



# Social Determinants of Health That Affected Covid-19 Outcomes

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## Abstract

The covid-19 pandemic has exposed the longstanding structural drivers of health inequities, such as race, economic disparities, and housing insecurities. These important determinants of health have interlinked with other factors during covid-19 to exacerbate existing social vulnerabilities in society. People from racial and ethnic minority groups are disproportionately affected by lack of access to quality health care which leads to inequities in treatment. People from lower incomes, experience challenges that make managing expenses, paying medical bills, accessing nutritious food, and reliable childcare difficult. Some groups are disproportionately affected by difficulties finding affordable and quality housing. This may limit their housing options to neighborhoods and residences with crowded conditions. These conditions are often time family members of many generations living in one household which can lead to exposure of older adults to illnesses and diseases. This research discusses how these determinants may increase risk of COVID-19 exposure, leading to hospitalization, long-term health issues, social consequences, and death.

## Introduction

Coronavirus disease 2019 (COVID-19) or coronavirus 2 (SARS-CoV-2), is a pathogen that has a severe acute respiratory attack to a person's body. It originally began in Wuhan, China and slowly spread across the globe. The virus showed us that everyone was not prepared and increasingly demonstrated that social inequalities in health are profoundly, and unevenly, impacted. Thus far it has left over "4.3 million infected and over 297,000 deaths". Many social determinants of health—including income, race and ethnicity, and housing insecurities can have a considerable effect on COVID-19 outcomes. To place the situation in perspective thousands of people diagnosed and hospitalized with COVID-19 are experiencing employment/income challenges in conjunction with large medical bills. Since access to health care is directly related to employment/income, loss of employment/income means loss of health care. Across the United States, your experience with the novel coronavirus has a great deal to do with who you are. People of color, in particular, are bearing the brunt of this disease. Black Americans are hospitalized for coronavirus-related illnesses at higher rates than any other racial or ethnic group—and they account for one in four coronavirus deaths, despite being just 13% of the population. Latinos are also four times as likely to be hospitalized for COVID-19 than white people. Native Americans too, face a similarly disproportionate risk. Homeless families are also at higher risk of viral transmission because of crowded living spaces and scarce access to COVID-19 screening and testing facilities. The effect of social determinants of health and COVID-19 morbidity is perhaps underappreciated. Yet, the great public health lesson is that for centuries pandemics disproportionately affect the poor and disadvantaged

