

First Person Accounts of the Impact COVID-19 had on Kansas Family Physicians and the Communities They Serve

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The state of Kansas is no stranger to novel medical mysteries. The first case of the “Spanish Flu” is hypothesized to have originated in Haskell County, Kansas, in January 1918.¹ This novel influenza A virus (formally called the 1918 H1N1 flu virus) triggered the 1918-1919 world pandemic. It is estimated that 500 million people, or one-third of the world’s population, became infected with this virus. The number of deaths was estimated to be at least 50 million worldwide, with about 675,000 occurring in the United States.² A Haskell County doctor, Dr. Loring Miner, was the first in the United States to raise the alarm about the deadly nature of the virus.³ Although medical technology, diagnostics, and therapeutics have greatly improved since 1918, we have much to learn as another pandemic sweeps the plains.

The SARS-CoV-2 virus, the causal agent for COVID-19, led to a global pandemic declaration in late 2019/ early 2020. Kansas has not been spared, with over 407,000 cases, 6,050 deaths, and no county left untouched.⁴

Family physicians have been trusted and respected members of Kansas communities for years. In the last 50 years, the focus of family medicine has been on providing continuing and comprehensive care for the individual and family across all ages, genders, disease states, and parts of the body.⁵ As we have seen from the data, SARS-CoV-2 knows no stranger. The virus has been reported to infect patients from newborn to 117 years of age.⁶ It also knows no racial

boundaries; however, a disproportionate number of persons of color have been susceptible to COVID-19. And it seemingly is blind to gender, although preliminary data suggests a case-fatality rate 2.4 times higher in men than women. Regardless of age, race/ethnicity, or gender—these are family physicians' patients.

From February 2021 to May 2021, approximately a year after the pandemic reached Kansas, ten family medicine physicians representing just a handful of those practicing in the state were interviewed or responded to a series of standardized questions about their experiences. Seven of these physicians work in rural Kansas; three in the western counties near the Colorado border, two in central counties, one in a southwest county, one a few blocks from the Missouri border, and three practice in Wichita, the state's largest city.

The participants began by describing their day-to-day work. For years, Kansas family physicians have practiced full scope medical care. The range of care is what many term *cradle to grave* medicine. Most participants provide ambulatory, inpatient, emergency, obstetrical, and long-term care. The family physicians who practice in rural communities are closely aligned with their local community hospitals and local health departments so, in addition to providing medical care, they typically also serve a leadership role in the community, such as County Health Officer or Chief Medical Officer.

Also, to understand the challenges associated with COVID-19, one must recognize the social determinants of health in Kansas. Patients from these communities come from a variety of backgrounds. 50% of the physicians reported taking care of patients in the agriculture and ranching industry, some reported taking care of international refugees. Over nine percent of Kansans lack health insurance.⁷ There is an average per capita income difference in urban vs rural counties, the reported average per capita income in urban Kansas cities was \$53,426 with

rural per capita income was \$47,397 (USDA-ERS, 2019). The poverty rate in rural Kansas is 12.9%, compared with 10.6% in urban areas of the state.⁸ A few physicians noted they rely on Medicare and Medicaid to make the bottom line each month.

The First Case

The first documented case of COVID-19 virus in Kansas was reported on March 7th, 2020 in Johnson County, after a middle-aged woman developed symptoms consistent with COVID-19 on March 1st, 2020.⁹ Dr. Jennifer Bacani McKenney (located in rural Fredonia), said she remembers March 9th, 2020 very clearly. She described the Monday after the first reported case of COVID-19, she gathered hospital and clinic staff, school staff, church officials, and government officials together and told them *we have to get together and talk about what is going on*. Another Kansas family physician, Dr. Drew Miller (located in rural Lakin) reported that he became the County Health Officer a few weeks later when someone in the office said *Hey, I think we need some more help with this COVID-19 stuff. Would you be willing to jump in and be County Health Officer?*

Dr. Beth Oller (Stockton), also a rural family physician and who owns her own practice with her family physician husband, remembers feeling *uncertain*. She was asking questions such as *How much should we be doing? How much precaution should we be taking? How bad was this going to get?* Dr. Laurel Witt (located in urban Kansas City), currently an associate professor with University of Kansas School of Medicine- Kansas City, recalled *I remember the first time I walked into a hospital room to take care of somebody with this virus and we tried to know as much as we could, and we still had more questions than answers*. She went on to say *I just don't want to ever get over that feeling of doubt and inadequacy and not being able to save*

them. And in fact, I will think of that person for the rest of my life. She will be the person, the face that represents this whole year for me, this whole pandemic.

