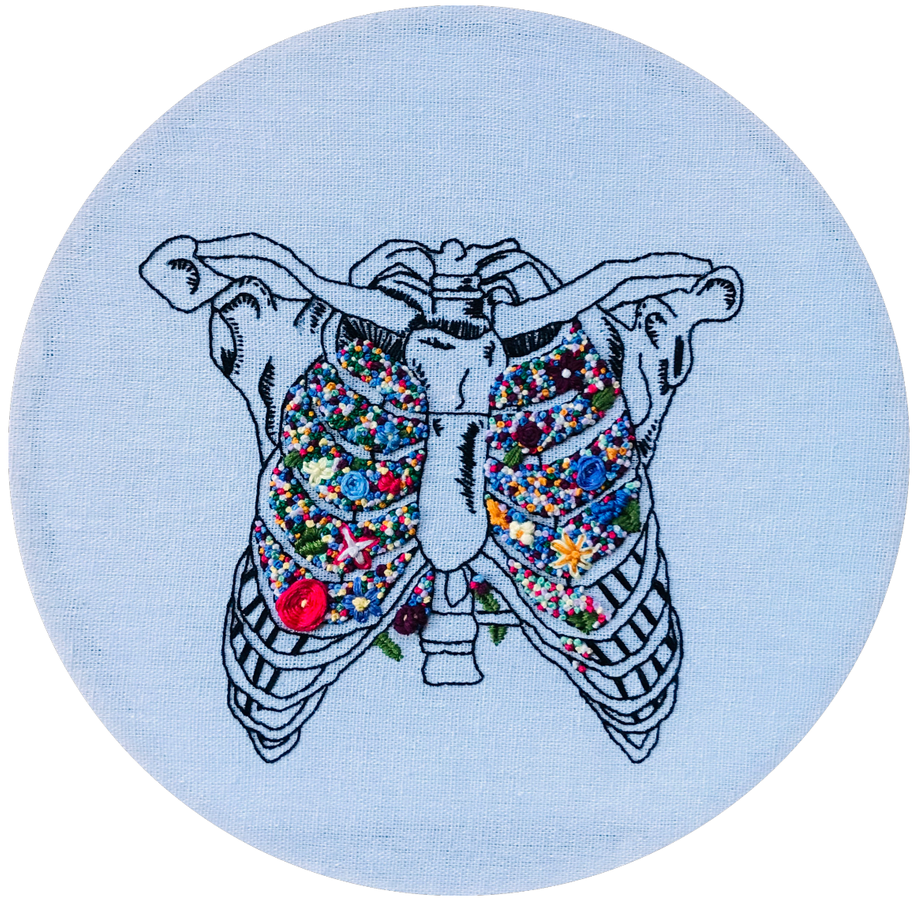
It was my first day on telemetry - a floor of COVID-19 positive patients who also required close cardiac monitoring. Historically, the patients on this service are medically complex - with multiple underlying comorbidities and new arrhythmias that require frequent face-to-face assessments. At this point, everyone on the floor is on hydroxychloroquine, and in many cases, at least one other QT prolonging agent. In fear of over-exposing myself and the nursing staff to the virus, I rely on my judgment of the telemetry monitors and am mindful of how many daily EKGs I am ordering, knowing however that an unstable arrhythmia could be the tipping point for any patient's continued stability.

A new COVID-19 positive patient arrived on the floor. I do a quick eyeball of her in the stretcher, and become cautiously optimistic when noticing that she appears comfortable on room air. With a scan of her labs, I learned that she initially presented with hyperglycemia and in diabetic ketoacidosis. With anecdotal evidence that these two presenting factors contribute to morbidity and mortality in COVID, I worry that her gap may reopen at any point. "An insulin drip? Q1H fingersticks? I cannot possibly do that to her nurse." In short, this would mean at least 12 gowns per shift for just one patient. Ideally, this patient should have been in the ICU, but she is not mechanically ventilated and is not in acute hypoxic respiratory failure; she is my responsibility now.

In the "pre-COVID era," I relied on hospital-based protocols and peer-reviewed recommendations to wisely devise a plan of care for my patients. Today, I rely on cautious optimism, defined by a hope that I am doing my best to improve a patient's prognosis, despite the boundaries and difficulties of frequent donning and doffing.

