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Claremont McKenna College

Inequalities in Covid-19 Mortality Rates: A Comparison of
Black Americans and Republican Americans

submitted to

Professor Andrew Schroeder

by Julia Garbee

for Senior Thesis

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Preface

As of April 15, 2022 there have been over 80,000,000 official cases and 987,000 official deaths from the Covid-19 virus in the United States alone.¹ These staggering numbers, however, are not distributed equally among the U.S. population. While anyone can contract or die from the Covid-19 virus, there are certain risk factors that make people more likely to contract Covid-19 or die from Covid-19. Some of these risk factors are behaviors like mask wearing, staying six feet apart, and attending social gatherings. Some of these risk factors, though, apply to entire populations.

In the United States, being Black is a risk factor for contracting and developing severe symptoms from the Covid-19 virus. From the onset of the pandemic until February of 2022, Black Americans have been hospitalized from Covid-19 at more than double the rate of white Americans.² Being Republican is also a risk factor for contracting and developing severe symptoms from the Covid-19 virus. Since May 2021, Americans living in Republican voting counties have been nearly three times as likely to die from Covid-19 as those living in Democratic voting counties.³

How does the Covid-19 virus disproportionately impact entire populations of Americans such as Black Americans and Republican Americans? Getting to the root of these inequalities is complicated because it is challenging to disentangle other risk factors, such as age or underlying

¹ The New York Times, “California Coronavirus Map and Case Count,” The New York Times (The New York Times, April 1, 2020), <https://www.nytimes.com/interactive/2021/us/california-covid-cases.html>.

² “Disparities in COVID-19-Associated Hospitalizations,” Centers for Disease Control and Prevention (Centers for Disease Control and Prevention), accessed April 18, 2022, <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-hospitalization.html>.

³ Daniel Wood and Geoff Brumfiel, “Pro-Trump Counties Now Have Far Higher COVID Death Rates. Misinformation Is to Blame,” NPR (NPR, December 5, 2021), <https://www.npr.org/sections/health-shots/2021/12/05/1059828993/data-vaccine-misinformation-trump-counties-covid-death-rate>.

conditions, from other reasons why these groups have experienced unequal Covid-19 outcomes. However, understanding the underlying causes of these outcomes is crucial in determining how to attribute responsibility in these two cases and make the healthcare system more equitable.

Chapter One

The Covid-19 pandemic provided the United States with a unique opportunity to transparently evaluate the equity of health outcomes. Against the backdrop of protests calling for an end to discrimination against Black Americans, racial disparities in Covid-19 infections and deaths have highlighted the protestors' message. Black Americans have been disproportionately affected by Covid-19 in a manner that spans the country, throughout hundreds of counties in urban, suburban and rural areas, and across all age groups. Less than one month after the pandemic was declared a national emergency, a *Washington Post* analysis found that Black majority counties had three times the Covid-19 infection rate and almost six times the death rate of white majority counties.⁴ By December 2020, Black individuals accounted for 16 percent of the U.S. Covid-19 deaths despite only making up 13 percent of the U.S. population.⁵⁶ Hospitalization rates reflect an even more dramatic racial disparity. Black Americans have been hospitalized from Covid-19 at more than double the rate as white Americans from the onset of

⁴ Reis Thebault, Andrew Ba Tran, and Vanessa Williams, "The Coronavirus Is Infecting and Killing Black Americans at an Alarming High Rate," *The Washington Post* (WP Company, April 7, 2020), <https://www.washingtonpost.com/nation/2020/04/07/coronavirus-is-infecting-killing-black-americans-an-alarmingly-high-rate-post-analysis-shows/>.

⁵ "Provisional Covid-19 Deaths: Distribution of Deaths by Race and Hispanic Origin," Centers for Disease Control and Prevention (Centers for Disease Control and Prevention), accessed April 18, 2022, <https://data.cdc.gov/NCHS/Provisional-COVID-19-Deaths-Distribution-of-Deaths/pj7m-y5uh>.

⁶ "U.S. Census Bureau Quickfacts: United States," accessed April 19, 2022, <https://www.census.gov/quickfacts/US>.

the pandemic until February of 2022.⁷ Specifically, Black Americans have been hospitalized at a rate of 1,488.9 per 100,000 population, while white Americans have been hospitalized 600.8 per 100,000 population, according to the CDC.⁸ In some geographic regions the disparity is stark. Mortality rates for Black individuals in Chicago are 397.3 per 100,000 people, compared to 182.6 per 100,000 for white individuals.⁹ In New York City, Black individuals were hospitalized at a rate of 119 per 100,000 while white individuals were hospitalized at a rate of 47 per 100,000 people (01/01/2022).¹⁰

Many journalists, researchers, and politicians are not surprised by these statistics, pointing to intergenerational, structural inequalities in the United States. In October of 2021, The New York City Board of Health even declared racism a public health crisis.¹¹ “Why do some nonwhite populations develop severe disease and die from Covid-19 at higher rates than whites?” asked the Health Department’s commissioner, Dr. Dave A. Chokshi, “Underlying health conditions undoubtedly play a role. But why are there higher rates of hypertension, diabetes and obesity in communities of color? The answer does not lie in biology. Structural and environmental factors such as disinvestment, discrimination, and disinformation underlie a greater burden of these diseases in communities of color.”¹² The resolution passed by the Health Department calls for the department to take concrete steps to ensure a “racially just recovery” from Covid-19.¹³ Dr. Anthony Fauci echoed the same message at a graduation ceremony for

⁷ “Disparities in COVID-19-Associated Hospitalizations,” Centers for Disease Control and Prevention (Centers for Disease Control and Prevention), accessed April 18, 2022, <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-hospitalization.html>.

⁸ Ibid.

⁹ “Latest Data: COVID 19,” Latest Data | COVID 19, accessed April 18, 2022, <https://www.chicago.gov/city/en/sites/covid-19/home/latest-data.html>.

¹⁰ “Covid-19: Data,” COVID-19: Latest Data - NYC Health, accessed April 18, 2022, <https://www1.nyc.gov/site/doh/covid/covid-19-data.page#daily>.

¹¹ Karen Zraick, “Racism Is Declared a Public Health Crisis in New York City,” The New York Times (The New York Times, October 19, 2021), <https://www.nytimes.com/2021/10/19/nyregion/nyc-racism-healthcare-system.html>.

¹² Ibid.

¹³ Ibid.

Emory University: “the undeniable effects of racism” have led to unacceptable health disparities that especially hurt African Americans, Hispanics and Native Americans during the pandemic.¹⁴

Despite these statements, many still have doubts about the role racism plays in the racial disparity in Covid-19 mortality rates. One Fox News article points to the 2020 Black Lives Matters protests as a reason why there were surging Covid-19 rates, particularly among Black Americans.¹⁵ Others have made baseless claims about Black people being intrinsically vulnerable to Covid-19. In an NPR interview, Louisiana Sen. Bill Cassidy, a doctor turned politician, claimed without evidence “that ‘genetic reasons,’ among other factors, put African Americans at risk of diabetes and, therefore, of serious complications from COVID-19.”¹⁶ This maelstrom of conflicting information concerning the glaring racial inequality in Covid-19 heightens the necessity to elucidate the factors associated with the racial disparity in Covid-19.

In this chapter, I will discuss and determine the most compelling determinant of the racial disparity in Covid-19 mortality rates, Structural Racism. I will first provide a widely accepted account of structural racism as well as its implications on the health care system. Using this definition, I will assess three empirical studies focused on the racial disparities in Covid-19 mortality for evidence of structural racism. While Covid-19 has had a disproportionate effect on numerous communities of color, my analysis will be limited to non-hispanic Black American because that population has been subject to the greatest analysis.

¹⁴ “Fauci Says Pandemic Exposed 'Undeniable Effects of Racism',” NBCNews.com (NBCUniversal News Group, May 16, 2021), <https://www.nbcnews.com/politics/politics-news/fauci-says-pandemic-exposed-undeniable-effects-racism-n1267530>

¹⁵ Gregg Re, “Anti-Police Demonstrations May Have Sparked New Coronavirus Cases, Some Cities Now Acknowledge,” Fox News (FOX News Network, July 6, 2020), <https://www.foxnews.com/politics/cities-protests-coronavirus-cases-black-lives-matter>.

¹⁶ “Sen. Bill Cassidy on His State's Racial Disparities in Coronavirus Deaths,” NPR (NPR, April 7, 2020), <https://www.npr.org/2020/04/07/828715984/sen-bill-cassidy-on-his-states-racial-disparities-in-coronavirus-deaths>.

Structural Racism

Consider the commonly cited experience of a police officer targeting a Black person for suspicion of crime simply based on the color of their skin. The police officer suspects the Black individual due to stereotypes that characterize Black people as inherently dangerous. This stereotype doesn't only occur in racial profiling. Take the standard example of a white woman walking down the street, who, after seeing a Black man walking towards her, walks to the opposite side of the street to avoid him. The white woman judges the danger of the situation based on the race of the man. Stereotypes like these have emerged from our nation's long history of legal racial inequality, specifically histories of slavery, Jim Crow, and the ongoing colonization of Africa. Scholars define **racism** as "the result of an illegitimate racial consciousness or racial awareness, in which the race of an individual is noted and taken to be significant, setting aside the question of who is noting who or how the significance is understood."¹⁷ Essentially, regardless of the outcome, racism occurs, overtly or covertly, when illegitimate racial biases interfere with the judgment of an individual. Illegitimate racial biases occur when race is inappropriately used to influence the decision making. Conversely, legitimate biases, such as in medical contexts where race can be useful information in determining treatment, should not qualify as racist.

While the previous example given was a glaring example of racism, some forms of racism work at less obvious level, often not visible to those who are not victims. In the 1930's, government homeownership programs were created as part of the New Deal.¹⁸ These programs gave homeowners government-insured mortgages to avoid mass foreclosure after the Great

¹⁷ Linda Alcoff, "Critical Philosophy of Race," Stanford Encyclopedia of Philosophy (Stanford University, September 15, 2021), <https://plato.stanford.edu/entries/critical-phil-race/>.

¹⁸ Candace Jackson, "What Is Redlining?," The New York Times (The New York Times, August 17, 2021), <https://www.nytimes.com/2021/08/17/realestate/what-is-redlining.html>.

Depression. The government began adding qualifications for properties and homeowners using a color-coded map that ranked the loan worthiness of U.S. neighborhoods. The neighborhoods colored in red were the most risky – and the most Black. This coding system barred Black homeowners from receiving government backed loans. The government’s theory was that the “presence of any population of Black residents was a sign of impending property value decline.” The government’s “illegitimate racial consciousness” negatively impacted Black people’s ability to buy homes. Further, this system, referred to by scholars as “redlining,” shaped the way American real estate operates today.¹⁹ Redlining, thus, falls under a specific kind of racism called **structural racism**. Structural racism occurs when racism can be attributed to properties of social structure, such as norms, practices, and institutions.²⁰ Residential segregation is a paradigm example of structural racism because it is caused and maintained by redlining, a federal discriminatory lending policy, in addition to federal housing policy and exclusionary residential zoning rules enacted by local jurisdictions.²¹ Institutions and policies, formal elements of social structure, resulted in residential segregation.

There are also informal elements of social structure, such as social norms and practices, that further entrench structural racism. Norms are “behavioral rules that are known to exist and apply to a class of situations.”²² Practices are “norm-following behavior.”²³ Together, these formal and informal elements of social structure create and maintain structural racism in the United States. Structural racism doesn’t always involve the explicit acknowledgement of race as is the case in Redlining. Face recognition software, which is deeply ingrained in institutional practices, such as law enforcement surveillance, airport passenger screening, and employment

¹⁹ Ibid. Preceding statistics drawn from Jackson, “What is Redlining?”(see note 16).

²⁰ Valerie Soon, “Social Structural Explanation,” *Philosophy Compass* 16, no. 10 (2021), <https://doi.org/10.1111/phc3.12782>, 2.