A rural physician from Sterling, Dr. Kristina Darnauer, said her *practice pulled back right away from in person visits*. She reported her practice *was also early mask adopters and implemented telemedicine early on*. She stated *Medicine was suddenly dangerous*. When asked about challenges early on she said *a lot of people were scared to come into the doctor's office. Our clinic numbers dropped significantly, as everyone's did*. A lot of her time was spent coordinating COVID-19 safety efforts locally and communicating with physicians. She said *there was this sense that we were entering a warzone as healthcare providers*.

Dr. Scott Rempel (located in rural Quinter) indicated that one of the initial challenges in the state was due to the statewide disorganization of local health departments. He said *Kansas has a decentralized public health system and every county has their own health department. Each county had to figure out how to navigate the pandemic on their own with guidance from The Kansas Health Department of Health and Environment and from the Center for Disease Control. There were 105 counties and 105 ways of looking at the pandemic*.

The Virus Spreads

Dr. Oller reported that as a small rural privately owned practice, she and her husband worried about paying employees and making the bottom line. She also noted other challenges in their community such as the geographic distance of consulting subspecialist physicians, patients having access to the internet for telehealth visits, and integrating a community education platform for pandemic updates. The hospital in Rooks County is 30 miles from Hays Med, the closest secondary referral center with 12-monitored bed units for intensive care patients.¹⁰ As case rates picked up, she frequently had to call hospitals four to six hours away to transfer

patients. During the first peak season, in October 2020, the hospitals she would contact had no open beds. She said *[critical access] hospitals were not equipped to take care of extremely ill patients, but we had no choice. We had to make it work.* Dr. Miller had similar experiences and said *it really was like flying blind, as far as trying to treat more severe COVID illness, without having much information.* He noted, however, *the more we could do with these patients here [in our small hospital], the less likely they were to be intubated and the less likely we'd risk them destabilizing while we transferred the patient.*

For others practicing in larger communities, other challenges were noted. Dr. Sheryl Beard (located in urban Wichita) remembered the challenge of getting patients into the office because they were afraid of getting COVID-19 from patients in the waiting room. Newer technology, such as telehealth visits played a large role in the provision of care for patients. Every physician interviewed, mentioned at least once, the importance of telehealth supplementing delivery of care in order to protect patients and their families from contracting COVID-19 in the doctor's office. Dr. Witt said *we used a variety of platforms, whatever we could get our hands on, and we formalized some processes pretty quickly. Many like myself who felt rather technologically behind were trying to ramp up and learn new things.*

Dr. Bacani McKenney noted *Diabetes doesn't stop. Hypertension doesn't stop. Cancer doesn't stop.* The family physicians were now faced with a variety of challenges. The physicians had to dive deep into research on a novel virus that was quickly spreading, while also figuring out how to provide care to their regular patients. Dr. Miller shared how his community clinic and hospital overcame a few of these challenges. He reported that during the first months of the COVID-19 pandemic *exposure and transmission were unknown.* Their clinic split up into teams. They had one group of providers, including two physicians and two physician assistants, who

established a 'sick clinic' to see patients with symptoms worrisome of COVID-19 infection. He described how they then turned an old FEMA trailer into a makeshift COVID-19 clinic. They had dedicated nursing staff and others who would evaluate and triage sick patients behind plastic sheets hung up to create a safeguard between non-medical staff and patients called *The COVID Team*. Dr. Miller made the difficult decision to temporarily stop participating in obstetrical care to care for the acutely ill with COVID-19 and joined this team when their clinic realized the large numbers of patients requiring COVID-19 triage.

Public Pushback

Dr. Stacy Dashiell, the office partner of Dr. Darnauer in Sterling, remembered *very strong reactions from the public regarding early stay at home orders and mask mandates*. She said there is *something about rural America that has been very anti-mask, a lot of feeling like no one else should be able to tell me what to do, or what to put on my face*. She noted there was misunderstanding, disbelief, and suspicion that these measures were effective or necessary. Dr. Darnauer recounted *there was no shortage of political opinions, which is probably true anywhere but all of a sudden, the pandemic became very political and our community was very divided*. *The greatest challenge we faced as a nation was the division on how this thing should be handled and who should really be in charge and which political party should be in charge of that*. She noted that *as physicians in the community, we would make recommendations to our local government. Those recommendations were met with resistance and it was met with anger at times, because of the political tension that had developed in the early days of the pandemic*. Feeling frustrated and unheard, Dr. Rempel said *it is really hard to get our population and patients to do all the right things until it hits home for them, for many it wasn't until they saw*

family members, friends, and community members severely ill and dying from COVID-19, that made them finally start making changes and listen to advice.