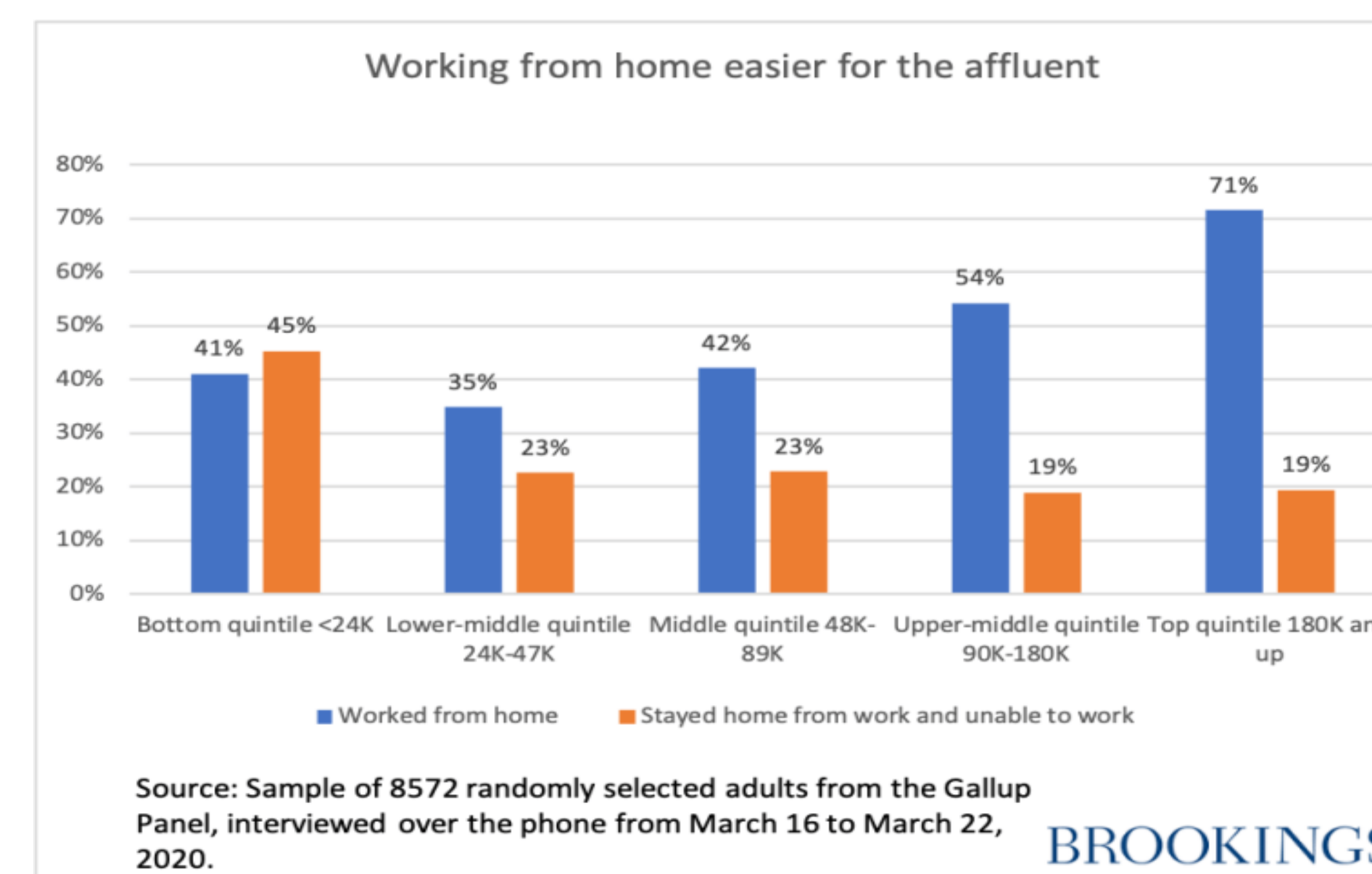