²¹ Ibid.

²² Ibid.

²³ Ibid.

and housing decisions, is an example of a practice that is unintentionally racist. The software was recently revealed to involve significant racial bias, particularly against Black Americans. Specifically, face recognition is less accurate for darker skinned individuals, particularly women, than lighter skinned individuals.²⁴ In a criminal justice setting, for example, face recognition software that is biased in its accuracy can misidentify suspects, resulting in the incarceration of innocent Black Americans. The result is an unintentionally racist system that protects the interests of white Americans more than Black Americans.

Structural Racism and Health

In the United States, 13.8% of Black Americans reported having fair or poor health compared with 8.3% of white Americans.²⁵ Black individuals live on average 5.3 fewer years than their white counterparts.²⁶ Specifically, Black women face a much higher risk of dying from pregnancy complications than white women. Maternal mortality rates for Black women are 41.7 per 100,000 live births, compared with 13.4 per 100,000 live births for white women.²⁷ Black infant mortality rates are also higher. Infant mortality rates for Black newborns are 10.62 per 1,000 live births, compared with 4.68 per 1,000 live births for white babies.²⁸ Evidently, racial health inequities in the United States are well documented, however, controversies over explanations of these inequities persist.

²⁴ Alex Najibi, “Racial Discrimination in Face Recognition Technology,” Harvard University, October 24, 2020, <https://sitn.hms.harvard.edu/flash/2020/racial-discrimination-in-face-recognition-technology/>.

²⁵ Sofia Carratala and Connor Maxwell, “Health Disparities by Race and Ethnicity,” American Progress, May 7, 2020, <https://www.americanprogress.org/article/health-disparities-race-ethnicity/>.

²⁶ “Life Expectancy in the United States,” EveryCRSReport.com (Congressional Research Service, August 16, 2006), https://www.everycrsreport.com/reports/RL32792.html#_Toc194633794.

²⁷ Arghavan Salles, Vineet M. Arora, and Kerry-Ann Mitchell, “Everyone Must Address Anti-Black Racism in Health Care,” *JAMA* 326, no. 7 (2021): p. 601, <https://doi.org/10.1001/jama.2021.11650>.

²⁸ Ibid.

Scholars argue that structural racism is at least in part to blame for these wide ranging racial health disparities in the United States. In 1899, W.E.B. Du Bois was the first to report that striking health disparities were often misattributed to biological or genetic differences between Black and white bodies.²⁹ Instead, he argued that the structural impact of race was to blame. He analyzed how racial segregation in regard to housing, economic opportunity, and access to healthy foods and environments influenced bodily differences in health and illness.³⁰ Though Du Bois' intricate maps rendered by careful statistical analysis of survey data was robust for his era, researchers have since been able to study these trends across the United States and across decades. For example, a study by JAMA examining almost 600,000 adults from 1999 to 2018 found that the racial health gap persists despite efforts to improve access to care through the Affordable Care Act.³¹ This finding highlights the challenges in understanding and addressing the exact relationship between structural racism and health inequities. This is because structural racism, by nature, reflects the accumulation of a wide variety of racial biases. It cannot be “fixed” by improving one variable. The editor in chief of JAMA emphasized their dedication to understanding racial health inequities, stating that “the topics of racial and ethnic disparities and inequities in medicine and health care are of critical importance” and noting that over 850 articles on racial and ethnic disparities have been published in JAMA in the past five years. Many of these articles point to structural racism as the root of this cause. The racial disparity in health outcomes is an example of structural racism because it is caused and maintained by both formal and informal properties of social structure. Racial discrimination, fostered through inequitable social systems and consequential reinforced beliefs, affected the risk of adverse

²⁹ Alexandre White, Rachel L.J. Thornton, and Jeremy A. Greene, “Remembering Past Lessons about Structural Racism — Recentering Black Theorists of Health and Society,” *New England Journal of Medicine* 385, no. 9 (2021): pp. 850-855, <https://doi.org/10.1056/nejmms2035550>.

³⁰ Ibid.

³¹ Ibid.

health outcomes. While the term structural racism was not created specifically to discuss health, many health experts endorse a similar definition, proving it useful when talking about the equity of health outcomes.

Researchers have studied how examples of structural racism have contributed to negative health outcomes in Black populations. Consider the previously mentioned ongoing residential segregation of Black Americans. Studies have proven that geographic areas with higher Black populations also have an increased risk of adverse birth outcomes, increased exposure to air pollutants, decreased longevity, increased risk of chronic disease, and increased rates of homicide and other crime. Moreover, residential segregation has systematically shaped healthcare access, utilization, and quality at the community, health-care system, provider, and individual levels. This is just one system of many that contribute to the structural difference in health outcomes.

The reasons for these inequalities can be traced to multiple causes. In fact, structural racism can damage health through multiple pathways.³² First, the lack of political power in Black communities produces a lack of access to key health resources like clean water, well-resources schools, affordable housing, and pollution-free neighborhoods. Second, racism-based hurdles to economic opportunity have a strong influence on health. Third, Black people face increased exposure to health-harming conditions and limited access to health-benefiting resources. Lastly, Black people experience increased exposure to, and threat of, race based unfair personal treatment. These pathways harm the health of Black Americans as a racial group.

³² Paula A. Braveman et al., “Systemic and Structural Racism: Definitions, Examples, Health Damages, and Approaches to Dismantling,” *Health Affairs* 41, no. 2 (January 2022): pp. 171-178, <https://doi.org/10.1377/hlthaff.2021.01394>.

Structural Racism and Covid-19 Outcomes: Empirical Evidence

Now that I have established definitions for systemic and structural racism as well as their relevance to health, I will use these definitions to determine if systemic racism is to blame for the racial disparity in Covid-19 mortality rates. I will evaluate two empirical studies focused on racial disparities in Covid-19 mortality.

Study #1: Hospitalization and Mortality among Black Patients and White Patients with Covid-19³³

While Black people only represent 33% of the entire population of Louisiana, they comprised 59% of all Covid-19 related deaths in the population between March 1st and April 11th of 2020. While it was previously proven that Covid-19 disproportionately affects Black people, it was unclear why. This motivated researchers to study why Black people were disproportionately affected by Covid-19. Researchers studied the characteristics and disease progression for 3481 patients who tested positive for Covid-19 in the Ochsner Health System in Louisiana between March 1 and April 11, 2020. The Ochsner Health system includes 40 hospitals and more than 100 health centers and urgent care centers, allowing researchers to observe the setting in which patients tested positive for Covid-19. The primary outcomes of the study were hospitalization and in-hospital death.

Key Finding: Severe Covid-19 in Black Patients

³³ Eboni G. Price-Haywood et al., “Hospitalization and Mortality among Black Patients and White Patients with Covid-19,” *New England Journal of Medicine* 382, no. 26 (2020): pp. 2534-2543, <https://doi.org/10.1056/nejmsa2011686>.

Researchers found the Black patients experienced more severe cases of Covid-19 than white patients. Black patients were overrepresented among all patients who died in the hospital, comprising 70.6% of patients who died in the hospital. Black race was also associated with approximately twice the odds of hospital admission as white race. At the time of testing, Black patients suffered more severe Covid-19 symptoms than white patients. Black patients were more likely to present with fever, cough, or dyspnea at the time of testing than white patients, indicating a higher likelihood of disease progression. Once in the hospital, Black patients had more severe cases of Covid-19. More Black patients presented with acute renal failure than white patients. Black patients were also ventilated at a much higher rate than white patients. These findings indicate that, overall, Black patients had more severe cases of Covid-19 than white patients.

Researchers attribute these findings to both health and economic factors. Black race was not independently associated with risk of in-hospital death after controlling for sociodemographic and clinical characteristics, indicating that the variables controlled for are to blame for the racial disparity in Covid-19 mortality. First, Black patients experienced higher rates of pre-existing conditions than white patients. There is strong evidence that people with diabetes, cardiovascular disease, or chronic lung disease are at higher risk for severe Covid-19-associated disease. In the population studied, Black patients had higher prevalence than white patients for almost every coexisting condition, including obesity and diabetes. Second, Black patients were less likely to utilize healthcare services compared to white patients. Prior to Covid-19, Black patients represented only 31% of patients routinely cared for by Ochsner Health, however, they made up 76.9% of Covid-19 positive patients hospitalized within the system. This indicates that Black patients only sought medical care when they had severe

symptoms. Further, the study finds that Black patients were more likely to be tested at the Emergency Department than at Urgent Care or Primary Care, signifying that they delayed care more than white patients (65.3% of patients that tested in ED were black, 38.0% were white).

Interpretation of Key Finding

The key findings of the study were therefore that Black patients experienced increased severity of Covid-19 as a product of experiencing higher rates of pre-existing conditions and utilizing healthcare services less frequently than white patients. We must now ask whether each of these causes is attributable to structural racism.

Diabetes and obesity, the two pre-existing conditions experienced by Black patients, are both exemplar health disparity diseases. According to the CDC, 12.1% of Black U.S. adults have diagnosed diabetes, compared to 7.4% of white U.S. adults.³⁴ Black patients have a 77% greater risk for developing type 2 diabetes than white patients.³⁵ Similarly, 49.6% of Black U.S. adults are obese, compared to 42.2% of white U.S. adults.³⁶ The disproportionate population burden for these two conditions is due to the large role that social factors of health play in the development of these conditions. Diabetes and obesity are influenced by socioeconomic status, neighborhood and physical environment, food environment, healthcare, and social context. As discussed earlier, residential segregation has proven to have negative health consequences on Black Americans. This helps to understand how Black Americans would score lower on these determinants. For example, the funding of public schools through property taxes, which are tied

³⁴ “Advancing Health Equity,” Centers for Disease Control and Prevention (Centers for Disease Control and Prevention), accessed April 19, 2022, <https://www.cdc.gov/diabetes/disparities.html>.

³⁵ Jacqueline Hill, Marcia Nielsen, and Michael H Fox, “Understanding the Social Factors That Contribute to Diabetes: A Means to Informing Health Care and Social Policies for the Chronically Ill,” *The Permanente Journal* 17, no. 2 (2013), <https://doi.org/10.7812/tpp/12-099>.

³⁶ “Adult Obesity Facts,” Centers for Disease Control and Prevention, September 30, 2021, <https://www.cdc.gov/obesity/data/adult.html>.

to historical practices of redlining, creates racial inequalities in education funding.³⁷ Education is strongly correlated with socioeconomic status, a determinant of obesity and diabetes. Further, access to health care is based on ability to pay, putting Black Americans, who are more likely to be poor and lack access to health insurance, at a greater disadvantage. Thus, this strongly suggests that the root cause of these health outcomes is structural racism, which operates using both formal and informal elements of social structure.

Is lower utilization of healthcare services by Black Americans also rooted in structural racism? For many, deciding to go to the doctor or hospital is a matter of personal choice. At a glance, this seems obvious – doctors serve the function of helping people when they are sick or injured. However, for some, doctors and the healthcare system have not upheld such an exclusively optimistic reputation. If the healthcare system has a proven history of failing to serve their designated role of medical help for certain populations then it seems justified that one might not choose to seek out help from a doctor. This is often the case for Black Americans.

Data shows that Black Americans are less likely to trust their physicians and hospitals than white Americans.³⁸ The adverse attitude Black Americans hold towards the healthcare system is unsurprising considering the legacy of abuses the healthcare system has committed. In the Antebellum period, doctors forced Black people to participate in dissections and medical examinations.³⁹ Slaves who ran away from their owners were diagnosed with drapetomania, or “runaway slave syndrome,” and treated by amputation of their extremities.⁴⁰ Later, white doctors

³⁷ Ruqaiyah Yearby, “Structural Racism: The Root Cause of the Social Determinants of Health,” Bill of Health, September 22, 2020, <https://blog.petrieflom.law.harvard.edu/2020/09/22/structural-racism-social-determinant-of-health/>.

