Social Sources Of Racial Disparities In Health

Policies in societal domains, far removed from traditional health policy, can have decisive consequences for health.

by David R. Williams and Pamela Braboy Jackson

ABSTRACT: Racial disparities in mortality over time reflect divergent pathways to the current large racial disparities in health. The residential concentration of African Americans is high and distinctive, and the related inequities in neighborhood environments, socioeconomic circumstances, and medical care are important factors in initiating and maintaining racial disparities in health. Efforts are needed to identify and maximize health-enhancing resources that may reduce some of the negative effects of psychosocial factors on health. Health and health disparities are embedded in larger historical, geographic, sociocultural, economic, and political contexts. Changes in a broad range of public policies are likely to be central to effectively addressing racial disparities.

RACIAL DISPARITIES IN HEALTH in the United States are substantial. The overall death rate for blacks today is comparable to the rate for whites thirty years ago, with about 100,000 blacks dying each year who would not die if the death rates were equivalent.[1]

This paper outlines factors in the social environment that can initiate and sustain racial disparities in health. Race is a marker for differential exposure to multiple disease-producing social factors. Thus, racial disparities in health should be understood not only in terms of individual characteristics but also in light of patterned racial inequalities in exposure to societal risks and resources.

We illustrate some of these social processes by examining racial differences in mortality from 1950 to 2000 for five causes of death that reveal divergent pathways to current health disparities. Three of these causes of death—homicide, heart disease, and cancer—show wide disparities between black and white populations; two of these causes—pneumonia and flu, and suicide—show virtually no disparities. Data are available for blacks and whites for the 1950–2002 time period only. We present both absolute (black-white differences) and relative (black-white ratios) indicators of disparity.

David Williams (wildavid@umich.edu) is the Harold W. Cruse Collegiate Professor of Sociology, a professor of epidemiology, and a senior research scientist at the Institute for Social Research, University of Michigan, in Ann Arbor. Pamela Jackson is an associate professor of sociology at Indiana University in Bloomington.

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Persistent Racial Disparities In Health

■ **Homicide.** Exhibit 1 presents national trend data for black-white disparities in homicide, heart disease, and cancer. The homicide rate in 2000 was almost six times greater for African Americans than it was for whites. However, homicide deaths for blacks were almost 30 percent lower in 2000 than in 1950, and the racial gap in homicide death rates, both absolutely and relatively, was smaller in 2000 than in 1950.

Homicide makes a small contribution to racial differences in mortality. It is the fifteenth leading U.S. cause of death and is responsible for about 17,000 deaths each year. In contrast, the annual death toll for the three leading causes of death—heart disease (700,000), cancer (550,000), and stroke (160,000)—are markedly larger. These illnesses and related chronic conditions, such as hypertension, diabetes, and obesity, are the key contributors to excess levels of ill health, premature mortality, and disability among blacks. Heart disease, for example, is the leading U.S. cause of disability and years of life lost for both men and women.

■ **Heart disease.** Death rates from coronary heart disease were comparable for blacks and whites in 1950, but by 2000, blacks had a death rate that was 30 percent higher than that for whites (Exhibit 1). Death rates from heart disease declined markedly from 1950 to 2000 for both racial groups, but because the decline for whites (57 percent) was more rapid than for blacks (45 percent), both the relative and absolute racial differences were larger in 2000 than in 1950.

■ **Cancer.** Blacks moved from having a lower cancer death rate than whites in 1950 to having a rate that was 30 percent higher in 2000. Cancer death rates for whites have been relatively stable over time, with the mortality rate in 2000 being al-

EXHIBIT 1
Age-Adjusted Death Rates For Blacks And Whites For Three Causes Of Death, And Racial Disparities, 1950–2000

