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Racial Health Disparities in Coronavirus Deaths

Daniel L. Howard

Abstract

Preliminary racial data on the coronavirus pandemic indicates that African Americans are much more likely to experience infections, hospitalizations, and death from the virus in comparison to other racial groups. While this appears to be an alarming health outcome regarding African Americans, it is, in fact, not surprising, nor even new information, considering the historical context of racial health disparities and the marginal health of African Americans in the United States. The leading causes of death for African Americans generally and historically reflects the leading causes of death for the entire United States population. More research, and obviously data, is needed to fully understand the factors that cause the overall racial health disparities, in general, and racial disparities in coronavirus cases and deaths, in particular. In the case of the coronavirus pandemic, the racial disparities in deaths reflect racial differences in the way that African Americans live, work, and exist as a result of their 'second-class citizenship' with respect to their lower socioeconomic status in comparison to other racial groups. From a health policy perspective, challenges exist to reversing the current trend in coronavirus deaths among African Americans due to a myriad of historic, consistent, and pervasive societally-induced deficits within African American life. The proposed chapter will rely on systematic review of the extant literature on racial health disparities to identify multiple factors that may affect African American deaths due to the current coronavirus pandemic. The chapter will also rely on this framework to inform evidence-based approaches to improve public health for African Americans.

Keywords: African Americans, race, health disparities, health equity, social determinants of health, coronavirus, COVID-19

1. Introduction

Preliminary racial data on the coronavirus pandemic indicates that African Americans are much more likely to experience infections, hospitalizations, and death from the virus in comparison to other racial groups. Of the 25,152,433 cases of COVID-19 infections and 419,827 deaths due to this infection in the United States as of January 26, 2021 (**Table 1**), the percentage of African Americans (12.2%) and Hispanics (20.8%) experience coronavirus infections (**Table 2**) near their representative percentages in the general population (13.4% and 18.5%, respectively) (**Table 3**). In addition, African Americans, Hispanics, and American Indians are among the highest proportion of individuals with laboratory-confirmed COVID-related hospitalizations per 100,000 population (564, 524.2, and 645.7, respectively) compared to whites (261.9) (**Table 4**). Finally, a higher percentage of African Americans (15.6%), specifically and uniquely,

Confirmed cases	25,152,433
Deaths	419,827
CDC Updated: Jan 26 2021 12:16 PM.	

Table 1.
Coronavirus confirmed infections and total deaths in the United States.

Race/Ethnicity	Percentage	Count
Hispanic/Latino	20.8	1,998,031
American Indian/Alaska Native, Non-Hispanic	1.3	126,045
Asian, Non-Hispanic	3.6	344,630
Black, Non-Hispanic	12.2	1,171,902
Native Hawaiian/Other Pacific Islander, Non-Hispanic	0.4	35,183
White, Non-Hispanic	55.8	5,353,940
Multiple/Other, Non-Hispanic	6	571,110
CDC Updated: Jan 26 2021 12:16 PM. Data from 18,807,907 cases. Race/Ethnicity was available for 9,600,841 (51%) cases.		

Table 2.
Percent of coronavirus infections by racial groups (as of January 26, 2021).

Self-Identified Race	Percent of Population
Non-Hispanic white	60.1%
Hispanic and Latino (of any race)	18.5%
Black or African American	13.4%
Asian	5.9%
Two or more races	2.8%
Native Americans and Alaska Natives	1.3%
Native Hawaiians and Other Pacific Islanders	0.2%
US Census Bureau April 1 2020 Estimates (web). United States Census Bureau. April 2020. Retrieved January 26, 2021.	

Table 3.
2019 U.S. Census Bureau estimates.

Overall	380.3
White	261.9
Black	564
Hispanic/Latino	524.2
Asian/Pacific Islander	214.6
American Indian/Alaskan Native	645.7
COVID-NET: COVID-19 Associated Hospitalization Surveillance Network, Centers for Disease Control and Prevention. WEBSITE. Accessed January 26, 2021.	

