



COVID-19, Social Determinants Past, Present, and Future, and African Americans' Health

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Abstract

As the COVID-19 pandemic progresses, more African Americans than whites are falling ill and dying from the virus and more are losing livelihoods from the accompanying recession. The virus thereby exploits structural disadvantages, rooted partly in historical and contemporary anti-Black sentiments, working against African Americans. These include higher rates of comorbid illness and more limited health care access, higher rates of disadvantageous labor market positioning and community and housing conditions, greater exposure to long-term care residence, and higher incarceration rates. COVID-19 also exposes African Americans' greater vulnerability to recession, and possibly greater susceptibility to accompanying behavioral health problems. If they are left unaddressed, the very vulnerabilities COVID-19 exploits may perpetuate themselves. However, continuing and supplementing health and economic COVID mitigation policies can disproportionately benefit African Americans and reduce short- and long-term adverse effects. The greater impact of COVID-19 on African Americans demonstrates the consequences of pervasive social and economic inequality and marks this as a critical time to prevent further compounding of adverse effects.

Keywords African American health disparities · COVID-19 · African American economic disparities · Policy

Introduction

Despite significant advances in scientific understanding and public health practice that have improved humans' ability to withstand pandemics, it remains true that COVID-19, like other pandemics, has exploited deep and enduring health-related, social, economic, and political divisions. Historical and contemporary structural injustices that deny African Americans equal access to education, employment, housing, justice, and health care opportunities have cumulative effects, and have produced marked African American-white disparities in health and in underlying social determinants. COVID-19 has capitalized on these, creating greater African American

COVID-induced challenges and suffering. Furthermore, COVID-19 threatens to perpetuate or even widen these differences.

Marginalized groups have long borne a greater burden from pandemics. Considering a third wave of bubonic plague lasting from 1898 to 1910, historian Frank M. Snowden described how it followed “the international fault lines of inequality, poverty, and neglect” (p. 38). He further documents how seven waves of cholera have ravaged impoverished people and areas of concentrated poverty [1]. COVID-19, too, exploits disparities in social determinants of health and health care, possibly yielding more illness and death and leaving an even wider gap in vulnerability.

In the present-day USA, marginalization, “inequality, poverty, and neglect” are partly driven by historically rooted assumptions of Black inferiority expressing themselves in contemporary anti-Black bias. By identifying particular areas of Black enslavement in the antebellum south, researchers demonstrate that “whites who live in areas where slaveholding was more prevalent are today... more likely to oppose race-related policies that many feel would potentially help Blacks” [2, p. 14]. Direct measurement of modern anti-Black implicit and explicit bias indicates that whites now living in once slaveholding areas exhibit more bias today, and that this bias is

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linked to Blacks' unfavorable standing on social and economic determinants [3]. The effects of bias on health [4] and health care availability [5] extend beyond formerly slaveholding areas. However, by tracing bias to slaveholding, researchers establish links between this bias and the economic and politically motivated belief in African Americans as inferior [2].

This paper reviews literature on African American-white disparities in COVID-19 illness and COVID-19 risk factors. It illuminates key points of African Americans' COVID-19 vulnerability arising from African Americans' disadvantaged social and economic positions, many originating in racism's contemporary and intergenerational effects [3]. It identifies mitigating policies—already enacted and needing renewal or otherwise up for consideration—mirroring policies put forward by Congressional Black Caucus (CBC) Chair Representative Karen Bass. The policies benefit African Americans especially, owing to African Americans' health and health care [6] and occupational disadvantages [7], as well as lower incomes and higher poverty rates [8] and smaller holdings of shock-absorbing personal and household wealth [9]. The paper also highlights how these vulnerabilities, if they remain unaddressed, can become self-perpetuating and produce cumulative effects.

