# **COVID-19 in Context**

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# 1. How Systemic Racism and Preexisting Conditions Contributed to COVID-19 Disparities for Black Americans

KEISHA L. BENTLEY-EDWARDS, MELISSA J. SCOTT, AND PAUL A. ROBBINS

The initial reporting of COVID-19 presented two dominant narratives. The first painted a picture in which all people in the United States faced a similar publichealth threat. Popular media narratives and publichealth campaigns asserted that COVID-19 was an invisible enemy that would strike indiscriminately. The second narrative was that black people were immune to COVID-19 because of both the low prevalence of the virus in Africa and too few known cases for black people prior to April 2020. These myths were quickly dispelled once researchers and publichealth officials began disaggregating and analyzing data along racial lines. The data revealed precisely what anyone with a rudimentary understanding of racial health disparities would expect: this illness could be added to an extensive list of preventable diseases that disproportionately impact black Americans.

Race, the social construction that supports racial hierarchies, is not based on genetic differences (Yudell et al. 2016), and black people are neither immune nor susceptible to COVID-19 because of race-based genetics (Carter and Sandford III 2020). Data analyzed by the Centers for Disease Control and Prevention (CDC) indicate that from March to mid-November 2020, African Americans were 3.7 times more likely to be hospitalized and 2.1 times more likely to die because of COVID-19 compared to white Americans (Centers for Disease Control and Prevention 2020). With minimal scrutiny, this health disparity could

simply be attributed to the large portions of black people who live in the major cities and densely populated neighborhoods that were greatly affected early on, such as New York and Detroit. However, white people who were living in adjacent densely populated neighborhoods had lower odds of contracting and dying from COVID-19. Thus, rationales for the observed racial group differences in COVID-19 outcomes plausibly extend beyond genetics, geographic location, and urbanicity; disparities are likely attributable to other social factors. This chapter argues that this virus is a unique threat to the health of black Americans because of ongoing systemic health disparities in preexisting conditions, access to quality healthcare, and differences in lived experiences, all of which have been major catalysts for dissimilar COVID-19 outcomes.

## **Social Determinants of Preexisting Conditions**

To understand why this disease and many others are particularly perilous for black Americans, it is important to consider how daily engagement with the racial biases that are embedded in the socioecological structures of the United States generate and exacerbate racial health gaps (Williams and Mohammed 2013a). These systems consistently endanger black people by exposing them to uneven risk without providing equitable support structures to mitigate the burden on black health. As a result, black Americans—especially those who were born in the United States rather than those who immigrated here—are more likely to have adverse health conditions such as hypertension, diabetes, asthma, obesity, kidney disease, and cardiovascular disease (Benjamin et al. 2019; Mazurek and Syamlal 2018). Typically, these comorbidities are more debilitating and often are deadlier among US-born black people. Each of these preexisting conditions has also been associated with suffering moderate to severe symptoms and greater mortality from COVID-19.<sup>1</sup>

Prior to the pandemic, black Americans had higher rates of the comorbid illnesses that make COVID-19 more dangerous, and they tended to develop many of these diseases at earlier ages than non-Hispanic, white Americans. For example, although the prevalence and mortality rates of cardiovascular disease are similar for black and white adults over the age of 65, young and middle-aged black adults have higher prevalence rates than their white counterparts that cannot be wholly explained by clinical and socioeconomic indicators (Jolly et al. 2010). The existence of such health disparities means that the population of black people who are vulnerable to the pandemic includes a wider age range than epidemiologists might predict for Americans in general. Relatedly, reports claimed that people who were 65 years or older were at substantially greater risk

for COVID-19 complications than younger adults, often without acknowledging that these data were not disaggregated by race and age. Conducting a deeper analysis of the data for which race was available, people who are over 65 years comprised the majority of COVID-19 hospitalizations among whites—but the same age group comprised less than 40 percent among blacks in the United States (Centers for Disease Control and Prevention 2021a). For black Americans, the majority of hospitalizations occurred in those who were thought to be at lower risk: adults younger than 65 years old. Black Americans began the pandemic with higher rates of medical conditions that exacerbate COVID-19, so their distinct susceptibility to COVID-19 should have been anticipated.