Cause	1950	1960	1970	1980	1990	2000
Homicide						
White	2.6	2.7	4.7	6.7	5.5	3.6
Black	28.3	26.0	44.0	39.0	36.3	20.5
Difference	25.7	23.3	39.3	32.3	30.8	16.9
Ratio	10.9	9.6	9.4	5.8	6.6	5.7
Heart disease						
White	584.8	559.0	492.2	409.4	317.0	253.4
Black	586.7	548.3	512.0	455.3	391.5	324.8
Difference	1.9	−10.7	19.8	45.9	74.5	71.4
Ratio	1.0	1.0	1.0	1.1	1.2	1.3
Cancer						
White	194.6	193.1	196.7	204.2	211.6	197.2
Black	176.4	199.1	225.3	256.4	279.5	248.5
Difference	−18.2	6.0	28.6	52.2	67.9	51.3
Ratio	0.9	1.0	1.2	1.3	1.3	1.3

SOURCE: National Center for Health Statistics, *Health, United States, 2003.*

NOTES: Deaths per 100,000 population. "Difference" is calculated as black death rates minus white death rates for each cause of death. "Ratio" refers to the ratio of black deaths to white deaths.

most identical to the rate in 1950. In contrast, cancer mortality for blacks has been increasing, with the rate in 2000 being 40 percent higher than in 1950. Over time, lung and ovarian cancer death rates increased for both racial groups, while mortality from colorectal, breast, and prostate cancer markedly increased for blacks but was stable or declined for whites.[2]

Understanding Racial Differences In Health

Racial differences in socioeconomic status, neighborhood residential conditions, and medical care are important contributors to racial differences in disease.

■ **Socioeconomic status.** Whether measured by income, education, or occupation, socioeconomic status (SES) is a strong predictor of variations in health.[3] Americans with low SES have levels of illness in their thirties and forties that are not seen in groups with higher SES until three decades of age later.[4] All of the indicators of SES are strongly patterned by race, such that racial differences in SES contribute to racial differences in health. Moreover, the differences in health by SES within each racial group are often larger than the overall racial differences in health.

Education. Among adults ages 25–44, homicide rates are strongly patterned by education.[5] The homicide rate for black males who have not completed high school is more than five times that of black males with some college education or more. Similarly, there is a ninefold difference in homicide rates by education for white males, a fourfold difference for black females, and a sixfold difference for white females. At the same time, large racial differences in homicide persist when blacks and whites are compared at similar levels of education. For example, the homicide death rate for African American men with at least some college education is eleven times that of their similarly educated white peers. Strikingly, the homicide rate of black males in the highest education category exceeds that of white males in the lowest education group.

Income. Income also plays a role in understanding racial differences in coronary heart disease and cancer mortality. For example, death rates from heart disease are two to three times higher among low-income blacks and whites than among their middle-income peers.[6] In addition, for both males and females at every level of income, blacks have higher coronary heart disease death rates than whites. Mortality from heart disease among low- and middle-income black women is 65 percent and 50 percent higher, respectively, than for comparable white women.

Health practices. Another pathway underlying the association between race and chronic diseases is the patterning of health practices by race and socioeconomic status.[7] Dietary behavior, physical activity, tobacco use, and alcohol abuse are important risk factors for chronic diseases such as coronary heart disease and cancer. Moreover, changes in these health practices over time are patterned by social status. Disadvantaged racial groups and those with low SES are less likely to reduce high-risk behavior or to initiate new health-enhancing practices. For example, people with high SES have been markedly more likely to quit cigarette smoking

over the past several decades compared with their lower-SES counterparts. They also have greater health knowledge, are more receptive to new health information, and have greater resources to take advantage of health-enhancing opportunities than their low-SES peers.[8]

Stress. Exposure to psychosocial stressors may be another pathway linking SES and race to health. Chronic exposure to stress is associated with altered physiological functioning, which may increase risks for a broad range of health conditions.[9] People of disadvantaged social status tend to report elevated levels of stress and may be more vulnerable to the negative effects of stressors. In addition, the subjective experience of discrimination is a neglected stressor that can adversely affect the health of African Americans.[10] Reports of discrimination are positively related to SES among blacks and may contribute to the elevated risk of disease that is sometimes observed among middle-class blacks.

