

The African American Petri Dish

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Abstract: This commentary amplifies the insidious nature of the novel coronavirus (resulting in COVID19) and its ubiquitous spread, which disproportionately and adversely affect the health and well-being of people of color. The consequence is poor health outcomes and premature death. Ample previous literature documents health inequities in the morbidity and mortality statistics for Black and Brown people in the United States. Their excess deaths are due to disproportionately high rates of serious health conditions (diabetes; hypertension; asthma; and lung, kidney, and heart disease), as well as structural factors having to do with income, employment, and the built environment in which they live. The health conditions are exacerbated with ongoing societal problems and stress emerging from the country's history of dehumanizing racial inequities. Current discrimination comes most virulently in the form of systematic and institutionalized racist policies that keep racial and ethnic minorities marginalized and disempowered. Furthermore, people of color encounter the immediate external pressures of working away from home and using public transportation during the country's extraordinary ongoing lockdown, heightening the risk of exposure to the virus. Moreover, the same population is overrepresented in jails and prisons where social distancing is impossible. Any virulent virus without a vaccine is bound to become a human petri dish in which people of color in the U.S. today are caught. The war against the coronavirus for people of color is part and parcel of the war to eliminate historic inequities and to level the socioeconomic playing field. This article covers the racial/ethnic inequities in morbidity and mortality from COVID19 and the slow and untimely response by the federal government to address mediation of the spread of the virus. For people of color to transcend the coronavirus pandemic crisis there must be comprehensive access to COVID-19 testing and early, sustained, and affordable access to health care, including hospitalization. Such access will require national leadership, which seems to be in short supply.

Key words: Pandemic, racial inequities, ethnic inequities, minority populations, COVID-19.

As 2019 drew to a close and the world celebrated the new year, a highly contagious and lethal virus had developed through animal to human transmission. Called the *novel coronavirus*, the resulting condition was known first as COVID-19 and later as SARS-CoV-2* (in view of its genetic relationship to the SARS-1 virus that had spread

*SARS is an acronym for Severe Acute Respiratory Syndrome, reflecting the acute condition that may develop once a person has contracted the virus.

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in some parts of the world in 2003, affecting 26 countries and resulting in 8,000 cases and 774 deaths). The novel coronavirus was destined to spread much further than SARS-1. The National Center for Medical Intelligence (NCMI) in the United States first alerted the White House and Pentagon of the virus and its catastrophic potential in November in 2019.¹ U.S. intelligence agencies continued to warn both the White House and lawmakers of the serious threat posed to the country by the virus in January and February of 2020, but their warnings were met in large part with resistance and public minimization of the threat throughout this critical period.² By March 2020, the virus was effectively entrenched in the U.S., which as of April 15, 2020 had a total of 605,390 *diagnosed* cases and 24,582 deaths attributed to the illness, occurring in all 50 states, the District of Columbia, Guam, Puerto Rico, the Northern Mariana Islands, and the U.S. Virgin Islands, according to the Centers for Disease Control and Prevention (CDC), with no certain end date to the crisis in view.³

Public health researchers might well have predicted what appeared to many to be an anomalous feature of the virus early on: It was killing far disproportionate numbers of African Americans (and, we would later learn, of Navajo and Latino people) in most jurisdictions. They might have predicted this in view of three fundamental facts:

1. Reaching back to the mid-20th century, the U.S. federal government had documented the fact that African Americans were far more likely than non-Hispanic White Americans to suffer from a wide range of potentially fatal illnesses, including very prominently the burgeoning epidemic of non-communicable diseases such as Type 2 diabetes (T2D), asthma, end-stage renal disease (ESRD), and cardiovascular disease (CVD). Eventually in the 20th century, the federal government documented disparities like these disfavoring the health of Latinos and American Indians as well as African Americans in relation to non-Hispanic Whites.
2. People who contracted the novel coronavirus were at much higher risk of severe illness and death than others if they had certain pre-existing conditions, including T2D, asthma, severe kidney disease (the most severe being ESRD) and CVD. Connecting 1 and 2: *Members of the racial and ethnic groups African American, American Indian, and Latino from the jump were at greater risk for severe illness and death from COVID-19 than were non-Hispanic Whites as a result of long-standing racial/ethnic health inequities in the U.S.*
3. People who continued to be exposed to others outside their homes (people unable or unwilling to practice the social distancing that was finally recommended by some state governors in the U.S. starting in mid to late March) were at greatly heightened risk of contracting COVID-19. Importantly, this group included people in lower-paying jobs that were deemed essential: many health workers (including—in addition to doctors and registered nurses—respiratory therapists, licensed practical and vocational nurses, health technicians, and home health aides); corrections officers; security personnel; housekeeping and janitorial workers; and other service workers. As the Bureau of Labor Statistics makes clear, members of most minority groups are over-represented in such jobs.⁴ We can add to this the fact that lower-income people more often travel by public transportation than

higher-income people do, again placing them at greater risk from the virus. We hold that both (1) (racial/ethnic health inequities) and (3) (SES inequity affecting health) arise largely due to *social determinants of health*, among which we count structural racism in U.S. society and the U.S. health care system.

Finally, we connect all three observations: Members of the racial and ethnic groups African American, American Indian, and Latino were at greater risk for severe illness and death from COVID-19 than were non-Hispanic Whites, and these same people were (and are) more likely to contract the virus in part because they hold jobs that they are unable to leave (and must travel to) and *therefore* were (and are) on average at much higher risk of contracting the virus.

In what follows, we explore in more detail how the pandemic contributed to the exaggerated threat from the novel coronavirus for minority group members: the mortality statistics for a number of states (broken down by percentage of African Americans in each listed state and the percentage of the people dying of COVID-19 in that state who were African Americans); the link between *social determinants* (or, social conditions) and health, including structural racism. As if this weren't enough, Black and Brown people whose health made them vulnerable, like others in the U.S., labored under another burden during the pandemic. The additional burden? The Executive Branch's halting response to the greatest public health crisis facing the U.S. and the world in over a century.

This commentary contributes a drop in the bucket of what researchers and thought leaders will write about for many years related to health inequities and how the novel coronavirus (Covid-19) brought the issues of health inequities full circle—full circle to a predictable reality of social determinants of health, including structural racism, presenting a clear and present danger to people of color. Contemporary Black scholars, including Vivian Pinn, Love Jones, Camara Phyllis Jones, Bob Robinson, David Williams, the late Bill Jenkin and recently, recently deceased, Bailus Walker, have written for decades about the failure of the U.S. public health and health care systems to address forthrightly the endemic racial and ethnic health inequities that plague U.S. society.^{5,6} These scholars and others have specifically drawn attention to implicit bias and silent (as well as *not* silent) racism.

Taking the widest analytic view, Jones argues that the tortured history of forced passage to the Americas, 400 years of chattel slavery, followed by war and more than a century and a half of struggle to achieve equal status is inscribed on the bodies and minds of African Americans—i.e., that history itself accounts for the greater levels of health distress that are seen among Black people in the U.S. in comparison with non-Hispanic Whites. Jones (Professor Emeritus at the University of Texas, MD Anderson Cancer Center) dubbed this the *Post-Traumatic Slave Syndrome* (PTSS)^{7,8} and postulated that PTSS accounts for many of the negative forces in the African American population that we observe today.^{7,9} Dr. Joy Degruy published a book under the title, *Post Traumatic Slave Syndrome: America's Legacy of Enduring Injury and Healing*, which became quite well-known.** One way of understanding the idea of PTSS is as the

**Degruy J. *Post Traumatic Slave Syndrome: America's Legacy of Enduring Injury and Healing*. Joy Degruy Publications Inc; Revised edition (September 11, 2017)

original cause of health inequities, while leaving plenty of room for more *immediate causes*, including the continued stress imposed by silent racism, structural racism, and systemic discrimination.