Breathe

by Claudia Aghale
University at Buffalo School of Medicine
Embroidery



This embroidery piece was inspired by my own struggle with perceived inadequacy. As a medical student, there is constant self-doubt and perseverance on what you could have done better. There is little time to focus on the great things you have done. I had to learn to inhale the future and exhale the past. Remember to forgive yourself for making mistakes as you are learning and transforming. Remember that you are good. Remember to breathe.

The Line: Tales From the UNO Testing Site

by Will Provosty
Tulane University School of Medicine
May 13, 2020
New Orleans, Louisiana

[Car pulls up, two women in the car - driver and passenger. Driver wearing workout clothing, passenger in jeans and a t-shirt.]

PAN OUT, VIEW OF LONG SNAKE LINE OF CARS. AT LEAST 50 BUT LINE CONTINUES OUT OF CAMERA VIEW.

CAMERA MOVES DOWN TOWARD FRONT WINDSHIELD. CUT TO WIDE SHOT INSIDE CAR OF BOTH PASSENGERS.

DRIVER
Why's it gotta be 80 degrees on a Sunday, don't the lord know we gotta get tested? Driver leans forward to turn up AC. Passenger quickly swats driver's hand.

PASSENGER
Just roll the windows down.

DRIVER
Fine.

Driver rolls down window.

DRIVER
You know my cousin had it.

PASSENGER
How do you know?

DRIVER
He got tested. Same place too. He had to wait five hours.

PASSENGER
Lord help me if I'm stuck in this line for five hours. It's already been two.

DRIVER
He's young though. You know who isn't young? Me, and I was with him last weekend.

[Volunteer walks by, leans over and hands two masks to the people in the car.]

VOLUNTEER
If you wouldn't mind please wear these. We are asking that all cars have their windows up until they reach the triage tent. Thank you.

[Volunteer walks away. Woman rolls up both windows. Women sit in silence for a few moments. Beads of sweat begin to appear on each of their faces.]

PASSENGER
The boy in that space suit must have been 15, what's he doing out here?

DRIVER
Somebody's gotta do it. I just want to get tested and get out of here. I haven't had my breakfast yet and if I'm not home before 12 you know Mark will have eaten all the left overs.

PASSENGER
What symptoms did he have?

DRIVER
What?

PASSENGER
Your cousin, what symptoms did he have?

DRIVER
I think it was a fever but I'm not for sure because everyone knows his momma tells a good story.

[Passenger looks at the window.]

PASSENGER
It's getting real hot in here. Turn it up just a little.

DRIVER
Oh now you want the AC on huh?

PASSENGER
They can't test us if we've melted to the seat.

DRIVER
Don't worry so much, I've still got my job at Rouse's and you KNOW that place isn't shutting down. Todd isn't even making us wear masks.

PASSENGER
Pff Todd.... (spoken simultaneously as driver mentions Todd)

[Passenger continues to look out window, though makes a slight turn towards the driver.]

PASSENGER
They said it was just for a week, I'll be back to work in a few days. I have to be.

[Passenger sits in silence. Driver wipes sweat off of her forehead with her shirt. Driver leans forward and turns up ac.]

DRIVER
Ahhh, thank the lord.

[Driver turns and smiles to passenger, passenger turns and smiles back.]

DRIVER
It's fine, shouldn't be too much longer we are almost to the tent. Why did you want to come so badly today? You never said.

PASSENGER
It's just my mom.

[Expression leaves passenger's face. She turns again to face the window.]

DRIVER
Oh. (beat) Yea, ya know I'm sure y'all will be fine. You just have to stay home that what the mayor says. She's healthy too right?

PASSENGER
She's an 86 year old with diabetes.

DRIVER
It's gonna be fine... No one you know even has it.

[Passenger leans further away from driver. Camera angle changes to outside the passengers window. Tears begin to form from in her eyes. The car engine starts and pulls forward. Passenger quickly wipes tears from her eyes so that driver does not see. Passenger turns to face forward.]

