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Black Lives Matter: Differential Mortality and the Racial Composition of the U.S. Electorate, 1970–2004

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Abstract

Excess mortality in marginalized populations could be both a cause and an effect of political processes. We estimate the impact of mortality differentials between blacks and whites from 1970 to 2004 on the racial composition of the electorate in the US general election of 2004 and in close statewide elections during the study period. We analyze 73 million US deaths from the Multiple Cause of Death files to calculate: (1) Total excess deaths among blacks between 1970 and 2004, (2) total hypothetical survivors to 2004, (3) the probability that survivors would have turned out to vote in 2004, (4) total black votes lost in 2004, and (5) total black votes lost by each presidential candidate. We estimate 2.7 million excess black deaths between 1970 and 2004. Of those, 1.9 million would have survived until 2004, of which over 1.7 million would have been of voting-age. We estimate that 1 million black votes were lost in 2004; of these, 900,000 votes were lost by the defeated Democratic presidential nominee. We find that many close state-level elections over the study period would likely have had different outcomes if voting age blacks had the mortality profiles of whites. US black voting rights are also eroded through felony disenfranchisement laws and other measures that dampen the voice of the US black electorate. Systematic disenfranchisement by population group yields an electorate that is unrepresentative of the full

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interests of the citizenry and affects the chance that elected officials have mandates to eliminate health inequality.

Keywords

Race; Health Disparities; Premature Mortality; Electorate; Political Inequality; Voting; Health Policy

Introduction

In the United States, after centuries of *de jure* and *de facto* disenfranchisement of black Americans, the Voting Rights Act of 1965 resulted in a mass enfranchisement of poor and black Americans. Today, however, erosion of these rights is a great and growing concern. Although the US government acknowledges political participation to be a universal human right, several governmental decisions and practices, often at the state level, appear to be selectively undermining the prohibition against voting rights discrimination on the basis of race, first set forth in the 15th amendment to the US Constitution. Felony disenfranchisement laws in many states have a significant discriminatory impact on voting outcomes given race/ethnic variations in prosecution and sentencing of drug-related crimes (Manza & Uggen, 2006; Uggen et al., 2012). Partisan legislative redrawing of electoral boundaries that concentrate racial/ethnic groups into minority districts also has been shown to reduce their political influence (Epstein & O'Halloran, 1999; Trebbi et al., 2008). The trend toward shortened poll hours and more stringent voter ID policies in several states have had or are anticipated to have disproportionately negative effects on voting among the nonwhite and the poor (Barreto, Nuno, and Sanchez 2009). US racial inequalities in excess mortality are another possible threat to the relative voting power of blacks compared to whites, but how important are they? In this analysis we begin to answer that question by estimating the cumulative impact of mortality differentials between US blacks and whites from 1970 to 2004 on the racial composition of the electorate in the general election of 2004 and in close statewide elections during the study period.

While voting behavior is influenced by a range of forces, it is certainly true that the longer a person lives, the greater their opportunity to vote over their lifetime. Throughout the 20th century, the mortality rate of US blacks was, on average, about 60% greater than that of US whites (Kaufman et al., 1998). Although measureable improvements in black excess mortality were seen mid-century, black-white mortality disparities have changed little over recent decades. For instance, the age-sex standardized mortality rate for blacks was 1.47 in 1960 and 1.41 in 2000 (Satcher et al., 2005). These statistics suggest that significant black-white mortality differentials are important social forces shaping the composition of the US electorate.

Beyond the compositional impact, a contraction in black voting-age adults might also affect partisan politics and policy, and thereby influence structural inequality. Abundant evidence indicates that race and racial prejudice affect political attitudes (Henry & Reyna, 2007; Sears & Kinder, 1971), candidate preferences (Bobo & Dawson, 2009; Valentino & Sears, 2005), political behavior (Enos, 2011; Sidanius & Pratto, 2001), political ideology (Lane et al.,

2011; Pratto et al., 1994), public opinion (Mendelberg, 2008; Valentino et al., 2002), political inclusion (Lavariega Monforti & Sanchez, 2010; Massey & Denton, 1989), and race-based policy preferences (Rabinowitz et al., 2009; Tesler & Sears, 2010). Other evidence ties these racialized political processes to broad social inequalities (Bonilla-Silva, 2013) including race-based geographic or residential segregation (Dawson, 1995), incarceration rates (Caplow & Simon, 1999), and access to and the quality of structural resources such as medical care and welfare (Gilens, 1995) – all factors connected to health outcomes. In the US, where populations with different voting preferences face systematically unequal life chances, population health inequalities could affect not only the composition of the electorate, but election outcomes and subsequent policy, including policy that influences the health disparities that lead to excess mortality (Blakely et al., 2001; LaVeist, 1992; Purtle, 2013; Rodriguez et al., 2013).

Differential mortality by social group has been found to be associated with the composition of the electorate in the United Kingdom (Dorling, 1998, 2010; Smith & Dorling, 1996). For example, individuals living in working class areas in the UK live an average of one general election less than those living in middle or upper class areas (McCartney et al., 2010). Many national UK general elections have been very closely fought battles and so this difference could have been influential on past electoral outcomes in the UK. However, the possible impact of black excess mortality relative to whites on US election outcomes has not been examined.

