The Effect of Racism and Discrimination on the Health of Milwaukee's African American Population

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ABSTRACT

Background: This scoping review focuses on the intersections of racism, health, and health care, as well as interventions for the African American population in Milwaukee, Wisconsin—one of the most hypersegregated regions in the country. We investigate what existing research provides about the impact of segregation and racism on health and consider how community setting informs health interventions, practice, and policy.

Methods: We analyzed studies that address racism and health in Milwaukee to assess the state of the science in this area. We searched databases using the terms "African American," "racism," "segregation," and "health." A total of 296 studies resulted, and 54 met the inclusion criteria.

Results: Racism is a known determinant of health. However, a lack of research investigating the impact of racism on health in Milwaukee County leaves a knowledge gap necessary for improving health among African American residents. The adverse effects of racism on health are compounded by the social, economic, and policy context of geographic and social segregation that limit access to care and resilience. Themes identified in the review include measures of physical and mental health, community factors related to health (eg, housing, environmental contamination, economic and social exclusion), intervention strategies, and theoretical gaps.

Discussion: Professionals must work across disciplines and social sectors to address the effects of racism on the physical and mental health of African American individuals in urban metropolitan environments. Health research and medical interventions in hypersegregated communities must center structural racism in their analysis.

BACKGROUND

Structural racism is a root cause of health inequity in the United States and manifests in unique ways in highly segregated urban metropolitan communities like Milwaukee, Wisconsin. The inequitable allocation of resources (ie, goods, services, societal attention) and the organization of power affect health outcomes.[1]

For example, health disparities in hypertension, heart disease, stroke, cancer, and diabetes remain a persistent and significant problem, with only minor progress in reducing the gap in health outcomes between the African American and majority White populations.[2] Similarly, a meta-analysis of US research[3] reports that racism is associated with poorer mental health—including depression, anxiety, and psychological stress—and poorer physical health. Age, sex, birthplace, and education level do not moderate the effects of racism on health.[3]

The first official report on African American and White health disparities was written by then Health and Human Services Secretary Margaret Heckler in 1985.[4] This report was followed in 2003 by the Institute of Medicine's report "Unequal Treatment Confronting Racial and Ethnic Disparities in Health Care," which highlighted the body of research documenting the existence of disparities in the delivery of health care services.[5] According to the report, racial and ethnic minorities received fewer interventions for common diseases than White patients.[5] Research consistently shows that racial identity predetermines health care providers' quality of care.[6]

There have been few efforts to assemble reviews of the impact

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of racism on health care practices and policy. We argue that this gap limits the understanding of clinicians, educators, scientists, and policymakers of the experience, context, and manner of racism, discrimination, and inequities as they occur in health, thus limiting the responsiveness of interventions to address health disparities. This review aims to guide next steps by addressing the research question, "What is known from the existing literature about the context and recent trends examining racism and discrimination on the health of African Americans in Milwaukee, Wisconsin?"

CONCEPTUAL FRAMEWORK

Race is a constructed, organized system that categorizes people into artificially created racial groups and then devalues, disempowers, and provides fewer opportunities to racial groups regarded as inferior.[1] Racism normalizes negative attitudes (prejudice) and beliefs (stereotypes) toward racial groups and differential treatment (discrimination) of selected groups by both individuals and within social structures.[2] Divisions among the manufactured social groups define power over resources, leadership, and control. Whiteness, a concept developed through legal and social practices of the 19th and 20th centuries, regulates many human relations and structures, as noted by critical race theory.[7] Constructed racial groups are bereft of any biological basis for their existence. However, in practice, racial divisions carry a great deal of meaning. This is amplified in racially hypersegregated communities where "Whiteness" defines nearly every aspect of daily existence—from housing to education, job opportunity, wealth accumulation, and health. Nationally, there is a growing body of epidemiological evidence documenting racism's adverse health outcomes and effects on mental health.[3]

Critical race theory calls for awareness of how the normalization of race and racism operate at a system level, shaping individual experiences. Developing medical and community health interventions in racially hypersegregated contexts requires the inclusion of measures of racism and its effects on health and methods for disrupting White dominant cultural assumptions across health infrastructures. Health is tied to systems of daily life, racialized distribution of resources, social capital, and the structures inequality perpetuates when policy and practice are infused with racist norms.[7]