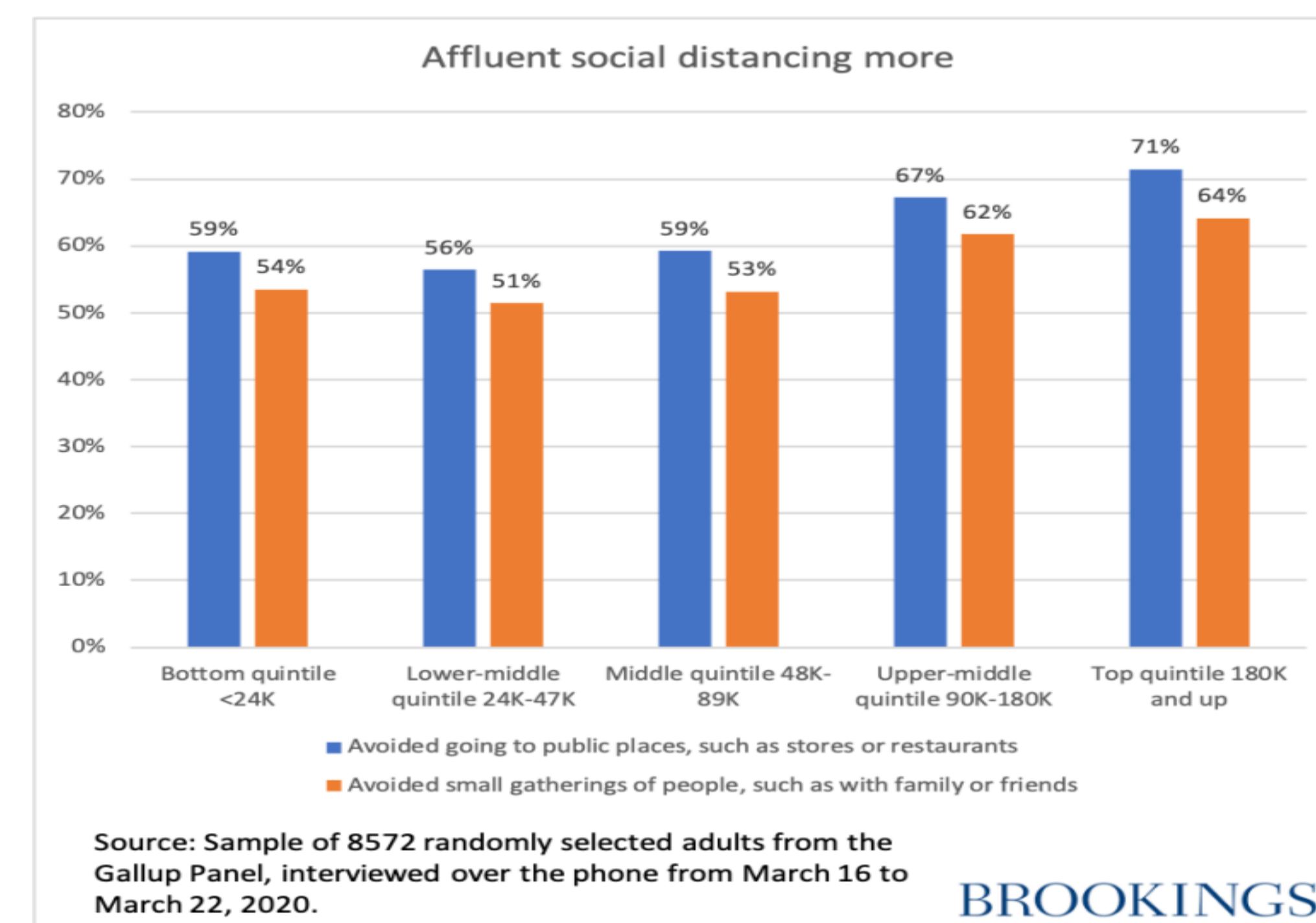
## Income As A Social Determinant

