COVID-19 Diaries Part Two

It has been months since our lives changed dramatically, and the entire world changed drastically. COVID-19 was a word never heard before. Now, it is used on a daily basis by all; young and old, well and infirm, medical and non-medical, domestically and internationally. According to the CDC COVID-19 tracker, there were in excess of 12 million confirmed cases in the USA, 263,455 total deaths from this disease as of Nov 27, 2020.

I am a pulmonary and critical care physician, a frontline health care worker. I work in a busy community hospital, which has taken care of up to 50 percent of COVID-19 cases in the Puget sound area, in WA state. I want to reflect today, on how I felt in the beginning, what has changed, what I have learned and my hope for the future.

Below is an excerpt of a blog post I wrote to make sense of the chaos in my mind in the early days. The full blog can be found at https://drkhanmdoncall.com.

The first case of COVID-19 was reported in the USA on Jan 20, 2020. It was a 35-year-old male in Snohomish County, WA. That was not too far from home, and social media was ablaze with physician communities scrambling to keep up with the daily and sometimes hourly updates. I was scrambling to keep abreast of the information as best I could. The usual sources of information, reputable medical journals, had nothing on this. Italy was being pulverized by the virus. The images and stories from the Italian hospitals were terrifying.

The first death from COVID-19 occurred on Feb 29, 2020. Then came the debacle at a long-term care facility in Kirkland, WA. The words 'community spread' and 'travel restrictions' started being used frequently in the media. The death count rose, and we started seeing cases in neighboring hospitals. All the while the drumbeat that I kept hearing in my head became louder and louder.

March 22, 2020 was an unforgettable day for me. I was working in the ICU and got a call about a COVID-19 patient who had been in the hospital for a few days and was tiring out, and needed intubation. My heartbeat rose about 20 points. My face felt flushed. I walked up to appropriate floor. I put on my PPE; my hospital had provided CAPRs, gowns, gloves, shoe covers – I was lucky. I took my time donning my 'armor', making sure that I was well protected from this invisible enemy. I evaluated the patient and agreed that intubation was the appropriate plan. I walked out of the room and doffed appropriately. I gathered the nurse, respiratory therapist and pharmacist, and we went about with the intubation. I don't think I have even felt apprehension as I did for my first COVID-19 intubation. This was no ordinary intubation. There would be no 'bagging', the patient would have to be paralyzed and sedated to decrease the risk of aerosolization and it would have to be very quick. I was surprised at how smoothly the procedure went. I am not sure what I expected (a giant visible viral ball to jump out at me when I looked at the vocal cords?) but I walked out of the room intact and hopefully virus free.

I made sure to doff again. I made sure to wash my hands more carefully than I even had. I made sure to change my hospital scrubs immediately – something I have never done after an intubation. I could almost feel the viral particles crawling all over me; or was it just my heightened state of apprehension and fear?

An hour later, I was finishing up my notes, and I got a call about another COVID-19 patient that needed intubation. This was not what I expected. To get called about two intubations in such a short time was pretty unusual. My heartbeat shot up another 20 points. The flush on my cheeks deepened. I evaluated the second patient and agreed that intubation was appropriate. This was starting to feel surreal. It was no virus I had ever encountered. It was indeed novel. It was invisible but the destruction it left in its path was frightening and I felt helpless.

I had my first preview of the next few weeks were going to be like.

Since then, virus has become a reliable if unwelcome fixture of the medical world and the community at large. Some of us survived the first and second waves, and are now battling the third wave, which is ravaging the USA with a renewed fury that put its predecessors to shame. It feels like we are sitting on a beach, watching a colossal tsunami wave crashing towards us at a speed that makes flight impossible, so we watch in terror and brace for the inevitable impact.

In the ICU a majority of my patients have severe COVID-19. The hospital has adapted to meet the changing needs of patients and safety of its employees. There are now several dedicated floors that are equipped with negative pressure air filtration systems – these wards are designated COVID-19 units. There is a trolley/table with masks, hand sanitizer, thermometer and sign in sheet for every employee that enters the dedicated unit.