³⁸ Katrina Armstrong et al., “Racial/Ethnic Differences in Physician Distrust in the United States,” *American Journal of Public Health* 97, no. 7 (2007): pp. 1283-1289, <https://doi.org/10.2105/ajph.2005.080762>.

³⁹ Corey J. Williams, “Black Americans Don’t Trust Our Healthcare System - Here’s Why,” The Hill (The Hill, August 25, 2017), <https://thehill.com/blogs/pundits-blog/healthcare/347780-black-americans-dont-have-trust-in-our-healthcare-system/>.

⁴⁰ Ibid.

argued against emancipation by claiming that Black people could not psychologically cope with freedom. In 1932, the Tuskegee experiment intentionally infected hundreds of non-consenting Black participants with syphilis and denied them access to medical care in order to track the disease's full progression.⁴¹ This is just one of many instances of medicine using Black bodies, without their consent, for advancement. While Black distrust in the medical system began far before this study, the atrocities committed in the Tuskegee experiment epitomize the rationale for distrust. Since then, the U.S. healthcare system has continued to offer inferior care to Black people. As a result, many Black Americans do not trust providers to act in their best interest and it is entirely reasonable for them to hold this view. Consequently, Black patients are less likely to seek care or be compliant with treatment plans.⁴² Thus, it is clear how Black lack of trust in the healthcare system is rooted in structural practices of racism in the United States.

*Study #2: Assessing differential impacts of Covid-19 on black communities*⁴³

Even in the first few months of the pandemic there was emerging evidence that Black Americans were at an increased risk for Covid-19 morbidity and mortality. However, 78% of the Covid-19 cumulative data from the CDC were missing race and ethnicity information. This absence of information prompted G.A. Millett et al. to use ecological analyses with data at the county level to understand the determinants of risk of Covid-19 for Black Americans.

Researchers compared predictors of Covid-19 cases and deaths between disproportionately Black

⁴¹ Elizabeth Nix, "Tuskegee Experiment: The Infamous Syphilis Study," History.com (A&E Television Networks, May 16, 2017), <https://www.history.com/news/the-infamous-40-year-tuskegee-study>.

⁴² Corey J. Williams, "Black Americans Don't Trust Our Healthcare System - Here's Why," The Hill (The Hill, August 25, 2017), <https://thehill.com/blogs/pundits-blog/healthcare/347780-black-americans-dont-have-trust-in-our-healthcare-system/>

⁴³ Gregorio A. Millett et al., "Assessing Differential Impacts of COVID-19 on Black Communities," *Annals of Epidemiology* 47 (2020): pp. 37-44, <https://doi.org/10.1016/j.annepidem.2020.05.003>.

counties ($\geq 13\%$ Black population) and non-disproportionately Black counties ($<13\%$ Black population). Researchers accessed Covid-19 case and death data through April 13th 2020. Using multivariable modeling, researchers analyzed this data to evaluate if the disproportionate effects were due to race or confounding factors such as social, environmental, and comorbidities.

Key Finding: Increased risk of contracting Covid-19 and experiencing death for Black Patients

Researchers of this study found that residents in disproportionately Black counties experience both increased risk of contracting Covid-19 and increased risk of dying from Covid-19 nationally. While only 20% of all U.S. counties are disproportionately Black, they accounted for 52% of Covid-19 diagnoses and 58% of Covid-19 deaths nationally. These disproportionate rates persisted after controlling for confounding factors, such as demographics, chronic disease, and social/environmental factors, that are likely to be associated with both high rates of Covid-19 cases and deaths as well as high proportions of Black Americans. This means that independent of these factors, those who reside in disproportionately Black counties are still infected and die from Covid-19 at a higher rate than those who do not. However, the researchers of this study found that certain confounding variables, such as county-level lack of insurance, comorbidities, and household occupancy, had a strong association with Covid-19 mortality rates in predominantly Black counties.

Interpretation of Key Finding

Researchers in this study point to three different factors that are likely to increase the risk of Black populations contracting and dying from Covid-19 at disproportionate rates.

First, the authors of this study point to the overrepresentation of Black workers in “essential occupations” as a reason for higher rates of infection in disproportionately Black counties. They support this claim with the evidence from their study that showed that higher county-level unemployment was associated with fewer Covid-19 diagnoses. They hypothesize that this is because employment, especially in occupations that require interaction with the public, increases the odds of exposure to Covid-19. However, since researchers did not control for this kind of employment in their analysis, this could be a reason why they found disproportionate rates of Covid-19 mortality in predominantly Black counties even after controlling for confounding variables.

Is it just a coincidence that Black Americans happen to be overrepresented in occupations that increase their odds of exposure to Covid-19? Or could it be the case that Black Americans work in these occupations as a result of systemic racism? Black Americans are disproportionately represented in employment in grocery, convenience, and drug stores (14.2%); public transit (26.0%); trucking, warehouse, and postal service (18.2%); health care (17.5%); and child care and social services (19.3%).⁴⁴ Many of these sectors were deemed essential occupations during Covid-19, requiring them to work in person even if it hindered their ability to socially distance.

While it might seem like a choice to work in these sectors, the reason why Black Americans are disproportionately represented in these sectors is rooted in Slavery and Jim Crow Era segregation.⁴⁵ During slavery, Black people were forced to work in poor conditions as

⁴⁴ Elise Gould and Valerie Wilson, “Black Workers Face Two of the Most Lethal Preexisting Conditions for Coronavirus-Racism and Economic Inequality,” Economic Policy Institute, June 1, 2020, <https://www.epi.org/publication/black-workers-covid/>.

⁴⁵ Arghavan Salles, Vineet M. Arora, and Kerry-Ann Mitchell, “Everyone Must Address Anti-Black Racism in Health Care,” *JAMA* 326, no. 7 (2021): p. 601, <https://doi.org/10.1001/jama.2021.11650>.

agricultural, domestic, and service workers.⁴⁶ In the Jim Crow Era, occupational segregation of Black workers continued to steer Black workers into these sectors via Jim Crow laws. For example, South Carolina enforced strict “Black Codes” that fined Black people if they worked in any occupation other than farming or domestic servitude.⁴⁷ Further, union benefits excluded Black workers, exclusively allowing them to work in the lowest paying opportunities with little benefits.⁴⁸ Low-wage jobs made it challenging for Black families to move to areas with higher quality education, acquire loans for home ownership, and, in general, experience upward social mobility. Thus, though these laws have dissolved, the effect of them remains intact. The fact that predominantly Black workers continue to work in the same, low-wage occupations is evidence that Black workers have been placed in these occupations as a product of structural racism. Thus, while essential workers have been praised for putting their lives on the line during the pandemic, it is important to recognize that many did not have the choice to work in a Covid-19 safe environment.

Second, researchers from this study found that disproportionately Black counties had greater health disparities, which resulted in higher rates of Covid-19 mortality in these counties. Specifically, researchers found that counties with higher proportions of Black residents also had higher prevalence of comorbidities and proportions of uninsured individuals. In the previous study I discussed why higher prevalence of comorbidities in Black individuals, rooted in structural racism, caused higher rates of Covid-19 mortality. So, in this section I will focus on the higher rates of uninsured individuals in disproportionately Black counties to see if this condition is rooted in choice or in structural racism.

⁴⁶ Danyelle Solomon, Abril Castro, and Connor Maxwell, “Systematic Inequality and Economic Opportunity,” Center for American Progress, August 7, 2019, <https://www.americanprogress.org/article/systematic-inequality-economic-opportunity/>.

⁴⁷ Ibid.

⁴⁸ Ibid.

Health insurance, which makes financing medical care feasible for most Americans, is gatekept from Black Americans via occupational segregation. Today, most Americans receive healthcare from employer-sponsored insurance. However, as a result of occupational segregation, many Black Americans work in low-wage jobs that do not provide adequate health insurance if at all. In 2019, only 47% of Black workers, in comparison to 66% of white workers, were covered by employer-sponsored insurance.⁴⁹ If low-income Black workers are covered by employer-sponsored insurance, the plans they are offered often provide poor coverage and they are unable to switch to more affordable plans sponsored by the Affordable Care Act. Thus, through occupational segregation, low-income Black workers are provided with inadequate health insurance, if they are provided health insurance at all. Without health insurance, accessing medical care for Covid-19 poses a huge financial burden, causing many to forgo care and develop more severe cases of Covid-19.

Third, researchers also identified crowded housing, which is more likely to occur in disproportionately Black counties, as a contributing factor to more Covid-19 cases and deaths. Crowded housing substantially increases the chance of contracting Covid-19 due to exposure to more individuals. One study found that with each 5% increase in percent households with poor housing conditions, there was a 50% higher risk of Covid-19 incidence.⁵⁰ While it could seem like a choice to live in crowded housing conditions, many scholars suggest that Black individuals are more likely to live in crowded housing conditions because of practices of residential racism in the United States.⁵¹ As previously discussed, redlining provided Black Americans with a huge

⁴⁹ Ruqaiyah Yearby, Brietta Clark, and José F. Figueroa, “Structural Racism in Historical and Modern US Health Care Policy,” *Health Affairs* 41, no. 2 (January 2022): pp. 187-194, <https://doi.org/10.1377/hlthaff.2021.01466>.

⁵⁰ Khansa Ahmad et al., “Association of Poor Housing Conditions with Covid-19 Incidence and Mortality across US Counties,” *PLOS ONE* 15, no. 11 (February 2020), <https://doi.org/10.1371/journal.pone.0241327>.

⁵¹ Dayna Bowen Matthew, Edward Rodrigue, and Richard V. Reeves, “Time for Justice: Tackling Race Inequalities in Health and Housing,” Brookings (Brookings, March 9, 2022), <https://www.brookings.edu/research/time-for-justice-tackling-race-inequalities-in-health-and-housing/>.

handicap in acquiring housing and living in whiter, wealthier neighborhoods. While these policies have changed, similar to the case of occupation segregation, the residual effects of these policies have limited the housing options available to Black Americans today. In 2019, 3.6% of Black Americans lived in housing units with more than one person per room, which is relatively larger than the 1.4% of white Americans who lived in housing units with more than one person per room.⁵² This evidence suggests that living in crowded housing is a product of structural racism. And, since crowded housing increases social interactions likely to contribute to the spread of Covid-19, structural racism is truly behind the increase in infection and mortality rates caused by living in crowded housing conditions.

Chapter Two

Black Americans were not the only population dying at higher rates from Covid-19. Since May 2021, Americans living in Republican voting counties have been nearly three times as likely to die from Covid-19 as those living in Democratic voting counties.⁵³ Counties that voted for Donald Trump in the 2020 election at a rate of 60% or higher had 2.73 times the death rate as those that voted for Biden.⁵⁴ These statistics become even starker for counties with an even

⁵² “Explore Crowded Housing in the United States: 2021 Annual Report,” America's Health Rankings, accessed April 19, 2022, https://www.americashealthrankings.org/explore/annual/measure/crowded_housing/population/crowded_housing_w_hites/state/ALL.

⁵³ Daniel Wood and Geoff Brumfiel, “Pro-Trump Counties Now Have Far Higher COVID Death Rates. Misinformation Is to Blame,” NPR (NPR, December 5, 2021), <https://www.npr.org/sections/health-shots/2021/12/05/1059828993/data-vaccine-misinformation-trump-counties-covid-death-rate>.

⁵⁴ Ibid.

higher share of Trump voters. In October, death rates for the most Republican tenth of the United States were six times higher than the most Democrat tenth of the nation.⁵⁵

While for much of the pandemic the divide between Republican and Democratic counties went largely unnoticed, recent discussions highlighting the partisan divide prove that discussions of inequalities in Covid-19 should not be limited to race. Why have many Republican Americans been disproportionately impacted by Covid-19?