■ **Residential segregation.** The persistence of racial differences in health after individual differences in SES are accounted for may reflect the role that residential segregation and neighborhood quality can play in racial disparities in health.[11] Because of segregation, middle-class blacks live in poorer areas than whites of similar economic status, and poor whites live in much better neighborhoods than poor blacks. Other U.S. racial/ethnic minority groups are less segregated than blacks, and although residential segregation is inversely related to income for Latinos and Asians, the segregation of African Americans is high at all levels of income.[12] The most affluent African Americans (annual incomes over $50,000) experience higher levels of residential segregation than the poorest Latinos and Asians (incomes under $15,000). Segregation is a neglected but enduring legacy of racism in the United States. Instructively, blacks manifest a higher preference for residing in integrated areas than any other group.[13]

Impact on income. Residential segregation is a central mechanism by which racial economic inequality has been created and reinforced in the United States.[14] It is a key determinant of the observed racial differences in SES because it determines access to education and employment opportunities. For example, an empirical study of the effects of segregation on young African Americans making the transition from school to work found that the elimination of residential segregation would completely erase black-white differences in earnings, high school graduation rates, and employment and would reduce racial differences in single motherhood by two-thirds.[15]

Violence. In addition, segregation creates health-damaging conditions in both the physical and social environments. Research has identified specific pathways by which neighborhood conditions can encourage violence and create racial differences in homicide.[16] Because of its restriction of educational and employment opportunities, residential segregation creates areas with high rates of concentrated poverty and small pools of employable and stably employed males. In turn, high male unemployment and low wage rates for males are associated with high

rates of out-of-wedlock births and female-headed households.[17] Single-parent households are associated with lower levels of social control and supervision of young males, which, in turn, lead to elevated rates of violent behavior.[18]

The association between family and neighborhood factors and the risk of violent crime is identical for blacks and whites.[19] However, because of residential segregation, blacks are more exposed to these conditions than whites. In the 171 largest U.S. cities, there is not even one in which whites live in socioeconomic conditions that are comparable to those of blacks. As Robert Sampson and William J. Wilson concluded, "The worst urban context in which whites reside is considerably better than the average context of black communities."[20]

Links to disease. Independent of individual SES, factors linked to poor residential environments make an incremental contribution to the risk of a broad range of health outcomes, including heart disease and cancer.[21] Multiple characteristics of neighborhoods are conducive to healthy or unhealthy behavioral practices. The perception of neighborhood safety is positively associated with physical exercise, and this association is larger for minority group members than for whites.[22] Neighborhoods also differ in the existence and quality of recreational facilities and open, green spaces. The availability and cost of healthy products in grocery stores also vary across residential areas, and the availability of nutritious foods is positively associated with their consumption.[23] Also, both the tobacco and alcohol industries heavily market their products to poor minority communities.[24]

■ **Medical care.** Racial differences in SES contribute to reduced levels of health insurance coverage for African Americans, and limited access to medical care plays a role in racial differences in disease. Moreover, the black-white gap in access to and use of health services did not narrow between 1977 and 1996.[25] Also, the racial gap in unemployment, median income, and poverty remained large and fairly stable throughout this period.[26]

Links to homicide. Medical care is a contributor to homicide and the racial disparities in homicide. Rates of violent crime have increased over time, but homicide rates have been fairly stable. The lethality of violent assaults has declined as advances in emergency medicine and trauma care have reduced the likelihood that a violent assault will end as a homicide.[27] However, black assault victims are less likely than their white peers to receive timely emergency transportation and subsequent high-quality medical care.[28] The Institute of Medicine (IOM) report *Unequal Treatment* also found that blacks receive poorer-quality emergency room care than whites.[29] It revealed systematic and pervasive racial differences in the quality of care provided across a broad range of medical conditions, including heart disease and cancer. Racial differences in the quality and intensity of treatment persist after SES, insurance status, patient preference, severity of disease, and coexisting medical conditions are taken into account.