In this analysis, we estimate the impact of excess deaths among blacks on the racial composition of the electorate in the US presidential election of 2004. Because felony disenfranchisement is widely considered significant enough to have changed electoral outcomes, especially in local elections (Manza & Uggen, 2006; Uggen & Manza, 2002), we also explore the impact of black excess mortality on close statewide elections during the study period.

Theoretical Framework

The social, economic and geographical inequalities in mortality found in the US are remarkably large by international standards (Marmot & Bell, 2009) and disproportionately disadvantage blacks relative to whites. And much evidence suggests that US black-white health disparities are persistent at all levels of the socioeconomic spectrum (Pearson 2008), and far higher than in other affluent countries with less of a history of racial discrimination. Popularized images portray excess US black deaths as largely occurring to youth – the result of homicide, drug overdoses and other accidents; or reflecting a shorter life expectancy among black relative to white seniors. In fact, the predominant and persistent driving force behind US black/white mortality disparities is the unequal distribution of chronic morbidity among young through middle aged adults (Geronimus et al., 2011; Geronimus et al., 1999; Geronimus et al., 1996).

Figure 1 shows the age distributions of all individuals who died in the US in 2004 by race. The area between the curves represents the mortality gap between non-Hispanic blacks and whites. Notably, the distributions do not intersect until approximately age 73, indicating that

the mortality gap between blacks and whites persists throughout the average life expectancy of blacks. Figure 1 also shows that the mortality gap between blacks and whites is greatest between the ages of about 40 and 65 – also an age range during which the probability of turning out to vote is the highest, as shown in Figure 2. Simply put, this creates an especially high political participation disadvantage for the black population because blacks are dying off from the electorate at higher rates than whites during the ages of highest voter turnout.

The causes of racial disparities in health are multiple and complex and include social policies and laws that are, at least theoretically, amenable to reinforcement or change depending on political mandates. Among them, residential segregation, cumulative disinvestment, and austerity urbanism in predominantly black neighborhoods in the US have contributed significantly to health disparities (Geronimus, 2000; Geronimus et al. 2015; Schultz et al., 2005). Predominantly black neighborhoods are characterized by higher exposure to pollution, fewer recreational facilities, less pedestrian-friendly streets/sidewalks, higher costs for healthy food, and a higher marketing effort per capita by the tobacco and alcohol industries (Diez Roux & Mair, 2010; Diez Roux et al., 2001; Geronimus, 2000; Schultz et al., 2005). In the US, large black-white disparities are also detected in access to and quality of health care resources, including health insurance coverage and health services for preventive screening, diagnostic, diagnosing and treatment, and rehabilitation (Williams & Mohammed, 2009).

Moreover, racialization and its subsequent environmental, material, and health care constraints shape exposure to everyday challenges and coping options. Repeated and high-effort coping with social disadvantage and the contingencies of stereotyped social identity are now thought to contribute to a cumulative physiological toll across the life-course, or *weathering* (Geronimus, 2013; Geronimus et al 2006). Weathering reflects stress-mediated physiological damage and dysregulation across body systems. These can result in a relatively steeper age-gradient increase in high allostatic load, adverse health outcomes including early onset of hypertension, diabetes, and disability, and excess death from young through middle adulthood, such as that observed in Figure 1 (Crimmins et al., 2003; Geronimus et al., 2010; McEwen & Seeman, 1999).

To the extent that social stratification processes – which are affected by public policy and political power – sort Americans into different socioeconomic strata and physical environments based on their race, a disproportionate number of blacks are non-randomly exposed to the challenges, physiological stressors, and risks of injury that emanate from social disadvantages, thus contributing to racial inequality in health. It is widely acknowledged that eliminating racial disparities in health will require addressing such fundamental social causes and more proximate social determinants of health (Satcher, 2010). Because the social determinants of health are influenced by political forces, the black vote may play a key role in determining both the mechanisms of social stratification and the ultimate exposure of blacks to the psychosocial and environmental threats and challenges that increase racial health inequality (Rodriguez et al., 2013, 2014).

Thus, large and persistent US black-white mortality disparities could be both a cause and an effect of political processes. Social and health policies that have population health

implications are shaped, in part, by those holding elective office. It is also possible that political mandates or political will in support of policy to diminish disparities in health, are linked to political participation (Keiser et al., 2004; Schneider & Ingram, 1993; Thompson, 2005). Because political representation is a function of the share of the population eligible to vote and participation levels throughout adulthood, racial disparities in age-specific mortality rates may influence political outcomes. In particular, as excess mortality impacts black underrepresentation in the electoral process, it may limit blacks' influence on policy-making and political decision-making processes including those that affect their health.

Racial Mortality Gaps and Electoral Politics

The effects of black-white differential mortality on electoral participation are dynamic and influence the demography of politics in at least three quantifiable ways. First, individuals who die before the age of 18 never have the opportunity to vote. Second, individuals who die after the age of 18, but before the age of life expectancy of their cohort have a shorter "electoral life" than those who culminate their normal life span. And third, premature death prevents individuals from voting not only in the election immediately following their death but in all subsequent elections for which they could have expected to have lived, making the effect cumulative. This cumulative effect most dilutes the electoral voice of blacks relative to whites. We aim to quantify this cumulative effect of excess mortality on nonparticipation.