This paper focuses on two distinct threats emanating from the pandemic that are likely to significantly affect African Americans' health. The first is the virus itself, which African Americans are more likely to contract and from which they are more likely to experience more serious illness and mortality. This is due to greater exposure to numerous health-related, social, and economic risk factors. The second threat is from the economic recession caused by the pandemic. African Americans are more vulnerable to this threat too, with potentially dire consequences for African Americans' economic well-being and health. Here, we consider each threat separately.

African Americans and COVID-19 Illness

Prevalence, Severity, and Mortality Truly representative national estimates are lacking due to unstandardized state data collection systems upon which national reporting relies and because only about half of states report data on race and ethnicity [10]. But evidence strongly points to African Americans being especially hard-hit by the COVID-19 pandemic. According to surveillance data from the Centers for Disease Control on September 28, 2020, African Americans, who represent about 13.4% of the US population [11], comprise 18.2% of COVID cases and 20.9% of deaths [12]. Whites are underrepresented, and African Americans are 3 times more likely than whites to become ill [13] and 3.5 times more likely to die compared to whites [10].

Disparities also occur at the state level: in the majority of states reporting data on race, Black people account for a higher share of COVID-19-related deaths and cases compared to their share of the U.S. population [14]. At the community level, controlling for a host of community-level risk factors, a 10% increase in Black population is associated with a 312.3 increase in Covid-19 cases per 100,000 residents. This increase in case rates is 20% greater than for an equivalent increase in Latino population, and the increased risk for Latino communities diminishes when other community risk factors are accounted for [15].

The African American population is also younger than the white population and death rate disparities widen after age adjustment is performed: African Americans' death rates become 3.4 times greater than whites' rates [16]. A death rate imbalance occurs when comparing all age categories: Black death rates for people 55–64 years old are higher than white death rates for people 65–74 years old; Black death rates for people 65–74 years old are higher than for white rates for people 75–84 years old [17].

African Americans become more seriously ill and are more likely to die from COVID-19 because African Americans suffer more from underlying illnesses and adverse health conditions [18]. More African Americans than whites have diseases of the heart, malignant neoplasms, cerebrovascular disease, diabetes, and obesity and, in turn, a shorter life expectancy (Health, United States, 2018). COVID-19 adds a new vector of vulnerability from these already-problematic conditions. Focusing on these and other risk factors for becoming seriously ill as identified by the Centers for Disease Control, Koma and colleagues [19] used the 2018 Behavioral Risk Factor Surveillance System (BRFSS) to estimate how many adults are at high levels of risk. They report that African Americans are about 1.3 times more likely to be at elevated risk among non-elderly adults living in the community. Disparities in comorbid illness elevate disparities in COVID severity revealed in COVID-associated hospitalization disparities. CDC data reveal that African Americans' COVID-associated hospitalization rates are 4.6 times greater than white rates. These data are better than others because they emanate from a comprehensive and uniform reporting system predating the COVID era and achieving a 95% reporting rate for race [20].

To ease COVID's spread in African American communities and reduce African Americans' greater likelihood of contracting and dying from COVID, barriers to COVID detection in African American communities and follow-up contract tracing must be overcome [21]. African Americans are more likely to reside in areas with fewer testing sites [22] and therefore more testing should be offered in churches, public housing sites, community health centers, and other familiar sites in African American communities [23]. Testing results should be broken down and reported to public health officials by race and ethnicity and should include zip code or

neighborhood identifiers for early targeting of hard-hit African American communities. To relieve the cost burden of testing, federal provisions supporting cost-free COVID testing for insured and uninsured people should be continued [24]. Expedited contact tracing should proceed with tracers employing community health workers and other trusted figures with access to far-reaching community networks [25].

Health Care Disparities in screening and treatment contribute to disparities in prevalence, illness severity, and mortality by creating disparities in COVID detection and in the provision of clinical care. Along with African American's historically justified mistrust of health care systems exposure to implicit clinical bias and other race-based barriers to treatment-seeking, important structural barriers to detection and treatment are present which align with key policy initiatives that have previously been enacted, are up for consideration for renewal, or are under continued threat.