PASSENGER
Let's get you home to some food. You made pork chops last night too, huh? Mark better have saved me one or lord knows I'm gon' whoop his ass.

People Need People

by Rishawn M. Dindial
Tulane University School of Medicine
April 24, 2020
Toronto, Ontario, Canada

Uncertainty is terrifying
Indefinite is paralyzing
Isolation is immobilizing

We take these terms in stride
as we know of the greater struggle
yet the fear of fear itself is not a source of pride

Feel the stress, endure the hardship
and remember there is a family here
that will be there for kinship

What is coming is unknown
what has happened is not overblown
How we move forward will make a noise that resounds

Lets band together and rise
Ensure we mitigate a demise
Keep away and safe
but not alone
not
without good faith

The Helpers

by Diana Zarowin
Albert Einstein College of Medicine
April 14, 2020
Bronx, New York

What could we do
To make it through
Forget ourselves, that isn't all
What about, those taking the toll?
Could we help, I'd tried to see.
Could more be done,
Than sourcing PPE.

I was amazed to find
People running to help
Putting into action
The strong will that they felt.

The community came together
To give support and strength,
We remembered we were one
Against this virus so immense.

They say to strive and be the change you wish to see
That will keep us going, no matter what will be.
The wonders of medicine will march on before our eyes
And the kindness we impart will help us mobilize.

So, we move forward,
With gratitude for each day,
And continue not
To let this virus get its way.

Clinical Vignettes

From What You Recall

by Megan Buckley, MD
Lenox Hill Hospital, Internal Medicine
May 29, 2020
New York, New York

You hear about this novel coronavirus from Wuhan and picture it being something that while devastating for those it impacts, is more like SARS or MERS, terrifying but distantly so. And then it emerges in Italy. You stay up until 2:00 AM one night scrolling through panicked reports of Italian doctors, doctors who describe a healthcare system completely inundated, begging for those to recognize the severity of the problem. And yet, still you feel protected by an 11-hour plane flight, a perhaps false notion of American invincibility, and the sense that a global pandemic is the plot twist of blockbuster movies, surely not that of your intern year. You see preparations being made, N-95s, thin plastic blue gowns, face shields, and surgical masks arriving in bulk, a vision that manages to be simultaneously comforting and alarming. And you wait.

The hospital becomes quiet, eerily so. You play Jenga with a group of interns on call one night because there are no new admissions, and you celebrate this moment of camaraderie, this golden call. You will later look back on this moment and recognize that it was the proverbial calm before the storm, feeling pangs of nostalgia and wondering how you could have been so naive. On the inpatient floors, a handful of COVID-19 rule-out patients begin to trickle in, and you sigh at the cumbersome process of donning and doffing, the 48 hours it takes for a swab to result, and the anti-climactic, but relieving feeling when these initial rule-out tests result negative. Maybe it won't be so bad?