Research Design

We evaluate a counterfactual: What would have been the effect on the 2004 general election if blacks had survived at the same rates as whites between the years 1970 and 2004? Considering that differential mortality effects are cumulative, the case study of the 2004 general election allows for the full electoral cumulative effects of excess mortality in the time range of the available data. Because the mortality files we use are only available on the state level until 2007, the 2004 general election represents the latest general election available for analysis.

Ideally we would trace cohort mortality back to birth, but for methodological and data availability reasons, we instead start the clock at 1970 rather than at the birth cohort of the oldest blacks alive in 2004. Although crude versions of the mortality data used in this analysis date back to 1959, it is not until 1970 that the available data allow us to account for consistent state-level mortality statistics in all states and years, and to validly identify the Hispanic or non-Hispanic origin of whites and blacks. In addition, in our statewide calculations we assume no net migration across states. This assumption would be implausible prior to 1970. Between 1910 and 1970, 6.5 million blacks migrated from southern to northern states, 5 million after 1940 during the Great Migration (Lemann, 2011). After 1970 when the Great Migration ended and there were small cross-state net migration rates among blacks, our assumption is reasonable. Using 1970 as the starting point, however, implies that we will underestimate accumulated excess black deaths by 2004 given that all those succumbing to premature death before 1970 – who would have otherwise survived beyond 1970 – are excluded from the analysis.

Our calculations use data from four sources. Deaths by state of residence, race, gender, and age were derived from the Multiple Cause of Death files from 1970 to 2004. Population counts by state of residence, race, sex, and age were taken from population estimates from the US Census Bureau. Data on the total number of votes by state were taken from the US Elections Project, while state data on the gender, race, and age distribution of voters were taken from the National Election Pool General Election Exit Polls (2004). For more details, see the Data Appendix.

All calculations are conducted using stratification by sex, non-Hispanic race origin (i.e., non-Hispanic black and non-Hispanic white), age (0 to 84 years), state of residence (32 states with significant black populations and the District of Columbia, see Table 1), and year (1970 to 2004). To exploit the fullness of the available data, we use similar analyses to examine both the presidential election of 2004 and close senate and gubernatorial elections during the study period.

Our calculations occur in stages. First, the total number of black excess deaths by sex, age, and state is calculated for each year between 1970 and 2004. Then, applying life tables for whites, we calculate the fraction of black excess deceased who would have survived to 2004 had they faced white mortality rates. Finally, using the election data we then estimate the fraction of these hypothetical black survivors who (1) would have voted; and (2) would have voted for each party's nominee -- John Kerry (D) or George W. Bush (R) --, assuming that the voting behavior of these hypothetical survivors would have resembled the voting behavior of the existing black population stratified by sex, age, and state of residence. To provide a context for the magnitude of our findings, we compare the number of voting-age hypothetical black survivors in 2004 to the total number of black disenfranchised felons and ex-felons in that year. (For detailed descriptions of our estimation procedures, please see the Methodological Appendix.)

In addition, we examine the possible partisan-electoral effect of black votes lost to excess mortality at the state level by identifying close senate and gubernatorial elections between 1970 and 2004. In this calculation, we make the conservative assumption that the number of black hypothetical survivors in each year prior to 2004 would be no greater than the number in 2004. Given the stability of the black-white mortality gap, this assumption, while crude, should not bias our conclusions. In addition, as explained above, we underestimate the 2004 accumulated excess black deaths by excluding from analysis those excess deaths occurring before 1970.

We looked for senate and gubernatorial elections in which the margin of victory for the Republican compared to the Democratic candidate was 35% or less than the number of hypothetical black survivors in that state, positing that these races were sufficiently close that had blacks survived at white rates, it is reasonably likely that the election result would have been reversed. To place our findings in context, we then compared these results to the implications for state elections of total felony disenfranchisement calculated by Uggen and Manza (Manza & Uggen, 2006; Uggen & Manza, 2002).

Results

As shown in Table 1, implementing our methods, we calculate 2.7 million excess deaths among US blacks (ages 0–84 years) from 1970 to 2004 in the 32 study states plus the District of Columbia (for additional estimations see appendix Table A2). Considering that the total US black population was 22.6 million in 1970 and 36.1 million in 2004, this number represents 20% of the total national black population growth in this period.

The total number of black deaths would have been reduced from 8.5 million to 5.8 million if blacks faced the same mortality schedules as whites. Thus, 1 out of every 3 black deaths occurring within this time period was an excess death.

Of the 2.7 million black excess deaths, we project a total of 1.87 million hypothetical survivors to 2004, 1.74 million of voting age, about 1 million of whom would have been voters (Table 1). This number represents 7.9% of the national black vote in the election.

Because black Americans vote overwhelmingly Democratic, black excess mortality disproportionately diminishes the Democratic Party voting base. According to our calculations, Democratic presidential candidate John Kerry lost 86.6% of the total number of all black votes lost to black excess mortality – or about 900,000 votes – while Republican candidate George W. Bush lost about 13.4%, or 140,000, of these votes. However, despite the closeness of the election, the additional black votes from our estimates of hypothetical survivors alone would not have been sufficient to reverse Bush's win.

When we combined the effects on the black voting population in 2004 of both excess mortality *and* felony disenfranchisement, we found that 1 in 7 (15%) of all voting-age blacks did not have the opportunity to vote in that year for one of these two reasons (Table A2, Appendix). In 2004, a total of 166 presidential electoral votes (61.5% of the 270 needed to elect a president) were disputed in states where at least 15% of voting-age blacks did not have the opportunity to vote either due to premature death or felony disenfranchisement.