African Americans continue to be uninsured at substantially higher rates than whites [26]. This may lead to greater fear of paying out-of-pocket costs for testing and treatment and less willingness to seek care when it is needed. Cost concerns deter COVID treatment-seeking for everyone [27], and cost is likely to interfere for African Americans especially. Private insurers' existing measures should be continued to defray costs for COVID treatment [28] and new measures should be adopted as needed. Furthermore, reversal of the Affordable Care Act, which comes before the Supreme Court in November of 2020, could result in loss of coverage for 1 in 10 Black Americans, resulting in 20% of African Americans being uninsured [29].

African Americans continue to be less likely to have an office-based usual source of health care, to have a personal physician or health care provider, and to have visited a physician in the past 12 months [30], and they are more likely to appear in emergency departments and to be hospitalized [31]. Less attached to the health care system and living where there is less COVID infrastructure, African Americans have fewer opportunities for diagnosis and early treatment and less awareness of programs to defray uncovered costs [32]. Community health workers should be employed who can assist with African Americans' access to community resources and at-home care during recovery [25].

A disproportionate number of African Americans rely on community health centers (CHCs) for outpatient care and COVID has brought many of them under threat. Almost 2000 sites closed temporarily as patients avoided routine health care and losses mounted with declining patient volume revenue [33]. Initially, federal rapid-response grants provided funding to increase CHC's testing capacity and for the purchase personal protective equipment. However, CHCs were

overlooked in subsequent safety net funding efforts as loopholes denied them appropriations [34]. CHCs should be funded to make up for lost revenue and provide sufficient funding for long-term operations [23]. More stable, long-term funding of CHCs would enable these organizations to address patients suffering from long-term damage from COVID infection [35].

Risk Factors

Labor Market Exposure Black Americans continue to be over-represented in the lowest-paying service and domestic occupations, including taxi drivers and chauffeurs, food servers, and maids and house cleaners [7]. In such works, face-to-face contact with the public is required and social distancing is difficult to maintain. Nor do these jobs permit working from home, denying disproportionately more African Americans opportunities for the social distancing considered essential to mitigating risk [36].

Those who would voluntarily abandon work to reduce exposure to COVID-19 are sometimes denied the opportunity to do so. African Americans' occupations render them more likely to be considered "essential workers," including grocery store, food service, health care, and courier workers, and they continue to perform their vocations in an environment of greater risk [37]. A recent study demonstrated that African Americans who were at high risk for severe illness for 1.6 time more likely than whites to live in households containing health-sector workers, and 56.5% of Black adults at high risk live in households where at least one worker is unable to work from home, compared to only 46.6% among whites [38]. If these workers become ill, they are less likely to have paid sick leave [39]. The Family First Coronavirus Response Act (FFCRA) attempted to redress the problem by bringing paid sick leave to those previously without it, but exemptions greatly restricted the scope of new coverage [40]. Thus, COVID-19 capitalizes on the lack of work flexibility and control over working conditions to illuminate a previously neglected source of health-related risk [36].

The Occupational Health and Safety Administration (OHSA) has issued standards and directives for sanitation, personal protective equipment, and other measures for workplace safety during the COVID pandemic [41] and these apply to many occupations where African Americans are overrepresented. Critics have charged that OHSA has been insufficiently vigilant in pursuing compliance and otherwise in insuring workplace safety [42]. African Americans' workplace safety interests are best served by strong enforcement of OHSA standards.

Community, Residence, and Household Factors African Americans are more likely to live in impoverished and

segregated neighborhoods and residents are at high risk of experiencing poor health [43]. This elevated risk extends to risk of becoming ill from COVID-19. Considering five county-level indicators of risk, one analysis found 43% of the Black population lived in high-risk counties—greater than 30% of the population at large. The disparity was even larger when considering the very highest levels of risk [44]. Another study focusing on the most populous counties found that as the African American population proportion increased, so did COVID-19 prevalence and death rates [45].