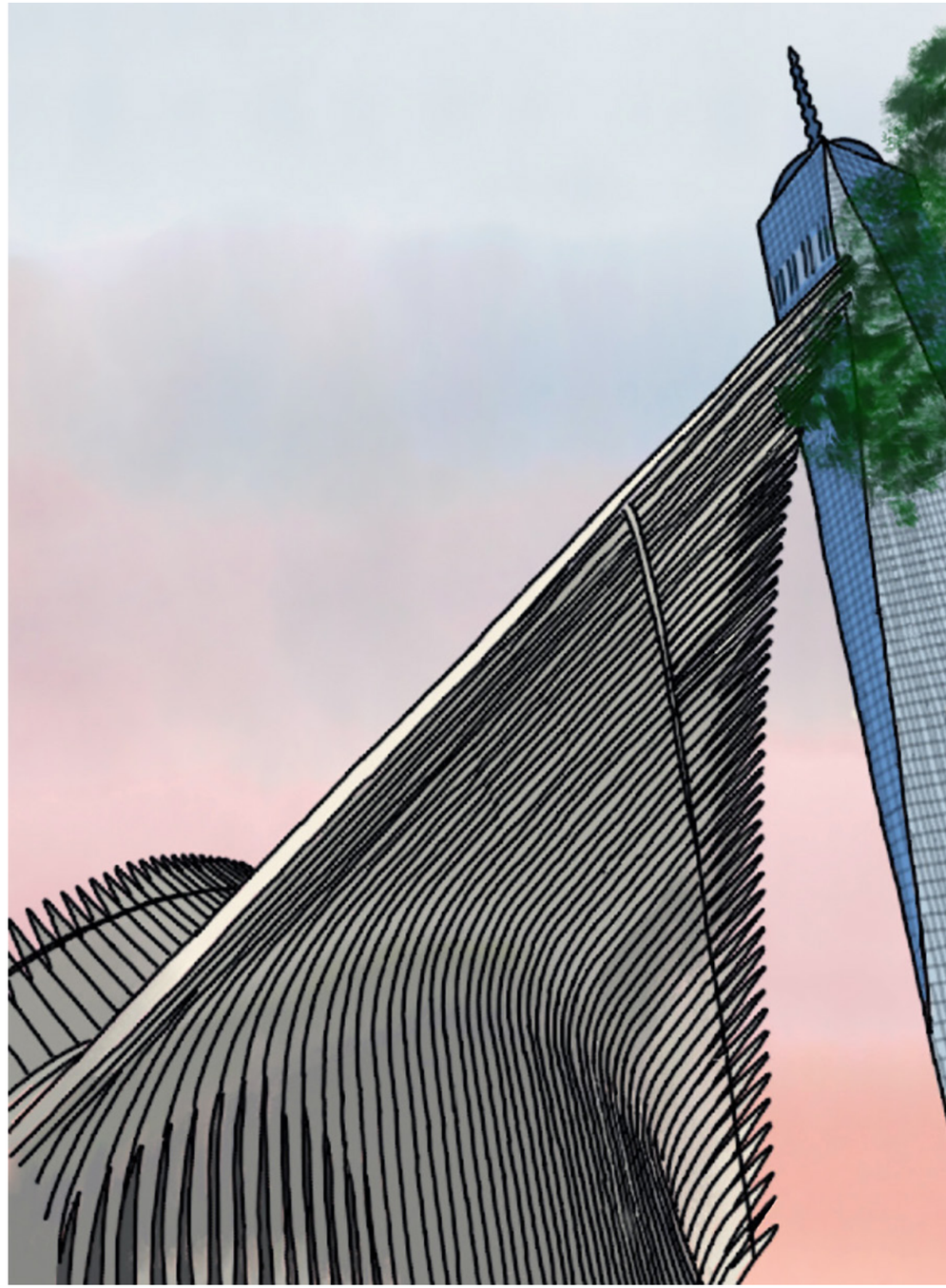
And then the wave hits. It feels like almost overnight the hospital has transformed into a refuge for COIVD-19 patients exclusively. You skim the ED board and see the only chief complaints listed are "fever, hypoxia, shortness of breath, dyspnea on exertion, viral symptoms," and the story already starts to feel stale. COVID-19 resident teams now staff the entire hospital, overflowing into units and floors that had previously never before had medicine residents. Even the inpatient psychiatric facility becomes a home to those with COVID-19. Anesthesia is paged multiple times overhead each day. On night float, you go back and forth between patients on 15 liters per minute non-rebreather mask, coordinating with nurses for extra vitals checks on those deemed most tenuous. Morning sign-out takes an hour because you go to 10 different floor teams to relay overnight events, and one morning you stand there, exhausted from the night before, but marveling at the fact that your hospital has so swiftly met an unprecedented demand that you almost no longer recognize it. You feel a sense of pride thinking about your tiny place in it all.

The once busy New York City streets remain empty, and the days drag on. In one day, you write 3 death notes, all of them with a cause of death that reads 'cardiopulmonary arrest secondary to acute hypoxic respiratory failure secondary to COVID-19 infection,' and you wonder how much longer this can possibly last. In the MICU, you spend hours over the course of a week relaying updates to family members who aren't permitted to visit their loved ones in the hospital. At the end of each phone call, these family members thank you profusely, asking that you please take care of yourself and your family, a gesture so sweet and so genuine, it stings. It stings in the way only a true act of human compassion can. It makes you think of your parents. How would you feel if they were the ones being intubated? You try to suppress these thoughts, after all, like you, your dad is busy treating patients.