Turning to state level results, we estimate that between 1970 and 2004 the outcomes of 7 close senate elections, and of 11 close gubernatorial elections would have been reversed from Republican to Democratic victors with the addition of black hypothetical survivors alone (see Tables 2 and 3). Uggen and Manza's estimations of the impact of total felony disenfranchisement on senate elections (Manza & Uggen, 2006) suggest it could have reversed 7 senate races between 1978 and 2004, of which 4 overlap with the 7 we have identified. In one additional election, the 2002 senate election in Missouri, adding excess mortality and felony disenfranchisement effects together, we infer that the Democrat would have won, even though neither effect alone would have been sufficient to change the election.

Discussion

In this study, we provide the first estimates of the impact of racial mortality differentials on political participation in the US. We find that premature deaths among blacks have had a significant impact on the racial composition of America's electorate and, during the study

period, may have been a key influence on several state election outcomes. State level findings suggest that our estimated effects could have had political potency at the national level, as well, given that the predicted reversal of specific senate elections would have changed the controlling party in the Senate from 1986 to 2002 (Manza & Uggen, 2006; Purtle, 2013).

In our calculations we were able to account for only 35 years of mortality exposure rather than the ideal of 84 years. Thus, while somewhat crude, on balance, our results underestimate the effect that black excess mortality has on the size of the black population and electorate. Even with our truncated years of data, we estimated 1.74 million total black voting-age hypothetical survivors in 2004 (see Table 1). This number is close to the 1.95 million black voting-age disenfranchised felons and ex-felons in the year 2004 estimated by Manza and Uggen (2006). Manza and Uggen's estimated figure is widely considered significant enough to have changed electoral outcomes, especially in local elections (Manza & Uggen, 2006; Uggen & Manza, 2002).

Blacks having the same mortality schedules as whites during the study period could have yielded different results in other political arenas as well – state legislatures, cities, counties, and congressional districts, although data limitations precluded us from these calculations. If so, they also may have acted to reduce the gerrymandering and redistricting by the majority that dilutes the political power of racial minorities, potentially altering national congressional majorities. The impact of these hypothetical black survivors might have been felt in additional aspects of the democratic process, such as Democratic primaries, in which blacks manifest a high vote share in key Southern states (some over 40%), or in the electoral college presidential vote, especially when a small number of swing states decide the election.

The current study findings suggest that excess black mortality has contributed to imbalances in political power and representation between blacks and whites. Politics helps determine policy, which subsequently affects the distribution of public goods and services, including those that shape the social determinants of health, which influence disenfranchisement via excess mortality. In the United States, especially after the political realignment of the 1960s, policy prescriptions emanating from government structures and representing ideologically divergent constituencies have influenced the social determinants of health, including those that affect racial disparities. And given the critical role of elected politicians in the policy-making apparatus, the available voter pool is an essential mechanism for the distribution of interests that will ultimately be represented in the policies and programs that affect us all.

Thus, our examination suggests that large and persistent black-white mortality disparities have been both a cause and a consequence of partisan US politics over the past 40 years. In our polarized electoral environment, partisan electoral implications can translate into important policy differences. On a speculative level, there are a huge number of 'what might have been?' hypotheses. For example, our estimates suggest that some recent Republican governors may have been defeated by their Democratic opponent, if hypothetical survivors were included in the electorate. The state-by-state question of whether or not to incorporate the Medicaid expansions provided by the Affordable Care Act has proven to be a highly

partisan issue, suggesting that different electoral outcomes in states with Republican governors might have affected the health insurance prospects of millions of poor residents of those states.

In general terms, what difference might it make for American democracy, if we were able to diminish or eliminate the several sources of disproportionate black disenfranchisement? Would minority interests be better reflected in government and policy? Suggestive evidence comes from a recent study where Fowler (2013) investigated the implementation of compulsory voting in Australia – a democracy with past turnout inequalities between different social groups similar to present-day inequalities in the US. The investigation was undertaken to respond to the question of what would happen to public policy and the partisan composition of government if the electorate were substantially expanded. Findings from this research suggest that both policy and government became more representative of the aggregate interests of the citizenry, including the most disadvantaged who did not vote before the adoption of compulsory voting.

Our findings highlight that black excess deaths are a challenge to democracy. While we have presented the results of a statistical exercise, the meaning of lives lost too soon cannot be reduced to aggregate numbers. As with all human beings, it matters whether a black person is alive or dead. Each of the hypothetical survivors represented in our results had a name, a personal history, a family, a community, and the potential to continue to contribute. They matter. After reconstruction, along with literacy tests and poll taxes, the lynch mob was used explicitly to rob blacks of their votes and to intimidate surviving blacks from fully exercising their rights, including to vote (Markowitz 2004). Although less spectacular or overtly intentional than the noose, the culture of impunity that allows us to escape accountability for the structural violence that disproportionately cuts black lives short – whether through acute injury, a discriminatory and militarized criminal justice system, or the accumulated physiological insults inherent to everyday life at the margins of a race-conscious society – remains a moral failure and a threat to democracy.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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References

Blakely TA, Kennedy BP, Kawachi I. Socioeconomic inequality in voting participation and self-rated health. *American Journal of Public Health*. 2001; 91:99. [PubMed: 11189832]

