

CANCER CARE  
CHRONICLES

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## Facing a Pandemic While Pregnant

**December 15, 2019**, was one of the happiest days of my life. After longing for a baby for years, I finally found out I was carrying a life inside of me. As a second-year hematology-oncology fellow in a busy fellowship program, I knew that pregnancy would come with its own set of challenges, which I was prepared to face. Many of my predecessors had gone through this before, and I did not think the experience would be any different for me. What I was absolutely not prepared for was facing a pandemic while living and training in one of the most populous cities in the world during the time I was carrying my first child.

In late December, rumors started circulating about an unknown virus that originated in China. On December 31, a cluster of patients in China were identified who were associated with the seafood market in Wuhan<sup>1</sup> and who had pneumonia associated with a novel coronavirus, also known as coronavirus disease 2019 (COVID-19).<sup>2</sup> Data later indicated person-to-person transmission was occurring.<sup>3</sup> At the time, no one seemed to have extensive concerns in the Western world. By late January 2020, the news regarding this novel coronavirus started spreading quickly in the media, and concern in the United States exponentially increased when reports emerged that the quickly and aggressively spreading virus had been reported in at least 21 countries.

I remember the day when this new topic of conversation went from being a distant thought in my mind to a real concern. It was February 7, the day that the 33-year-old physician who weeks prior had raised concerns about a severe acute respiratory syndrome-like virus at the Wuhan seafood market and was reprimanded for bringing up false news passed away from complications of the same virus. We later learned that on January 20, the first case of COVID-19 had been reported in the United States after a 35-year-old man who had returned from Wuhan, China, days prior presented to an urgent care clinic in Washington State with a 4-day history of cough and subjective fever. The Centers for Disease Control and Prevention confirmed that results of his nasopharyngeal and oropharyngeal swab tests were positive for COVID-19.<sup>4</sup> Meanwhile, more information became available regarding the virus itself, mode of transmission, vulnerable populations, and its complications, such as severe pneumonia, respiratory failure, acute respiratory distress syndrome, and cardiac injury, including fatal outcomes.<sup>5</sup>

The second week of February came, and with it my 3-month block of inpatient consult rotations and increasing fears of when the time would be that I would come face to face with the dangerous COVID-19. I kept repeating to myself that I am a healthy 31-year-old with no coexisting medical conditions and so I should be fine. But my medical knowledge

intruded my thoughts and reminded me that pregnancy itself is considered an immunosuppressive state. Despite not wanting to, I started fearing not just for myself, but also for my unborn, still-developing baby who I had already grown so attached to.

Then, on February 29, my biggest fear turned into a reality when New York State confirmed its first case. At that moment, I started preparing myself for potential consequences. In the following days I saw the numbers doubling and the amount of cases rising in a shocking manner. Paranoia crept inside of me when I first read how there were 89 people in quarantine being tested for the virus in Nassau County, where the hospital I work at is located. My thoughts kept fluctuating between a feeling of fear and my almost-reflexive sense of altruism, which is the very reason I chose this profession over others. I, like many others in my profession, have over the years developed a mindset that compels me to choose work over anything else.

Like many others in my field, I often feel guilty even taking a sick day and have powered through my ailments in the past in an effort to help others. So I continued doing just that: pushing myself through overwhelming anxiety and continuing to go to work daily as the number of confirmed cases keep growing and the number of rule-outs were skyrocketing.

Meanwhile, inside of my brain my maternal instincts continued to battle my physician instincts on a daily basis. A part of me would tell myself to ask one of my very supportive cofellows to cover during this period, and the other would say to persist and that I would be OK if I took the necessary precautions. However, the necessary precautions were not as simple as they sounded. Hospitals were running out of surgical masks and gowns. The supposedly disposable N95 masks were a rare commodity that people were claiming by writing their names on them and reusing several times over.

While countries such as South Korea have been widely screening individuals even without symptoms, the United States is far behind in testing capabilities owing to major shortage of kits, and the Centers for Disease Control and Prevention has recommended strict criteria for testing. Individual institutions are drafting their own algorithms and testing criteria to rule out other infections, such as influenza, prior to COVID-19 testing. However, there are now reports of patients getting coinfecting with influenza and COVID-19. The Vienna International Centre recently reported a case of a female member of the cleaning staff who was initially diagnosed with influenza in early March and was later found to test positive for COVID-19 as well.<sup>6</sup> Getting exposed to the virus is becoming more of a possibility as days go by. Becoming sick during pregnancy and the effect of the virus on my unborn baby are thoughts that I am actively trying to block out of my mind.