Links to cancer mortality. African Americans are less likely than whites to receive preventive, screening, diagnostic, treatment, and rehabilitation services for can-

cer, and this probably contributes to racial differences in cancer mortality.[30] Although blacks have higher cancer mortality than whites, the annual incidence (new cases) of cancer is lower for black than for white women. However, when compared at the same stage of cancer diagnosis, black women have poorer survival rates than their white counterparts. Blacks also are more likely than whites to experience delays in the receipt of care after a positive screening test, delays in the initiation of treatment after a biopsy, the receipt of care from inadequately trained providers, and limited access to appropriate follow-up and rehabilitation services.

Impact of segregation. Black Medicare patients are more likely than white ones to reside in areas where medical procedure rates and the quality of care are low.[31] In addition, a small group of physicians, who are more likely to practice in low-income areas, provide most of the care to black patients. These providers are less likely than other physicians to be board certified and less able to provide high-quality care and referrals to specialty care.[32] Also, pharmacies in segregated neighborhoods are less likely to have adequate medication supplies, and hospitals in these neighborhoods are more likely to close.[33]

Disentangling the relative importance of the complex causal processes that lead to disparities in disease is challenging, but renewed efforts are needed to identify key points of intervention.

Where There Are No Disparities

■ **Flu and pneumonia.** Examining racial disparities over time reveals that success stories do exist. Flu and pneumonia is one such story. It is the seventh leading cause of death and is responsible for more than 65,000 deaths annually. However, both the absolute and the relative racial differences for deaths from flu and pneumonia were minimal in 2000 (Exhibit 2). In contrast, large racial differences existed in 1950, with black mortality being 70 percent higher than that of whites. Over time,

EXHIBIT 2
Age-Adjusted Death Rates For Blacks And Whites For Flu And Pneumonia And For Suicide, And Racial Disparities, 1950–2000

Cause	1950	1960	1970	1980	1990	2000
Flu and pneumonia						
White	44.8	50.4	39.8	30.9	36.4	23.5
Black	76.7	81.1	57.2	34.4	39.4	25.6
Difference	31.9	30.7	17.4	3.5	3.0	2.1
Ratio	1.7	1.6	1.4	1.1	1.1	1.1
Suicide						
White	13.9	13.1	13.8	13.0	13.4	11.3
Black	4.5	5.0	6.2	6.5	7.1	5.5
Difference	−9.4	−8.1	−7.6	−6.5	−6.3	−5.8
Ratio	0.3	0.4	0.5	0.5	0.5	0.5

SOURCE: National Center for Health Statistics, *Health, United States, 2003.*
NOTES: Deaths per 100,000 population. "Difference" is calculated as black death rates minus white death rates for each cause of death. "Ratio" refers to the ratio of black deaths to white deaths.

striking declines are evident for both races, with larger declines for blacks than for whites. Flu and pneumonia is an acute respiratory illness that can be prevented by vaccination and treated by antiviral medicines. It differs from the major chronic illnesses that typically have a large behavioral component, are long term in development, and have symptoms that are not always readily evident. The virtual elimination of this disparity suggests that the application of a widely diffused technology (facilitated by Medicare and Medicaid), in which social variations in motivation, knowledge, and resources play a small role, can eliminate a large disparity in health.

■ **Suicide.** Suicide is a success story of another sort. Suicide is the eleventh leading U.S. cause of death (30,000 deaths annually). Suicide rates for both racial groups have been fairly stable over time, with a slight decline for whites and a slight increase for blacks in recent years. However, black suicide death rates have been consistently lower than those of whites. The suicide data are consistent with national data, which indicate that the prevalence of major psychiatric disorders are lower for blacks than for whites.[34] Suicide is an example of a health condition for which the socially disadvantaged group does not have elevated rates. This pattern highlights the importance of attending to protective resources that may improve health and protect vulnerable populations from at least some of the negative effects of environmental exposures. For example, high levels of self-esteem and religious involvement are potential contributors to blacks' better suicide and mental health profile.