Still more narrowly, substantial research demonstrates the direct effects of *proximal social and environmental determinants* on health. Social determinants include poverty, food insecurity, access to health care, exposure to violence, and barriers associated with language and literacy. As parts of the physical environment, we must mention housing, exposure to toxins, availability of green spaces, and damage due to global warming, among others. All of these conditions mediate the effects of American history on the health of people of color generally and African Americans specifically.¹⁰

We must also acknowledge the complex role played by gender in the expression of health. Vivian Pinn MD, former President of the National Medical Association, and founding Director of the Office of Research on Women's Health, National Institutes of Health has argued for years about including women and people of color in biomedical research.¹¹ In the present context, we strongly assert that as research around coronavirus commences and continues, people of color of both genders must—as a matter of ethics—be included as both subjects and researchers related to coronavirus. This is especially true given the emerging pattern of sharply disproportionate mortality from COVID-19 among men and African Americans, and disproportionate incidence of COVID-19 among members of the Navajo Nation as well as among Latinos (about which more below).¹²

Camara Phyllis Jones, MD, PhD, MPH, a family physician, epidemiologist, and former president of the American Public Health Association, noted recently on CNN that structural segregation and inequality in the U.S. have positioned African Americans and other people of color to be disproportionately at risk for infection and death from COVID-19, due in part to the pre-existing co-morbidities summarized earlier in this paper.¹³ Equally importantly, she noted, continual environmental and employment exposures place African American and other people of color at great risk.¹³ Hence, as people of color are infected with COVID-19, they have more severe outcomes from the virus. These citizens living in high-density areas represent clusters of petri dishes, much like the jails and prisons with disproportionately high numbers of Black and Brown people held captive (in yet another petri dish).¹⁴⁻¹⁷

In 1974, Victor Fuchs, a health economist and professor at Stanford University School of Medicine, wrote a book entitled, *Who Shall Live?* which drew widespread attention to the increasingly out of control costs and the chaotic system of health care services.¹⁸ His startling, but fully documented, conclusion was that in the U.S. our health has less to do with what we spend on health care and more to do with hereditary and environmental factors, as well as access to quality health services. While there is a thin line between personal responsibility and health care system responsibility with respect to people's health status, we cannot escape the conclusion that racism and economic inequality exert strong influence. Lack of access to quality health care in the U.S. continues to worsen significantly and very disproportionately the health of people of color and people with low incomes.¹⁹ Nor, as we pointed out above, can we escape the well-documented observation that political and social determinants (employment, education, housing, social justice, food security, environment) are part

of the American tapestry, just like apple pie. The social determinants of health inequity and structural barriers remain daunting vectors, and it should come as no surprise that they have generated (with help from some other factors) racial and ethnic disparities in morbidity and mortality associated with COVID-19. A small but telling example comes from St. Louis, where—as of April 12th, 2020—there had been 12 deaths from COVID-19; all 12 were African Americans. The disproportionate effects of COVID-19 on African Americans in some areas of the U.S. are laid out in Table 1 (based on data from American Public Media²⁰ as of April 17, 2020).²¹

Table 1.
DEATHS FROM COVID-19

State	% African American	% of COVID-19 Deaths
Georgia	31%	56%
Illinois	14%	44%
Kansas	6%	37%
Louisiana	32%	65%
Maryland	29%	49%
Michigan	14%	47%
Wisconsin	8%	39%

In a more complex sociological context, New York City—the virus's first major hotspot in the U.S.—demonstrated a pronounced inequity in coronavirus cases (Latinos were significantly over-represented relative to non-Hispanic Whites and African Americans) and a *different* pronounced inequity in deaths (disfavoring both African Americans *and* Latinos) relative to non-Hispanic Whites and Asians:

Averaging out the racial composition of the five New York City zip codes with the highest coronavirus rates shows a significant overrepresentation of Latinos (45.8 percent) and Asians (23.4 percent), and a significant underrepresentation of non-Hispanic Whites (21.2 percent) and blacks (8 percent) when compared with their citywide populations.²²