- Bobo LD, Dawson MC. A change has come. *Du Bois Review: Social Science Research on Race*. 2009; 6:1–14.
- Bonilla-Silva, E. *Racism without racists: Color-blind racism and the persistence of racial inequality in America*. Rowman & Littlefield Publishers; 2013.
- Caplow T, Simon J. Understanding prison policy and population trends. *Crime and Justice*. 1999:63–120.
- Crimmins EM, Johnston M, Hayward M, Seeman T. Age differences in allostatic load: an index of physiological dysregulation. *Experimental Gerontology*. 2003; 38:731–734. [PubMed: 12855278]
- Dawson, MC. *Behind the mule: Race and class in African-American politics*. Princeton University Press; 1995.
- Diez Roux A, Mair C. Neighborhoods and health. *Annals of the New York Academy of Sciences*. 2010; 1186:125–145. [PubMed: 20201871]
- Diez Roux A, Merkin SS, Arnett D, Chambless L, Massing M, Nieto FJ, et al. Neighborhood of residence and incidence of coronary heart disease. *New England Journal of Medicine*. 2001; 345:99–106. [PubMed: 11450679]
- Dorling D. Whose voters suffer if inequalities in health remain? *Journal of Contemporary Health*. 1998; 7:50–54.
- Dorling D. All connected? Geographies of race, death, wealth, votes and births. *The Geographical Journal*. 2010; 176:186–198. [PubMed: 20827844]
- Enos, RD. *Racial threat: Field-experimental evidence that a proximate racial outgroup activates political participation*. Harvard University; 2011. p. 1-50. Unpublished Manuscript
- Epstein D, O'Halloran S. Measuring the electoral and policy impact of majority-minority voting districts. *American Journal of Political Science*. 1999:367–395.
- Fowler A. Electoral and policy consequences of voter turnout: Evidence from compulsory voting in Australia. *Quarterly Journal of Political Science*. 2013; 8:159–182.
- Geronimus AT. To mitigate, resist, or undo: addressing structural influences on the health of urban populations. *American Journal of Public Health*. 2000; 90:867. [PubMed: 10846503]
- Geronimus, AT. *Jedi Public Health: Leveraging Contingencies of Social Identity to Grasp and Eliminate Racial Health Inequality*. In: Gomez, L.; Lopez, N., editors. *Mapping 'Race' and Inequality: A Critical Reader on Health Disparities Research*. Vol. chapter 11. Rutgers University Press; 2013. *Critical Issues in Health and Medicine* series
- Geronimus AT, Bound J, Colen CG. Excess black mortality in the United States and in selected black and white high-poverty areas, 1980–2000. *American Journal of Public Health*. 2011; 101:720. [PubMed: 21389293]
- Geronimus AT, Bound J, Waidmann TA. Poverty, time, and place: variation in excess mortality across selected US populations, 1980–1990. *Journal of Epidemiology and Community Health*. 1999; 53:325–334. [PubMed: 10396478]
- Geronimus AT, Bound J, Waidmann TA, Hillemeier MM, Burns PB. Excess mortality among blacks and whites in the United States. *New England Journal of Medicine*. 1996; 335:1552–1558. [PubMed: 8900087]
- Geronimus AT, Hicken M, Keene D, Bound J. 'Weathering' and Age-Patterns of Allostatic Load Scores among Blacks and Whites in the United States. *American Journal of Public Health*. 2006; 96:826–833. [PubMed: 16380565]
- Geronimus AT, Hicken MT, Pearson JA, Seashols SJ, Brown KL, Cruz TD. Do US black women experience stress-related accelerated biological aging? *Human Nature*. 2010; 21:19–38. [PubMed: 20436780]
- Geronimus AT, Pearson JA, Linnenbringer EP, Schulz AJ, Reyes A, Epel E, Lin J, Blackburn E. Race/Ethnicity, Poverty, Urban Stressors and Telomere Length in a Detroit Community-Based Sample. *Journal of Health and Social Behavior*. 2015
- Gilens M. Racial attitudes and opposition to welfare. *The Journal of Politics*. 1995; 57:994–1014.
- Henry PJ, Reyna C. Value judgments: The impact of perceived value violations on American political attitudes. *Political Psychology*. 2007; 28:273–298.