Policy Implications

Persisting disparities in health violate widely shared U.S. norms of equality of opportunity and the dignity of each person. Eliminating health disparities is also important for the overall well-being of the entire U.S. society. First, diseases that are initially more prevalent in disadvantaged geographic areas eventually diffuse and spread into adjacent affluent communities.[35] Second, the illnesses and disabilities associated with racial disparities limit the productive capacities and output of adults in their prime working years. This can negatively affect productivity at the local and national levels and can lead to declines in tax revenues and increased costs of social services.[36] Thus, effectively addressing racial disparities in health likely requires addressing distal social policies and arrangements that create the disparities in the first place.[37]

■ **Addressing segregation.** Racial residential segregation is one of the primary causes of U.S. racial inequality, and although discrimination in the sale and rental of housing was made illegal in 1968, considerable evidence suggests that housing discrimination persists.[38] Current public preferences and opportunities for the enforcement of equal opportunity statutes suggest that U.S. residential patterns are unlikely to change in the foreseeable future. Thus, the elimination of the negative effects of segregation on SES and health may require a major infusion of economic capital to improve the social, physical, and economic infrastructure of disadvantaged communities.[39] Such investment could improve the economic circumstances and

productivity of African American families and communities and have spillover benefits for health.

■ **Narrowing the income gap.** Over the past fifty years, changes in the black-white gap in income have been associated with parallel changes in the black-white gap in health. Between 1968 and 1978, in tandem with the narrowing of racial inequality attributable to the economic gains of the civil rights movement, black men and women experienced a larger decline in mortality than their white counterparts on both a percentage and absolute basis.[40] However, as blacks' median household income fell relative to that of whites from its 1978 level throughout the 1980s, the black-white gap in adult and infant mortality widened between 1980 and 1991.[41]

At the same time, although it is generally recognized that policies that disproportionately assist the disadvantaged are desirable, it is unclear whether those policies are best implemented at the federal, state, or local level and what optimal forms such policies should take.[42] Greater attention needs to be given to rigorously evaluating the extent to which policies in multiple sectors of society have consequences for health and health disparities, so that we can have an improved understanding of the conditions under which specific policy initiatives are more or less likely to achieve desirable results.

■ **Improving medical care.** Improving access to medical care for vulnerable populations, especially for preventive services, can play a role in reducing racial disparities in health. According to a 2000 study, only half of physicians or fewer routinely counsel patients who smoke about smoking cessation, treat patients with elevated blood lipids for this condition, treat hypertensive patients for their high blood pressure, and routinely screen patients for diabetes.[43] One way to improve medical care might be to provide physicians with incentives to ensure that they use evidence-based guidelines for treatment and follow national standards of care. Also, given that underrepresented minority providers are more likely than others to practice in underserved areas, increasing the numbers of blacks in the health professions is likely to be an effective strategy in improving access to care.[44]

■ **Rethinking health policy.** There is a need to rethink what constitutes health policy. Given the broad social determinants of health, policies in societal domains far removed from traditional health policy can have decisive consequences for individual and population health. A recent federal report outlines an ambitious agenda to eliminate disparities in cancer.[45] Recognizing that the determinants of cancer disparities transcend its scope, the U.S. Department of Health and Human Services (HHS) called for the creation of a Federal Leadership Council, led by HHS, that would leverage governmentwide resources to address disparities. This proposed council would include all federal departments that have policies that can affect health and health disparities, including the Departments of Labor, Education, Defense, Justice, Energy, and Transportation. Similar coordination is necessary at the regional and local levels. There are political, professional, and organizational barriers to such intersectoral collaboration, but multiple strategies to address them have

been identified, including the need to establish a permanent locus for intersectoral activity regarding health.[46] Although much is yet to be learned about the specific pathways by which the social environment creates disease, much progress can be made toward eliminating disparities by acting on current knowledge.

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NOTES

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