Having a reliable source of income is vital throughout all of life's phases, however, especially during a worldwide pandemic. The coronavirus has remarkably impacted the world's economy, and as a result, many families have had to adapt to living off of unemployment wages. As quoted by Fernandes, "in the U.S., job losses reached an unprecedented high" (Fernandes, 2020). Such economic impacts have introduced various issues for homeowners and their financial security. An individual's income during COVID-19 could potentially present various other concerns. Perhaps, housing expenses may in fact be more difficult to afford as a result of reduced income. According to brooking.edu:

"Now, with unemployment at historic highs and more than 20 million individuals out of work, the country's housing crisis is only getting worse. In April 2020, one in three Americans did not pay rent, and, despite moratoriums to protect against evictions, renters are still being evicted" (Grinstein-Weiss et al., 2020).

Moreover, kff.org states, "job losses caused by the coronavirus pandemic have threatened to disrupt health coverage for millions of people as most working-age adults get coverage for themselves and their families through their work" (McDermott et al., 2020). If all income is lost, adequate health insurance may no longer be provided during such concerning times.

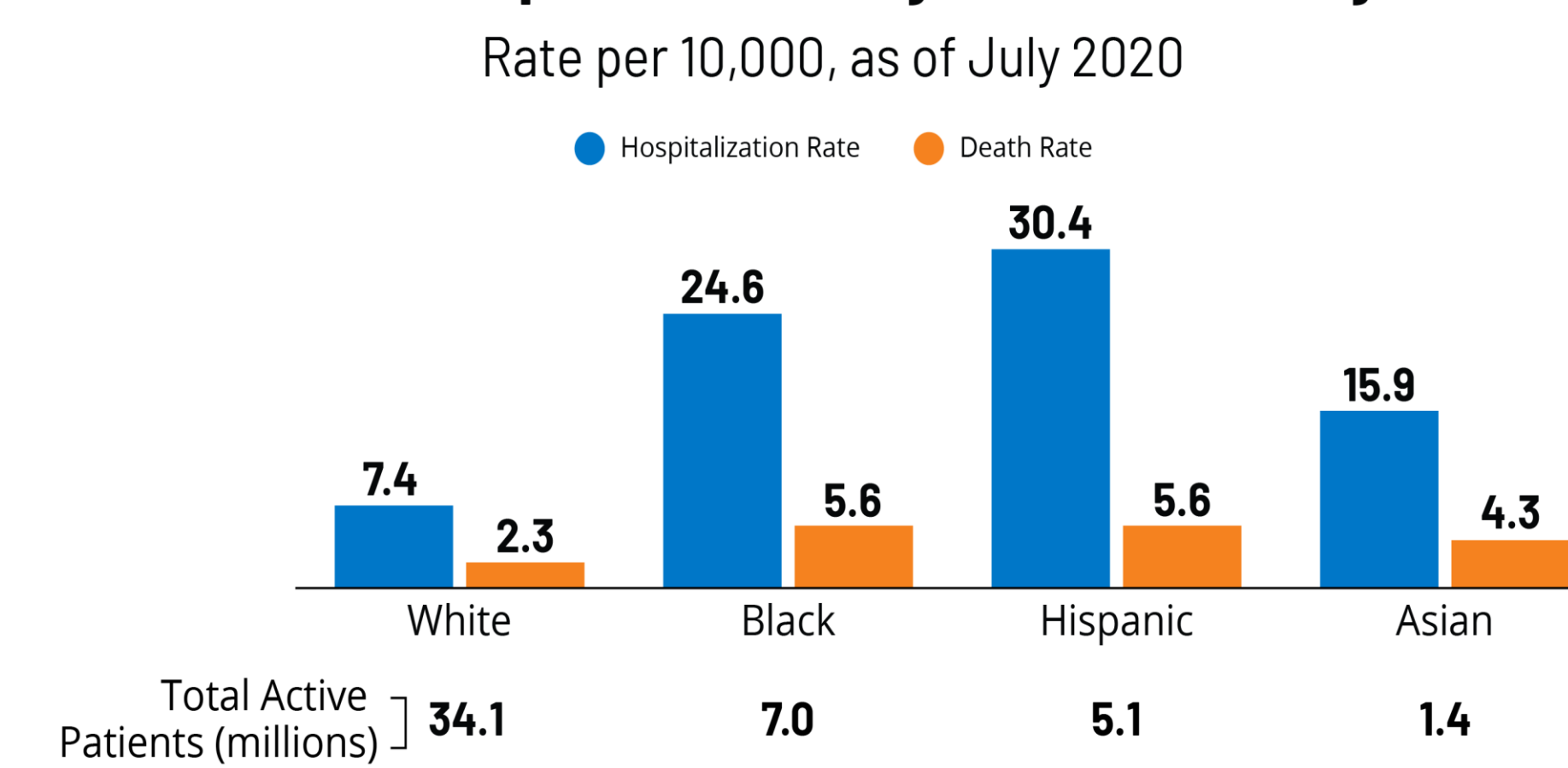
In contrast, some were fortunate enough to remain employed without suffering the effects of income loss. Maintaining income during the pandemic has gleaned multiple benefits. Consistent income can produce financial security during such times of uncertainty. Financial affordability for home expenses and healthcare insurance are examples of why income during the pandemic may be beneficial. Income is a vital health determinant that influences COVID19 outcomes both individually and economically.