Racism often presents as implicit (unconscious) bias (responding to stereotypes based on memory images). Since 1965, support for the principle of equity has increased among White people but not support for policies and laws that increase equity. Structural racism is a multilevel system of ideologies, institutions, and processes that have established racial inequities.[1] Segregation refers to the physical separation of the races in racially distinctive neighborhoods and communities developed to "safeguard" White populations from residential closeness to African American populations. Milwaukee is persistently at or near the top of the most hypersegregated US cities.[8] Only 9% of African Americans in the metropolitan Milwaukee area live outside of the city of Milwaukee.[9]

Racial discrimination is a psychosocial stressor that can lead to adverse health outcomes and altered behavioral patterns that increase health risks. Concentrated poverty (Black populations) and concentrated wealth (White populations) lead to critical health differentials. Health disparities are associated with the institutional and structural racism that for generations has affected housing, neighborhood, and educational quality; employment opportunities; and other essential resources in predominantly African American communities. During the height of home foreclosures in 2008-2010, Massey and Tannen found a direct connection between hypersegregation and foreclosure.[10] Lack of financial resilience and social capital results in great measure from residential segregation, leaving African Americans vulnerable to conditions that increase stress and undermine preventive health practices.[10]

At both the societal and individual levels, racism negatively affects economic status and health by creating a policy environment that is not equal, triggering negative stereotypes and discrimination that foster health-damaging psychological responses, stereotype threats, and internalized racism.[11] For example, segregation in urban environments like Milwaukee leads to divestment in predominantly African American spaces. The resultant poverty in predominantly African American communities serves to further White ideologies that African American people are inherently limited in their ability to advance and contribute to society. Simultaneously, they tout White people as having earned superiority, discounting the advantages provided to them by the very same policies. Limited interactions among African American and White populations result in missed opportunities for understanding equity and diversity, including among White medical professionals.

METHODS

As an interdisciplinary, multiracial team, we conducted a comprehensive scoping review[12] of research that explores the impact of racism on health inequities experienced by African American residents in Milwaukee. A scoping review synthesizes evidence and maps a body of literature specific to location and identifies primary concepts and gaps in the science. The group includes staff from the City of Milwaukee and the Milwaukee County Office on African American Affairs and university faculty from nursing, sociology, public health, and political science departments. Team members have extensive experience and expertise in health disparities research, epidemiology, and health policy. We aimed to identify and summarize science that defines, describes, and explores the impact of racism on the health status, health care utilization, and health care delivery of Milwaukee's African American population. We conducted this review in 5 phases (see Appendix).