Housing units occupied by African American individuals and families are more likely to place them routinely in close proximity to others, making it more difficult to maintain the social distancing that reduces risk of COVID-19 infection. When compared with whites, African American households are considerably more likely to reside in multiunit structures, such as apartments and condominiums, with more shared functional spaces and equipment (e.g., mailboxes or laundry facilities) [46].

Black households are also more than twice as likely as whites to live in households with three or more generations. Despite its many advantages in ordinary times, these arrangements pose challenges for minimizing COVID-19 risk: “While older people have been encouraged to isolate themselves as a preventative measure, this presents a challenge in homes where other members of the household must work outside of the home. In smaller or more densely populated home environments, it can be more difficult to effectively isolate vulnerable family members from those who have been infected or who face greater risk of exposure to the virus because of their work conditions” [40].

When isolation and quarantine are necessary to lessen COVID’s spread, requirements should be implemented while keeping in mind African Americans’ lesser ability to afford living in housing arrangements that allow for quarantine. Government support is needed for rental of temporary housing in suitable empty apartments, hotels, and other temporary housing [47]. For African Americans who can arrange safe conditions while remaining at home, costs should be defrayed for supportive services such as grocery and medication delivery. To stop the spread of COVID-19 among African Americans requires these and other supports to implement isolation and quarantine requirements.

Long-Term Care Facilities It is widely known that nursing homes are hotspots for the rapid spread of COVID-19, and that the largest proportion of pandemic-related deaths have been among the elderly and long-term care resident populations [48]. A greater proportion of African Americans aged 65 years or older reside in long-term care or skilled nursing facilities than do white Americans and this disparity is growing; from 1999 to 2008, the number of elderly Black Americans living in nursing homes grew by almost 11% while

the number of white residents in nursing homes declined by over 10% in the same period [49]. A wealth of data shows that racial/ethnic minorities receive care in lower performing nursing homes than their white peers [50], and Black nursing home residents receive a lower clinical quality of care than their white peers, with poorer outcomes [51]. The concentration of residents of color within lower quality nursing homes suggests that they may be at a higher risk of COVID-19 infection and mortality. However, in a recent report to Congress, researchers testified that though quality ratings of a nursing facility had no significant relationship with COVID-19 cases or deaths, nursing homes with the highest percent of non-white residents were more than twice as likely to have COVID-19 cases or deaths as those with the highest percent white residents [52]. Rigorous adherence to CDC guidance for safe operation of long-term care facilities, via strict protection and better pay and working conditions for long-term care staff and prioritizing minority-serving facilities, can benefit African Americans especially [51].

Jails and Prisons Correctional populations suffer from COVID infection at very high rates due to long periods of joint confinement in close quarters [53]. Although African Americans’ incarceration rates have fallen since 2006 [54], African Americans remain considerably more likely to be incarcerated than whites, and they are overrepresented among older prisoners serving longer sentences who are more vulnerable to serious illness if infected [55].

Non-incarcerated African Americans are 50% more likely to have an incarcerated family member [56], posing greater family and community risk as prisoners are released to prevent or eliminate uncontrolled spread in correctional hotspots [57]. Released inmates contribute greatly to coronavirus infection rates in their communities. One study attributed almost 15% of COVID cases statewide in Illinois to persons who cycled in and out of the Cook County Jail [58]. Alternatives to incarceration can better control confinement as a source of risk: “alternative mechanisms of criminal deterrence such as citations, public service requirements, and supervised release are not only more humane policies in accordance with international standards of human rights but also sound public health policy in a globalized era of vulnerability to the rapid spread of infectious diseases” [56, p. 1417].