Table 4.
Percent of laboratory-confirmed Covid diagnosis hospitalizations per 100,000 by racial groups (as of January 16, 2021).

Race/Ethnicity	Percentage	Count
Hispanic/Latino	13.1	30,338
American Indian/Alaska Native, Non-Hispanic	1	2,349
Asian, Non-Hispanic	4.3	9,847
Black, Non-Hispanic	15.6	36,207
Native Hawaiian/Other Pacific Islander, Non-Hispanic	0.2	532
White, Non-Hispanic	61.5	142,411
Multiple/Other, Non-Hispanic	4.2	9,686
CDC/Updated: Jan 26 2021 12:16 PM. Data from 298,564 deaths. Race/Ethnicity was available for 231,370 (77%) deaths.		

Table 5.
Percent of coronavirus deaths by racial groups.

experience death from this infection at a much higher percentage than they are represented in the general population (**Table 5**).

While this appears to be an alarming health outcome regarding African Americans, it is, in fact, not surprising, nor even new information, considering the historical context of racial health disparities and the marginal health of African Americans in the United States. In a co-authored article entitled, “The Color Line and the Health of African Americans” [1], I noted that one of the first examinations of African American health was in the W.E.B. DuBois classic study of the Philadelphia Black population of the late 1880s, *The Philadelphia Negro*, which revealed that the death rate of Philadelphia Blacks was higher in comparison to other populations [1, 2]. In fact, other early examinations of Black health status noted historically that African Americans have greater morbidity and mortality than other Americans [3–5]. And, many studies since have consistently shown that African Americans live sicker and die younger than other racial groups [6].

The leading causes of death for African Americans generally and historically reflects the leading causes of death for the entire United States population [6]. In 2017, these included diseases of the heart, cancer, stroke, homicide (specific to Blacks only), and unintentional injuries [7]. Moreover, the health status of African Americans identifies a higher prevalence of cardiovascular diseases, cancer, hypertension, diabetes, obesity, and sexually transmitted infections, i.e., HIV infections, when compared with whites [6, 7]. The projected deaths from coronavirus in 2020, with estimates in the hundreds of thousands to millions and its predominance among African Americans, will undoubtedly catapult it into the top five of leading causes of death for African Americans [8].

As a result of this pervasive deficit in health status and health outcome among African Americans, a “Task Force on Black and Minority Health” was established in 1984 by the U.S. Department of Health and Human Services that resulted in the landmark “Heckler Report” in 1985 [9, 10]. This report by Secretary Heckler marked the first convening of a group of health experts by the U.S. government to conduct a comprehensive study of racial and ethnic minority health and elevated minority health to a national stage [10]. The term ‘racial health disparity’ was coined shortly thereafter [11, 12], which is defined as differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions that exist among specific populations in the United States [13]. In 2000, Congress passed The Minority Health and Health Disparities Research and Education Act (Public Law 106–525) to address “the significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates.” The Act created the National Center on Minority Health and Health Disparities

at the National Institutes of Health (NIH). This Center was re-designated as one of twenty-one [14] preeminent *Institutes* of Research, each with a specific research agenda and independent ability to set its own funding priorities and strategies, at NIH in 2010, as part of The Patient Protection and Affordable Care Act (Public Law 111–148), or colloquially known as ‘Obamacare’, with the stated mission to “lead scientific research to improve minority health and eliminate health disparities.”