Days become weeks and weeks become months, and you celebrate your hospital's 1000th COVID-19 patient discharged. You walk home that day taking an extra second to stand in the Central Park sun, relishing in those victories big and those small, for while it's impossible to say what comes next, the journey has been unparalleled.

Oakland Redwoods

by Vidushi Purohit
Albert Einstein College of Medicine
Photography



Untitled

by Gayatri Nangia
Albert Einstein College of Medicine
Drawing

Handshake

by Kathy Chu MD
Montefiore Medical Center
May 11, 2020
Bronx, New York

Putting on my mask, putting on my goggles, putting on my face shield. Running to rapid responses and codes from one end of the hospital to another. Patients dying every night, after doing everything that could be done. I'm exhausted. Sanitizing my hands for the hundredth time. Leaving my shoes at the door, wiping down my phone, my keys, my pager, my pens, my stethoscope, my badge. Showering for twenty minutes with hot scalding water. Over and over. I'm exhausted. Today, the same as the one before.

And yet each day is different – a different patient of mine is dying each day. Today is Mr. R. His eyes closed as his chest heaves, at first leaning forward and then leaning to the side, all in an attempt to catch his breath. He responds to me when I call his name, with one word only – agua, over and over he calls, agua. The mask is blowing oxygen, fast, into his mouth and his nose. A small wind tunnel sitting on his face. He is dying, the critical care doctors tell me. And this I know, as I hold his hand and watch tears fall from the corner of his eyes. I don't know whether it's from the oxygen from the mask, or because he can actually hear everything we're saying, or maybe because he hasn't seen his son in three weeks. I leave the room to call his son – L asks to come to the hospital – he doesn't care about getting infected, speaking so fiercely over the phone I feel as if we're strangers arguing on the subway. I warn him about the risks, but honestly I don't push as hard I could. I tell him the hospital rules – ten minutes and no touching.

L is much younger than I expected. A gruff voice on the phone, he spoke with the confidence and assurance of someone much older. Here in high-top street Nikes and maroon corduroy pants, he puts on the N95 mask I've taken for him. My co-resident shows him how to put it on and it's clear that the straps are digging into the tops of his ears, which are now red and angry looking. We take him to the room. Mr. R is not responding as much as before and my co-resident has to rub him in the middle of chest, hard, to get him to open his eyes. But as soon as Mr. R sees his son, the brown-green eyes jolt wide open and Mr. R is more alert than I've seen him for a whole week. We pull the curtain to give them privacy. From the hallway, I see the high-top street Nikes run around to the side of the bed. It's clear from the shoes and the forward lean of the blue gown, now touching the floor, that L is leaving over to embrace his father. "Your son loves you," L yells. Over and over. Over and over. My co-resident and I wait silently in the hallway, looking at each other over our N95s. Ten minutes pass and we go in and pull the curtain just the slightest bit, and my co-resident looks back at me and I look at her and give the slightest nod. She holds up her hand, indicating five more minutes.

"You were a good father," L yells. And another lean forward, the blue gown grazing the floor again. I count…fourteen seconds.

L steps out of the room and asks for his father's phone and wallet, he says he needs to pay his father's bills. We awkwardly exchange the items from a contaminated bag to a new clean bag, and once that's done, he hastily grabs the bag. He sticks out his hand to shake mine – I look down at it for a second, and realize it's the first handshake I've been offered in almost six weeks. I hesitate for just a brief moment, and then firmly take his hand in mine. I imagine he can't see my eyes much behind my goggles and my shield, but tears fall onto my N95 mask, soaking through the top of the mask and the wetness and heaviness of it all sits on my face. I squeeze his hand hard, trying to make up for all the handshakes that were lost for my patients and their families these long six weeks, and I find myself not knowing how to let go.

"Thank you for everything," he says.

I'm sorry we couldn't do more, I think, as I watch him walk down the hall, and I've never meant it so much.