African Americans and the COVID-19 Recession

African Americans’ Greater Job Loss African Americans’ occupations afford limited job security [59] and, as unemployment surged for everyone when the economy contracted, it struck at African Americans particularly. In May 2020, the white seasonally adjusted unemployment rate peaked at

12.4%, whereas the African American rate was 16.8%. By September 2020, unemployment rates fell to 7.0% for whites but it was 12.1% for African Americans [60]. In 2020, before COVID-related shutdowns, the white unemployment rate was 3.2%, and the Black unemployment rate was 5.5% [40].

African Americans' greater increase in unemployment continues a longstanding pattern of Black's greater job loss in response to economic contraction. Measuring unemployment changes from the high point of joblessness to the low point for the 1979–1982 and 2007–2009 recessions, Hoynes and colleagues [61] found that African American men fared worse than white men in both recessions and that African American women fared worse than white women during the 2007–2009 recession.

African Americans, Recession, and Behavioral Disorders

Suicide and behavioral health disorders have been shown to increase following recession more consistently than other health problems [62–64], and mental health complaints have increased with rising rates of COVID-19. National survey data indicate that over half of adults report problems with sleeping or eating, increased alcohol use, or worsening chronic health conditions due to worry or stress from COVID-19 [65], and persons with significant psychological distress report greater financial strain [66]. Another national survey found that the depression symptoms rose more than three times higher during the COVID-19 pandemic, especially for African Americans and others with fewer social and economic resources and more stressors including job loss [67].

COVID-19 has precipitated a spike in behavioral health crisis care-seeking: spokespersons for the Substance Abuse and Mental Health Services Administration reported an almost 900% increase in calls to its Disaster Distress Helpline [68]. Data are lacking for African Americans' COVID-19-related behavioral health crisis care, but African Americans are more likely than whites to make emergency room visits for psychiatric reasons [69, 70] as the stresses associated with job loss—from foreclosure and eviction and inability to meet monthly expenses—befall African Americans especially. African Americans have repeatedly demonstrated mental illness rates that are no higher than those of whites [71]. However, mental health concerns from COVID-19 may challenge African Americans especially, as structural factors leave African Americans more susceptible to mental health problems from COVID-19 illness and economic recession.

Provisions of the now-expired 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act helped to cushion African Americans greater economic suffering from the pandemic [72]. With a median household income of less than \$42,000 [11], few African Americans exceeded the income limits for direct cash payments to individuals and households. Other provisions benefitting the economically precarious called for eviction relief, foreclosure moratoriums, and

mortgage forbearance; loan payment postponement and interest waivers; and enhanced, extended unemployment payments, and assistance for minority owned businesses and for state and local governments [73]—which benefit African Americans disproportionately [74]. The CARES Act, however, neglected to include rental assistance for non-home owners, among whom African Americans are disproportionately represented [75], and this exclusion can have devastating financial consequences for both renters and property owners [73]. Reauthorizing and extending provisions of the CARES Act, and including provisions for rental assistance, would enable African Americans to recover economically more than they have from past recessions.

COVID-19 and Perpetuation of Social, Economic, and Health Inequalities

From the COVID-19 pandemic and recession, pathways appear by which disproportionate African American suffering can perpetuate and increase the very social inequality that renders African Americans more vulnerable to COVID-19 and its effects. Seen most readily are effects entrenching African Americans' greater poverty—a strong predictor of poor health. By operating in such a manner, COVID-19 will trigger a feedback loop by which, even as African Americans' poverty causes poor health, African Americans' poor health will cause more African American poverty [76].

One route to perpetuating economic disparities has already been established: more serious illness as indicated by higher rates of COVID-associated hospitalization and mortality, especially in the presence of comorbid illness [21]. With fewer opportunities for testing [22], fewer trusted, usual providers [30, 77] and lower rates of health insurance [26], African Americans are likely to be diagnosed and treated later. As a result, many may experience a more serious course of illness and lesser degree of recovery both short-term and long-term. African Americans are notably more likely than whites to have incomes marginally above the poverty line, and they are more likely to slip into poverty and remain in poverty for longer spells [8]. With the advent of COVID illness, and smaller personal and household wealth reserves to absorb the economic impacts of illness or job loss [9], more African Americans may slip into poverty and they may remain there for a longer period of time.