More research, and obviously data, is needed to fully understand the factors that cause the overall racial health disparities, in general, and racial disparities in coronavirus cases and deaths, in particular. But, to do so, we must first understand ‘what is race’ and how is it related to health? [15] Earlier research on racial differences in health had been dominated by a genetic model that views race as primarily reflecting biological homogeneity, and Black-White differences in health as largely genetically-determined [15, 16]. More recent, rigorous, and comprehensive examinations of racial differences in health suggest, however, that race is a societally constructed taxonomy that reflects the intersection of particular historical conditions with economic, political, legal, social, and cultural factors, as well as mistrust of the medical care system and racism pertaining to biases in the quality of medical care received [15–17]. Macrosocial factors and position within social statuses also most often affect health through intermediary mechanisms and process such as health behavior, mistrust of the medical care system, stress, quality of medical care received, and a broad range of social, psychological, cultural, and religious resources [17]. Therefore, to understand the complex relationship between race and health, these factors have to be considered, which are known as ‘social determinants of health’ [18–21]. Thus, it is more correct to view race as a proxy variable for, or an influence of, many aspects of the health care experience that subsequently impact health outcome, rather than a direct influence on health outcome [14, 22].

‘Health equity’ -- the absence of health disparities in controllable or remediable aspects of health, i.e., social justice -- arises from having access to the social determinants of health, specifically those related to wealth, power and prestige [23, 24]. In the case of the coronavirus pandemic, the racial disparities in deaths reflect racial differences in the way that African Americans live, work, and exist as a result of their ‘second-class citizenship’ with respect to their lower socioeconomic status in comparison to other racial groups.

As noted, the health status of African Americans identifies a higher prevalence of cardiovascular diseases, cancer, hypertension, diabetes, obesity, and sexually transmitted infections, i.e., HIV infections, when compared with whites. Higher rates of coronavirus among African Americans may be due to being more likely to have comorbidities, which has been noted as a significant risk factor for coronavirus death [6, 7].

Minority racial groups are more likely to experience multidimensional poverty than their White counterparts [25]. Higher rates of coronavirus among African Americans may be due to being less likely to have basic resources or access to basic resources to provide protection against the virus, i.e., masks, gloves, sanitized wipes, etc.

The nation is largely segregated, leaving racial groups exposed to different health risks and with variable access to health services based on where they live [26]. Higher rates of coronavirus among African Americans may be due to being more likely to co-exist around others in their respective densely-populated neighborhoods and communities who are at higher risk from contracting the virus. And, there may be limited facilities to seek care in these neighborhoods and communities that have less resources.

As of 2018, most groups of color remained more likely to be uninsured compared to Whites. Moreover, despite the larger coverage increases for groups of color, the relative risk of being uninsured compared to Whites did not improve for some

groups [27]. For example, Blacks remained 1.5 times more likely to be uninsured than Whites from 2010 to 2018 [27]. Higher rates of coronavirus among African Americans may be due to being more likely to be uninsured and, therefore, less likely to receive medical care after contraction of coronavirus.

U.S. Census Data from 2010 revealed that whites have the country's highest homeownership rate, while those identifying as being African American had the lowest homeownership rate, by almost half [28]. Higher rates of coronavirus among African Americans may be due to being more likely to live in densely-populated apartments and other multi-person dwellings, rather than single-family homes, which reduces the ability to self-isolate and increases the exposures for contracting the virus.

12.4 percent of African-American college graduates between the ages of 22 and 27 were unemployed in 2013, which is more than double the rate of unemployment among all college graduates in the same age range, 5.6 percent [29]. African American unemployment rates are typically double that of whites. African-American men working full-time earn only 72 percent of the average earnings of comparable white men and 85 percent of the earnings of white women [30]. Moreover, a national review of 2015 data on white-collar employment showed that white men are 61.3% of executives nationally and 81% above parity when compared with their 33.8% representation in non-management professionals [31]. African American men and women still represent a very low percentage of the professional white-collar workforce (less than 8%), given their overall representation in the population [31]. Higher rates of coronavirus among African Americans may be due to being more likely to work in customer service, technical, and support staff positions or in the 'gig economy' i.e., Uber and Lyft, which require more interaction with the public and increases the exposures for contracting the virus, rather than in more professional positions, which are more likely to allow the ability to work from home.