When You Realize Your Purpose

by Aysha Malik MD
University at Buffalo School of Medicine,
Internal Medicine-Pediatrics
May 13, 2020
Amherst, New York

Being a Med-Peds resident, I rotate between the worlds of adult medicine and pediatric medicine every three months. When the pandemic began, I was on the pediatrics side, and was hearing and reading reports about how children were less affected by COVID-19, and did not suffer morbidity and mortality to the degree that their adult counterparts were facing. Despite this, we tested several patients with concerning symptoms, and wore our N95s, yellow gowns, eye shields, and gloves when we went to examine them; taking all the necessary precautions. I've worn protective gear before, but this time, it was different. A plethora of mixed emotions ran through my mind when donning the PPE, including fear. It was strange having to write your name on a sheet of paper before entering the patient's room so that they could track you down if the patient's test did return positive. It felt surreal. However, as soon as I entered the patient's room, those feelings disappeared, and confidence and sympathy overtook the fear; it became one of those ominous moments when you realize your purpose, the beauty of medicine, and the reward of taking care of others.

I first witnessed the toll this pandemic was having on patients, families, and healthcare workers while I was working in the neonatal ICU. A 34 –week-old male was born via an emergent C-section in an ICU, where his mother was admitted on a ventilator, battling COVID-19. She had no idea that she was being operated on, and did not have a chance to see or hold her baby. The child was immediately transported to our ICU and kept in isolation while his COVID-19 test was run. His father was not allowed to visit his wife or newborn son, for fear that he could catch the virus. I was called by the nurse the night the patient was admitted saying that dad had arrived for the first time to see his baby. I walked over and saw dad standing outside the patient's room, one hand pressed against the glass. I paused for a second, took a deep breath, and introduced myself. I went over how the patient was doing, and that our hope was to have the viral testing back the next day. Dad was concerned about feeding his little one. Prior to her decline, his wife had emphasized how important it was for her to breastfeed, and if there was any way we could pump some milk and give it to baby. I discussed how the baby's nutrition was of utmost importance, and although breast milk would be ideal, we would need to weigh the risks and benefits, and the implications pumping could have on mom while she was intubated and admitted in the ICU.

"I'm sure she would understand," I said. I couldn't see dad's smile through his mask, but I picked up on the wrinkles at the corners of his eyes as he smirked "Oh you don't know her," he joked. I smiled and replied, "She's pretty strong-willed, huh?" Dad paused, with tears filling his tired eyes, he turned to his newborn and said, "yes she is."

I Wait for What is to Come

by Nasir Malim MD
Montefiore Medical Center, Internal Medicine
March 25, 2020
Bronx, New York

Brief Covid thoughts from the front lines as a first year Medicine Resident. All thoughts are representative of myself and not a larger institution.

January 14th, 2020: Finishing my medical ICU block. Witnessed 2 patients pass away from the flu in my 2 weeks.

January 24th, 2020: Working in the ER filling in for a resident doctor with the flu. Head doctor huddles every morning to discuss the novel coronavirus and screening precautions we are taking.

February 20th, 2020: First grand rounds on Covid-19. discussed the 2 English language peer-reviewed publications. Discussed threat of pandemic, however at that moment influenza was still the greater threat domestically.

March 1, 2020: First confirmed case COVID-19 in NYC. In the days following many additional reports of localized and widespread cases.

March 6th, 2020: My first COVID-19 rule-out patient with hypoxia, shortness of breath, and ground glass opacities on CT chest. The day prior to suspecting COVID-19 and taking appropriate precautions the entire medical team and all staff went into this patients room unprotected.

March 7th, 2020: With patience and lots of determination I was able to retrieve appropriate personal protective equipment and see my rule-out patient.

March 8th, 2020: My rule out patient tests negative, the medical team and staff breath a sigh of relief. News from areas around the world, including the dire situation in Italy, continues to poor in.

March 16th, 2020: I transition to my clinic block. We initially transition to telemedicine, and within a few days all clinics at my institution are essentially shut down to accommodate resident return to the hospital to prepare for the expected influx of COVID patients.

March 18th, 2020: First Internal Medicine town hall on the current situation in the departmentand hospital with COVID patients coming in.
March 19th, 2020: Though this was not a new thought, the reality sets in that tough medical-ethical decisions will need to be made in the coming weeks. Decisions around who gets a ventilator and who doesn't, who is given a chance to live and who doesn't. Many people will not survive this, including people I know and love.