Some scholars claim that President Trump instigated this divide in Covid-19 case and mortality rates along partisan lines. President Trump, a particularly polarizing Republican president, has made controversial remarks about pandemic policy since January 2020. He publicly disagreed with health experts about what policies should be implemented in response to Covid-19.⁵⁶ When the CDC made its official recommendation to wear face coverings in April 2020, President Trump, who didn't wear a facemask until July 2020, said: "You don't have to do it. I'm choosing not to do it, but some people may want to do it, and that's OK. It may be good. Probably will. They're making a recommendation. It's only a recommendation."⁵⁷ By September 2020, President Trump still made claims that downplayed the severity of Covid-19.⁵⁸ At a campaign speech in Ohio, Trump stated without evidence that Covid-19 "affects virtually nobody."⁵⁹ President Trump even admitted to understating the health threat of Covid-19, commenting in an interview released in September 2020 that "I wanted to always play it down. I

⁵⁵ Ibid.

⁵⁶ Jingjing Gao and Benjamin J. Radford, "Death by Political Party: The Relationship between Covid-19 Deaths and Political Party Affiliation in the United States," *World Medical & Health Policy*, May 2021, <https://doi.org/10.1002/wmh3.435>.

⁵⁷ Juana Summers, "Timeline: How Trump Has Downplayed the Coronavirus Pandemic," NPR (NPR, October 2, 2020), <https://www.npr.org/sections/latest-updates-trump-covid-19-results/2020/10/02/919432383/how-trump-has-downplayed-the-coronavirus-pandemic>.

⁵⁸ Ibid.

⁵⁹ Ibid.

still like playing it down, because I don't want to create a panic.”⁶⁰ Despite Trump's true intentions, many Republicans took these comments seriously. In 2020, Republicans were more likely to assign credibility to the advice of Trump instead of other state officials.⁶¹ President Trump's attitude towards the pandemic's threat may have instigated misinformed beliefs in Republicans about the severity of the pandemic, resulting in a lower rate of adherence to Covid-19 policies by Republicans and, consequently, more Covid-19 cases and deaths.

Others attribute this disparity to be more closely related to differences in state-level policy decisions, which might also have been influenced by Trump's downplayed rhetoric. The policy stances taken by Republican politicians had a large influence on the behaviors of Republican Americans. By April 16, President Trump allowed governors to reopen their economies, however, unsurprisingly, Republican governors were quicker to reopen their economies than Democratic governors.⁶² The Republican party was also obstinate about making strict pandemic policy at the state level. Studies find that Republican governors were slower to adopt stay-at-home orders, if they did so at all.⁶³ Another study found that Democratic governors had longer durations of stay-at-home orders than Republican governors.⁶⁴ Further, governor Democratic political party affiliation was identified by researchers as the most important predictor of state mandates to wear masks.⁶⁵ The lack of state-level legislation may have catalyzed the spread of the virus in Republican states.

⁶⁰ Ibid.

⁶¹ Marcus Painter and Tian Qiu, “Political Beliefs and Compliance with Social Distancing Orders,” VOX, CEPR Policy Portal, May 11, 2020, <https://voxeu.org/article/political-beliefs-and-compliance-social-distancing-orders>.

⁶² Jingjing Gao and Benjamin J. Radford, “Death by Political Party: The Relationship between Covid-19 Deaths and Political Party Affiliation in the United States,” *World Medical & Health Policy*, May 2021, <https://doi.org/10.1002/wmh3.435>.

⁶³ Brian Neelon et al., “Associations between Governor Political Affiliation and Covid-19 Cases, Deaths, and Testing in the U.S.,” *American Journal of Preventive Medicine* 61, no. 1 (March 9, 2021): pp. 115-119, <https://doi.org/10.1016/j.amepre.2021.01.034>.

⁶⁴ Ibid.

⁶⁵ Ibid.

Another potential cause of this partisan divide is the differences in attitudes towards the threat of Covid-19. Many researchers find that Republicans developed a hesitant, negative attitude towards health-protective measures early on in the pandemic. Survey research finds that Democrats were more likely to adopt health-protective behaviors, more likely to worry, and more likely to support social distancing policies.⁶⁶ Democrats were also more likely to exercise protective actions against COVID-19 like taking fewer trips, staying home more, maintaining safe distances, and touching their own faces less frequently.⁶⁷ Republicans, on the other hand, appeared to be less concerned about Covid-19, practice social distancing, follow the social distancing orders after the state-wide policy enactment less, and were less likely to search for information about Covid-19.⁶⁸ The behaviors of Republicans may have caused them to be more at risk of contracting Covid-19.

Still, many journalists and researchers point to the vaccine to be the real cause in differential partisan outcomes. Prior to the vaccine being widely available, Black and Hispanic people were vaccinated at a lower rate than white people due to the obstacles to vaccine access people of color initially faced.⁶⁹ After the vaccine became widely available, the trend shifted. Data reveals that a major contributing factor to the difference in death rate is that a higher vote

⁶⁶ Shana Kushner Gadarian, Sara Wallace Goodman, and Thomas B. Pepinsky, "Partisanship, Health Behavior, and Policy Attitudes in the Early Stages of the COVID-19 Pandemic," *PLOS ONE* 16, no. 4 (July 2021), <https://doi.org/10.1371/journal.pone.0249596>.

⁶⁷ Jingjing Gao and Benjamin J. Radford, "Death by Political Party: The Relationship between Covid-19 Deaths and Political Party Affiliation in the United States," *World Medical & Health Policy*, May 2021, <https://doi.org/10.1002/wmh3.435>.

⁶⁸ Hunt Allcott et al., "Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic," *Journal of Public Economics* 191 (November 2020), <https://doi.org/10.3386/w26946>; ohn Barrios and Yael Hochberg, "Risk Perception through the Lens of Politics in the Time of the COVID-19 Pandemic," *National Bureau of Economic Research*, April 2020, <https://doi.org/10.3386/w27008>.

⁶⁹ Denise Lu and Albert Sun, "Why Covid Death Rates Are Rising for Some Groups," *The New York Times* (The New York Times, December 28, 2021), <https://www.nytimes.com/interactive/2021/12/28/us/covid-deaths.html?searchResultPosition=7>; Nina Feldman, "Why Black and Latino People Still Lag on Covid Vaccines - and How to Fix It," *NPR* (NPR, April 26, 2021), <https://www.npr.org/sections/health-shots/2021/04/26/989962041/why-black-and-latino-people-still-lag-on-covid-vaccines-and-how-to-fix-it>.

share for Trump is correlated with a lower vaccination rate.⁷⁰ “An unvaccinated person is three times as likely to lean Republican as they are to lean Democrat,” announced Liz Hamel, vice president of public opinion and survey research at the Kaiser Family Foundation.⁷¹ Vaccination greatly reduces the risk of death from Covid-19, according to the CDC.⁷²

Why, though, are Republicans vaccinated at a lower rate than Democrats? The answer is complicated. First, much of the distrust in the federal government Covid-19 policy from the early days of the pandemic has become firmly entrenched in Republican minds. Second, widespread disinformation on vaccines reaches Republican voters at a far greater rate than Democrats.⁷³ Right-wing media, like Fox News, have publicly denounced the safety of the vaccine.⁷⁴ In June 2021, Sherri Tenpenny, a Cleveland-area doctor, falsely suggested during a hearing in the Ohio House of Representatives that Covid vaccines left people “magnetized” and could “interface” with 5G cellular towers, Republican lawmakers thanked her for her “enlightening” testimony.⁷⁵ Third, some suggest that socioeconomic disadvantage is to blame for vaccine hesitancy in low-income communities.⁷⁶

⁷⁰ Daniel Wood and Geoff Brumfiel, “Pro-Trump Counties Now Have Far Higher COVID Death Rates. Misinformation Is to Blame,” NPR (NPR, December 5, 2021), <https://www.npr.org/sections/health-shots/2021/12/05/1059828993/data-vaccine-misinformation-trump-counties-covid-death-rate>.

⁷¹ Ibid.

⁷² “CDC Covid Data Tracker,” Centers for Disease Control and Prevention (Centers for Disease Control and Prevention), accessed April 19, 2022, <https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>.

⁷³ “Unvaccinated Adults Are Now More than Three Times as Likely to Lean Republican than Democratic,” KFF, November 16, 2021, <https://www.kff.org/coronavirus-covid-19/press-release/unvaccinated-adults-are-now-more-than-three-times-as-likely-to-lean-republican-than-democratic/>.

⁷⁴ Dean Obeidallah, “Opinion: Fox News' Alarming Vaccine Disinformation Is a Danger to America,” CNN (Cable News Network, July 20, 2021), <https://www.cnn.com/2021/07/18/opinions/vaccine-disinformation-fox-news-obeidallah/index.html>.

⁷⁵ Andrea Salcedo, “A Doctor Falsely Told Lawmakers Vaccines Magnetize People: 'They Can Put a Key on Their Forehead. It Sticks.',” The Washington Post (WP Company, June 9, 2021), <https://www.washingtonpost.com/nation/2021/06/09/sherri-tenpenny-magnetized-vaccine-ohio/>.

⁷⁶ “Covid-19: Where Do We Go from Here?,” *The Lancet* 398, no. 10318 (December 18, 2021), [https://doi.org/10.1016/s0140-6736\(21\)02790-2](https://doi.org/10.1016/s0140-6736(21)02790-2).

Should this partisan disparity bother us? Researchers and scholars clearly point to a wide variety of causes that could cause the differential mortality rates between Republicans and Democrats. While some point to the general attitudes Republicans hold towards the pandemic and the policy decisions made by Republican states, others point to low vaccination rates rooted in misinformation. Therefore, some of these potential causes seem less choice driven than others. If the differences in Covid-19 mortality rates are driven by choice, then that might seem to suggest there's no serious concern of justice. If not, though, then the case might appear to parallel the unequal outcomes experienced by Black Americans, which were largely a product of structural racism. So, we need to investigate what is responsible for the partisan divide in Covid-19 infection and mortality rates to formulate appropriate policy responses.

Now, I will turn to studies that flesh out the partisan gap in Covid-19 mortality rates. First, I will explain the conclusions drawn in articles written by NPR and the Pew Research Center while also pointing out the limitations of these articles. Then, I will turn to two empirical studies that highlight partisan differences in behaviors that are correlated with Covid-19 mortality.

Article #1: NPR: Pro-Trump counties now have far higher COVID death rates.

Misinformation is to blame.⁷⁷

In December 2021, NPR published a report examining how political polarization and misinformation have driven deaths during the pandemic. NPR writers analyzed Covid-19 deaths per 100,000 people in 3,000 counties across the U.S. from May 2021 and November 2021.

⁷⁷ Daniel Wood and Geoff Brumfiel, "Pro-Trump Counties Now Have Far Higher COVID Death Rates. Misinformation Is to Blame," NPR (NPR, December 5, 2021), <https://www.npr.org/sections/health-shots/2021/12/05/1059828993/data-vaccine-misinformation-trump-counties-covid-death-rate>.

During this time period, vaccinations became widely available, potentially igniting the divergence between Republican and Democratic outcomes in the pandemic.

Key finding: Pro-Trump counties have higher Covid-19 mortality rates in 2021 than Pro-Biden counties

NPR's report finds that Pro-Trump counties had higher Covid-19 death rates than Pro-Biden counties. Specifically, counties that voted for Donald Trump at 60% or more during the 2020 election had seen much higher death rates from Covid-19 than counties that voted for Trump at 40% or less (2.73 times the death rate).