Still, a singular focus on the higher likelihood of having underlying health conditions overlooks the larger social systems that contribute to black overrepresentation among the less healthy in the United States. Specifically, this emphasis on individual health trivializes how racially biased social, medical, and environmental systems reliably produce worse outcomes for black Americans compared to their white peers. Recognizing systemic failures does not take away from an individual's personal agency around health behaviors; to the contrary, it recognizes that people's health behaviors, conditions, and outcomes are informed by the society and structures in which they live, play, and work. The interplay between systemic racism and individual outcomes and behaviors complicates the relentless focus of poor outcomes resulting from a combination of poor individual choices. Instead, a recursive approach clarifies how disparities in preexisting conditions are produced by black people being sorted into contexts of social and health immobility (Colen et al. 2018; Yancy 2020). These social determinants of health make it more likely that, collectively, black people will become and remain in poorer health regardless of their financial and social capital (Williams, Priest, and Anderson 2016; Smith et al. 2018).

Many of the racial gaps in the health conditions that have been linked to worse COVID-19 outcomes can be partially attributed to differences in access to the US healthcare system. Not only are black people overrepresented among the uninsured and underinsured, but a sizable portion reside in areas that lack quality medical facilities. As is outlined in other chapters of this book, black Americans have lower incomes and less wealth than white Americans, which limits their access to private insurance and their ability to pay for medical care if they are uninsured. Furthermore, the majority of black Americans live in southern states, many of which have rejected federal funding for Medicaid expansion without providing adequate alternatives.

Also contributing to black Americans' lack of access to the healthcare system is their overrepresentation in jobs that do not subsidize or provide sufficient

insurance benefits and paid sick leave (Brundage Jr. 2020). The drastic rise in unemployment due to COVID-19-related restrictions and expiring pandemicrelated safety nets have expanded disparities in the labor force, which, in turn, have negatively impacted black Americans' access to health insurance (Groeger 2020; Garfield and Tolbert 2020). People without health insurance are often dissuaded from scheduling doctor visits for nonemergencies because of the out-of-pocket costs of covering preventative healthcare. At times, they avoid going to the doctor if they believe that they could be diagnosed with a serious illness or one that would require significant time and money for proper treatment. Those without or with only minimal paid sick leave sometimes are made to choose between missing shifts to receive a professional assessment of their symptoms or working while ill. For workers who are paid by the hour, missing work to see a physician means they will lose some of the money they would have earned as well as the opportunity to make additional money. The combined lack of financial resources and public or private protections decreases black Americans' inclination and agency to seek routine wellness screenings and medical treatment, adding to their likelihood of having undiagnosed and untreated preexisting conditions that leave them susceptible to COVID-19.

#### **Essential Workers and Health Risk**

Aside from the lack of wages and insurance coverage provided to black employees, many of their jobs directly contributed to their risk of exposure to COVID-19. Black Americans are overrepresented within service occupations, such as public service, food service, manufacturing, food processing, postal service, package delivery, custodial, healthcare support, and gig economy (e.g., ride-share and grocery delivery) jobs (US Bureau of Labor Statistics 2018). Many of these jobs cannot be performed remotely and require close, direct contact with clients, customers, or coworkers and left black workers disproportionately vulnerable to COVID-19 exposure, which likely increased their risk of contracting and dying from the disease (Rogers et al. 2020). As states implemented stay-at-home orders and business restrictions, many service occupations were deemed essential and did not suspend operations; some even increased their business. Many traveled to and from these jobs as either a passenger on or an employee of public transportation systems, which added another potential point of exposure (Dwyer 2020).

During widespread uncertainty about the prevalence of this respiratory pathogen or effective mitigation strategies, these employees were expected to risk their own health to not only ensure societal stability in some instances but also support the comfort and consumerist conveniences of their fellow citizens. For many, taking this risk was not a choice. Workers who were unwilling to make this sacrifice during a time when so many others had either permanently or temporarily lost their jobs learned that essential workers were, in fact, disposable. The volatility of employment in this sector likely disincentivized employees who were symptomatic from reporting COVID-19 symptoms or potential exposure. Moreover, many of these workers risked spreading the virus to others and caused outbreaks because they could not afford to get precautionary testing or engage in extended quarantines and risk being replaced, especially if they were asymptomatic. Having to work in these circumstances placed many black workers, especially those who had other health conditions, at risk of being disproportionately impacted by COVID-19.