March 20th, 2020: I cancelled all the plans I had been looking forward to for months and years. The wedding in Houston, my first ever trip to Houston where I could enjoy my first try of Texas BBQ, I had to cancel. My honeymoon, the re-try of a honeymoon initially planned 3 years prior that was cancelled by Hurricane Maria, I had to cancel. Graduations, family trips, once in a life celebrations: cancelled or soon to be cancelled.

March 21st, 2020: I wish this was only the first time I cried after feeling emotionally overwhelmed from the medical, social, lifestyle, implications of living in the era of this pandemic. The emotions I'm feeling are truly a roller-coaster.

March 23rd , 2020: One thought I now cannot escape keeps recurring. My internal medicine program is ~150 residents across the 3 years, with a 1% death rate and realization that younger populations are not as safe as once believed, there is a fair chance that myself or someone among my colleagues will probably not survive the next few months.

March 24th, 2020: I am starting on sick call for our new schedule aimed to accommodate the rise in patient numbers. So far I haven't been called in and had a couple extra days to rest at home, though the overwhelming thoughts remain. The number of hospitalized COVID patients at my hospital climbs above 200.

March 25th, 2020: Due to lack of access to alternatives to N95 respirators, I'm going to have to shave my beard for the first time in over 12 years which I have kept for religious reasons. This is difficult but given the circumstances is the necessary move. I wait for what is to come in the coming days, and my next ICU block in the coming week.

What Felt Like Closure

by Niloy Jafar Iqbal
Albert Einstein College of Medicine
April 21, 2020
Bronx, New York

I have been a volunteer sub-intern at Jacobi since the first week of April. I did not think twice about volunteering; I had spent the entirety of my third year at Jacobi for clerkships and felt it an honor and privilege to give back to all the residents and attendings who had spent the past year training me. Now, two weeks in, I remain grateful for having this opportunity to support my colleagues and community. I am a fully integrated member of an amazing, multi-disciplinary team. Our attending is an OB/Gyn. Our residents are pulled from radiology and GI. It is truly "all hands on deck" as we all try our very best to combat a disease that we sometimes feel like we barely understand.

After two weeks on service, as the management of my patients becomes more algorithmic, I am beginning to re-accumulate enough bandwidth to start thinking about what comes next. Namely, I have started wondering how I am going to deal with all the death I have seen in the past two weeks. I think about one of my first patients, who passed away six hours after I first saw her. Although she was DNR/DNI, and the family was aware of her grim prognosis, I remember trying to find the words on the phone to explain why they could not see her or be with her in her final moments. I think about how, in my second week, an incredibly young patient of mine went into cardiac arrest, and the physician running the code did not think it either feasible nor safe to intubate him; he was pronounced dead as I performed chest compressions. I have seen more people die in the last two weeks than I have in the entire year preceding them. Everyone on my team feels strangely desensitized, compartmentalizing each death for the sake of the patients who are still alive and need our care.

As I head back to Jacobi for another two weeks, I fear that I will accumulate more memories of tragedy and death, and I am unsure as to how they will shape me in the future. But, among all the sadness, I look forward to the small reminders of the good we are doing for our patients. At the end of last week, I discharged an older COVID patient home. As I finished talking to his daughter (through a Spanish translator, no less), she asked if it was okay if we prayed together over the phone. I have never been a religious person, but this was an incredibly spiritual experience for me. As we prayed together, for both my patients and my colleagues, I felt some measure of what felt like closure for all of the patients I had lost in the past few weeks. I only hope that I have more moments like this.