Interpretation of Key Finding

NPR journalists exclusively identify vaccination rates as the reason why Republicans now have higher death rates than Democrats. Republicans currently make up the majority of unvaccinated people in the United States. As of November 2021, Republican and Republican leaning Independents, who represent 41% of adults, make up 60% of the adult unvaccinated population.⁷⁸ Democrats, on the other hand, make up 17% of the unvaccinated population.⁷⁹ This trend has existed since April, however, the divide is growing. In April 2021, there was only a 8% difference in vaccination rates between the two parties.⁸⁰ In October, that divide grew to 43%.⁸¹ Vaccinations are crucial in hindering the spread of Covid-19 and preventing severe cases. While rates have oscillated due to different strains of the Covid-19 virus, as of November 2021,

⁷⁸ "Unvaccinated Adults Are Now More than Three Times as Likely to Lean Republican than Democratic," KFF, November 16, 2021, <https://www.kff.org/coronavirus-covid-19/press-release/unvaccinated-adults-are-now-more-than-three-times-as-likely-to-lean-republican-than-democratic/>.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid.

unvaccinated people are around six more times more likely to test positive for Covid-19 than unvaccinated people.⁸² This means that Republicans, who make up a much larger portion of the unvaccinated population, have a substantially larger risk of contracting Covid-19. Further, during the same time period, unvaccinated people were shown to be nine times more likely to be hospitalized and 14 times more likely to die from Covid-19.⁸³ Not only does the vaccine prevent the spread of Covid-19, but it also decreases the severity of its progression. Many Republicans are lacking this essential defense against the virus which is increasing their likelihood of dying from the disease.

The NPR article points to misinformation as the cause of low rates of vaccinated Republicans. Polling reveals that Republicans are more likely to believe false statements about Covid-19 and vaccines. In fact, 94% of Republicans think one or more false statements about Covid-19 and vaccines might be true, and 46% believe four or more false statements might be true.⁸⁴ Only 14% of Democrats, in comparison, believe that four or more false statements about Covid-19 might be true.⁸⁵ Those who believe false statements about Covid-19 are more likely to be unvaccinated as much of the misinformation about Covid-19 has centered around the safety and necessity of the vaccine.⁸⁶ The most widely believed false statement was that the “government is exaggerating” about the high number of Covid-19 deaths.⁸⁷ Those who believe this statement would feel that getting a vaccine might be unnecessary because the illness is not as

⁸² Ralph Ellis, “Unvaccinated 14 Times More Likely to Die from Covid,” WebMD (WebMD, November 25, 2021), <https://www.webmd.com/vaccines/covid-19-vaccine/news/20211124/unvaccinated-14-times-more-likely-to-die-fro-m-covid>.

⁸³ Ibid.

⁸⁴ Ralph Ellis, “Unvaccinated 14 Times More Likely to Die from Covid,” WebMD (WebMD, November 25, 2021), <https://www.webmd.com/vaccines/covid-19-vaccine/news/20211124/unvaccinated-14-times-more-likely-to-die-fro-m-covid>.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

bad as it is claimed to be. Misinformation is likely at the root of low vaccination rates of Republicans, which in turn causes higher mortality rates among Republican-voting counties.

Limitations:

While this NPR article incorporates data analysis, it is not nearly as robust as the analysis and review process in formal empirical research. Thus, it is important to highlight its strengths and limitations. A key strength of this analysis is that it uses reputable sources of data such as Johns Hopkins University, the CDC, and the Census. However, the article is not peer reviewed under the same scrutiny as a formal study would have been. Instead, NPR recruited Charles Gaba, an independent healthcare analyst to review the article. Second, the article does not include analysis before vaccinations became available. If this trend existed before the vaccine became available, then, we would have to assume that other factors are causing the difference in mortality rates. Third, the reporters in this article only controlled for some factors in their analysis. The factors they controlled for are age, which is the primary demographic risk of Covid-19 mortality, and population. This means that these variables, which are also factors that influence Covid-19 mortality, were made equal so that researchers could attempt to isolate the relationship between just Republican voters and Covid-19 mortality. However, the reporters did not control for other confounding variables such as socioeconomic status, overall health in counties, race, or social distancing metrics. These are variables that are associated both with partisanship and Covid-19 mortality and thus would be very important to understanding the strength of association between vaccination rate and mortality rate. For example, Trump counties are typically lower socioeconomic, which is correlated with increased risk of Covid-19

mortality.⁸⁸ Finally, the explanation of their statistical analysis is limited. Simply stating that there is 2.73 times the death rate does not tell us what the level of significance was or what kind of regression was used.

Article #2: Pew Research Center: The Changing Political Geography of Covid-19 over the Last Two Years⁸⁹

In March, The Pew Research Center published a report analyzing how the geographic dynamics of the pandemic have shifted over the past two years. This report uses Covid-19 data collected by the New York Times from March 2020, the beginning of the pandemic, to February 2022. Throughout the entire report, the writers divide the pandemic into five waves. Each wave impacted the country differently depending on population density, vaccination availability, and variant surge, among other factors. The report analyzes these waves in comparison to the population density of different counties and election votes for the 2020 election of different counties.

Key findings: Pro-Trump counties had more deaths during 2020 than Pro-Biden counties

Overall, this article found that since the beginning of the pandemic, counties representing the 20% of the population where Trump ran the highest margins in 2020 have experienced more

⁸⁸ Mark Muro et al., “Biden-Voting Counties Equal 70% of America's Economy. What Does This Mean for the Nation's Political-Economic Divide?,” Brookings (Brookings, November 10, 2020), <https://www.brookings.edu/blog/the-avenue/2020/11/09/biden-voting-counties-equal-70-of-americas-economy-what-does-this-mean-for-the-nations-political-economic-divide/>.

⁸⁹ Bradley Jones, “The Changing Political Geography of Covid-19 over the Last Two Years,” Pew Research Center - U.S. Politics & Policy (Pew Research Center, March 3, 2022), <https://www.pewresearch.org/politics/2022/03/03/the-changing-political-geography-of-covid-19-over-the-last-two-years/>.

deaths, 70,000 more, than counties representing the 20% of the population where Biden performed best. Specifically, this pattern became evident in the latter stages of the pandemic.

Interpretation of Key Finding

The Pew Research Center finds that the partisan inequities in Covid-19 mortality rates started in July 2020, when the death rate in counties that would vote for Trump in 2020 became higher than in counties that would vote for Biden. As the vaccine didn't become widely available until June 2021, this suggests that the differential uptake in the vaccine along partisan lines cannot be the only explanation for the difference in mortality rates. As I discussed earlier in this chapter, the partisan divide before the vaccine's availability is likely attributable to the lower rates of social distancing and mask-wearing among Republicans which were instigated by Trump's downplayed rhetoric and Republican state's loose policies.

The partisan divide widened dramatically in the fall of 2021, where death rates in the counties most supportive of Trump were about four times as high as in the counties most supportive of Biden. Vaccination rates, found to have a positive linear relationship with a county's share of Democratic votes, are likely to blame for this large divide. Given the widespread availability of the vaccine across the country, being vaccinated is a choice. However, it is still unclear why many Republicans have chosen to not be vaccinated.

Limitations:

These results together advocate for a particularly strong stance that low rates of social distancing and low vaccination rates in pro-Trump leaning counties are the cause of the shift in Covid-19 mortality from Biden supporting counties to Trump supporting counties. However, without

statistical analysis, this article cannot make certain claims that vaccination was attributed to the rise of deaths in pro-Trump counties in the later waves of the pandemic. Similar to the NPR article, this article does not control for confounding factors, like socioeconomic status, age, race, etc. to accurately depict the relationship between Covid-19 death rates and partisanship.

*Study #1: The Party-Line Pandemic: A Closer Look at the Partisan Response to COVID-19*⁹⁰

This empirical study was conducted to assess the relationship between Covid-19 and partisanship as a growing body of research suggests that partisanship has a strong impact on Covid-19 related behavior. Prior to this study, it was evident that Republicans viewed the pandemic as less severe and were less concerned about contracting the virus, however little statistical analysis had been done to understand how these attitudes materialized. This study investigates the quantitative effects of partisanship on not only policy but also individual behavior from March 2020 through June 2020. Researchers used daily relative mobility data, 2016 presidential voting data, Johns Hopkins University Covid-19 data, controlling for factors such as age, population, household income, unemployment rate, and percent college educated. The primary dependent variable of interest was mobility, which was obtained from Descartes Labs, a firm which aggregates geospatial data. This data allowed researchers to gauge the reduction in day-to-day activity related to the virus, which can be viewed as a proxy for social distancing.

⁹⁰ John F. Camobreco and Zhaochen He, “The Party-Line Pandemic: A Closer Look at the Partisan Response to Covid-19,” *PS: Political Science & Politics* 55, no. 1 (2021): pp. 13-21, <https://doi.org/10.1017/s1049096521000901>.

Key finding: Republican counties were more mobile in 2020 than Democratic counties

Authors find that partisanship is a strong predictor of county-level mobility during the Covid-19 pandemic, even when accounting for the severity of the outbreak in each county. Republican counties had higher levels of mobility during lockdown and after lockdown, even after controlling for population density and other confounding factors. In fact, mobility in a typical Republican county under lockdown is comparable to a typical Democratic county without a lockdown, even after controlling for Covid-19 prevalence, local economic conditions, population density, and other demographic characteristics. Why is it the case that partisanship was the single-most important predictor of mobility during the lockdown period and the third most important subsequently, second only to income and education levels?

Interpretation of key findings

Authors identify the reason behind the close relationship between partisanship and mobility during Covid-19 to be due to the fact that many Republicans did not consider Covid-19 a major threat to the health of the U.S. population as a whole. In July of 2020, only 46% of Republicans, in contrast to 85% of Democrats, said that Covid-19 was a major threat to the health of the U.S. public.⁹¹ There are a few different reasons why many Republicans developed this line of thought.

First, Republican Party leaders downplayed the seriousness of the Covid-19 virus from the beginning of the pandemic. Republican leaders, like President Trump, minimized the threat of Covid-19, creating a widespread message to Republican Americans that they too should not

⁹¹ Alec Tyson, “Republicans Remain Far Less Likely than Democrats to View Covid-19 as a Major Threat to Public Health,” Pew Research Center (Pew Research Center, July 28, 2020), <https://www.pewresearch.org/fact-tank/2020/07/22/republicans-remain-far-less-likely-than-democrats-to-view-covid-19-as-a-major-threat-to-public-health/>.

feel endangered by the virus. Republican governors took President Trump's lead, not locking down their states until far after many Democratic governors did. Many studies suggest that these signals from party leaders led Republicans to take Covid-19 less seriously, as depicted in many of their self-reported behaviors.

Second, Republican rhetoric at this point in the pandemic was largely focused on the health of the economy, which was declining due to restrictions around mobility. For example, tight restrictions on citizens' movements in Michigan sparked a national debate about public health versus economic survival. In a *New York Times Daily* episode, a Republican business owner, Phil Campbell, stated he thinks that "people who want to work... should be able to" because "staying home and nobody working has its own inherent risks and dangers and devastations that's going to come."⁹² Campbell took part in a large protest against the strict social distancing policies, arguing that these policies were taking away the "most basic human right... to provide your own well-being."⁹³ This response to social distancing and quarantine policy was not isolated to Michigan or the beginning half of the pandemic. In a PBS interview conducted in March of 2021, 78% of Democrats said they think their states should stop the spread of Covid-19, even if it hurts the economy.⁹⁴ However, 74% of Republicans said that states need to prioritize the economy over the pandemic.⁹⁵ Though it might be the case that Republicans, on average, are in worse economic positions than Democrats, authors find this divergence to still be significant after controlling for economic conditions, which indicates that Democrats and Republicans facing similar economic risk behaved differently.

⁹² Michael Barbaro, "The Governor and the Protester," *The New York Times* (The New York Times, April 29, 2020), <https://www.nytimes.com/2020/04/29/podcasts/the-daily/gretchen-whitmer-michigan-protests.html?showTranscript=1>.

⁹³ *Ibid.*

⁹⁴ Laura Santhanam, "Politics Still Drives How Americans Feel about Covid Response, One Year In," PBS (Public Broadcasting Service, March 11, 2021), <https://www.pbs.org/newshour/politics/politics-still-drives-how-americans-feel-about-covid-response-one-year-in>.