As businesses and restaurants continue to reopen, many states have assumed that essential workers are not returning to the workforce because of pandemic-related enhanced unemployment benefits rather than because of health concerns and trauma. Essential workers, particularly black essential workers, personally witnessed the dire repercussions of COVID-19. A study found that in California, black retail workers experienced a 36 percent increase of mortality in 2020 (from March to October) that can be attributed to the COVID-19 pandemic (Chen et al. 2021).

# **Neighborhood and Environmental Factors**

The health risks for black Americans do not end at work, as many went back to homes and neighborhoods, shaped by racialized contexts, that bolstered the threat of contact with COVID-19 and amplified the illnesses that exacerbate COVID-19's effects. Since many of the early pandemic mitigation strategies were based on the assumption that people would be safer at home, it is important to reflect on how and why black Americans live in homes and neighborhoods that do not necessarily decrease their susceptibility to COVID-19 or the comorbid illnesses that worsen its effects. To begin, inequitable social and economic systems make black people more likely to live in multigenerational, multifamily, and overcrowded congregate living situations or public housing, irrespective of income and urbanicity (Marquez-Velarde 2020). Living in these circumstances during a highly communicable, respiratory pandemic obviously can facilitate widespread contagion among older people and those with preexisting conditions.

Once outside of their homes, black Americans face disparately unhealthy outcomes in their neighborhood contexts through at least two primary methods. First, many black people who live in racially and economically segregated areas

have insufficient access to mechanisms that support overall health and well-being (White and Borrell 2011). Second, they often live in settings with higher exposure to hazardous pollutants that have also been linked to many of the wide-ranging health problems that predispose people to poor COVID-19 outcomes (Bullard 2007; Winkler and Flowers 2017; Bullard 1994). Explicitly, neighborhood design and environment contribute to disparate rates of preexisting conditions and, subsequently, disparities in COVID-19 outcomes.

Neighborhood-level variation in supports and barriers affects the health of residents. For instance, those who live in safe areas with features that promote physical activity—such as sidewalks, bike lanes, and green spaces—have more opportunities to walk to their destinations (Casagrande et al. 2011). Additionally, having access to businesses that carry nutritious and affordable food is an important part of ensuring healthy neighborhoods (Cooksey Stowers et al. 2020). Regularly participating in active transportation or exercise and having access to healthy food can decrease the likelihood of developing cardiovascular disease, hypertension, diabetes, obesity, and neurological conditions. However, structural systems that determine resource allocations and business locations have constrained black proximity to activity spaces and inexpensive grocery stores. Instead, black neighborhoods contain more fast food and convenience stores and fewer supermarkets than white neighborhoods of similar socioeconomic status (Singleton, Affuso, and Sen 2016; Powell et al. 2007). Those who live in these areas experience the corresponding health burden (Kelli et al. 2017).

Even when black people live in adequately resourced neighborhoods, they are disproportionately exposed to environmental hazards that are beyond their control. For instance, black people tend to live in areas with greater air pollution than whites, even though white consumerism and travel cause more of this contamination (Tessum et al. 2019; Mikati et al. 2018). Black people in urban communities encounter compounded pollutants from cars, bus stations, and airports as well as from factories and toxic waste disposal plants. Those living in rural areas might avoid toxins from massive transportation corridors, but they may live close to or work at heavy polluters such as large farms, meat producers, manufacturers, and chemical and solid waste disposal sites. Notably, this is not simply a matter of public infrastructure and businesses arbitrarily depositing their waste in neighborhoods that lack resources (Winkler and Flowers 2017). Entities that contribute to large-scale environmental pollution are more likely to be located in areas that expose black people and other minority populations, even after controlling for neighborhood socioeconomic factors (Mohai et al. 2009).

There is substantial evidence that, even at low levels, exposure to ambient air pollution and other toxins contributes to higher rates of cardiovascular disease, cancer, diabetes, hypertension, asthma, and respiratory disease (Papadogeorgou et al. 2019; Brender, Maantay, and Chakraborty 2011; Ruiz et al. 2018). Thus, many of the same illnesses that are linked to environmental hazards have been identified as preexisting conditions that predict worse COVID-19 outcomes. Predictably, there is evidence that people who live near higher levels of air pollution have an increased risk of COVID-19 mortality. Specifically, small increases in the amount of exposure to long-term air pollution predicted increased county-level COVID-19 death rates in parts of the United States, even after adjusting for factors on various socioecological levels (Wu et al. 2020). Black Americans' inordinate exposure to contaminants likely puts them at risk of developing the diseases that worsen COVID-19, while also making them more susceptible to COVID-19 morbidity and mortality even if they do not suffer from an underlying medical condition.