The age-adjusted death rate for COVID-19 is 22.8 per 100,000 people among Latinos in New York. This is higher than the rate among African Americans (19.8), non-Hispanic Whites (10.2), and Asian Americans (8.4).²³

Georgia and many other states initially reported not keeping records on the race/ethnicity of the people infected and die from the coronavirus disease. Georgia is now noting the race of the cases after the lack of records was brought to the attention of the governor and the state health commissioner. We find this omission rather odd, since race is certainly noted on death certificates. Table 1 above depicts the skewed nature of African Americans in particular locations dying from COVID-19, in contrast to the proportion of African Americans in the population of that area. The mismatch

between rates of death from COVID-19 and representation in the overall population demands attention and action: It began to be noted in the press as hot spots developed around the country.

The numbers are sad but not surprising to those who recognize the ongoing saga of health inequity among people of color in contrast to their non-Hispanic non-Hispanic White counterparts. We suspect that there are many more people of color dying at home from COVID 19 who did not make to the hospital. Among other reasons for our expectation: the cost of health care looms large for most Americans. The Kaiser Family Foundation conducted a survey on March 25-30, 2020, and found that over eight in 10 (82%) of uninsured adults ages 18-64 say that they worry that they will not be able to afford testing or treatment if they contract COVID-19.²⁴ Furthermore, people in lower-paying jobs (a cohort that includes a larger proportion of people of color than other income groups, as noted above) reported they felt themselves to be at increased risk of contracting COVID-19 than others:

Six in ten (57%) also now report being worried they will put themselves at risk of exposure to coronavirus because they can't afford to stay home and miss work (up from 35% earlier in March). This includes six in ten hourly workers (60%) and workers who get paid by-the-job (61%) as well as seven in ten employed adults who earn less than \$40,000 annually (72%). Part-time, hourly, and lower-income workers are also disproportionately more likely to be worried about losing their home or being laid or losing their job because of the coronavirus outbreak.

—Kaiser Family Foundation²⁴

Over one-third (36%) of all respondents to the Kaiser survey were worried about being able to afford testing or treatment for COVID-19. While the federal government is covering the costs of testing (since testing is free to consumers) the costs of *treatment* can be unaffordably high for many people. Testing in populations of color certainly has not been widespread: thus, a predictably high incidence of asymptomatic cases among these groups—again—should not be surprising.²⁵

The 45th President Donald J. Trump (hereafter, Forty-five or 45), has said that more African Americans dying from COVID-19, "...just does not make any sense."²⁶ His view is both naïve and myopic. Indeed, it does make sense, and public health professionals acknowledge the long-known and scientifically documented observation that African Americans suffer disproportionately high occurrence of risk factors: heart disease, cancer, diabetes, obesity (women only), hypertension, asthma, and kidney disease.^{19,27,28} In 1985, there were 60,000 excess deaths reported among Black people. This number of excess deaths among Black people was calculated by comparison with the death rates among the sex/age adjusted death rate of their non-Hispanic non-Hispanic White counterparts. In 2005, the reported number of excess had risen to 83,000.²⁹ These underlying assaults compounded by COVID-19 can only result in disproportionately lethal outcomes for African Americans. Once diagnosed with COVID-19, the survivors are those who are more physically fit, who are younger, who are not burdened by such pre-existing conditions, and who have access to health care unimpeded by financial concerns. Any high school student could recognize this symbiotic relationship. Yet 45

was naïve to this cause-and-effect relationship, reminding us unavoidably of the fable, *The Emperor Has No Clothes*. Slow getting out the gate, 45 called the virus a hoax, and he often continues to be deaf to the guidance of scientists, until it becomes blatantly correct in the eyes of the public. As a direct result, the coronavirus pandemic spiraled out of control in the United States, causing many deaths, especially among people of color. The public health crisis has escalated into a medical crisis, and now we have both a public health crisis (which we can lay at the door of the Executive Branch's relentless focus on politics) *and* a medical crisis (due to the lack of a vaccine or effective treatment for this novel virus, exacerbated by widespread chronic conditions, especially among minority populations). Forty-five is known for throwing others under the bus when they don't agree with him. He engages in what we might call *happy talk*, implying that everything will be fine, and the virus will suddenly go away. He offers false hope under the guise of optimism. Yet, he fails to allow science to drive national public policy. He has yet to acknowledge that President Barack Obama, in a 2014 address to the National Institutes of Health (NIH), predicted a flu-like epidemic and cautioned NIH to ready itself.