Dr. Bacani McKenney, who was born and raised in Fredonia, felt targeted because of her race. She is the daughter of Filipino immigrants, and she sometimes wonders if this has played a role in how some in her community- including some she had known all her life- treated her at times. She received comments such as *that's what it is right? The China flu?* Early on, she also heard remarks such as *she is just trying to push her own agenda. She can't tell us to wear masks. We need to find somebody who doesn't want us to wear masks.* She remembers thinking, *but we are friends, what is happening?* She illustrated just how dire the situation was between community and family physicians. She recalled getting escorted out of a town hall meeting on masking and initially feeling casual about it, but soon realized the local sheriff thought she might not be safe. The next day, while her kids were attending online school, she had a family member take her children to the back of the house in case protestors retaliated in aggressive ways. Dr. Bacani McKenney said *it felt personal when I was thinking about my own children's safety.*

Public Support

Between inflammatory comments on Facebook and verbal slander, there were many kindhearted citizens ready to support the family physicians. Dr. Bacani McKenney recalled stories of local women who would offer support to the community. She told the story of one local retired lady who would purchase items such as hand sanitizer, masks, and food using her own money, and take them to the clinic, hospital, and restaurants. Dr. Bacani McKenney was also impressed with another lady in her community who created *blessing boxes*. The local community members could donate nonperishables and other household items for the boxes for those families in financial need during the initial stages of COVID-19.

Education of the Public

Numerous physicians felt it was their duty to share updates and provide new information regarding COVID-19 with their community. They wanted to give their patients the opportunity to hear directly from the local health care team. Dr. Oller offered live Facebook videos educating her community about new trends in case counts and updates on COVID-19 research. Dr. Bacani McKenney also used Facebook Live to get information out to her community, along with utilizing various news media sources such as local news interviews and local paper interviews. Dr. Miller said he authored almost weekly articles for his local newspaper. Although the intent to inform the community was well-intentioned, some physicians noted major pushback via online social media platforms. Dr. Dashiell noted she had been *personally attacked on social media*. She explained how *some of those sorts of things are isolating and have made the professional and personal balance really difficult to manage*. Dr. Darnauer said she stopped using social media to avoid *a constant onslaught of negativity*.

Dr. Darnauer also recalled her unique Fourth of July in 2020. What was once a normal holiday spent with family and friends turned into an attempt to connect and educate her community. She recounted how she and her husband spent the day prior walking around their little town and handing out masks they had purchased to help protect their community. She said *it was our way of saying even though there is not a mask mandate, we should still do this for each other, and we really care about each other*.

Family Medicine Patients

Family Medicine physicians play a unique role in patients' lives. Many patients spend a fair amount of their time with physicians and long-lasting relationships naturally form. This is especially true in small town America where patients and physicians often cross paths in multiple

facets of their lives. As the family physicians recounted stories of the first year of the COVID-19 pandemic, a few patient stories stood out. Dr. Beard recalled a story of a young healthy athlete, who she saw yearly for preparticipation sports physicals. The young male presented to clinic with multiple blood clots secondary to COVID-19. She said *this struck how detrimental this disease is for those who might not otherwise get sick*. Dr. Miller described the story of a young male in his community who fell ill with COVID-19. The patient initially presented with shortness of breath. He noted the patient looking *quite obviously very ill*. Initially Dr. Miller and the COVID care team tried outpatient management with little success. The patient, now hypoxic, returned to the office. Once admitted to the small critical access hospital, the patient was placed on oxygen supplementation and medically managed. After nine days of inpatient care, the patient's blood gases were noted to be extremely out of range, with pO₂s in the 40s. Dr. Miller and his team knew they could no longer adequately treat this patient with their resources and needed to transfer him to a larger facility. There were no secondary care regional hospitals open to accept his care. The only hospital with an open bed was four hours by air and six and a half hours by ambulance. Dr. Miller was concerned that the patient would not survive transfer and made the difficult decision to keep the patient. The next day there was an opening for an ICU bed 30 miles away. As Dr. Miller and his team were about to get ready to transfer, the patient, through his BiPAP machine asked, *am I going to beat this thing?* Dr. Miller replied with *yeah. Yes, you are, let's do this*. The patient was subsequently intubated before transfer. As the care team was proceeding with intubation, the patient coded. The team went through the ACLS protocol for 45 min to resuscitate the patient. Eventually the team noticed a faint femoral pulse and Dr. Miller said *it energized us to keep going*. During these events they were on the phone with the regional intensivist who was to take over the patient's care. As they were progressing