### **Disparities in Vaccine Rollout**

In December 2020, the Food and Drug Administration provided emergency use authorization for two vaccines, commonly known as the Moderna and Pfizer COVID-19 vaccines (US Food and Drug Administration 2020). Like at the onset of COVID-19 earlier in the year, the vaccine rollout bore the weight of overarching narratives that specifically affected black Americans. The first narrative, was that black people would not get the COVID-19 vaccine because of vaccine hesitancy, which refers to "delay in acceptance or refusal of vaccination despite availability of vaccination services" (MacDonald 2015, 4163). The second narrative was that everyone had an equal likelihood of accessing the COVID-19 vaccines. The realities of these narratives are much more complex.

When vaccines became available in December 2020, polls revealed that if available, 39 percent of black adults wanted to delay vaccination, while 9 percent said that they would refuse the vaccine if available (Kaiser Family Foundation 2021). In comparison to other groups, black adults had the highest vaccine hesitancy. These findings of black people's vaccine hesitancy were met with equal parts urgency to understand black people's mistrust of the government and health systems and dismissal of their concerns. Some of the most common concerns of black Americans included the perception that the vaccine was experimental and not sufficiently tested, discomfort with large-scale vaccination sites (as opposed to a doctor's office), prior discrimination in healthcare settings, and a mistrust of government health initiatives based upon a history

of medical experimentation and mistreatment (Shah et al. 2021). Interestingly, upon closer inspection, those same polls revealed that, were a dose available, 36 percent of white adults wanted to delay vaccination, while 15 percent said that they would refuse the vaccine if available (Kaiser Family Foundation 2021). Despite the similarly low enthusiasm for the COVID-19 vaccine in December across races, the public-health activities at that time were focused on *educating* black people about the vaccine while *vaccinating* white people.

This leads to the second narrative around vaccines: access. The initial rollout was determined by each state. Most states loosely followed the CDC's vaccine priority tiers and phases (Dooling et al. 2020). With this structure, healthcare personnel and long-term care facility residents were given first access to the vaccine across most states. Some states quickly realized that an age priority for residents who were 75 and over, as recommended by the CDC, created a racial equity issue and reduced the age requirement in the second tier to 65 years. People of color in the United States skew younger than white people; moreover, black life expectancy in 2019 was 74.7 years in comparison to white life expectancy of 78.8 years (Arias, Tejada-Vera, and Ahmad 2021). The priority age group recommended by the CDC extended beyond the life expectancy of black Americans, further delaying this population access to the vaccine.

As demand for the vaccine grew beyond the supply, priority status to the vaccine became politicized. Essential workers who were initially included in the second tier were pushed further and further down the priority list for vaccines, while occupations that typically have low black representation (such as teachers) were moved higher on the list (Watson 2021). As executed, the vaccine rollout prioritized people who *interacted* with people at greatest risk for COVID-19 infection rather than those who were actually at greatest risk themselves.

As supply increased and could theoretically meet demand, President Biden approved the vaccine to all residents sixteen years and older in mid-April 2021. After a quick surge from those who were high in vaccine enthusiasm, once again, the issues of hesitancy and access came to the forefront. Disaggregated data on vaccine enthusiasm collected in May 2021 revealed that refusal sentiments were highest among white adults (15 percent), Republicans (27 percent), and those living in rural communities (24 percent). Whereas vaccine refusal remained consistent for these populations, vaccine refusal sentiments fell from 10 percent in December 2020 to 6 percent in May 2021. Although the desire to delay vaccination remained highest for black Americans, the percentage polled fell to 22 percent (Kaiser Family Foundation 2021).

As of June 2021, black Americans had the lowest vaccination rates of any racial or ethnic group (Centers for Disease Control and Prevention 2021b).

