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OVERVIEW

The Intellectual Roots Of Current Knowledge On Racism And Health: Relevance To Policy And The National Equity Discourse

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ABSTRACT Research related to racism and health has evolved in recent decades, with a growing appreciation of the centrality of the social determinants of health, life-course approaches and structural racism, and other upstream factors as drivers of health inequities. Examining how race, class, and structural racism relate to each other and combine over the life course to affect health can facilitate a clearer understanding of the determinants of health. Yet there is ongoing discomfort in many public health and medical circles about research on racism, including opposition to the use of racial terminology. Similarly, most major national reports on racial and ethnic inequities in health have given limited attention to the role of racism. We conclude that there is a need to acknowledge the central role of racism in the national discourse on racial inequities in health, and paradigmatic shifts are needed to inform equity-driven policy and practice innovations that would tackle the roots of the problem of racism and dismantle health inequities.

There is a current wave of increasing scientific interest in the presence and persistence of racism in contemporary societies, with health scientists paying increased attention to the measurement and conceptualization of racism as part of a concerted effort to understand how racism can adversely affect health and to identify the optimal strategies for mitigating and eliminating its pathogenic effects. Use of the term *racism* in research is relatively recent, and we have seen a bubbling up of a new lexicon around racism and its manifestations (exhibit 1). While acknowledgment of racism as a determinant of health dates back at least to the nineteenth century, it was an unwelcomed idea because it was at odds with the then dominant scientific paradigm. Traditional paradigms of science that study group differences in health have historically privileged risk factors measured at the individual level that capture biological, psychological, behavioral, or other exposures that can trigger adverse changes in health status. In the case of racial and ethnic inequities, these categories were viewed as capturing biological distinctiveness in human populations, with any observed racial disparities viewed as reflecting either innate biological differences or deeply embedded differences in values, habits, and culture.[1,2]

The purpose of this article is to provide a brief but cogent and chronological rendering of the alternative scholarly efforts of researchers that were foundational to the emergence of paradigmatic shifts and new constructions of knowledge. These scholarly efforts place greater emphasis on the ways in which the health of populations is deeply affected by larger institutional and policy contexts. We describe the growing attention, over time, to the centrality of so-

EXHIBIT 1

Defining The Constructs Of Racism

Constructs	Definitions
Racism[a]	An organized social system, in which the dominant racial group, based on an ideology of inferiority, categorizes and ranks people into social groups called "races" and uses its power to devalue, disempower, and differentially allocate valued societal resources and opportunities to groups defined as inferior. The structure and ideology of racism can persist in governmental and institutional policies in the absence of individual actors who are explicitly racially prejudiced.
Structural racism[b]	Historical and contemporary policies, practices, and norms that create and maintain White supremacy by segregating racial and ethnic communities from access to opportunity and upward mobility by making it more difficult to secure high-quality education, jobs, housing, health care, and equal treatment in the criminal justice system.
Systemic racism[c]	Racism characterized by a dominant racial hierarchy, comprehensive White racial framing, individual and collective discrimination, social reproduction of racial-material inequalities, and racist institutions integral to White domination of Americans of color.
Institutional racism[d]	Racially adverse discriminatory policies and practices carried out within and between individual state or nonstate institutions on the basis of racialized group membership. Sometimes used synonymously with *structural* and *systemic racism*.
Internalized racism[e]	Acceptance by members of stigmatized races of negative messages about their own abilities and intrinsic worth.

SOURCE Authors' review of the literature, as specified below. [a]Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. Annu Rev Public Health. 2019;40:105–25. [b]Urban Institute. Structural racism in America [Internet]. Washington (DC): Urban Institute; [cited 2021 Dec 20]. Available from: https://www.urban.org/features/structural-racism-america. [c]Feagin J, Bennefield Z. Systemic racism and U.S. health care (note 20 in text). [d]Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017; 389(10077):1453–63. [e]Pallok K, De Maio F, Ansell DA. Structural racism—a 60-year-old Black woman with breast cancer. N Engl J Med. 2019;380(16):1489–93.

cial determinants, with an increasing recognition that structural racism is a fundamental but neglected upstream driver of health inequities.[3] Relatedly, there has been growing appreciation of the intersections of race, socioeconomic status, and structural racism. We also provide an overview of the contested domain of research on racism, including opposition to the use of racial terminology and efforts to dilute the evidence linking racism to health. We review major scientific reports on racial and ethnic inequities, giving attention to the explanations provided and the extent to which racism is named as a determinant of racial disparities in health. We argue that the influx of racial and ethnic scholars in institutions of higher learning in the 1980s and the simultaneous attention of the US federal government to the existence of large disparities in health opened new avenues of thinking about the intersections of race, ethnicity, class, and health. Finally, we describe the critical need for paradigmatic shifts that incorporate racism as a driver of inequities and that recognize that dismantling racism is an indispensable component of policies and interventions to achieve racial equity in health.