## Race As A Social Determinant

Do viruses discriminate? That question has been pondered with the Covid-19 pandemic that has affected the global world. The answer is no; viruses can affect people of all races and ethnicities. Viruses do not discriminate, but people do. We have marginalized groups of people like Blacks, Hispanics, and Native Americans that lack opportunities and resources. This lack will always expose these groups to more risk when it comes to healthcare. We have come to understand that pre-existing conditions such as high blood pressure, diabetes, and obesity, to name a few, cause people to be more vulnerable to contracting Covid-19. Blacks, Hispanics, and Native Americans tend to live in overcrowded housing communities or live within crowded households with multigeneration occupying small spaces (Lopez, Hart, & Katz, 2021). Often the only mode of transportation for these groups is public transportation, which makes it more likely that they are exposed to others who could be carriers of the virus, which again causes them more susceptible of contracting Covid-19. For Blacks, Hispanics, and other non-whites, having comorbidities more likely to cause hospitalization and death due to Covid-19 to be more prevalent. The same health conditions that make it more likely to contract this virus make it more of a possibility that persons of these races and ethnicities will be hospitalized or die due to more prevalent conditions. According to the chart below, we can see that hospitalizations and death are higher among non-whites (Racial Disparities in COVID-19 Hospitalizations and Deaths in Epic Electronic Health Records, 2020).

## COVID-19 Hospitalization and Death Rates among Active Epic Patients by Race/Ethnicity



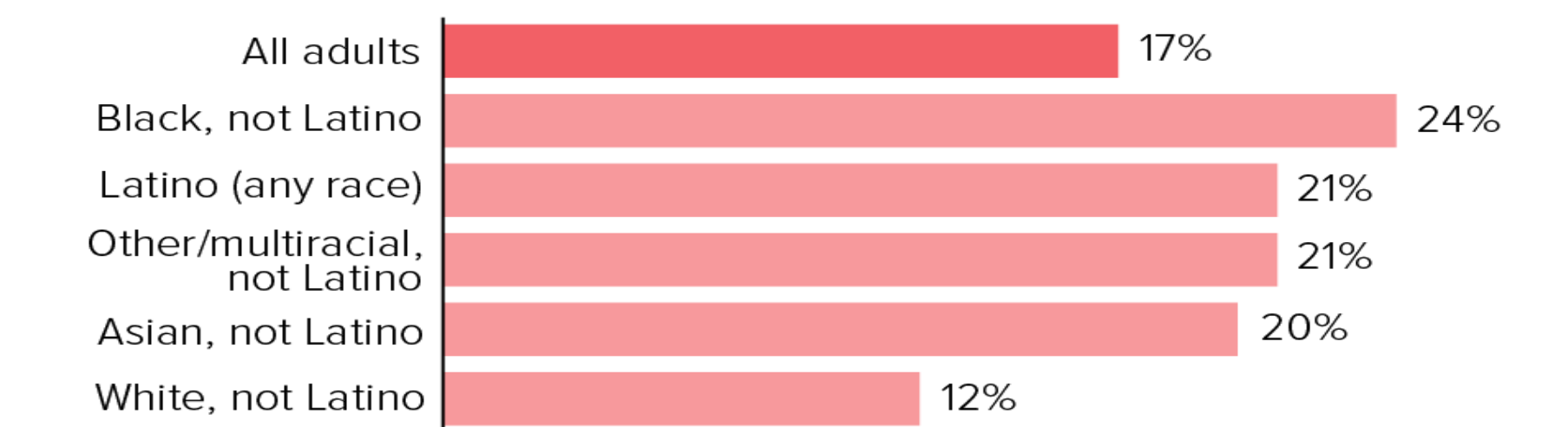
Many long-term health effects of covid-19 are being experienced. Long haulers have developed the post-covid-19 syndrome. It appears that these post-covid-19 effects have a myriad of symptoms that range from acute kidney injury to organ damage to the heart, lungs, and brain. These effects can last long past the recovery of covid-19 (Mayo Clinic, 2020). As it pertains to race and ethnicity, persistent symptoms are more likely to occur in people over age 50, people with two or three chronic illnesses, and, possibly, people who became very ill with COVID-19 (Komaroff, 2021). These effects will most likely be more chronic for Blacks, Latinos, and non-whites.