Rather than focusing on why black people who are unvaccinated have not been vaccinated, some polls asked why they will eventually get vaccinated (Shah et al. 2021). For the most part, the reasons were family focused: protecting family members or keeping children from losing a parent to COVID-19, as well as wanting to safely return to family celebrations. The COVID-19 pandemic as a whole—and specifically the vaccine rollout—has crystallized the need for racial equity in health implementation strategies and health communications.

#### **Health Communication**

While health communications about the risks of COVID-19 have been effective among older adult Americans, there are multiple issues with communication and messaging among other age groups. There has been communication about who is at greatest risk of COVID-19-related hospitalizations and death—specifically in consideration of age (people of 65 years and above). As noted earlier, for black Americans, risk for adverse outcomes related to COVID-19 is rather high across adulthood. Additionally, the heavy communication about high-risk age groups has implied that young adults and children have no or negligible risk for COVID-19-related morbidity and mortality. The consequences of being told throughout the pandemic that young adults are not at risk can be seen in the low vaccine uptake among young adults as well as in the reluctance of black parents (30 percent refusal, 22 percent unsure) to vaccinate their children (Shah et al. 2021).

Health communication strategies must remain nimble to manage evolving recommendations. The confusion around sometimes contradictory COVID-19 health guidelines provides opportunities for misinformation to thrive. For example, some social media misinformation campaigns will distort contemporary and historical racial health disparities, social justice initiatives, and medical experimentation to dissuade black people from getting the COVID-19 vaccine (Stone 2021). Often by deceiving respected scholars into providing interviews and statements, these antivaccine strategies specifically target black Americans by acknowledging structural racism while also discouraging black people from seeking healthcare. Improving health communication that specifically addresses the concerns of black Americans is among our recommendations.

#### **Recommendations and Conclusions**

Respect Black Patient Advocacy. The prevalence and death disparities related to COVID-19 closely mimic the outcomes of most racial health disparities in America—that is, they strongly evidence systemic racism. For example, early

in the pandemic, black people in Detroit and Chicago reported that their family members were denied testing or sent home from hospitals prematurely—and died shortly thereafter (Eligon and Burch 2020). These narratives echoed the stories of black women whose perinatal concerns were ignored, resulting in infant and maternal deaths or severe morbidity (Cottom 2018; Martin and Montagne 2017; Scott, Britton, and McLemore 2019). Black patient advocacy is often ignored or seen as threatening because black patients and their family's composure can take precedence over the urgency of their health needs.

Disaggregate the Data. It is necessary to emphasize the importance of disaggregating data in order to better understand the prevalence, treatment, and consequences of COVID-19. Broad generalizations do not capture the severity of risk and the depth of protection for black Americans overall, nor do they do so for intersectional identities. As discussed in this chapter, age was seen as a key indicator for complications and deaths related to COVID-19, yet disaggregated data revealed increased hospitalization rates for black Americans in young and middle adulthood (Centers for Disease Control and Prevention 2021a).

At the beginning of the pandemic, the Centers for Disease Control and Prevention found that the COVID-19 hospitalization rates for black people were higher across the lifespan than for white people (Centers for Disease Control and Prevention 2020). Black children, adults 18–49 years old, and adults 50–64 years old had hospitalization rates that were 5.1, 5.4, and 4.7 times higher, respectively, than for similarly aged white people. As of June 2021, age adjusted hospitalization rates for black Americans were 2.9 times higher than for white Americans (Centers for Disease Control and Prevention 2021a). In the 2020–2021 winter, a major surge point of the pandemic, black adults over 65 years had the greatest hospitalization rate ratio of any group of 1,168.2 per 100,000, which was 3.4 times higher than for older white adults. In sum, without disaggregated data, prevention efforts and treatment of COVID-19 would ignore the vulnerabilities of younger black people and make the concerns of older black adults invisible, even though they still face an outsized health burden.

Children, Native Americans, and the Latinx Community. Although African Americans had the highest COVID-19 mortality rates at the beginning of the outbreak in the United States, the prevalence of the disease and hospitalization rates among Latinx people rose at an alarming rate (Centers for Disease Control and Prevention 2020; APM Research Lab 2020, 2021). As of March 2, 2021, the cumulative age adjusted mortality rates for Latinos and Native Americans were 2.4 and 3.3 times higher, respectively, than for white Americans. Prior to March 2, 2021, the cumulative age adjusted mortality rates for Latinos and Native Americans were 3.2 and 3.1 times higher, respectively, than

for white Americans (APM Research Lab 2020, 2021). Thus, the age adjusted mortality rates for Latinos went down compared to that of white Americans, whereas the age adjusted mortality rates for Native Americans increased compared to that of white Americans. Native Americans have the highest COVID-19 mortality rate among all racial or ethnic groups (APM Research Lab 2021).