Forty-five boasts about the U.S. having the strongest armed forces in the world. He says that the U.S. has more ammunition and firepower than any other country. Thus, one wonders why he was so slow to arm the frontline health care workers with adequate personal protective equipment (PPE), in the fight against the coronavirus—a fight that he himself calls a war against the virus. Certainly, 45 would not send soldiers into combat with no bullets in their guns. Yet, he was slow and paralyzed when it came to deploying the National Defense Production Act to have companies to make ventilators and needed PPEs of which the governors and hospitals were desperately in need (in the face of hundreds of dying citizens every day). The inaction and indecisiveness by the White House reminds us of another famous fable—Humpty Dumpty!



*Humpty Dumpty Sat on a Wall.
Humpty Dumpty had a great Fall.
All the king's horses and All the king's men
Couldn't put Humpty together again.*

The lack of a comprehensive national testing strategy continues to be a major problem. Testing for the coronavirus is not uniform across sub-populations (as noted above), much as there was and continues to be redlining for housing. Typically, people showing signs of infection (dry cough, high fever, trouble breathing) meet the threshold criteria for being tested, yet many thousands infected with the virus are asymptomatic and thus are *not* tested, though they are fully capable of spreading the virus to anyone close enough to them. The Executive Branch's directive is that those with symptoms

should call their doctor first, with the expectation that a private doctor will advise them on what to do. They tell people not show up at the emergency room (ER), where they might infect others. There seems to be no sensitivity to—or even awareness of—those marginalized and low-income people who do not even have a primary doctor to call. The ER is their primary source of care. The affluent find it much easier to be tested; among other things, they are more likely to own cars to do drive-by testing, while the people with fewer resources rely on public transportation (another petri dish) and go untested and spread the virus. Since testing is already limited, the burden of infection will be determined, not by the incidence of the disease, but by those who have access to testing. This is to say nothing of incarcerated populations (who truly lack an exit from an infected setting where people are tightly packed and unable to maintain anything like social distancing). It is also to say nothing of people who are homeless; like many low-income populations and people of color, the homeless have very high rates of chronic conditions and very few opportunities for social distancing. Furthermore, people who are homeless cannot in general get regular access to soap and water and places to wash and bathe.

Collecting racial and ethnic data on testing, infection, morbidity, hospitalization, and mortality rates associated with COVID-19 is essential, not collecting and sharing such data is racist, by design. It is a stunning fact that on April 15, 2020, the CDC reported that *in 78% of identified coronavirus cases, no race or ethnicity was identified in patient records.*³⁰ No doubt, sociologists and urban scientists will be studying the discrimination in access to COVID-19 testing for many years to come. Contact tracing is a misnomer in inner-city areas—given the density of the populations there—and will not be effectively implemented there.

As we have documented, the White House was slow in adopting mitigation strategies. After the intelligence and military agencies had been warning of the threat from the novel coronavirus since late 2019, in mid-February 2020, Dr. Anthony Fauci from the National Institutes of Health (the leading expert on infectious diseases in the country, and Ambassador Dr. Deborah Birx from the State Department (an epidemiologist and global health expert) advocated for social distancing—they were met with four solid weeks of pushback from the White House in response.³¹⁻³³ Social distancing was not adopted as a national recommendation until mid-March 2020. All of this tragic history is because one man thinks he is smarter than everyone else in the room, despite his cavalier and self-serving disregard for science.