⁹⁵ *Ibid.*

Third, Republican voters, generally, are less confident in science than Democratic voters.⁹⁶ In 2021, 79% of Democrats said they were confident in science, while only 45% of Republicans said they were confident in science.⁹⁷ These statistics stem from partisan disputes over the validity of climate change, evolutionary theory, and the seriousness of the Covid-19 pandemic. Republicans are more likely than Democrats to reject the recommendations of health experts about prevention measures, which played a vital role in advising the control of the Covid-19 virus outbreak.

Lastly, a core political value of the Republican party is limited government. The Republican party viewed social distancing guidelines as governmental overreach and a violation of individual freedom, leading Republican politicians and individuals to advocate for and follow more lenient policies.

These beliefs influenced the behaviors of many Republican individuals and policy decisions of many Republican politicians. At the individual level, Republicans were less likely to follow social distancing suggestions and exhibited more mobile behaviors. At the state level, however, there was less rigorous legislation in Republican states than in Democratic states. For example, Authors find that many Republican states reopened sooner than their Democratic counterparts, despite similar rates of infection. This influenced differences in individual behavior, reinforcing Republicans' position as more mobile on average than Democrats. One setting where this seems especially characteristic is in school reopenings for the 2020 - 2021 school year. These decisions were made at the state and local levels, giving free reign to politicians to decide the best course of action for their jurisdiction. However, this issue was extremely divisive along partisan lines. In March 2021, 9% of Democratic adults, in comparison

⁹⁶ Jeffrey M. Jones, "Democratic, Republican Confidence in Science Diverges," Gallup.com (Gallup, July 16, 2021), <https://news.gallup.com/poll/352397/democratic-republican-confidence-science-diverges.aspx>.

⁹⁷ Ibid.

to 39% of Republican Adults said that their top priority is to reopen schools.⁹⁸ These polling results were not due to the fact that Democratic-voting school districts were already reopened. A 2021 study found that in the South there was a “significant and sustained increase in cases per week among counties that opened in a hybrid of a traditional mode versus remote, with weekly effects ranging from 9.8 to 21.3 additional cases per 100,000 people.”⁹⁹ As the majority of Southern states are Republican voting, it is clear that school reopening policy impacted the mobility of many Republicans, which in turn increased the Covid-19 infection rate and potentially also the mortality rate.

Study #2: Vaccination, politics, and Covid-19 impact¹⁰⁰

In the first three waves of the pandemic the only mechanisms to prevent the spread of Covid-19 were social distancing, frequent sanitation, and mask wearing. By December of 2020, however, the first vaccines were being delivered in the United States. Despite results showing that the vaccinations were very safe and effective, only 61.6% of eligible people were fully vaccinated as of September 2021. This study examines the role of political affiliation in explaining variation of actual vaccination rates across U.S. counties. In addition, this study analyzes the relationship between political views, vaccination rates, and per capita Covid-19 cases and deaths.

This study uses data from the New York Times and CDC to assess how Covid-19 cases and deaths per 100,000 between March 1, 2021 and September 1, 2021 were related to

⁹⁸ Laura Santhanam, “Politics Still Drives How Americans Feel about Covid Response, One Year In,” PBS (Public Broadcasting Service, March 11, 2021),

<https://www.pbs.org/newshour/politics/politics-still-drives-how-americans-feel-about-covid-response-one-year-in>.

⁹⁹ Zeynep Ertem et al., “The Impact of School Opening Model on SARS-COV-2 Community Incidence and Mortality,” *Nature Medicine* 27, no. 12 (2021): pp. 2120-2126, <https://doi.org/10.1038/s41591-021-01563-8>.

¹⁰⁰ Don Albrecht, “Vaccination, Politics and Covid-19 Impacts,” *BMC Public Health* 22, no. 1 (2022), <https://doi.org/10.1186/s12889-021-12432-x>.

vaccination rates and percent of Republican voters per county. Researchers held constant variables expected to have direct effects on both vaccination rates and Covid-19 cases and deaths. These variables include race, educational attainment, and poverty. Researchers use a path model to understand the relationship between these variables.

Key findings: Republican counties have lower vaccination rates and higher Covid-19 cases and deaths in 2021

Not only was Republican voting behavior strongly correlated with vaccination rates, but also was related to more extensive Covid-19 cases and deaths. In counties where Trump received less than 25% of the vote, death rates per 100,000 were less than half as high as in counties where Trump received 75% or more of the vote between March 1, 2021 and September 1, 2021.

Interpretation of key finding

The effect that vaccinations have on preventing the spread and severity of Covid-19 is undeniable. This study highlights a few key reasons why counties with higher shares of Republican voters are less likely to be vaccinated.

First, authors claim that skepticism towards science among Republicans might be a factor influencing their decision to be vaccinated. As mentioned earlier, many Republicans do not trust the findings of scientific studies. President Trump himself has opposed vaccines even before the Covid-19 pandemic, sending many tweets with anti-vax and pro-conspiracy theory themes. In 2014, he tweeted: “Healthy young child goes to doctor, gets pumped with massive shot of many vaccines, doesn’t feel good and changes – AUTISM. Many such cases.” A study found that these statements made Trump voters more likely to express vaccine hesitancy views, distrust medical

authorities, and believe conspiracy theories about COVID-19 vaccines. Further authors found that lower rates of education, and presumably less credence in scientific thought, meant lower vaccination rates and more votes for Trump. Thus, Republicans, on average, are likely to not believe the scientific evidence about the vaccine due to more skepticism about science in general, rooted in a lack of education.

Misinformation also played a large role in the decisions of Republicans to not be vaccinated. A Study by Fridman et al. found a critical factor in vaccine resistance was exposure to right-wing media. The media is heavily polarized, creating vastly different information environments that Republicans and Democrats occupy. Sources trusted by at least forty percent of Democrats include sources like CNN, NBC, ABC, NPR, and the NYTimes. In contrast, the only news source trusted by at least forty percent of Republicans is Fox News.¹⁰¹ During the pandemic Fox News gained a reputation for being anti-vax. Media Matters, a liberal media watchdog group, published a report stating that just between June 28 and July 11 “Fox News aired 129 segments about Covid vaccine.¹⁰² Of those 57% included claims that either undermined or downplayed immunization efforts.¹⁰³ Fox News has generally advocated for three messages: the vaccine is coercive, unnecessary, or dangerous. Jeanine Pirro declared on her show that “the goal of the Biden administration's door to door vaccine outreach was ultimately “about confiscating your gun.”¹⁰⁴ Laura Ingraham declared that “natural immunity” was preferential to

¹⁰¹ Mark Jurkowitz and Amy Mitchell, “About One-Fifth of Democrats and Republicans Get Political News in a Kind of Media Bubble,” Pew Research Center’s Journalism Project (Pew Research Center, March 4, 2020), <https://www.pewresearch.org/journalism/2020/03/04/about-one-fifth-of-democrats-and-republicans-get-political-news-in-a-kind-of-media-bubble/>.

¹⁰² Dean Obeidallah, “Opinion: Fox News' Alarming Vaccine Disinformation Is a Danger to America,” CNN (Cable News Network, July 20, 2021), <https://www.cnn.com/2021/07/18/opinions/vaccine-disinformation-fox-news-obeidallah/index.html>.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

the Covid-19 vaccine.¹⁰⁵ For many Republicans, whose only source of news is Fox News, took these messages seriously as many decided not to be vaccinated.

Fox News, however, is not the only machinery delivering misinformation to Republican viewers. Facebook has become a hub for the incubation of echo chambers. In a 2016 study, researchers found that Facebook tends to polarize users, particularly conservative users, more than other social media platforms.¹⁰⁶ This means that Facebook users, who are predominantly conservative, are pushed towards even more conservative news. Most of the news sources that reach conservatives are not even from mainstream news outlets like Fox News. CrowdTangle, a data analytics tool owned by Facebook, revealed that right-wing commentators like Ben Shapiro and Dan Bongio were getting much more engagement on their Facebook pages than mainstream news outlets.¹⁰⁷ In fact, Ben Shapiro's media company, The Daily Wire, drew more interactions than the New York Times, The Washington Post, the Wall Street Journal, the Los Angeles Times and NPR combined.¹⁰⁸ These news platforms tend to send extreme right-wing messages. When the vaccine was about to be released, social media posts presented a range of falsehoods about the vaccines, including claims that COVID vaccines would alter DNA, negatively affect fertility, or that the government was injecting microchips into people so that their behavior could be monitored. Specifically, an NPR review of Shapiro's stories about Covid-19 found numerous stories about the potential side effects from Covid-19 vaccines, but none that portrayed the scientifically demonstrated efficacy of the vaccines or that focused explicitly on the hesitancy

¹⁰⁵ Ibid.

¹⁰⁶ Caroline Newman, "Study: How Facebook Pushes Users, Especially Conservative Users, into Echo Chambers," UVA Today, November 18, 2020, <https://news.virginia.edu/content/study-how-facebook-pushes-users-especially-conservative-users-echo-chambers>.

¹⁰⁷ Ben Gilbert, "Facebook Executives Weren't Happy When Their Own Data Showed It Perpetuates a Right-Wing Echo Chamber," Business Insider (Business Insider, July 14, 2021), <https://www.businessinsider.com/facebook-right-wing-echo-chamber-data-executive-pushback-2021-7>.

¹⁰⁸ Ibid.

that has slowed the U.S. rollout.¹⁰⁹ Ben Shapiro’s platform has not only featured anti-vax content, but also aims to challenge the authenticity of mainstream media. He recently stated: “The establishment media’s deep desire to keep people from clicking on stories they want to read, and to re-establish their traditional informational monopoly — now an effort funded by US taxpayer dollars via NPR — is truly authoritarian garbage...this is a clear and present danger to American freedom to access information outside the media they correctly distrust.”¹¹⁰ This means that Republican Americans are not only receiving misinformation from Fox News, but also fed a diet of misinformation from right-wing anti-vaccination supporters. The choice to be vaccinated was influenced by Republican leaders and news outlets, like Fox News, then propagated by Republican echo chambers on social media websites like Facebook.

Chapter Three

The Covid-19 pandemic disproportionately affected both Black and Republican Americans. For both populations, Covid-19 infection rates and mortality rates were significantly higher than those of the rest of the United States at various points in the pandemic. In the past two chapters, I have laid out the unique causes behind the unequal Covid-19 outcomes these groups experienced during the Covid-19 pandemic. In this final chapter, I will compare the levels

¹⁰⁹ Miles Parks, “Outrage as a Business Model: How Ben Shapiro Is Using Facebook to Build an Empire,” NPR (NPR, July 19, 2021), <https://www.npr.org/2021/07/19/1013793067/outrage-as-a-business-model-how-ben-shapiro-is-using-facebook-to-build-an-empire>.

¹¹⁰ Dominick Mastrangelo, “Ben Shapiro Rips NPR Following Story Critical of Daily Wire's Business Model,” The Hill (The Hill, July 19, 2021), <https://thehill.com/homenews/media/563711-ben-shapiro-rips-npr-following-story-critical-of-daily-wires-business-model/>.

of responsibility underlying the causes of these inequitable outcomes to evaluate possible policy recommendations.

Summary of Chapter One and Chapter Two

For Black Americans, the reasons for their unequal Covid-19 outcomes manifest in three distinct ways. First, Black Americans experience higher rates of pre-existing conditions due to the pathways in which structural racism has damaged the health of their population. Second, despite the high prevalence of these conditions, Black Americans utilize healthcare services less frequently than white Americans, resulting in more severe cases of Covid-19 in the Black population. Third, Black Americans were more at risk of contracting Covid-19 because they are overrepresented in jobs that require interaction with the public and are more likely to live in crowded housing conditions.

