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A student's lesson in healthcare disparities

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A student's lesson in healthcare disparities

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Abstract

This narrative was born out of a desire to examine the effects of healthcare disparities among minority populations. As a medical student, I had the opportunity to spend a 4-week rotation working with physicians specializing in palliative care during what is arguably the most challenging public health crisis in over a century. This provided a unique perspective that allowed the observation of the intersection of healthcare systems with underserved and vulnerable minority populations, and palliative medicine. It also allowed us to observe the negative consequences it has had, particularly during a hard-hitting global pandemic. The paper gives a brief introduction to the problem of healthcare disparities as described by the WHO and CDC. We discuss some of the statistical data that show how certain demographics like workers in service industries, or meat-packing facilities are more likely to contract the COVID-19 virus, and how these same populations are disproportionately affected by the pandemic due to their limited access to healthcare systems. We then discuss the case of a COVID-19 patient that was treated by a multidisciplinary team during this period. This patient, like many others, was an immigrant with limited proficiency in the English language, as well as a limited medical education. We provide details about his medical course during his admission, and we try to highlight some of the pitfalls in the healthcare system as it relates to this patient's prognosis and healthcare outcome.

Keywords

Disparity, palliative care, COVID-19, human experience

Introduction

With the steady wave of the COVID-19 pandemic sweeping across the US, and the rest of the world, it has become a daily routine to look up updated statistics on the number of cases and casualties that are collected from state health agencies across the US. Something that has stood out quite distinctly to me is the alarming number of cases and deaths that are being recorded amongst racial minorities, including Blacks and Hispanics, especially when compared to whites. For example: in New York City, 29% of the population is Hispanic but made up 34% of COVID-19 deaths.¹ In Chicago, Black citizens make up 30% of the population, but make up 70% of the COVID deaths.¹ In Louisiana, we also see a 70% COVID related death rate among Blacks, despite making up only 32% of the population.¹

As a fourth-year medical student, I see that my clinical rotations often demonstrate how the advances in modern medicine and medical technology provide satisfactory outcomes for patients. However, it was not until I spent a month with a palliative care consulting service that I realized firsthand the scourge of inequities among different racial groups in healthcare access and outcomes. It is this awareness which compels me to share

one story of a patient encounter, which is the same story for thousands of minority patients and their families today.

Palliative care is an interdisciplinary team approach of care based on alleviation of symptom burden, while providing psychosocial and spiritual support for patients and their families, to improve their quality of life. Despite the high chronic disease burden, and the morbidity and mortality experienced by this population, data suggest that the provision of palliative care to these patients is poor.² Studies have demonstrated lower-quality palliative care for minorities in the topics of satisfaction with care, communication, and pain management.³ Black and Hispanic patients are less likely to complete advanced directives,⁴ are more likely to die in the hospital setting,⁵ and have less access to hospice support, compared to whites.³

I saw the direct impact on patient care and the family experience caused by the COVID-19 pandemic, largely affecting those patients and families within the Latinx and Black communities. The palliative care team often served during this time as "medical interpreters" and a consistent bridge for communication to families who otherwise were struggling to get information about their loved ones. I observed family members experiencing increased frustration, anger, sadness and guilt about the lack of

visitation at the hospital. The barriers in communication created by this were numerous, and even further impacted these barriers when patients and families did not speak English as a primary language. The majority of the patients were uninsured, and the cost burden was significant for these families.

What are health care disparities, really?

One definition describes it as the differences in health and healthcare outcomes that exist between groups, and that are closely linked with social, economic, and or environmental disadvantages. Another definition simply describes it as “a higher burden of illness, injury or mortality experienced by one group relative to another”, typically within a specific geopolitical entity.⁶ While many disparities cut across a wide spectrum of possible causes, including but not limited to race, ethnicity, religion, sexual orientation, gender, socioeconomic status, and even disability status, the overwhelming reality is that many of the determinants of health do in fact exist along racial and ethnic lines.⁷

This report highlights a case study where a patient with COVID-19 disease was treated at our tertiary hospital system in an urban setting. The patient was a worker in a meat processing facility, an industry in the U.S is classified as essential business. Our patient, like many others in his position, was forced to work due to the looming threat of losing his job. This industry is considered a high exposure risk to this highly contagious virus.

Several outbreaks have been reported in many meat and poultry processing facilities scattered across several states in the US. According to investigative bodies such as the Midwest Center for Investigative Reporting, over 20,000 cases of COVID-19 disease have been reported in 33 meat processing facilities, with about 74 deaths as of June 6, 2020.⁸ The CDC guidelines for critical infrastructure workers states that workers may continue to work even after known exposure to COVID-19, provided that necessary steps have been taken to ensure that they and other members of the community remain protected. These protective measures include a negative test result for COVID-19 and remaining asymptomatic while in the work environment.