Early Scholarship: Social Class, Race, Ethnicity, And Health

Current research on social factors that affect health builds on a long history of scientific interest in the unequal distribution of health and wealth in society. Social and behavioral scientists have long focused on how social structure and social stratification are key determinants of health. Social class, usually operationalized as socioeconomic status in the US, is a central determinant of variations in health.[4,5] However, as far back as the 1840s, a seminal study by Friedrich Engels showed how life expectancy in Liverpool, England, varied by the occupation (a marker of social class) of the residents.[6] Moreover, he described how specific exposures (social determinants) in both occupational and residential environments were related to the elevated risk for particular diseases. He concluded that the larger society was guilty of "social murder" by creating conditions that markedly reduced the life expectancy of the socially disadvantaged.

In his classic 1899 volume, *The Philadelphia Negro*, W. E. B. Du Bois, an influential Black (or African American, terms used interchangeably) social scientist of that era, included a chapter on Negro health that painstakingly described the ways in which the living and working conditions of African Americans shaped their exposure to factors that determined their risk for disease.[7] Although the term *racism* does not appear in the chapter, Du Bois saw racial differences in health as reflecting differences in "social advancements" and the "vastly different conditions" under which Black and White people lived, indicating that the causes of racial differences in health were multifactorial, but primarily social. His list of contributing factors included poor heredity, neglect of infants, bad dwellings, poor food, and unsanitary living conditions. In the case of consumption (tuberculosis), he indicated that factors at the individual and neighborhood

levels increased exposure to health risks. For example, death rates were higher in the Fifth Ward, "the worst Negro slum in the city and the worst part of the city in respect to sanitation," than in the Thirtieth Ward, which had "good houses and clean streets."

Kellee White indicates that the intellectual roots of constructs such as social determinants and structural and institutional racism can be traced back to the seminal work of scholars such as Engels and Du Bois.[8] In striking contrast to this conceptualization, the dominant US medical paradigm in the late nineteenth and early twentieth centuries attributed any observed racial difference in health to innate biological differences between racial groups.[1,9] At the same time, historically underrepresented scholars and others studying race and ethnicity produced additional observations on the social, political, and economic determinants of health. Of note, African Americans have a larger historical record of the documentation of disparity and unequal treatment as a result of the work of individuals such as Du Bois. American Indians and Alaska Natives, people of Mexican origin, and Puerto Rican peoples have a less robust collection of historical observations of disparities and abuses of their populations, in part because of the historically smaller size of these populations, limited access to educational opportunities, and the exclusion of their scholarly voices.

By the middle of the twentieth century (the 1960s to the 1980s), there was increasing attention to the ways in which laws, policies, and the medical establishment had historically supported abuse, exploitation, and unethical health experiments for multiple racial and ethnic groups from the late 1800s through the 1970s.[10–13] There are several examples. In the 1950s birth control trials were conducted on Massachusetts psychiatric patients and in a Puerto Rican public housing project.[11] In addition, Black, American Indian, Puerto Rican, Mexican American, and other poor women were unknowingly sterilized, coerced to sign consent forms, or given inadequate information about sterilization.[10,13] In the well-known Tuskegee Experiment (1932–72), Black men with syphilis were denied medical treatment so that researchers could study the course of untreated syphilis.[12] In 1951 Henrietta Lacks, a Black woman, was treated for cervical cancer, and some of her cancer cells were preserved for use in scientific research without the consent of Lacks or her family.[14]

Awareness of these critical race-related abuses triggered advocacy and scholarship by race and ethnicity scholars and other investigators that emphasized the need to shift the dominant scientific paradigms to avert future mistreatment of disadvantaged racialized groups. Community, medical, and public health advocates also expressed concerns about exclusionary practices and policies that created socioeconomic and health inequities in disadvantaged racial and ethnic communities.[15–17]

It was a watershed moment in American history as the Civil Rights movement made visible to the American public the systematic exclusion of racially stigmatized groups, striking differences in access to basic goods, and the strident demands for equality in fundamental social and human services including health. The Kerner Report, a landmark study of racism, inequality, and police violence, continues to offer important lessons today.[18] Critical scholarship, visible evidence of medical abuse, and grassroots and professional social mobilization to end inequitable practices contributed to the strength of the Civil Rights movement and new health coverage legislation. The passage of the 1964 Civil Rights Act, the 1965 Social Security Amendments that established Medicaid and Medicare, and the 1963 Community Mental Health Act increased equity in access to health and mental health care for racial and ethnic communities who had previously been denied access. In the 1960s and 1970s affirmative action policies also expanded access to higher education and afforded new professional opportunities to educate an intellectual class of scholars with African American, American Indian, Mexican American, and Puerto Rican ancestry.