Inconsistencies in healthcare are not a new revelation when it comes to race and ethnicity. Many factors play a role in these disparities; social conditions such as income and housing are factors that have affected the outcomes of Covid-19. However, actual change will require more than an expansion of services. The Covid-19 pandemic provides an opportunity for clinicians, health systems, scientists, and policymakers to address social disparities and improve the health and well-being of all persons in the US for both known and future illnesses (Lopez et al., (2021).

## Housing Insecurity As A Social Determinant

### 1 in 6 Renters Not Caught Up on Rent During Pandemic, With Renters of Color Facing Greatest Hardship

Share of adult renters saying their household is not caught up on rent



Note: Other/multiracial, not Latino = people identifying as American Indian, Alaska Native, Native Hawaiian or Pacific Islander, or more than one race. Chart excludes renters who did not respond to the question. Source: CBPP analysis of Census Bureau Household Pulse Survey tables for March 3-15, 2021. CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

Housing security is one of the key components listed as a basic human need or social determinant of health; many times, resulting from financial instability often leading to food insecurity and inadequate healthcare to name a few. To understand the broad spectrum of what housing security represents, it is simpler to describe what it means to be housing insecure. Housing insecurity can include an unbalanced ratio of housing cost to earned income, unsanitary or dangerous living conditions (i.e., poor water quality, shelter in disrepair, lack of proper utilities...), overcrowding or multiple family units in one living space (often to share the responsibility of housing costs), unstable transient living patterns, and the most severe form of housing insecurity is homelessness (Olympian Management, 2021). Secretary of the U.S. Department of Housing and Urban Development (HUD), Marcia L. Fudge, reports that in a single night in the United States in 2020, there were over 580,000 people experiencing homelessness; up from approximately 12,700 people in 1919 (U.S. Department of Housing and Urban Development, 2021). A family in America facing financial instability must constantly make difficult financial decisions; it can mean choosing to pay for housing instead of seeking healthcare when recommended or necessary, or opting to make partial housing payments to afford other needs such as food or utilities. Oftentimes, healthcare coverage is linked to gainful employment, and with the major layoffs, furloughs, and reduced hours resulting from the COVID-19 pandemic, employer-based healthcare plans and secure access to healthcare posed an additional challenge to the already large number of Americans lacking healthcare.

One must ask how housing insecurity, just one social determinant of health among many, has affected COVID-19 outcomes? According to an article linked to the Center for Disease Control (CDC), it is known that lack of access to basic human needs is indeed directly related to poor health outcomes in general (Sharma et al., 2020). Those most at risk of health complications associated with COVID-19 are the homeless. A brief released by the National Healthcare for the Homeless Council (2020) states that poor health is a leading cause of homelessness and is an extremely large factor that plagues the homeless community. Further, it was noted that the homeless presented were more likely to experience and lead in common chronic health complications such as diabetes, lung disease, kidney disease, asthma and bronchitis, and heart disease to name a few (Department of Health and Human Services, 2020). Shelter in place mandates established across the United States to reduce the contraction and transmission of COVID-19 posed a greater challenge for those who were severely housing insecure or homeless. They were still at high-risk for contracting the virus because they are often in congregate settings such as shelters, public transportation, soup kitchens, etc. Sanitary stations designed to handle large groups of people were uncommon. The question is asked, how are the homeless supposed to follow the seemingly basic mandate of shelter in place to include the guidelines of staying home, maintaining social distance, practicing basic hygiene, and quarantining with or without symptoms (National Healthcare for the Homeless Council, 2020).