Despite this, the reported number of COVID-19 cases and related deaths associated with meat processing facilities have been significantly higher than in any other sector of the essential industry, or even in the general public. According to the Center for Economic and Policy Research, CEPR, minorities, immigrants, and generally people with low income make up the bulk (as much as 60% in many cases) of the working population. CEPR also points out that about 51.5% of frontline meatpacking workers are immigrants. This heavily contrasts the

population of immigrant workers in the general US population which sits at about 17%. The meat packing industry also has a large population of non-native English speakers, and speakers with low English proficiency, and low educational attainment. This makes these population groups especially vulnerable because they have very limited access to health and medical information, especially pertaining to the present COVID-19 pandemic.⁸

Narrative

Patient A is a 50-year-old Hispanic male with a history of diabetes mellitus Type 2 was admitted following an out-of-hospital cardiac arrest. He lives in a multi-generation home and his family reported that he had approximately two weeks of a febrile illness with a dry cough, which progressed to shortness of breath prior to his complaint of chest pain on day of admission. Patient A developed chest pain and then collapsed at home, and CPR was only begun upon EMS arrival. Patient A was intubated and was admitted to the intensive care unit (ICU). Laboratory testing for SARS-CoV-2 infection was done using RT-PCR of nasopharyngeal swab samples. On admission, Patient A's D-dimer level >1 microg/mL with elevated fibrin degradation products, prolonged activated partial thromboplastin and prothrombin times. The patient subsequently received vasopressor support, developed acute respiratory distress syndrome and was initiated on renal replacement therapy.

This case represents the complexities in caring for these patients, with evolving data on mortality and practice changes to improve outcomes. For patients with COVID-19 who develop severe ARDS requiring mechanical ventilation, the prognosis is poor with mortality ranging from 52 to 67 percent, with the highest rates of death occur in those ≥ 64 years.^{9,10} Patient A also had other known admission laboratory findings associated with mortality in COVID+ patients, such as elevated markers of coagulation and inflammation.^{11,12}

The Palliative Care (PC) team was consulted on ICU day five and became involved in the care for Patient A and his family. Due to public health care concerns, families were not permitted inside the hospital setting. In recognizing and anticipating the high level of family and surrogate psychosocial distress associated with patients in the ICU setting - let alone from a novel viral infection - the PC team was proactive in our involvement for patients like Patient A, particularly when English was not a primary language for patient and their families.

Whenever possible, the PC team used audio-visual telecommunication visits with an interpreter to improve the quality of in decision-making, to eliminate barriers to receiving in-person medical information in real time, and to establish a trusting relationship between the healthcare

team and Patient A's family. Many families did not have the internet access to use this type of technology, so a phone call was the most common means of communication. As with other families in this situation, what complicated this situation more, was that Patient's A family spoke primarily Spanish, which required an interpreter with every phone call to provide medical updates or goals of care discussion. This also provided an opportunity for the PC team to offer emotional comfort for the family if possible.

I worked closely with Patient A's wife. She shared eloquently and clearly with the team via phone, with the use of a Spanish interpreter, how difficult it was to "go about her day" and take care of her family while she worried about her husband, his condition, and anxiously awaited medical updates. Patient A's wife felt that her inability to speak English directly impacted communication between her and the medical team. At one point, Patient A's wife had waited over 24 hours to hear from a medical provider, and this was agonizing and frustrating for her. Patient A's wife also shared with the PC team that nothing mattered more than his survival and that no matter his condition, the family intended to care for him at home, no matter the cost burden. This conversation made an impression on me, as I could not imagine the financial costs of that was ahead for this family- another reminder of such disparities as the result of this pandemic.

Patient A remained critically ill in the ICU for over month, The PC team remained involved with the care and support for Patient A and his family throughout the course of his illness through the time of his death. Patient A died alone in the hospital, without his family at his bedside. The PC team offered bereavement services for Patient's A family following his death using an interpreter and audio-visual telecommunication for his family.

Reflections

This case, and many others I have come across during my time with a palliative care team, highlights a critical deficit in the provision of care for racial minorities and historically underserved communities. I witnessed a patient and his family, with many disadvantages prior to this pandemic, have an outcome too common for other minority families these past months. I appreciated the value the PC team had in participating in the care for Patient A and his family and saw how regular communication built a trusting relationship between the healthcare team and the family. But this was just one patient among thousands of others who may never have the involvement of a PC team, a team dedicated to bridging the gap for people living their daily lives with the disparities of health and resources that exist along racial and ethnic lines.

As a fourth-year medical student, I will hold onto the lessons learned during this pandemic throughout my career. I see myself as fortunate to have had the opportunity to work alongside a PC team and witness the most important lessons any medical student or other healthcare learner should experience for themselves. Our medical education system needs to finally acknowledge healthcare disparities and the resultant outcomes for many of our patients, and it must be embedded within the curriculum for students in healthcare. For myself, as I complete medical school and look ahead in my career as a physician, I will be active in advocating for those who live in my community for equal healthcare access that result in poorer outcomes for racial minorities.

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