The influential book *Black Power: The Politics of Liberation in America* by activist Stokely Carmichael and political scientist Charles Hamilton also emerged out of the Civil Rights movement and advanced understanding of the nature of racism.[19] This volume provided an insightful conceptualization of the nature and consequences of racism. It also coined the term *institutional racism* to refer to the dimensions of racism that were less perceptible than individual racism because they were systemic and deeply embedded in the laws, practices, and societal forces, creating pervasive restrictions in access to political, social, and economic resources in society. Carmichael and Hamilton argued that racism had historically operated through routine and respected forces and institutions of society that were discriminatory in their impact on stigmatized groups. This conceptualization of institutional racism includes what many contemporary scholars call *structural racism* and *systemic racism*.[20] In a 1972 book, African American social psychologist James Jones identified three aspects of racism—personally mediated, internalized, and institutionalized—using *institutional-*

ized in a way that incorporates current notions of structural and systemic racism.[21] During this time, a modest body of knowledge was produced that described the suffering and excess morbidity and premature mortality of poor and racial and ethnic groups and the growth of a medical care system of privilege.[22] Several scholars observed the toll of inequality and exclusion due to the disadvantages and extreme social inequality faced by poor African American, American Indian, Mexican American, and Puerto Rican communities.[23,24]

In spite of these significant social movements in the US during the latter part of the twentieth century, systematic examination of race, ethnicity, racism, and class was not a mainstream issue addressed in either academic or policy circles. Scientific commentary regarding historic socially disadvantaged racial and ethnic groups continued to be laden with stereotypic attributes, and centers of science and health policy exhibited strong resistance to including varying perspectives. The voices and lived experiences of those most deeply affected by racism and inequity were often absent or overlooked. Scientific explanations of the impact of social and material conditions on the health status of low-income racial and ethnic communities continued to reinforce negative individual attributes as causal factors for adverse community and individual outcomes.

Social Science And Public Health Research Extends The Paradigm

A major historical debate has centered on what race is and what racial categories capture. In the 1980s and 1990s important work was produced, predominantly by social scientists, on the social determinants of health, including institutional or structural racism, building on prior empirical work. This research focused on examining the conditions under which marginalized racial and ethnic people lived.[25–28] Constructs such as racism and social class and its association with adverse health outcomes and institutional deficiencies, such as inadequate living and working conditions and poor nutrition, were key factors in a robust body of knowledge about poor racial and ethnic communities.[29]

Research from physical anthropology and the Human Genome Project indicated that human genetic variation does not map onto traditional racial categories, with "race" being more of a social category than a biological one.[30,31] That is, given that racial categories do not capture genetic distinctiveness in human populations, gene frequency differences are not major determinants of racial differences in health. This does not mean that biology is irrelevant. Given the adaptive capacity of humans to alter biology in response to the environment, the distinctive residential and occupational environments created by racism can lead members of racial and ethnic minority groups to be exposed to risk factors and resources in the social environment. These exposures can trigger changes in biology, including in gene expression, that can contribute to racial inequities in health.[32,33]

During the 1990s researchers increasingly recognized racism as a neglected pathogenic factor.[34] Nancy Kreiger and colleagues published an influential paper in 1993 that laid out a research agenda to better understand the intersections among racism, sexism, and social class.[35] The journal *Ethnicity and Disease* published a special double issue in 1996 on racism and health consisting of fifteen papers prepared by scholars from multiple disciplines that provided a unique glimpse of the complexity of racism and the myriad pathways by which it could initiate and sustain health inequities across the life course.[36] This corpus of research explicitly drew on the larger literature in the social sciences on racism, conceptualizing it as a multilevel construct, encompassing institutional, structural, and individual discrimination; racial prejudice and stereotypes; and internalized racism.[37,38]

In an influential paper targeted to a public health audience, Camara Jones illustrated the multiple ways in which racism, including institutional racism, could affect health.[39] Douglas Massey and Nancy Denton's path-breaking sociological work, *American Apartheid*, underscored the role of residential racial segregation as a primary institutional mechanism of racism and the key to understanding racial inequality in the US.[27] Other social scientists documented how segregation was a fundamental cause of racial disparities in health because it concentrates poverty, social disorder, and social isolation, triggering pathogenic conditions in residential environments that could adversely affect health.[40,41]