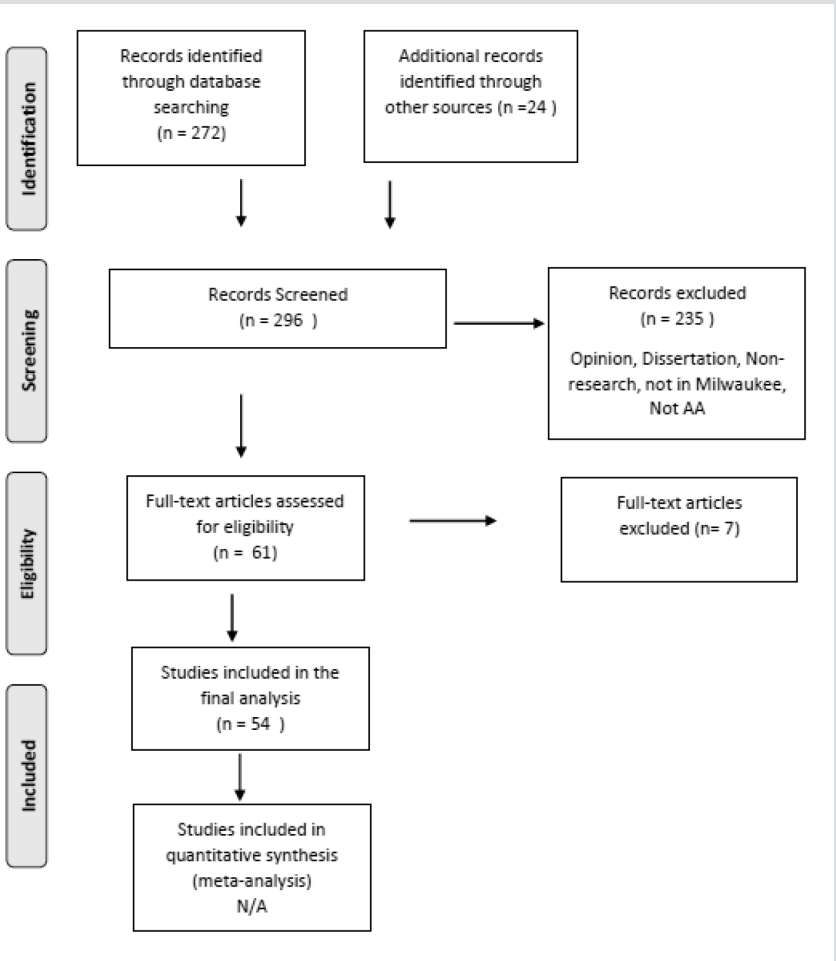
RESULTS

The researchers used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) as a framework in this review. The Figure is a flowchart of the literature retrieved and

selected. Of the 275 unique articles identified in the initial search, 54 met the inclusion criteria (Table). We identified 4 major content categories with subthemes under each:

1. Measures of health/ill-health included (a) incidence and prevalence of health disparities, (b) physical conditions, (c) mental effects, and (d) institutional barriers.
2. Community factors that promoted racism and affected health or ill-health included (a) environmental contamination; (b) economic, employment, educational, and residential exclusion; (c) historical foundations of exclusion; and (d) violence in the community – structural and direct.
3. Interventions included (a) individual factors, (b) community factors, (c) structural, and (d) research that considered racism as a variable.
4. Theoretical gaps identified a lack of theoretical frameworks in the articles and little direct analysis of racism.

Figure. PRISMA Flow Diagram of Literature Retrieved and Selected



Measures of Health/Ill-Health

The studies showed extensive support for claims of Black/White health disparities, including that African American children with private dental insurance had half as many preventive dental procedures as White children.[13] Mohiuddin et al reported that 64% of deaths from asthma occurring in Milwaukee outside a hospital were African American, independent of education and income.[14] Another study reported mental health disparities for African American,[15] while another showed that liver cancer linked to hepatitis C infection rates and alcoholism is more prevalent in poor African American neighborhoods.[16]

Few studies directly measured the health effects of racism. However, an extensive data set that included Milwaukee found that emotional and physical stress symptoms from perceived racial treatment predicted the number of poor mental and physical health days, leading to poorer health.[17p55] The researchers asked, "Within the past 30 days, have you experienced any physical symptoms, for example, headache, upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?" and "During the past 30 days, have you felt emotionally upset, for example, angry, sad, or frustrated as a result of how you were treated based on your race?"[17] African American people have the highest stress rates, with 18.2% experiencing emotional stress symptoms and 9.8% experiencing physical stress symptoms, compared to 3.5% and 1.6%, respectively, for White people. They also have a notably high number of poor health days than White people.[17] Another study found that overall segregation leads to worse breast survival outcomes and diagnosis at a later stage.[18]

Physical Conditions

Cancer screening allows for early detection of cancer and better outcomes. Beyer et al[19] found that neighborhood conditions affected cancer screening rates. Perceptions of social and physical disorder, fear of crime, and visible garbage in the streets in poor Black neighborhoods correlated with lower cancer screening—especially colorectal screening.[19]

Racism also plays a role in poor outcomes for maternal and fetal health. Preterm births and low birthweight births were 3 times higher for African American women than White women.[20]

HIV/AIDS is a serious health problem among young African American men who have sex with men (MSM).[21] African American MSM are diagnosed with HIV at higher rates than any other group. African Americans comprise 13% of the US population but account for nearly half of all new HIV diagnoses—8 times the diagnosis rate of White individuals.[21] Additionally, African