through the code, they would continue to get arterial blood gases. The intensivist, after receiving two consecutive abnormal values, said *these numbers are not compatible with life*. Dr. Miller and his team did not give up. They eventually got the patient stable enough to transfer to the nearby secondary referral center. Thanks to the dedication and perseverance of *The COVID Team* and the care provided at the transfer hospital, that patient is alive. After months of rehabilitation, monitoring, procedures and temporary setbacks, the patient walked in to visit Dr. Miller for a hospital follow-up visit on room air.

Reflections

The physicians were asked to reflect on the past year. Dr. Beard said she learned more of *the unknown*. She said *in medicine, if you don't know something, there is usually someone who does*. Dr. Lynn Fisher (Wichita) took a bird's eye view and stated *one thing that I think about is the effect of COVID-19 on systemic racism and health in our country. I don't know if [the efforts to engage in conversation about racism and healthcare distribution] would have been accelerated or our desire to act as quickly as we did if the pandemic hadn't happened. I do think there is some great work being done that will really make a difference*.

Dr. Dashiell talked about the perception of the public, on public health information. As she faced numerous challenges in leadership positions in her community, she said in her reflections *it gave me some empathy to realize that the common person that is gathering their information from social media, or just a passing news source, can't be expected to understand and appreciate the nuances of ever-changing public health recommendation if they're getting mixed messages from the very top down*. Over half of respondents commented on the importance of emphasizing public health in medical education and increasing efforts to expand public health resources in

communities. Dr. Rempel noted *public health isn't funded well and, per capita, Kansas hasn't seen much increase in public health since the early 2000s.*

Dr. Witt said *we protected ourselves as well as we could or as well as our supplies would allow, and we took the very best care of our patients the best way we could. We read constantly and supported each other. No regrets about those things.* Dr. Tessa Rohrberg (Wichita) reflected on the mental and emotional impact the COVID-19 pandemic has had on healthcare workers. She was asked about the long-term effects on physicians and patients and replied *I think we are going to see a [spike in mental health issues] in patients, caregivers, and providers. There [were] challenges with [patients] losing jobs. The [medical staff] were fortunate to still have our jobs, but frontline healthcare workers did face a lot of the burden in working. And there's, I think, a huge risk for post-traumatic stress disorder and anxiety disorders.*

Moving Forward

As each conversation concluded, there was a somber mood to many of the interviews. The family physicians poured their time, energy, love and more into their patients and community during the COVID-19 pandemic. Although many are tired and wishing things were the way they used to be, many are confident about the future of family medicine. Family medicine will grow, learn and succeed at the end of the seemingly endless COVID-19 pandemic. Dr. Witt commented *I think family medicine is poised to be community medicine in new ways, to really include all patients in ways that other specialties might not be. I think we are poised to understand, incorporate, and address structural determinants of health and disease. We're ready to incorporate those and problem solve. I think we listen well and we're ready to listen to those lessons that have to be reckoned with and have started to be reckoned with. And I think that's a really exciting place for family medicine to go.* Dr. Rempel looked to the future to reflect on the

past. He said *I am so hopeful that someday 5, 10, 20 years from now, I can tell my kids- and if I have any grandkids- 'I did the right thing and made our corner of the world a better place' and I hope the history looks favorably on what we have done in medicine and public health, even though it still seems like we've been fighting a losing battle.* Dr. Oller ended her sentiments with *Family Medicine just plain and simple are the ones that are best suited and positioned to be the most trusted by the community as a whole, to be most involved in their community.*

Family physicians in Kansas are prepared for the future of modern-day medicine post-COVID-19 pandemic. They have persevered through the pandemic, acquiring new knowledge in various aspects of patient care and personal self-care. Although the pandemic persists, they stand strong and unified as proud Kansas family physicians.

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