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So far, there is very limited data on pregnancy and COVID-19 infection. One retrospective study<sup>7</sup> discussed clinical characteristics of pregnant women infected with COVID-19 and possible transmission to the fetus. The study reported 9 pregnant patients with pneumonia who tested positive for COVID-19 infection. None of the patients developed severe COVID-19-associated pneumonia or died. All 9 women gave birth to healthy newborns, and no cases of neonatal asphyxia was observed.

A recently published study<sup>8</sup> from Wuhan, China, evaluated 4 full-term infants born to pregnant mothers who tested positive for COVID-19. None of the 3 infants for whom consent was provided tested positive for the virus. None developed clinical symptoms at the time of discharge. However, in early February, an infected mother in China delivered a baby who tested positive for COVID-19 after birth.<sup>9</sup> Recently, on March 14, there was a report<sup>10</sup> of a second newborn baby who had reportedly tested positive for COVID-19 in London, England, minutes after delivery. The mother was diagnosed with pneumonia, and her positive test results were given after birth. To date, it is unclear if the virus was contracted in utero or after birth for both cases.

For a moment, I would like to believe that neither I nor my baby will get really sick from the virus based on these reports, but I cannot ignore the real chance that I or any of my colleagues working in health care might become a vector for the virus with minimal or no symptoms. As health care professionals, we all have to change our mindset and refrain from our reflexive attitude of pushing ourselves through illness because we could end up actually spreading disease to the very patients we are trying to help. What used to sound heroic before this pandemic has started to seem ironic to me now.

In conclusion, we are all in uncharted territories, some of us more than others. Living and working in this era of horrific pandemic while pregnant is definitely not easy, but faith in God and support from my family, friends, cofellows, and institutional leadership has gotten me this far, and I hope it will continue as I tread along. There is always a light at the end of the tunnel, and I have faith that this, like other pandemics in the past, shall pass and hopefully in the near future we will all look back optimistic and proud about how we learned, united, overcame, and grew together from a situation like this.

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1. World Health Organization. Pneumonia of unknown cause—China. January 5, 2020. Accessed April 20, 2020. <https://www.who.int/csr/don/05-january-2020-pneumonia-of-unknown-cause-china/en/>
2. World Health Organization. Novel coronavirus—China. January 12, 2020. Accessed April 20, 2020. <https://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en/>
3. Chan JF-W, Yuan S, Kok K-H, et al. A familial cluster of pneumonia associated with the 2019

novel coronavirus indicating person-to-person transmission: a study of a family cluster. *Lancet*. 2020;395(10223):514-523. doi:10.1016/S0140-6736(20)30154-9

4. Holshue ML, DeBolt C, Lindquist S, et al; Washington State 2019-nCoV Case Investigation Team. First case of 2019 novel coronavirus in the United States. *N Engl J Med*. 2020;382(10):929-936. doi:10.1056/NEJMoa2001191
5. Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395(10223):497-506. doi:10.1016/S0140-6736(20)30183-5
6. Influenza case at Vienna International Centre now tested positive as COVID-19. News release. United Nations Office on Drugs and Crime. Accessed April 20, 2020. <http://www.unodc.org/unodc/en/press/releases/2020/March/influenza-case-at-vienna-international-centre-now-tested-positive-as-covid-19.html>.

7. Chen H, Guo J, Wang C, et al. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. *Lancet*. 2020;395(10226):809-815. doi:10.1016/S0140-6736(20)30360-3

8. Chen Y, Peng H, Wang L, et al. Infants born to mothers with a new coronavirus (COVID-19). *Front Pediatr*. 2020;8:104. doi:10.3389/fped.2020.00104
9. Coronavirus: newborn becomes youngest person diagnosed with virus. BBC News. February 6, 2020. Accessed April 20, 2020. <https://www.bbc.com/news/world-asia-china-51395655>
10. Bryner J. Newborn tests positive for COVID-19 in London. March 15, 2020. Accessed April 20, 2020. *Live Science*. <https://www.livescience.com/newborn-has-coronavirus-london.html>