We cannot close without mentioning 45's advocacy of using hydroxychloroquine for treating COVID-19. This FDA-approved drug is approved to treat malaria, lupus, and sickle cell anemia, illnesses that are disproportionately high among African Americans and Hispanics. Additionally, there is little evidence for the efficacy of the drug against COVID-19. Yet the White House promotes the drug for treating the novel coronavirus. As a result, patients with malaria, lupus, or sickle cell anemia must now compete with misled people gobbling up this drug in a desperate attempt to defeat the coronavirus, causing the supply chain to dry up and creating more access barriers to needed medication for people of color.

In response to the global cry to flatten the upward curve of Coronavirus infections and death, we say this: *The curve that needs the most flattening is the health inequity*

curve. The income inequality curve needs to be flattened for a more equal distribution of income within the U.S. population. In 2018, the Gini Coefficient was .49 in contrast to 1990 when it was .43. This coefficient is a measure of income inequality with a range 0 to 1. The 28-year change from .43 to .49 indicates movement in the wrong direction, since the higher Gini Coefficient indicates an increasingly inequitable distribution of income.³⁴

Globalization has sparked such competition that income inequality places low-income people and nations at a higher risk for death from COVID-19. Recent reports indicate that U.S. Customs authorities seized personal protective equipment (PPE) and ventilators scheduled for delivery to Barbados.³⁵ On top of that, French doctors have been discussing doing experiments in African countries to test the efficacy of new drugs to combat COVID-19.³⁶ However, Dr. Tedros Adhanom Ghebreyesus, the World Health Organization director, said *hell no* to these racist discussions. He said these French doctors have a “Hangover from Colonial Mentality.”³⁶ Dr. Ghebreyesus was referring to remarks made by Dr. John-Paul Mira, head of intensive care unit Services at the Cochin Hospital in Paris and Dr. Camille Locht, research director for France’s National Institute of Health and Medical Research. Given these behaviors, people of color and less developed countries thoughtfully and rightly distrust governments and the mega-countries.³⁷⁻⁴⁰

Moreover, there is a lack of involvement and problem-solving with input from scholars who represent people of color (historically Black colleges and universities [HBCUs], the Congressional Black Caucus, and other minority think-tank organizations). It was refreshing to hear remarks, on CNN, from three national health leaders, including Dr. Valerie Montgomery Rice, President and Dean of Morehouse School of Medicine; Dr. James E.K. Hildreth, President of Meharry Medical College; and Dr. Patrice Harris, President of the American Medical Association. Dr. Hildreth’s contributions are especially meaningful as his background includes an influential career as a scientist researching HIV/AIDS, a poor infectious disease that caused many thousands of deaths world-wide, and that continues to do so, especially in sub-Saharan Africa. Dr. Hildreth speaks with a depth of knowledge from the prior epidemic that is vital to draw upon as the U.S. and the world at large strive to overcome the massive challenge suddenly facing us in the form of COVID-19.

Make no mistake: COVID-19 is a disease and a virus most dangerous for the less able people, the people with meager incomes. This includes the disproportionately high number of African American patients, front-line health workers, hospital cleaning staffs, and public service employees who drive buses and serve as flight attendants, airline ticket agents, and TSA screeners, as well as those who work as domestic employees in other people’s homes. These are the high-exposure petri dish positions occupied largely by people of color. These are the people *who live* in the petri dish. This is the structurally stratified population in the U.S who are more exposed to the virus. Suddenly, the whole nation is depending on the very people politicians don’t want to pay \$15.00 an hour. The economic toll is equally devastating for people of color. When things get tight for employers, the last hired (more often than not, the Black and Brown people) are the first fired. Catastrophically, upwards of 22 million people had applied for unemployment benefits after losing their jobs as a result of the shutdown designed to mitigate the spread of the coronavirus (as of April 16, 2020). We strongly expect that people of color constituted well more than their share of this group.⁴¹

Where do we go from here? Surely, not to trust those who have not been trustworthy. We say to you. “Prove yourself trustworthy, before you ask for trust!”

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