- Kaufman JS, Long AE, Liao Y, Cooper RS, McGee DL. The relation between income and mortality in US blacks and whites. *Epidemiology*. 1998;147–155. [PubMed: 9504282]
- Keiser LR, Mueser PR, Choi SW. Race, bureaucratic discretion, and the implementation of welfare reform. *American Journal of Political Science*. 2004; 48:314–327.
- Lane KA, Jost JT, Parks GS, Hughey MW. Black man in the White House: Ideology and implicit racial bias in the age of Obama. *The Obamas and a (Post) Racial America*. 2011:48–69.
- Lavariega Monforti J, Sanchez GR. The politics of perception: An investigation of the presence and sources of perceptions of internal discrimination among Latinos. *Social Science Quarterly*. 2010; 91:245–265.
- LaVeist TA. The political empowerment and health status of African-Americans: mapping a new territory. *American Journal of Sociology*. 1992:1080–1095.
- Lemann, Nicholas. *The promised land: The great black migration and how it changed America*. Vintage: 2011.
- Manza, J.; Uggen, C. *Locked out: Felon disenfranchisement and American democracy*. Oxford University Press; USA: 2006.
- Markovitz, Jonathan. *Legacies of lynching: Racial violence and memory*. University of Minnesota Press; 2004.
- Marmot M, Bell R. Action on health disparities in the United States: Commission on social determinants of health. *JAMA: The Journal of the American Medical Association*. 2009; 301:1169–1171.
- Massey DS, Denton NA. Hypersegregation in US metropolitan areas: Black and Hispanic segregation along five dimensions. *Demography*. 1989; 26:373–391. [PubMed: 2792476]
- McCartney G, Collins C, Dorling D. Would action on health inequalities have saved New Labour? *British Medical Journal*. 2010:340.
- McEwen BS, Seeman T. Protective and damaging effects of mediators of stress: Elaborating and testing the concepts of allostasis and allostatic load. *Annals of the New York Academy of Sciences*. 1999; 896:30–47. [PubMed: 10681886]
- Mendelberg T. Racial priming revived. *Perspectives on Politics*. 2008; 6:109–123.
- Pratto F, Sidanius J, Stallworth LM, Malle BF. Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*. 1994
- Purtle J. Felon disenfranchisement in the United States: a health equity perspective. *American Journal of Public Health*. 2013; 103:632–637. [PubMed: 23153146]
- Rabinowitz JL, Sears DO, Sidanius J, Krosnick JA. Why do White Americans oppose race-targeted policies? Clarifying the impact of symbolic racism. *Political Psychology*. 2009; 30:805–828. [PubMed: 20161542]
- Rodriguez JM, Bound J, Geronimus AT. US infant mortality and the President's party. *International Journal of Epidemiology*. 2013; 43:818–26. dyt252. [PubMed: 24381011]
- Rodriguez JM, Bound J, Geronimus AT. Rejoinder: Time series analysis and US infant mortality: De-trending the empirical from the polemical in political epidemiology. *International Journal of Epidemiology*. 2014; 43:831–834. dyt284. [PubMed: 24510981]
- Satcher D. Include a social determinants of health approach to reduce health inequities. *Public Health Reports*. 2010; 125:6. [PubMed: 20629251]
- Satcher D, Fryer GE, McCann J, Troutman A, Woolf SH, Rust G. What if we were equal? A comparison of the black-white mortality gap in 1960 and 2000. *Health Affairs*. 2005; 24:459–464. [PubMed: 15757931]
- Schneider A, Ingram H. Social construction of target populations: Implications for politics and policy. *American Political Science Review*. 1993; 87:334–347.
- Schulz AJ, Kannan S, Dvonch JT, Israel BA, Allen A, James SA, House, Lepkowski J. Social and Physical Environments and Disparities in Risk for Cardiovascular Disease: The Healthy Environments Partnership Conceptual Model. *Environmental Health Perspectives*. 2005; 113:1817–25.10.1289/Ehp.7913 [PubMed: 16330371]
- Sears, DO.; Kinder, DR. *Racial tension and voting in Los Angeles*. Institute of Government and Public Affairs, University of California; 1971.

- Sidanius, J.; Pratto, F. *Social dominance*. Cambridge University Press; 2001.
- Smith GD, Dorling D. "I'm all right, John": voting patterns and mortality in England and Wales, 1981–92. *British Medical Journal*. 1996; 313:1573. [PubMed: 8990989]
- Tesler, M.; Sears, DO. *Obama's race: The 2008 election and the dream of a post-racial America*. University of Chicago Press; 2010.
- Thompson, JP. *Double trouble: Black mayors, black communities, and the call for a deep democracy*. Oxford University Press; USA: 2005.
- Trebbi F, Aghion P, Alesina A. Electoral rules and minority representation in US cities. *The Quarterly Journal of Economics*. 2008:325–357.
- Uggen C, Manza J. Democratic contraction? Political consequences of felon disenfranchisement in the United States. *American Sociological Review*. 2002:777–803.
- Uggen C, Shannon S, Manza J. State-level estimates of felon disenfranchisement in the United States, 2010. 2012 Sentencing Project.
- Valentino NA, Hutchings VL, White IK. Cues that matter: How political ads prime racial attitudes during campaigns. *American Political Science Review*. 2002; 96:75–90.
- Valentino NA, Sears DO. Old times there are not forgotten: Race and partisan realignment in the contemporary South. *American Journal of Political Science*. 2005; 49:672–688.
- Williams DR, Mohammed SA. Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*. 2009; 32:20–47. [PubMed: 19030981]

Highlights

- We estimate effects of black excess deaths on the composition of the US electorate
- Excess mortality reduced the 2004 black voting age population by 1.7 million
- In 2004, Kerry lost 900,000 votes and Bush lost 100,000 to black excess death
- Outcomes of 7 senate and 11 gubernatorial races could have been reversed
- Excess mortality among blacks in the United States may dampen their political voice