For reasons that are not clearly understood, children are generally spared from the most severe illness associated with COVID-19. This has been the overarching reason why many schools reopened in fall 2020. In September 2020, the CDC revealed that although children under twenty-one years old accounted for less than 1 percent of all COVID-19 deaths, 45 percent were Latinx, and 29 percent were black (Bixler et al. 2020). The fact that one-quarter of these children had no underlying health condition, and that roughly half had either obesity or asthma, should raise alarms about the vulnerability of black and Latinx children to COVID-19. As noted above, obesity and asthma are noted for their association with environmental racism in adults, and children are not immune to their effects. As of June 2021, white children aged 0-4 years old have had the highest percentage of COVID-19 deaths (50 percent), whereas Hispanic and black children aged o-4 years old have experienced the second and third most COVID-19 deaths at 24 percent and 18 percent, respectively. This trend remains the same for ages 5-17 years old. Black children are overrepresented in their share of COVID-19-related deaths in comparison to their population.

It should be noted that the onset of the Omicron variant in winter 2021–2022 saw a surge of COVID-19-related pediatric hospitalizations, with a particularly large increase among children who were four years old and younger and who were ineligible for COVID-19 vaccination at the time. Early data that are not disaggregated by race show that COVID-19 hospitalizations for children four years old and younger went from a low case count of four in mid-June 2021 to a case count of 239 in early January 2022 (Centers for Disease Control and Prevention, 2022).

Community Partnerships. Evidence shows that community partnerships with universities in the vaccine rollout have been effective at getting black Americans and Latinos vaccinated. Trusted community health and faith organizations as well as state and local governments joined forces with universities to provide free COVID-19 testing, resources for care, free ride shares to services, space, and COVID-19 vaccinations regardless of immigration or insurance status. A breakthrough in vaccination efforts in Philadelphia occurred through the Black Doctors Consortium at the University of Pennsylvania, led by Dr. Ala Stanford. Expanding on their successful COVID-19 testing strategies, the Consortium brought the COVID-19 vaccine to black and other underserved

communities by having round-the-clock availability; engaging with neighborhood block captains, churches, and community organizations; and utilizing mobile testing and vaccination sites (Jaklevic 2021; Marrett 2021). Moving forward, the question is how do university and government health systems maintain these community partnerships so that they are mutually beneficial, shared collaborations and so they can spark innovation in eliminating health disparities and their underlying causes?

Eliminate Systemic Racism. A 2017 report, "Discrimination in America: Experiences and Views of African Americans," found that 32 percent of the African Americans in the study stated that they had been discriminated in healthcare settings, and 22 percent avoided medical care out of fear of discrimination (National Public Radio, Robert Wood Johnson Foundation, and Harvard T. H. Chan School of Public Health 2017). The healthcare system has a discrimination problem that extends beyond interpersonal dynamics. If these problems were truly about an individual provider or healthcare worker that treats black patients poorly, then eliminating or retraining these individuals would end these disparities in care. Yet, these individuals persist within healthcare systems because their perceived talent or status is seen as having greater value than the health of the black people they serve. We must address systems where accountability and blame for outcomes are not balanced between institutions and patients.

Ultimately, we must decide that the health disparities that allow COVID-19 to proliferate among black Americans is both unacceptable and actionable. Publichealth initiatives must balance campaigns that address individual behavior with those that eliminate institutionalized racism. The more than 825,000 lives lost in the United States at 2021's end because of COVID-19 is truly unconscionable. But we must also recognize that in the first year and a half of the pandemic, if black Americans died of COVID-19 at the same rate as white Americans, more than forty-four thousand black people would still be alive (APM Research Lab 2020; Centers for Disease Control and Prevention 2021c).

#### NOTE

1. For a well-developed framework on the impact of racism on health outcomes, see the work of Williams and Mohammed (2013b, 2013a).

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