Researchers examined 2000 U.S. Census data to find that Black households were much less likely to own a car than were white households, identifying a growing gap between car ownership in white and black households that spanned income levels [32]. 19% of African Americans reported living in a household without access to a vehicle [31]. 4.6% of White Americans reported living in a home without access to a vehicle [32]. Higher rates of coronavirus among African Americans may be due to being more likely to use public transportation, i.e., subways and busses, to get to work, which reduces the ability to socially-distance and increases the exposures for contracting the virus.

The Pew Research Center 2014 US Religious Landscape Survey indicated that 47% of Blacks attend religious services at least once a week in comparison to 34% of whites [33]. Higher rates of coronavirus among African Americans may be due to being more likely to congregate in public spaces with many other individuals, rather than practice social distancing, particularly at the advent of the spread of the coronavirus and prior to public health messaging to stay at home and to avoid large gatherings.

Morbidity and mortality rates among African American may be influenced by the healthcare seeking behaviors of this population. Eley et al. findings confirm the importance of social relationships in influencing African American health-seeking behaviors and offer characterization of the nature of influence across different types of relationships: family, culture and upbringing, and peers [34]. For African American men, beliefs about masculinity and manhood that are deeply rooted in culture play a role in shaping the behavioral patterns of men in ways that have consequences for health [35]. Men are socialized to project strength, individuality, autonomy, dominance, stoicism and physical aggression, and to

avoid demonstrations of emotion or vulnerability that could be construed as weakness [35]. These norms can translate into African American men “toughing it out” through fewer encounters with the health care system, delayed attention to symptoms, poor medication compliance, and an unwillingness to talk openly about health concerns [36]. For African American women, the literature on the reasons why individuals may miss healthcare appointments suggest that socioeconomic reasons may play a major factor [37]. African American women are more likely to be single, employed, and the sole provider of her children in comparison to white women [38]. Pavik et al. indicated that full-time employment (not being able to get off work) is a reason for missing a breast examination appointment [39]. Taplin et al. noted that those attending a clinic more than 45 minutes from the breast cancer screening center was negatively associated with subsequently obtaining a breast mammogram [40]. Blankton et al. suggested that lack of transportation is the main reason for missed healthcare appointments [41]. Higher rates of coronavirus deaths among African Americans may be due to racial differences in healthcare seeking behavior as a result of sociocultural and/or socioeconomic issues.

In the United States, the more vulnerable segments of the population were also the most unwitting subjects of medical experimentation, but African Americans, including children, bore a disproportionate burden and suffered the most brutal, invasive, and perilous of the medical experiments [5]. The infamous Tuskegee Syphilis Study from 1932 to 1972 is most illustrative of this and may resonate the most with respect to African American’s lack of trust in the medical care system [5]. Medical mistrust is thought to affect health care–based decisions and has been linked to poor health outcomes [42]. Previous work has demonstrated that medical mistrust is not significantly associated with failure to receive needed medical care; however, medical mistrust can serve as a barrier to optimal health [43]. Higher levels of medical mistrust have been found to be associated with failure to take medical advice, failure to keep follow-up appointments, and postponement of receiving needed care [43]. Higher rates of coronavirus deaths among African Americans may be due to mistrust in the medical care system, in general, and physicians, in particular, which may specifically impact compliance with healthcare instructions and more broadly, with public health messaging.

Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, a 2003 book by a panel of national experts convened by the Institute of Medicine, revealed that racial and ethnic disparities in health care are known to reflect access to care and other issues that arise from differing socioeconomic conditions [6]. However, the book further reports that there is increasing evidence that even after such differences are accounted for, race and ethnicity remain significant predictors of the quality of health care received [6]. A number of studies by this author corroborate *Unequal Treatment* as pervasive and consistent racial differences and disparities in the medical treatment that African Americans have received in comparison to whites are indicated [44–49]. These differences and disparities exist for a myriad of medical conditions and procedures and in spite of controlling for insurance status and for income. For instance, studies have revealed that the occurrence of urinary symptoms by African American men does not necessarily result in the receipt of further diagnostic tests [50]. African Americans were less likely than whites to have regular digital rectal exams (DREs) by physicians. Moreover, African Americans were more likely to not received DREs at all. In contrast, whites were more likely to receive a DRE every year as recommended by the American Cancer Society guidelines. This result is consistent in the Flint Study of African American men with prostate cancer that showed that few of these men sought and received for urinary complaints [51]. In contrast, the solicitation of medical care for white