To Which he Gasped

by Nikita Agrawal MD
Montefiore Medical Center, Internal Medicine
April 2, 2020
Bronx, New York

"Oh God"

He was a 49 year old south Asian male, although 10 years younger I couldn't help but think of my own dad. This patient could easily have been him. He had come to the emergency room that night because after 6 days of him and his wife having fevers he more recently over the past 3 days started to have trouble breathing. He had returned from Spain in the past 1 month and like all of us knew he most likely had the mysterious and unforgiving virus, COVID19. His symptoms fit too well. His chest x-ray with more white than black was already an ominous sign. He was immediately placed on a non-rebreather with improvement in his breathing. With the exception of an apple shaped abdomen he looked relatively healthy and I could picture him just 1 month prior vacationing in Spain. When I met him, he was able to converse at length but his oxygen levels did not match up with how he was looking. An oxygen level of 89% slowly crept down to 86%, soon enough to 80% and before we knew it he was down the 70s. Although his numbers rapidly worsened he continued to talk to comfortably as if he was my Dad telling me about his day. We all knew from the many patients that we had seen over the past weeks that if we did not put him on a ventilator he would almost definitely go into cardiac arrest in a few hours from low oxygen levels. But, if we intubated him-- would he beat the odds and be be the minority that are able to be weaned off the ventilator? Hesitantly we explained the situation to the patient asking him if he wanted to Facetime with his family before we put him to sleep and connected him to the ventilator to which he gasped...

"...Oh God. Im... going to die..."

Uncertainty

Joshua Heisler MD
Montefiore Medical Center, Internal Medicine
April 5, 2020
Bronx, New York

The hardest part is not knowing. In training, one of the most frequent phrases I heard tossed around in med school and residency has been the importance of "decision making in uncertainty". The general point being that, as physicians we cannot always wait for all the information before making decisions that are time sensitive. Sometimes it is necessary to weigh pre-test probabilities and decide on treatment prior to a formal diagnosis. Other times, like in a GI bleeder with an arrhythmia, there is no set answer, and I might have to plan with my patient based on perceived risks and benefits. You don't always have all the information you would like, but more often than not, you have enough to make an educated decision, at least until this pandemic.

The uncertainty of how to treat this pandemic surrounds and suffocates me. We know that oxygen supplementation is beneficial, probably. I've treated nearly every patient I've admitted with hydroxychloroquine, relying on what seems to be at best, equivocal evidence. I attempt enrollment for each of my patients into clinical trials, hoping that might make a difference. From there it gets only murkier. Earlier this week I've been told that 'dry lungs are happy lungs' and so I tried to keep my patients from getting any IV fluids. Later in the week I read an article from a critical care doctor in the UK stating that physicians are being too aggressive in fluid restriction and causing worse outcomes due to kidney failure, and so I've liberalized the fluid I'm giving, if only a little. In order to predict which patients will do poorly I've been told at various points to trend CRP, or maybe it was IL-6. Nevermind, I'm sure ferritin is the marker to watch most closely. Everything is uncertain, and I feel lost.

Mr. W is in the room across from me right now. He was moved from a telemetry bed so I can no longer peek in to see his face or O2 sat and heart rate. His face is blocked by a portion of the wall, so when I try to look in all I see is a blanket covering his legs. I don't know if my lack of knowledge has lead him to dying on a ventilator. What is certain is that he is a 77 year old man with mild hypertension and hypothyroidism, who had the misfortune of having a severe influenza pneumonia a month earlier. I know that when I met him he was receiving oxygen via face mask, and gradually needed more and more support, escalating to high-flow oxygen and then to BiPAP. When he decompensated with worsened pulmonary edema and a blood gas showing severe ARDS, I made the decision to give him lasix, even with his AKI, hoping that it would help dry his lungs. Hoping that dry lungs are happy lungs. I know he was enrolled in the Sirolumab trial, receiving his dose via small peripheral in his foot, after an hour of trying to get an IV in a dehydrated patient. I know that two days later he was intubated regardless, and by then, had developed renal failure. I know his wife is sitting at home, her quiet hope for recovery shattered by the afternoon phone call relaying his dire prognosis. I'm certain he will die soon, his blood pressures flagging, now only on a fentanyl drip to keep him calm while ventilated. This sort of knowing is small comfort sitting across from him with an empty feeling growing in my stomach.

I hope that tomorrow I will find an enlightening article, or that noon conference will share breakthrough, clear, data driven guidelines. I hope my patients will not be guinea pigs, that they won't be practice for my next wave of admissions. Most of all, I hope for clarity.

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Acknowledgements

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Pandemic Perspectives Team
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