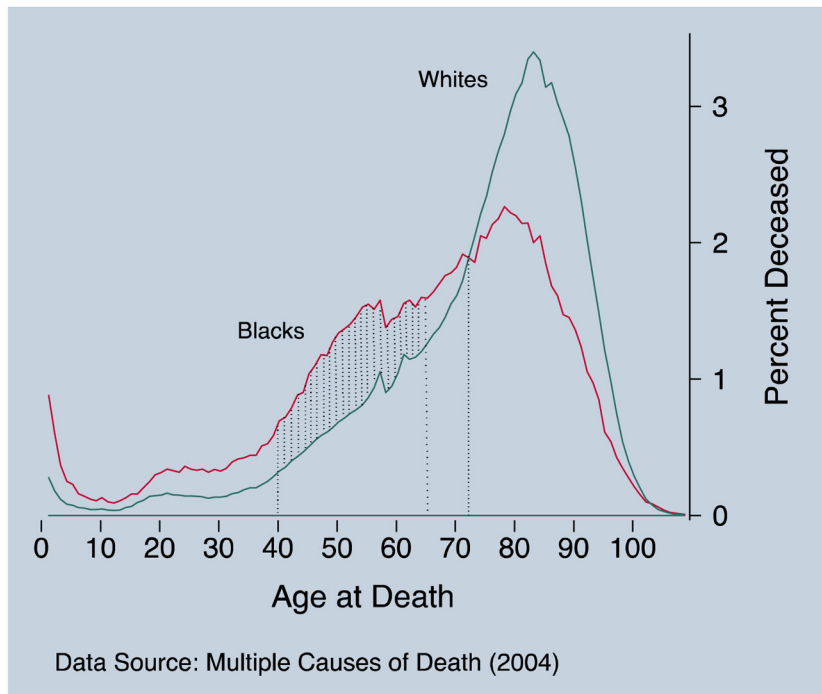


Figure 1.
Age Distribution of the Deceased by Race (2004)
Data Source: Multiple Causes of Death (2004)

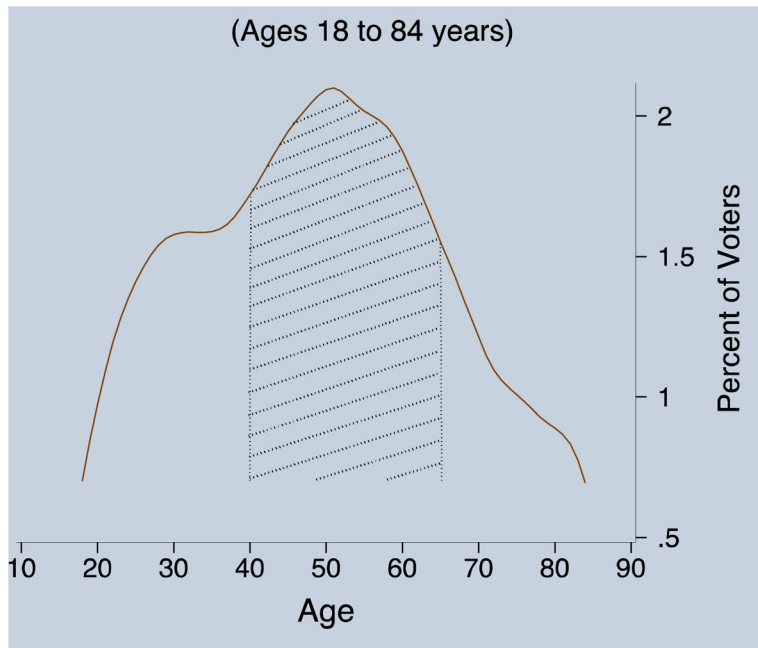


Figure 2.
Age Distribution of Voting Population (2004)
Data Source: National Election Pool General Election Exit Polls (2004)

Table 1
 Estimates of excess deceased blacks (1970–2004), hypothetical survivors and votes lost (2004)

State	Total Black Excess Deceased (1970–2004)	Hypothetical Black Survivors to 2004	Voting-age Hypothetical Black Survivors to 2004	Voting-age Hypothetical Survivors as Percent of Black VAP	Total Black Votes Lost	Black Votes Lost for Kerry	Votes Lost for Kerry as Percent of Total Votes Lost	Black Votes Lost for Bush	Votes Lost for Bush as Percent of Total Votes Lost	Votes Lost as Percent of Total Black Votes
New York	256,004	193,672	183,654	8.7	88,657	77,238	87.1	11,419	12.9	9.5
Illinois	191,485	140,224	130,406	10.0	55,945	50,459	90.2	5,486	9.8	10.3
Florida	170,230	107,659	99,705	5.6	54,110	44,364	82.0	9,746	18.0	6.2
California	162,482	120,635	112,673	6.8	59,268	48,841	82.4	10,427	17.6	8.2
Texas	158,970	106,493	100,065	5.6	65,143	56,386	86.6	8,757	13.4	7.3
Georgia	154,380	102,343	95,052	5.3	47,286	39,728	84.0	7,558	16.0	5.8
North Carolina	142,957	92,549	86,960	6.7	59,292	49,271	83.1	10,021	16.9	6.8
Pennsylvania	132,674	90,276	84,579	9.6	71,932	62,099	86.3	9,833	13.7	9.8
Michigan	128,294	97,609	90,554	9.1	59,691	54,239	90.9	5,452	9.1	9.8
Louisiana	112,055	76,624	71,700	7.2	42,037	37,016	88.1	5,021	11.9	8.1
Virginia	107,365	67,084	62,771	6.0	56,231	50,205	89.3	6,026	10.7	8.3
New Jersey	103,858	80,155	75,049	9.1	54,188	44,925	82.9	9,263	17.1	10.5
South Carolina	101,121	65,970	62,175	7.3	35,223	29,599	84.0	5,624	16.0	7.5
Ohio	100,113	68,586	63,685	6.8	37,365	30,659	82.1	6,706	17.9	6.9
Maryland	99,806	73,179	68,118	6.0	41,133	36,539	88.8	4,594	11.2	7.4
Alabama	90,602	58,313	54,778	6.7	34,753	31,380	90.3	3,373	9.7	7.5
Tennessee	75,011	45,494	41,774	6.2	26,181	22,899	87.5	3,282	12.5	8.1
D.C.	70,120	48,012	46,425	18.5	21,501	20,735	96.4	766	3.6	17.6
Mississippi	68,700	49,031	45,604	6.4	29,990	27,378	91.3	2,612	8.7	7.8
Missouri	57,089	37,961	35,331	7.8	18,933	17,205	90.9	1,728	9.1	9.0
Indiana	38,192	26,732	24,663	6.7	13,997	12,696	90.7	1,301	9.3	8.2
Arkansas	32,396	20,396	19,254	6.7	11,389	9,551	83.9	1,838	16.1	7.2
Kentucky	22,080	11,622	10,974	5.0	9,565	8,370	87.5	1,195	12.5	6.4
Connecticut	20,125	16,068	14,902	6.5	6,089	5,438	89.3	651	10.7	6.7
Massachusetts	16,981	13,999	12,889	4.7	7,304	6,949	95.1	355	4.9	6.3
Wisconsin	16,511	13,433	11,751	5.6	8,915	7,499	84.1	1,416	15.9	6.1