For Republican Americans, there are two causes underlying their unequal Covid-19 outcomes. First, Republican Americans experienced higher overall rates of mobility during the pandemic. Second, they experienced lower rates of vaccination. Together, these behaviors caused both more infections and deaths of Covid-19.

The United States' Black community and Republican community were both disproportionately affected by Covid-19, but to what extent were these outcomes the result of choice? Understanding the set of choices available to individuals in each group will help illustrate the amount of responsibility we can attribute to the unequal outcomes they experienced during the pandemic. If either group was put in a position where they could not have controlled these outcomes, it seems unlikely that they should be held responsible for these outcomes.

However, if these outcomes were a product of the decisions made by these groups then it seems like we can potentially hold them responsible for their Covid-19 outcomes.

Membership to these two communities has varying levels of choice involved.

Understanding one's opportunity to opt-in or out of these communities might help determine if the Covid-19 outcomes they faced were inherently avoidable. Racial identity is a term that refers to how individuals define themselves with respect to race.¹¹¹ For example, those whose race is Black typically identify with being Black. Race is determined by the genetics of one's parents, creating phenotypic distinctions like skin color. In this way, being born Black is not a choice. And as a result of the historical racism in the United States, Black people are marginalized from the time they are born. This marginalization is inescapable because one cannot simply change their skin color. Blackness, as it is defined in opposition to whiteness, is often central to the identities of Black people. In fact, 52% of Black adults say being Black is extremely or very important to how they think about themselves, in comparison to only 5% for white adults.¹¹² Thus, being Black is a feature over which individuals have little control, and due to its marginalization, creates a strong broader community. Being a member of the Republican Party, on the other hand, is fundamentally a choice. The United States' political system functions on the basis that people can vote for whatever candidate or party they think will serve them best. Americans can officially join a party when they vote for the first time, which is not until the age of 18. Further, one can easily change their partisan membership. Partisanship, therefore, is definitionally a choice, while race is not. This means that the position that Black individuals were put in during the pandemic was unavoidable. While the position that Republicans were in

¹¹¹ "Racial Identity," Racial Identity - an overview | ScienceDirect Topics, accessed April 19, 2022, <https://www.sciencedirect.com/topics/social-sciences/racial-identity>.

¹¹² Amanda Barroso, "Most Black Adults Say Race Is Central to Their Identity and Feel Connected to a Broader Black Community," Pew Research Center (Pew Research Center, February 5, 2020), <https://www.pewresearch.org/fact-tank/2020/02/05/most-black-adults-say-race-is-central-to-their-identity-and-feel-connected-to-a-broader-black-community/>.

during the pandemic may have been avoidable due to their decision to join the Republican Party, we cannot transitively conclude that the negative outcomes of Covid-19 were also their choice. The pandemic by its very nature has unforeseeable consequences. For example, doctors were disproportionately affected by Covid-19 due to the level of involvement they had with Covid-19 patients. It is a choice to become a doctor, however, as Covid-19 is a novel virus, it would have been impossible for doctors to anticipate this while making their decision to become a doctor. While analyzing the choice of membership is illustrative of the position of Black individuals in contrast to Republicans, it is limited in helping us understand the level of choice involved in the outcomes of Covid-19 themselves. Consequently, we must contrast the kind of decisions involved in the individual causes of unequal Covid-19 outcomes between Black Americans and Republicans.

Similarities

While these causes of increased Covid-19 infection and mortality rates for Black and Republican Americans might seem different, there are many similarities in the nature of the causes. In both cases, there were greater numbers of social contacts resulting in a higher risk of infection. As noted earlier, for Republicans this was due to higher levels of mobility and for Black individuals this was due to overrepresentation in “essential” services occupations and increased likelihood of living in crowded housing conditions. Also, in both cases, there is a lack of trust in the healthcare system. For Black Americans, this is due to a history of atrocities committed against Black Americans by the healthcare system. For Republicans, this was due to a distrust in mainstream media sources. These cases are similar because both groups base their

mistrust in external evidence whether it be a severe example of racism in the healthcare system or a steady diet of misinformation from right-wing media.

These apparent similarities pose interesting ethical questions. Might they also indicate the same level of responsibility for each group? On the one hand, these similarities do seem to imply similar kinds of responsibility. If Black and Republican Americans both distrust institutions due to external factors that are out of their control, then the level of responsibility for each group would be similarly low. On the other hand, though, each group's justification for their actions seems particularly important in assessing their responsibility. If Republicans interacted with more people as a result of choice, while Black Americans interacted with more people as a result of their disadvantaged position in society, then it seems like under this surface-level similarity there are quite different levels of responsibility involved. Therefore, contrasting these groups' justifications for their actions is crucial to assessing the kind of responsibility we can attribute to their actions.

While Black Americans experienced higher Covid-19 mortality rates in part due to higher rates of pre-existing conditions, I will set this cause aside because it is more obvious that we should not hold them responsible for this cause. As I explained in Chapter One, the reason why Black Americans have higher rates of pre-existing conditions, like diabetes and obesity, is due to structural racism. As a result of structural racism, Black Americans have faced historical barriers to healthy environments which in turn has resulted in higher frequencies of these conditions in Black communities. Thus, these conditions are not a product of choices made by Black individuals which means that we cannot hold them responsible for the effects these conditions have on their Covid-19 outcomes.

Exposure to Covid-19

Both Black Americans and Republican Americans experienced higher Covid-19 infection rates as a result of higher numbers of social interactions. However, the reason behind the high levels of mobility for these two groups was drastically different. Since the beginning of the pandemic, experts have advised individuals to socially distance themselves to prevent the spread of Covid-19. This is because the virus that causes Covid-19 spreads mainly from person to person through aerosols, or tiny droplets from an infected person's nose or mouth that carry the virus.¹¹³ Before the vaccine was available, the only way to prevent the spread of the virus was by wearing a mask and staying six feet away from others.¹¹⁴ As both Black and Republican Americans had higher numbers of social contact, it is likely that these conditions were not upheld, causing the virus to spread more easily. If social distancing was not a choice for certain individuals, then we cannot hold these individuals responsible for spreading the virus. However, if certain individuals were able to socially distance and chose not to, then we can hold them responsible for spreading the virus. Making the decision to not socially distance not only has the potential to impact health on an individual level, but also impact the health of other people.

For Black Americans, social distancing was often not a choice. First, as noted in Chapter One, the reason why Black Americans are overrepresented in essential occupations, which typically require interaction with the public, is due to structural racism. Similar to the rationale for pre-existing conditions, Black Americans have been put in a position by society to work these low-wage jobs. For example, grocery store occupations qualified as essential work, which required employees to continue working and interacting with the public during the pandemic.

¹¹³ Melinda Ratini, "How Coronavirus Is Transmitted: Here Are All the Ways It Can Spread," WebMD (WebMD, January 21, 2022), <https://www.webmd.com/lung/coronavirus-transmission-overview#1>.

¹¹⁴ "How to Protect Yourself & Others," Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, February 25, 2022), <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>.

These minimum wage jobs most likely provided a necessary income for workers, making their choice to quit and forgo pay improbable. Thus, we cannot hold Black individuals responsible for having to choose between an income and their health as a result of their position in society. Second, as also noted in Chapter One, the reason why Black Americans often live in crowded housing conditions, which would increase their social interactions, is due to structural racism. Following the same logic, we cannot assign responsibility to Black Americans for conditions that they are in as a result of their historic and current disadvantage in society. Thus, these barriers to social distancing are not a result of unreasonable individual decisions, but rather a product of structural racism. This means that we cannot attribute the significant difference in Covid-19 mortality to voluntary choices made by Black Americans.

Can we also say that Republicans are not responsible for their high numbers of social interactions during the pandemic? Republicans experienced higher numbers of social interactions during the pandemic due to higher levels of mobility. Counties that vote Republican are more likely to be lower-socioeconomic, so it could be the case that Republicans are in the same position as Black people.¹¹⁵ In fact, many Republicans argued that pursuing economic survival was reasonable justification for some to forgo social distancing. However, recall the study in Chapter Two that compared mobility of Republicans against Democrats. This study found that even after controlling for factors like median household income Republicans had higher levels of mobility during lockdown and after lockdown than Democrats. This means that there are other factors, aside from income, that explain why Republicans were more mobile during the pandemic than Democrats.

¹¹⁵ Eduardo Porter, "How the G.O.P. Became the Party of the Left Behind," *The New York Times* (*The New York Times*, January 27, 2020), <https://www.nytimes.com/interactive/2020/01/27/business/economy/republican-party-voters-income.html>.

The attitude of most Republicans towards social distancing policy is likely the missing explanatory factor. As stated in Chapter Two, Republicans, on average, have not viewed Covid-19 as a major threat to the health of the U.S. population. This belief caused many Republicans to prioritize other values, such as economic health, over their adherence to social distancing guidelines. Is this a reasonable decision? As Republicans were still more mobile even when their real economic circumstances were identical to that of Democrats, it is unlikely that their economic circumstances necessitated breaking social distancing guidelines more than others. Therefore, we cannot justify the decision made by Republican voters to break social distancing guidelines due to economic concerns over the same decision made by Democratic voters. Is it also unreasonable for them to undervalue the virus' threat to their health and the health of others? While in the first few months of the pandemic there were many unknowns surrounding the virus, such as how it was transmitted or how to prevent its spread, it was clear that it was spreading quickly. The first case of Covid-19 in the United States was confirmed on January 20, 2020 and by March 13, 2020 the pandemic was declared a national emergency. Schools and businesses shut down, hospitals reached capacity, borders were closed, masked became required. In 2020, Covid-19 was the 3rd leading cause of death, with an official count of nearly 351,000 deaths in the United States.¹¹⁶ All of this information and guidelines to prevent the further spread of the virus was constantly discussed on news channels, newspapers, radios, and social media. The threat of the pandemic to the health of Americans shouldn't be denied. Given all of the information available to them, many Republicans still did not believe that the pandemic was a threat to the health of the U.S. population. While this implies that Republicans are indeed responsible for their high numbers of mobility during the pandemic, it is important to

¹¹⁶ "2020 Final Death Statistics: Covid-19 as an Underlying Cause of Death vs. Contributing Cause," Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, January 7, 2022), <https://www.cdc.gov/nchs/pressroom/podcasts/2022/20220107/20220107.htm>.

consider that some Republicans might not have had all of this information available to them. In fact, one might argue that as a result of widespread misinformation about Covid-19, many Republicans did not perceive the Covid-19 virus to be a threat to their health and therefore did not consider social distancing to be necessary. If this is the case, then, many Republicans might not be entirely responsible for their high numbers of mobility during the pandemic. I will address this concern in the following discussion about Republican vaccine hesitancy.

Unlike Black Americans, who due to racist practices were put in a position which infringed upon their ability to socially distance, many Republicans willingly chose not to socially distance due to the unreasonable belief that Covid-19 did not threaten the health of the United States population. While the information available to Republicans and Black Americans was likely very similar, the set of choices available to them were very different. Many Black Americans often did not have the choice to socially distance themselves even if they wanted to. Many Republicans did have the choice to socially distance themselves but chose not to. Thus, while many Black Americans should not be held responsible for the high numbers of social contacts they experienced during the pandemic, many Republicans should be held responsible for their high numbers of social contacts.

Healthcare Hesitancy

Along with high numbers of social contacts, among both Black Americans and Republican Americans there was a trend of healthcare hesitancy rooted in distrust. In Chapter One, I discussed the history of racism the healthcare system has exhibited towards Black Americans, evidenced by severe cases of abuse. For this reason, many Black Americans do not trust the healthcare system, which, in the context of the pandemic meant that these individuals

could become more severely ill or contribute to the further spread of the virus. In Chapter Two, I concluded that many Republicans were skeptical of the Covid-19 vaccine due to a lack of trust in claims made about the pandemic by mainstream media sources. Similar to Black Individuals, choosing to not be vaccinated could result in more severe Covid-19 infections and the further spread of the virus. Therefore, we must ask if the distrust by these groups is justified. If the distrust is not justified, then it might be appropriate to hold these individuals responsible for the potentially life-threatening repercussions of their actions.

