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My Thoughts / My Surgical Practice

COVID 19: Surgery & the question of race



The COVID-19 pandemic is a health crisis like none other faced in modern medicine. Yet the more things change, the more things stay the same. COVID-19 has re-exposed a familiar pattern of health care disparities and reminded us that in America, not everyone is equal.

For some, the price of inequality is death. Case fatality rates among counties with an African-American population majority are six-fold higher compared to counties with a white population majority. In cities like Chicago, Milwaukee and New Orleans, death tolls are primarily concentrated in African Americans neighborhoods. It is no coincidence that in these same locations, residents have battled an entrenched history of segregation, underinvestment and underemployment. These factors work synergistically with poor social determinants of health to increase vulnerability to COVID-19 and result in egregious disparities in infection rates and morbidity/mortality.

Although the national discussion is appropriately focused on the disheartening reality of COVID-19's effects on the African American community, the disparities seen within this demographic are illustrative of the damage COVID-19 is having on other marginalized populations. The disease burden currently seen in the African American community foreshadows a deeper and unknown risk of COVID-19-related fatality in other equally vulnerable minority groups, including undocumented immigrants, people of Native Americans and Latin American descent, rural inhabitants, those living in poverty, the homeless and the incarcerated. In this moment, our response to African American COVID disparities is critical and signifies our call to action for all vulnerable populations affected.

Race inequity has a history both stark and nuanced in the U.S. and has rightfully warranted caution in scientific discussion. For some, COVID-19's emerging disparity sings an all too familiar tune and remains a harsh reminder about the legacy and deadliness of racism in the U.S. In the face of COVID-related health disparities, we are reminded that race, poverty and novel disease are inextricably linked.

Looking back to the not so distant past, the AIDS epidemic gave us a clear framework of this relationship and the lasting consequences of novel epidemics to African American health. Like COVID-19, AIDS started as a novel disease with a unique clinical picture and devastated the nation with an inconceivable rate of morbidity and mortality. As AIDS spread across the U.S., it exposed structural vulnerability within African American communities and the ways in which poor pre-existing health infrastructure contributed to outcome disparities. Today, AIDS continues to disproportionately affect African Americans, who account for 42% of new AIDS cases while making up only 13% of the total U.S. population.³ The AIDS epidemic is the only modern day health crisis we can

compare to COVID-19; its lessons require us to have truthful reflection and discussion regarding our progress with disparities and the associations of race with health outcomes. We cannot allow the lessons learned from AIDS to be wasted and for mistakes to be repeated.

How, you might ask, does this affect us as surgeons? While COVID-19 and AIDS are not strictly surgical diseases, their implications are noteworthy and may deepen mistrust and distance between minorities and healthcare providers. Thus, our investment in the pre-operative health of minorities is more critical now than ever before. This requires our protection, advocacy, and purposeful availability to minority communities. In light of the COVID-19 related disparities, the question becomes: is it enough to continue the work that we are doing, or might this moment of exposed inequalities reveal an opportunity to pursue a more equitable healthcare system? How can we facilitate and advocate for new healthcare system partnerships? And when the dust settles, how do we keep true to our commitment to racial equity in medicine?

It is in our nature to seek out a clear, concise, and actionable solution; sadly with the current pandemic there is no quick fix. But we might do well to push the conversation about racial disparities, and look at our own profession and practices. Given the gravity of COVID-19 and the current uncertainty regarding elective surgical cases, ^{4,5} recommitment and reformation must be our resolve. Access to surgery starts long before a patient walks into our office or into our emergency room. Surgical outcomes have to do with far more than our hands and our teams, and follow-up does not end with the post-operative visit.

A successful surgical outcome is tied inextricably to a patient's overall health and the health of the system that cares for them. Race, poverty and insurance status are only a few of the "non-medical" factors that influence outcomes. Shortly before our nation had its first surge of COVID-19 patients, the American College of Surgeons published a perspective piece with a specific call to action in addressing disparities and surgical access. Other authors have encouraged surgeons to seek interventions by addressing various factors that may contribute to disparities, such as socio-economic factors and imbalanced referral networks. In the complex terrain of COVID-19, it is imperative that we recognize the utility of that request.