African Americans may also recover less from the COVID-19 recession. This can be expected because African Americans' recovery from the 2007–2009 recession was incomplete. By 2017, white household income levels had more than rebounded past pre-recession levels, but African American income levels had not. The effect was such that between 2015 and 2017 “recent progress in closing the Black-white income gap over the last couple years has been

reversed” [78]. African Americans’ occupations provide them with lower wages and slower wage growth [78], thereby contributing to African Americans’ financial precariousness. Recovery from COVID-19 recession, in whatever form it might take, will likely see a slower economic response for African Americans due to their greater economic fragility.

Intergenerational perpetuation of poverty becomes more likely with the closing of schools to prevent the spread of COVID-19. Along with smaller residences with more residents affording less opportunity for isolated study, Black households with teens are 2.5 times more likely to lack high-speed internet access [79]—a handicap when completing homework assignments under ordinary circumstances and posing an insurmountable obstacle when all instruction must be conducted at home via web-based learning. Furthermore, low-income youth—among whom African Americans are disproportionately represented [80]—have been more absent in online learning [81] and families facing poverty and economic stressors exacerbated by the pandemic may lack the time, capacity, and emotional resources to adequately support their children in online learning [82]. Furthermore, among children with special education needs—also a group in which African American children are overrepresented [83]—school closures mean the loss of critical specialized supports for learning as well as school-based mental and behavioral health needs services [82].

School is also a source of meals that low-income students rely on, leaving districts scrambling to continue to provide this critical service [84]. School also can be a shelter from strains of living in impoverished neighborhoods [85] and inability to attend can reduce psychological well-being and safety. Increased risk for family violence due to economic stressors and confinement [86] combined with reduced contact with mandated reporters in school settings places children in poverty at increased physical and emotional risk [82].

As educational, nutritional, and emotional difficulties grow, already-troubling disparities in educational achievement are likely to widen from the COVID-19 pandemic [81]. Though the CARES Act included some provisions for maintaining school lunch programming and family nutritional assistance, food insecurity has doubled among families with children since 2018 [87]. Additional funding for family and child food assistance is needed to ensure adequate nutrition for low-income and newly unemployed families. Furthermore, as schools re-open for students, with less than 20% of the requested funding to expand building and online learning capacity, processes and outcomes should be carefully tracked and evaluated by local governments and school districts [82]. Additional school supports and services should be provided to children known to be more educationally, emotionally, and physically at risk during school closures [88].

Conclusion

By these and other mechanisms, both in this generation and the next, COVID-19 is likely to reinforce or increase African American’s poverty. Poverty’s well-established link to poor health is such that COVID-19 can entrench, or widen, African American-white health disparities. The coronavirus has exposed the existing economic, political, and institutional structures in the USA to a “stress test” and structural inequalities have led to cascading and potentially compounding adversities for African Americans. Underlying disease rate disparities render African Americans more vulnerable to contracting and suffering more serious forms of illness and outcomes, as more barriers keep them from accessing information as well as diagnosis and treatment. Labor market positioning, neighborhood residence, household composition, and confinement rates in long-term care facilities and in jails and prisons present additional sources of high risk. The COVID-19 recession affects African Americans more because of a more precarious hold on employment and higher unemployment, but also because of access to fewer alternative sources of financial resources to compensate for lost income. Furthermore, the long-term effects of disadvantaged and lost education for African American children and youth who are less likely to receive the formal and informal learning supports they need succeed during school closures may contribute to disparities in economic advancement and recovery in decades to come. In this manner, COVID-19 animates structural barriers underlying health disparities and presents us with choices that can reduce them, or reinforce them, or even exacerbate them going forward.

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Data Availability Not applicable

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Code Availability Not applicable

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