Research had long documented that socioeconomic status is inversely associated with multiple risk factors for disease (such as stress, poor living conditions, exposure to toxins, and unhealthy behaviors) and one of the strongest known determinants of variations in health status globally.[42] Emerging research also demonstrated that race was strongly intertwined with socioeconomic status and that socioeconomic differences between the races accounted for a substantial part of the racial and ethnic differences in health.[4,5] At the same time, race and socioeconomic status are two related but not interchangeable systems of social ordering that

jointly contribute to health risks.[5,43] Residual racial differences are present at every level of education and income, and attention should be given to the intersection of race- and class-based factors that undergird racial and ethnic health disparities.[44]

Drawing on prior scholarship, an important theoretical innovation in the 1980s and 1990s was the development of an intersectional critical analytic lens that aimed to contest existing approaches to structures of inequality by centering the lived experiences of historically disadvantaged groups in institutional contexts. This perspective integrates the role of historical events as determinants of layered identities associated with social status, and it unveils the interconnected structures of inequality that are strongly associated with power, wealth, and life-course outcomes.[45] The intersectional lens uprooted implicit scientific assumptions and offered explicit new insights: The impact of historical racial and ethnic disadvantage accrues over the life course; historical policies and practices provide greater benefit to some social groups than to others; and structural racism is foundational in determining access to opportunity and outcomes in society.[46,47]

Intersectionality was also uniquely designed as a tool for social change and social justice. Lisa Bowleg affirms that the practical application of intersectionality can facilitate equitable health policy and practice for marginalized groups and is essential to addressing health equity effectively.[48] For example, the impact of COVID-19 was uneven across racial and ethnic and socioeconomic groups in terms of exposure to risk, the severity of disease, access to optimal medical treatment, and the risk of mortality, with racial disparities persisting at every level of education.[49] Thus, engagement with members of communities that have been most affected is essential to assuring equitable responsiveness.

The early twenty-first century has benefited from multiple strands of intersectional scholarship that clearly delineated social determinants, wealth and assets, and structural racism as critical factors in health disparities. This body of knowledge on racial and ethnic health disparities unveiled interdependent systems of inequality that are deeply rooted in our society's intellectual and political ways of thinking and doing.[50,51]

Yet despite the growth in research on racism and health in more recent decades, there remains a tenacious resistance in many scientific circles to research on racism and health. This resistance is especially unyielding to the explicit use of the term *racism*. For example, in 2015 the *Journal of the American Medical Association* invited one of the authors of this article to submit a paper on racism in medical care, which was submitted with the title "Racism in Health and Healthcare: Challenges and Opportunities." Fearing that using the word "racism" could lead to the loss of readers, the editor substituted "racial bias" for "racism" in the title of the published article.[52] Similarly, an anonymous reviewer of a different paper once told one of the authors of this article that "the term racism does not belong in a scientific paper. Racism is an ideological concept that cannot be measured." In this case, the journal editor told the author to disregard the reviewer's comment.

A recent study that examined the use of *institutionalized racism* in the titles or abstracts of papers published in the fifty highest-impact public health journals between 2002 and 2015 found only twenty-five articles that used the term.[53] Another study examined the use of the word *racism* between 1990 and 2020 in the four highest-impact medical journals and found that papers in the medical literature use the term *racism* far less often than papers in the public health literature.[54] In 2002 scientists within the National Institutes of Health (NIH) opted not to use the term *racism* when the NIH convened its first meeting of about 100 scientists to consider emerging research on racism and health in 2002. The organizers used the term *racial/ethnic bias* to describe the focus of the meeting because the terms *racism* and *racial discrimination* were regarded at that time as too controversial.[55]

Treatment Of Racism In Major Reports On Health Disparities

In the late twentieth and early twenty-first centuries, several influential reports that addressed racial and ethnic inequities in health were issued by federal health agencies, the National Academy of Sciences, and the World Health Organization (WHO). These reports are important because they reflected and drove intellectual currents and health policy. As we illustrate below, these major reports were slow to embrace the emerging scientific research on racism as a social determinant of health and as a contributor to racial inequities in health.

In 1985 the landmark *Report of the Secretary's Task Force on Black and Minority Health* marked the first federal report exclusively focused on the health of racial and ethnic minority groups.[2] The report documented a higher burden of disease among Black and other minority populations compared with the White population, and it identified six causes of death that accounted for more than 80 percent of the elevated mortality risk for Black Americans. The report

indicated that the primary risk factors for these diseases were behavioral, and it did not situate these behaviors within the larger social context of the living and working conditions of disadvantaged racial populations. While the report led to the establishment of the Office of Minority Health at the Department of Health and Human Services in 1986 to coordinate efforts to reduce racial and ethnic disparities in health, it made no mention of racism.