Let us take this moment to outline some of the tangible steps in our purview. First, reflect on one's own practice, survey our respective implicit bias training, and be honest with our diversity initiatives. Two, reach out to primary care physicians and community organizations that are well informed about the populations at risk, and aid in their outreach efforts. Three, advocate at the hospital administrator level for reviewing data that include race and

social determinants. Finally, support community initiatives, which reach volunteers directly to improve access to care by novel approaches such as telemedicine.

While some of us have laid the foundation for these requests, we must have dedicated action towards our distance from primary care and fortify our partnerships with community leaders. Such dedicated action can better engineer fast track referral systems and aid surgical care to minority communities. If COVID-19 has taught us anything, it has taught us that the problems of healthcare inequity cannot afford the status quo.

We need a paradigm shift in how we care for patients, and in particular, minority patients. The complex nature of race, poverty, and social vulnerability are immutable characteristics of these patient populations and whether it's now in the face of COVID-19, or in the future as we rebuild, these characteristics will change the way in which these patients have surgery. Though it is wise to caution against generalized assumptions about race and its effects on African American health, it cannot be contested that regardless of socioeconomic status and prior health, African Americans tend to have poorer outcomes and worse morbidity across a myriad of health measures. This is what makes COVID-19 so devastating; we must acknowledge the impact of this disparity in this community and recognize that it is one that goes far beyond this moment.

Too often we have avoided "race informed" medicine. This is to mean utilization of what we know regarding race-based health disparities and appropriately augmenting care in pursuit of a more equitable system. Sadly, we are well aware of the past, the exploitation of race, and the lasting harm it has created for minority communities. The call now is to not shy away from race, but instead to use it as a means of informing care, to right our wrongs, and lift up those most crucially affected so that we don't again find ourselves rewriting the same story.

Disclaimer

This does not necessarily represent the views of the University at Buffalo Jacobs School of Medicine & Biomedical Sciences or John R. Oishei Children's Hospital.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Thebault R, Tran AB, Williams V. The coronavirus is infecting and killing black Americans at an alarmingly high rate. Washington Post. https://www. washingtonpost.com/nation/2020/04/07/coronavirus-is-infecting-killing-blackamericans-an-alarmingly-high-rate-post-analysis-shows/; 2020. Published April 7, 2020. Accessed April 16.
- 2. Husain Pratt CR Nausheen, Gutowski Christy, Stacy St Clair Gregory. Chicago's coronavirus disparity: black Chicagoans are dying at nearly six times the rate of white residents data show. chicagotribune.com https://www.chicagotribune.com/coronavirus/ct-coronavirus-chicago-coronavirus-deaths-demographics-lightfoot-20200406-77nlylhiavgjzb2wa4ckivh7mu-story.html. Accessed April 16, 2020.
- HIV and African Americans | race/ethnicity | HIV by group | HIV/AIDS | CDC. Published April 6, 2020. Accessed April 23 https://www.cdc.gov/hiv/group/racialethnic/africanamericans/index.html; 2020.
- Shao C. The COVID trolley dilemma. Am J Surg. 2020. https://doi.org/10.1016/ j.amjsurg.2020.05.012, 0(0).
- Diaz A, Sarac BA, Schoenbrunner AR, Janis JE, Pawlik TM. Elective surgery in the time of COVID-19. Am J Surg. 2020. https://doi.org/10.1016/j.amjsurg.2020.04.014. Published online April 16.
- Levine AA, de Jager E, Britt LD. Perspective: identifying and addressing disparities in surgical access: a health systems call to action. *Ann Surg.* 2020;271(3): 427–430. https://doi.org/10.1097/SLA.0000000000003572.
- Perez NP, Pernat CA, Chang DC. Surgical disparities: beyond non-modifiable patient factors. In: Dimick JB, Lubitz CC, eds. Health Services Research. Success in Academic Surgery. Springer International Publishing; 2020:57–69. https://doi.org/10.1007/978-3-030-28357-5_5.

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