men has been demonstrated to be a function of symptom severity, according to the Olmsted Study of white men with prostate cancer [52]. Higher rates of coronavirus deaths among African Americans may be due to inherent racial biases in the medical care system that impact the quality of medical care received after contraction of coronavirus.

Finally, satisfaction with medical care is increased when physicians are attentive, give patients the chance to relay information in their own way, provide more information, and share control of the termination of the medical interaction [53, 54]. In general, practitioners who use a more companionable communicative style characterized by warmth, empathy, genuineness, and a nonjudgmental attitude rather than a controlling, authoritative style received more favorable evaluations by patients. According to Auslander et al., ineffective communication can be caused by a lack of sensitivity to the cultural values, norms, and environmental contexts of patients of races or ethnicities other than those of the provider [54]. African Americans are less likely to be satisfied with the medical care that they do receive, which, again, may directly impact their use of health care services [55]. In a study of the impact that physicians trained at international medical schools (IMGs) in comparison with physicians trained at United States medical schools (USMGs) have on the satisfaction with medical care and health care-seeking behaviors of an oversampled racial cohort of urban and rural elders, Howard et al., found that for African Americans, perception of IMGs is directly related to issues of cultural competency, communication, and ageism [55]. Higher rates of coronavirus deaths among African Americans may be a result of dissatisfaction with the medical care system that dampens their pursuit of needed medical care services.

2. Conclusion

Challenges exist to reversing the current trend in coronavirus deaths among African Americans due to a myriad of historic, consistent, and pervasive societally-induced deficits within African American life. However, these are only a few of the possible factors that cause the overall racial health disparities and, in particular, influence the disproportionately high rate of coronavirus deaths among African Americans. Only a qualitative research assessment of the lives of these unfortunate individuals as well as analysis of the corresponding data will begin to provide the answers as to why these outcomes are occurring.

3. Implications

In general, the provision of widespread testing and monitoring for COVID-19 in African American communities would facilitate early detection among the symptomatic and asymptomatic infected; self-isolation and quarantine of both the symptomatic and asymptomatic infected will reduce the spread of the virus. Hospitalizations and adverse treatment outcomes could possibly be reduced by earlier treatment of the flu- and pneumonia-like symptoms before illness progresses to the need for extensive medical stays and subsequent use of ventilation for lungs.

However, due to social determinants of health that convolute the relationship between race and health, substantial funding is necessary to promote health equity in the African American community during the coronavirus pandemic. For instance, due to the level of poverty, lower socio-economic status, and uninsured among African Americans, COVID-19 testing, vaccinations, as well as medical

treatment for those suffering from coronavirus must be cost-free for these specific sub-groups of the African American community.

Further, not all adverse healthcare seeking behaviors can be address in the African American community as it relates to this current pandemic. But certainly, those healthcare seeking behaviors related to socio-economic factors, i.e., not being able to get off of work during traditional business hours, not having treatment facilities in proximity to poor, minority communities, and not having transportation to travel to these facilities, can be addressed. More COVID-19 testing and vaccination sites can be placed in African American communities and along or near major mass transportation routes. Hours of operation for testing and vaccination sites can be expanded to accommodate those African American workers with jobs that have less flexible schedules, i.e., customer service, technical, and support staff positions.

Finally, given the high level of mistrust of the medical system by African Americans, it is critical to build public health campaigns driven by leaders in the African American communities, and have oversight provided by community consortiums to ensure ethical, fair and safe practices in the administration of these tests and vaccines in order to enhance compliance that will facilitate the eradication of the coronavirus pandemic.

Conflict of interest


The author states that there is no conflict of interest.

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