State	Total Black Excess Deceased (1970–2004)	Hypothetical Black Survivors to 2004	Voting-age Hypothetical Black Survivors to 2004	Voting-age Hypothetical Survivors as Percent of Black VAP	Total Black Votes Lost	Black Votes Lost for Kerry	Votes Lost for Kerry as Percent of Total Votes Lost	Black Votes Lost for Bush	Votes Lost for Bush as Percent of Total Votes Lost	Votes Lost as Percent of Total Black Votes
Oklahoma	14,568	9,473	8,756	4.6	6,853	5,003	73.0	1,850	27.0	5.5
Delaware	10,460	6,984	6,437	5.6	5,054	4,382	86.7	672	13.3	6.8
Washington	8,274	6,204	5,602	3.5	2,705	2,073	76.6	632	23.4	4.8
Arizona	7,159	5,024	4,440	3.3	2,671	2,085	78.1	586	21.9	5.5
Colorado	7,139	5,518	4,852	3.7	4,759	3,770	79.2	989	20.8	6.4
Minnesota	5,877	5,116	4,353	3.1	3,694	3,176	86.0	518	14.0	4.2
Nevada	3,973	3,490	3,038	2.6	1,852	1,606	86.7	246	13.3	3.2
Total	2,687,051	1,865,928	1,742,969	7.0	1,043,706	903,763	86.6	139,943	13.4	7.9

Table 2

Crude test of hypothetical effect of mortality gaps on US senate elections

Territory - year	Republican candidate votes (two-party vote share %)	Democratic candidate votes (two-party vote share %)	Two-party vote difference (%)	35-year voting- age hypothetical black survivors (% black VAP)
Georgia - 1992	635,118 50.7	618,774 49.3	16,344 1.3	95,052 5.3
Florida - 1988	2,051,071 50.4	2,016,553 49.6	34,518 0.8	99,705 5.6
Georgia - 1980	803,686 50.9	776,143 49.1	27,543 1.7	95,052 5.3
North Carolina - 1980	898,064 50.3	887,653 49.7	10,411 0.6	86,960 6.7
Texas - 1978	1,151,376 50.3	1,139,149 49.7	12,227 0.5	100,065 5.6
Virginia - 1978	613,232 50.2	608,511 49.8	4,721 0.4	62,771 6.0
Nevada - 1974	79,605 50.2	78,981 49.8	624 0.4	3,038 2.6

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Table 3

Crude test of hypothetical effect of mortality gaps on US gubernatorial elections

State - year	Republican Candidate votes (two-party vote share %)	Democratic Candidate votes (two-party vote share %)	Two-party Vote difference (%)	35-year Voting-age hypothetical black survivors (% black VAP)
Alabama - 2002	672,225 50.1	669,105 49.9	3,120 0.2	54,778 6.7
New Jersey - 1997	1,133,394 50.6	1,107,968 49.4	25,426 1.1	75,049 9.1
Alabama - 1994	604,926 50.4	594,169 49.6	10,757 0.9	54,778 6.7
New Jersey - 1993	1,236,192 50.5	1,210,130 49.5	26,062 1.1	75,049 9.1
Mississippi - 1991	361,296 50.8	349,775 49.2	11,521 1.6	45,604 6.4
Michigan - 1990	1,276,134 50.3	1,258,539 49.7	17,595 0.7	90,554 9.1
New Jersey - 1981	1,145,999 50.0	1,144,202 50.0	1,797 0.1	75,049 9.1
Louisiana - 1979	690,691 50.3	681,134 49.7	9,557 0.7	71,700 7.2
Texas - 1978	1,183,828 50.4	1,166,919 49.6	16,909 0.7	100,065 5.6
Ohio - 1974	1,532,214 50.2	1,520,554 49.8	11,660 0.4	63,685 6.8
South Carolina - 1974	266,338 51.7	248,861 48.3	17,477 3.4	62,175 7.3