Black Distrust of Healthcare System

While it is undeniable that Black Americans have been betrayed by the medical system countless times throughout history, is it reasonable for them to think that they would be betrayed in the same way while seeking treatment for Covid-19? The most prominent recent case of racism by the medical system towards Black Americans was the 1932 Tuskegee experiment. In this example, Black bodies were essentially used as test subjects without their consent. The harm done unto Black Americans was extreme, leaving an enduring memory in the collective consciousness of the Black community.

During Covid-19, the effects of these historical events materialized into avoidance of the healthcare system on the part of Black Americans. This means that ninety years later, many Black Americans still do not trust the healthcare system to act in their best interest. Is it rational for Black Americans to believe that they could be subject to similar outcomes as the Tuskegee experiment? It is challenging to see how Black Americans could justify forgoing treatment when there is little evidence suggesting they might be hurt more than helped by the healthcare system. Since 1932, when the United States was segregated under Jim Crow laws, there have been

massive strides made to diminish racism in the United States. While racism still exists at a structural level in the healthcare system, there are many internal checks to prevent something as egregious as the Tuskegee experiment. During the Covid-19 pandemic, Hospitals had a legal obligation to treat all patients that they had the capacity to treat. Specifically, under the EMTALA rights, which all patients have regardless of their race, “Inpatient care provided must be at an equal level for all patients, regardless of ability to pay.”¹¹⁷ Hospitals and doctors face serious repercussions if these rights are not upheld. Further, there is no evidence that these rights have been outwardly violated in recent years. While some might argue that there are more contemporary cases of racism in healthcare, these examples don’t suggest that the healthcare system would fail to properly treat Black patients. Rather, these cases are far more subtle than the historical examples, suggesting that the healthcare system might not always treat white and Black patients exactly the same, but nonetheless the Black patients are still treated. Therefore there is no reason why Black Americans should think that the medical system would be incapable of healing them if they sought treatment.

Should Black Americans, then, have a responsibility to update their beliefs about the severity of racism in the modern healthcare system? It is not always the case that those who hold inaccurate beliefs should be required to revise them. Consider recommending to a friend a local hiking trail that you had done a few months ago. Your friend tries to go but later informs you that the trail had closed due to a recent storm. In this case, your belief that the trail would be open is justified because you formed that belief when the trail actually was open. However, due to unforeseeable circumstances, your belief that the trail would be open was false. Aside from your friend having to find a new trail, the consequences of your false belief were minimal. Thus, since

¹¹⁷“Emergency Medical Treatment and Active Labor Act,” Wikipedia (Wikimedia Foundation, January 14, 2022), https://en.wikipedia.org/wiki/Emergency_Medical_Treatment_and_Active_Labor_Act.

no one was harmed as a result of your false belief, you shouldn't have been responsible for seeking out new information about the trail.

In certain cases, though, it does seem like individuals should be responsible for updating their false beliefs. Consider a mother who tells her pregnant daughter that she is taking all of the supplements necessary to prevent her child from suffering from birth defects. In recent years, however, folic acid supplements were discovered to prevent major birth defects from developing in the brain and spine.¹¹⁸ Like in the hiking example, the mother's belief that her daughter was taking all of the necessary supplements was justified because she formed that belief prior to folic acid supplements existing. However, unlike the hiking example, the consequences of this false belief could lead to the daughter's baby developing serious birth defects. Therefore, in this case, the mother should be responsible for seeking out new information. In general, then, when people hold inaccurate beliefs that can cause other people harm, it is crucial that these individuals update their beliefs to mitigate the impact they have on other people.

Black Americans should have a responsibility to update their beliefs about the severity of racism in the modern healthcare system because their decision to forgo care could harm other people. If someone has symptoms of Covid-19 yet forgoes care due to inaccurate beliefs, then they risk spreading the virus to other people who live with them or interact with them. Like the misinformed mother, this individual's inaccurate beliefs not only negatively affect them but also put others at risk. Thus, Black individuals should be responsible for the outcomes they experienced due to their decision to avoid medical treatment rooted in an inaccurate belief.

¹¹⁸ "Commit to Healthy Choices to Help Prevent Birth Defects," Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, November 5, 2021), <https://www.cdc.gov/ncbddd/birthdefects/prevention.html>.; Brian Resnick, "Millions of Women Take Folic Acid for a Healthier Pregnancy. Thank Lucy Wills.," Vox (Vox, May 10, 2019), <https://www.vox.com/science-and-health/2019/5/10/18563248/lucy-wills-google-doodle-folic-acid-wills-factor>.

It is imperative that Black individuals who continue to distrust the medical system based on historical atrocities take steps to overcome this distrust. This does not mean that we should forget about these extremely racist atrocities, in fact, I contend that this would be extremely dangerous and irresponsible. However, acknowledging the past is different than making decisions in the present based on a past that existed within a very different context. If the circumstances of the past are radically different, then there is no reason to believe that the same outcomes would hold, especially when there is evidence to suggest the contrary. Therefore, Black Americans who chose to avoid medical treatment due to fears of harmful racist treatment must learn that these fears are unjustified so that they can receive proper medical treatment and decrease the harm to others.

Republican Distrust of Mainstream Media

Republicans' skepticism towards the Covid-19 vaccine is rooted in the misinformation they receive from news sources they trust. While getting vaccinated is highly encouraged by the federal government, the CDC, and many other widely accredited sources, it is still a choice. Being vaccinated not only decreases one's chances of contracting the virus and having severe symptoms, but also decreases the overall transmission of the virus and helps prevent the emergence of new variants. The CDC, along with many mainstream news organizations, non-profits, and medical organizations, has made extreme efforts to disseminate factual evidence about the safety and effectiveness of the vaccine. These organizations, however, have been repeatedly discredited by trusted Republican news sources, such as Ben Shapiro, Fox News, and Republican politicians. As noted in Chapter Two, not only have these news sources discredited

mainstream media, they have also spread misinformation that the vaccine is unnecessary or unsafe.

At surface level, it seems reasonable for individuals to choose not to be vaccinated if trusted sources of information claim that the vaccine hasn't been adequately tested or that Covid-19 is unlikely to cause them harm in the first place. This claim holds because it is extremely justifiable to A) believe information from news sources that you trust and B) not elect to get vaccinated if it will cause you harm or is unnecessary. However, while B seems undeniable, I would argue that the justification of A is dependent on if it is also reasonable to put trust in the news source you do. For most Republicans, this means putting trust in Fox News and right-wing media companies.

Can we hold Republicans responsible for choosing to only trust Fox News and other right-wing media outlets? For those who consume a variety of different media sources, it might seem unreasonable to put all of your trust in one source of information. However, there are other underlying factors that steer Republicans towards only conservative media that are not very obvious. First, the choice to be Republican and believe discourse from Republican sources is not as straightforward as I initially laid out. Second, media and technology make it challenging to obtain factual information.

Partisan beliefs are largely shaped by other aspects of an individual's identity. These aspects include family, gender, religion, race and ethnicity, and geographic region. Republicans are more likely to be white, older than 50, less educated, and Christian than Democrats.¹¹⁹ These aspects of their identity make them gravitate more towards Republican ideology, but also make

¹¹⁹ John Gramlich, "What the 2020 Electorate Looks like by Party, Race and Ethnicity, Age, Education and Religion," Pew Research Center (Pew Research Center, October 26, 2020), <https://www.pewresearch.org/fact-tank/2020/10/26/what-the-2020-electorate-looks-like-by-party-race-and-ethnicity-age-education-and-religion/>.

them more predisposed to be Republican in the first place. This means that growing up in environments with many similar identifying people causes people to develop these beliefs. For example, if someone grows up in a rural town in a southern state and doesn't leave this environment for higher education, they will likely develop Republican beliefs as a product of socialization. Thus it would naturally follow that this individual would consume the same media that others in this environment do, even if that media insists that mainstream media should be discredited.

Second, social media companies, like Facebook, use algorithms to guide people, Democrats and Republicans, towards more extreme views. This skews an individual's choice of what sources to consume and trust – if all of your Facebook feed is extreme-right views, you might believe that this is the only worthy viewpoint that exists. While these news sources don't normally include false information, readers are presented with only some of the facts, offered exclusively biased opinions, and told that they should “correctly distrust” mainstream media. Still, when it comes to the Covid-19 vaccine, a significant portion of the information they presented about the safety and necessity of the vaccine was incorrect. Thus, many Republicans are unknowingly deceived by social media companies and Republican news outlets.

While Republican ideology and social media polarization schemes convinced many Republicans to distrust mainstream media's claims about Covid-19, the fact that this distrust could cause harm to other people puts pressure on absolving Republicans of the responsibility to seek out external information. Earlier I argued that people who hold inaccurate beliefs that can cause other people harm should update their beliefs to mitigate the impact they have on other people. Many Black Americans avoided seeking treatment for Covid-19 symptoms due to inaccurate beliefs about the severity of racism in the modern healthcare system. Due to the

extremely contagious nature of Covid-19, not seeking care could mean spreading the virus to others. Thus, I argued that Black Americans had a responsibility to update their beliefs to avoid harming others. The same applies here. Republicans that didn't social distance, wear a mask, or get vaccinated due to inaccurate beliefs formed from misinformation put other people at risk of contracting the Covid-19 virus. Therefore, like Black Americans, Republicans should be responsible for seeking out correct information to avoid harming others.

Conclusion

Both Black Americans and Republican Americans were disproportionately impacted by the Covid-19 pandemic. Analysis of the causes behind these unequal outcomes in Chapter One and Two revealed that the reasons for their unequal outcomes were quite different. Black Americans were more likely to have pre-existing conditions, work in "essential" occupations, avoid healthcare services, and live in crowded housing conditions. Republican Americans were more likely to be more mobile and not be vaccinated. Peeling back the layers of these causes in Chapter Three, however, elucidated similarities between the nature of causes experienced by Black Americans and Republican Americans, such as increased social contacts and healthcare hesitancy. Comparing these similar causes uncovered important principles regarding the kinds of responsibility each group had for their unequal outcomes during the pandemic.

I argued that Black Americans should not be held responsible for having pre-existing conditions or being exposed to Covid-19 at higher rates because structural racism forced Black Americans into these positions. Black Americans, however, should have updated their beliefs regarding the threat of severe racism in the modern healthcare system. Similarly, I argued that

Republicans had a responsibility to seek out information about Covid-19 from non-conservative news sources. Thus, both Black Americans and Republican Americans are, in part, responsible for contracting and spreading Covid-19 at higher rates.

The public policy strategy to address the unequal Covid-19 outcomes experienced by Black Americans and Republican Americans should correspond to the kind of responsibility each of these groups had for the outcomes they experienced. Public policy can fulfill two functions to help make pandemic outcomes more equitable. First, it should mitigate the magnitude of individual decisions that risk causing harm to others. Requiring that masks be worn in public spaces, for example, reduces the impact that one person's unreasonable choices have on others. Second, it should address any underlying inequities that force some populations into positions that make them more likely to contract or die from Covid-19.

Since Black Americans experience pre-existing conditions or exposure to Covid-19 at higher rates because of structural racism, policy should address these underlying inequities that have put Black Americans in these positions. However, healthcare hesitancy for Black Americans, and mobility and hesitancy for Republican Americans does not fit as neatly into these two categories. In both cases there are both underlying inequities present, such as a past history of racism in the healthcare system and targeted misinformation from conservative media sources. In both cases, though, these populations did not seek to change their beliefs. Therefore, an appropriate policy response would seek to eliminate underlying inequities while also obligating individuals to update their beliefs when they put others at risk. This would reduce unequal Covid-19 outcomes experienced by both Black Americans and Republican Americans in the future.

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