The eerie quiet of these units has given way to the familiar busy noise of hospitals. There are nurses, CNAs, physician's, advance care providers, lab technicians, house keepers, food service workers going about their routine tasks. It takes everyone a little longer to prepare to enter the isolation rooms, which are invariably single occupancy. There are no shared rooms anymore. There are hooks outside each door to hold face shields, N95 and surgical masks, reminding everyone to take the extra time to don PPE. Every room has a green 'modified droplet sign' as another reminder to be safe. There is a CAPR cart in a central location. This is a new fixture on the floors. We are no longer struggling to find N95s or CAPR shields. We are no longer required to bag and save and recycle them. We have an adequate supply at the hospital. We are now universally masking. This change took longer than it should have, given the confusion in the early days, with conflicting guidelines and PPE shortages. Every break room, elevator, conference room has a maximum occupancy sign. It's a different hospital environment but one that is calmer, safer and I no longer feel the chill of fear as I walk the hallways.

Patient encounters are also different. We wear PPE for every patient. We test for COVID-19 as if our lives depend on it – because they do. Once a patient is ruled out, they are housed in the non-COVID-19 unit. We still wear a surgical mask for these patient encounters. If a patient tests positive they are housed in the COVID-19 unit. I spend more time in these patient rooms, than I used to. I feel secure in my N95 or CAPR. I ask these patients about their lives, I joke with them to lift their spirits, I read the cards that decorate their walls. After all, the RN and Iare their only human contact until (and if) they recover and can leave this unit.

Of late I have noted the consequences of COVID-19-fatigue. I had a 50-year-old dad, with diabetes and obesity, who told me he had just travelled to Mexico with his family for a vacation. He told me they were limiting their stay to family, no sight -seeing, no eating out, but here he was in the ICU. He had 'happy hypoxia' for 3 weeks – alternating between high flow nasal canula and BIPAP. He eventually got 'fatigued' and was intubated. He remained on the ventilator, deeply sedated, paralyzed, proned for another three weeks and was extubated and eventually went home several weeks later. I had reassured

him that I believed he would survive this and go back home to be with his family. He told me this was his hope and I was glad he eventually did.

Another patient was a petite Asian mom to a college-aged son. His girlfriend, a frequent visitor in the shared home, had mild symptoms and tested positive. This patient had severe illness but she managed to recover after a week on high flow and self-proning. It was touch and go for a while, since she seemed to be fatiguing, but rallied on day seven of her ICU stay.

In my practice I have noticed that women do better than men. We see more male patients in the ICU and they tend to fare worse. I have also seen a disproportionate number of from minority communities. The Hispanic, black and Asian communities were featured prominently in my ICU.

Another patient encounter weighs heavily in my memory. A 67-year-old-dad of relatively young daughters. He was in good health prior. His wife had contracted COVID-19 while working at a checkout counter in a supermarket. He had tried to wait it out at home for a week and told me that he thought he was going to die because he had never felt so sick, hence he called EMS. He ended up in the ICU, rapidly deteriorating to requiring high flow nasal canula then BIPAP to intubation within a few days. I had had a bad feeling about him from the first day. His course was typical with need for deep sedation, paralysis and proning. What was not so routine was that he developed a pneumothorax and pneumomediastinum. His lungs did not recover, and he developed end stage fibrotic lungs and remained on the ventilator for over six weeks, until his family made the excruciating decision to withdraw life support. I had joked with him when he was not yet on the ventilator, that he was getting 'presidential treatment' for COVID-19. He had laughed at this and his laugh was genuine and infectious – his daughters will never hear him laugh again.

I remember another patient whose family had to withdraw ventilatory support after 60 days in the ICU due to end stage fibrotic lung disease. His stay had been a roller coaster with many highs and lows. We all thought he was improving, and had even arranged a tracheotomy, before he crashed. His family had made a poster which documented his life as an immigrant who succeeded in setting up a family business, including his children, their graduation pictures, and his life at home with family and pets around the holidays.

These posters always remind me of the human cost of this disease. I see them more often in patient rooms, since they are not allowed visitors. Families make these posters in the hope that their loved one will wake up and be comforted by the familiar, but often this does not happen.

Patients have much longer ICU stays. In the pre-pandemic days, most patients spent less than a week on the ventilator. Now it is not unusual to see ICU stays over 30, 40 and even 60 days. The resilience of the human body surprises me daily. I did not believe patients had the ability to survive with any meaningful quality of life after months on life support. I have seen a handful of patients awaken after having suffered multiorgan failure and cardiac arrests.

We have more to offer now than we did in the beginning of the pandemic. We have learned that nothing is superior to basic ICU care. We are seeing the benefits of ARDS ventilatory strategies and steroids. There is hope for the future with vaccine development. We have hope for a robust national coordinated effort and uniform adoption of public health guidance. I am hopeful now as I go to work every morning. I am not as scared, even as I brace for the tsunami of the third wave.