A Common Destiny, a 1989 National Research Council/National Academy of Sciences report, focused on the progress of Black Americans in multiple societal domains since 1940.[56] In describing health disparities among the Black population, chapter 8 of the report acknowledged the persistence of poverty, segregation, and social fragmentation for Black Americans and indicated that poverty and sociocultural factors that influence access to health services were the central drivers of racial disparities in health. It noted, without any elaboration, that "racial discrimination in treatment" and an inadequate number of minority providers were other factors that probably played a role.[56(p429)]

In 1998 the National Center for Health Statistics published national data on health status by race and socioeconomic status simultaneously.[57] Strikingly, the data showed that racial differences persisted at every level of socioeconomic status for most outcomes—but the report did not mention racism or identify factors linked to racial status that could account for this pattern.

In 2001 the National Academy of Sciences published *America Becoming*, a major report in support of President Bill Clinton's initiative on race. Four chapters in the report's second volume focused on racial disparities in health.[58] Some chapters in the report mentioned racism as a determinant of racial inequities in health, while others did not. Of note, in contrast to a somewhat cursory treatment of the subject in other chapters that did name racism, chapter 14 of the report described how racism, embedded in societal policies, had contributed to racial differences in socioeconomic status and described how racism can influence racial disparities in health through residential segregation, differential access to high-quality medical care, and the stress generated by the subjective experience of discrimination.

In 2003 the Institute of Medicine (now the National Academy of Medicine) released *Unequal Treatment*, a groundbreaking report that found that across virtually every medical intervention, Black people and members of other minority groups received poorer-quality care than White people—differences that persisted after socioeconomic status and insurance status were taken into account.[59] The report strongly suggested that racism in health care delivery was a likely contributor. Since 2003 there has been an annual report, *the National Healthcare Disparities Report* (combined with the *National Healthcare Quality Report* since 2014), on racial and socioeconomic disparities in access to and quality of care in the US.[60] Largely descriptive, it does not focus on the factors that drive the underlying patterns, including racism.

A 2008 WHO report documented how socioeconomic status and other social determinants shape health and identified needed policy interventions.[42] The report acknowledged that race and ethnicity is a social position that affects health and called for its inclusion in the collection of surveillance data. However, although the report mentioned gender, disability, and age discrimination, racism and racial discrimination were never referenced. *Healthy People 2010*, which had the overarching goals of improving health and eliminating health disparities (including racial health disparities), discussed the importance of the social determinants of health, but the terms *racism*, *racial bias*, and *racial discrimination* were never mentioned.[61]

In contrast to the 2008 WHO report, a 2019 report from the Pan American Health Organization, a regional arm of the WHO, on health inequities within and between countries in the Americas identified "structural racism" as a key driver of health inequity.[62] This shift in research and policy circles to acknowledge and address racism is also evident across federal agencies in recent months. For example, the Centers for Disease Control and Prevention declared racism a public health threat in 2021, and the NIH launched an "Ending Structural Racism" initiative and offered several new funding opportunities in 2020 and 2021 to address structural racism.

Science Guides The Path To Policy Implementation

The US is at a crossroads. Until recently, the language and terminology of racism has been contested, often ignored, and viewed as not relevant to, or acceptable for, accounting for and intervening on racial and ethnic inequities in health. Because scientific language has the power to encourage normative standards, new and sustained paradigmatic shifts are necessary in the scientific community to strengthen the commitment to addressing health inequities and to enhance the depth and richness of traditional research and intervention approaches. This is a critical moment, socially and intellectually, as tensions rise in some quarters regarding

new social constructs and language around history, race, class, racism, health, poverty, and place. While the "new" terminology and framing of racism—which as we have noted in this article is indeed not new at all—can be unsettling to some, it offers the opportunity to interrogate traditional frameworks that center on the characteristics or behavior of individuals or their presumed cultures to explain health disparities and to move science and policy toward an enhanced understanding of the critical role played by larger social, economic, historical, and institutional factors. A growing body of scientific research indicates that a greater emphasis on these "upstream" factors holds much promise for policy decisions and interventions that are likely to be effective in improving population health and in reducing, and ultimately eliminating, large racial and ethnic gaps in health.[63] The past four decades of scholarship combined with insights from major reports provide a solid groundwork for policy to address racism as a key social determinant of health and to initiate new directions in the equitable allocation of resources. ■

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