American MSM are less likely to use protection/prevention and have higher HIV/AIDS morbidity, with the highest rates in the highest poverty areas.[21]

Socioeconomic inequities in health influence prevention and intervention efforts. The use of PreP (HIV pre-exposure prophylaxis) is lower in young African American MSM related to the effect of racism and homophobia.[22] They report that previous and anticipated negative interactions with physicians and distrust of the health care system are barriers to their use of PreP.[22] However, interventions with African American men, such as geosocial networking and the use of smartphones mobile applications, have been used to disseminate HIV prevention information to thousands of men.[23]

Milwaukee's infant mortality rate, which is among the highest in the nation, is 2.3 times higher among African American versus White infants.[24] Salm Ward et al studied racial discrimination experiences during prenatal care. They found that institutionalized racism (women report being treated differently by staff and clinicians based on public vs private insurance) and personally mediated racism decreased prenatal care quality.[25] Lifetime racism also leads to poor and inadequate prenatal care. African American mothers were 8 times as likely as White mothers to have insufficient prenatal care and 3 times more likely than poor White mothers to have insufficient prenatal care, contributing to disparities in infant mortality.[26] Ake reports that low employment opportunities, lack of insurance, neighborhood violence, and housing eviction risk are linked to low birth weight.[27] Racism causes chronic stress in pregnant women—especially those living in homeless shelters—affecting birth outcomes.[27] Ngui reports the disparities and factors associated with preterm birth, including race,[20] and finds that parental involvement, paternity status, and welfare reform affect infant mortality.[28] Meanwhile, Johnson et al report that racism, poverty, and perception of stress are contributors to poor maternal and fetal outcomes in African American women in their 20s;[29] and Mazul et al report that barriers to prenatal care for African American women included transportation, insurance, negative attitudes toward prenatal care, perceived poor quality of care, and overall life stress and chaos.[30]

Mental Health Effects

Physical and emotional stress are pathways by which racism harms health. Cichy reports that African Americans experience more physical reactions to daily family stressors, and these reactions are longer-lasting. Prolonged biological reactivity triggers stress hormones.[31] Chronic upregulation of stress hormones leads to inflammation and chronic diseases, such as hypertension and cardiovascular disease. While people of all races and ethnicities are generally emotionally reactive to daily family stressors, African Americans tend to be more physically reactive.[31] Police brutality is another form of societal stress that fosters poor mental health outcomes among African Americans.[32]

Community Factors in Health/ Ill-Health Related to Race and Racism

Connecting Health and Exclusionary Housing Policy

Milwaukee's population has changed over time, from primarily American Indian to White European immigrants, with few African American residents. In 1840, Milwaukee had a population of 20,000, with only a few hundred African American residents. By 1915, Milwaukee had approximately 1500 African American residents, all whom found themselves—even the upper class—consigned to the "colored district" known as "Milwaukee's Little Africa."[33] Redlining began in the 1930s, allowing African American residents to buy homes only in identified areas, and in 2020, the city map looked much the same in terms of racial segregation.[34]

The African American "Great Migration" came later to Milwaukee than many Midwestern cities. Thus, migrants arrived in larger numbers into communities that were already residentially segregated, forcing them into low-quality housing. Housing restrictions intensified due to the increased flow of African Americans into the Milwaukee area in the 1940s and 1950s. Segregation policies led to structural racism and exacerbated poverty while enhancing stereotypes of African Americans as incapable. The economic status of White communities grew, as did White fear of African Americas, and the push to enforce divisions prompted the racialization of policing practices.[35] Threats to health grew as access to care was segregated, and financial stability depended on race.

However, class and race divisions were complex, and clashes ensued.[35] African American workers were excluded from labor unions due to racism, but factory jobs created a middle-class African American Milwaukee with home ownership. Then, in the 1970s, Milwaukee's manufacturing base collapsed, leaving it as one of the many midwestern "rustbelt" cities, with a blighted, low-income inner core of African American residents and White flight to the growing suburbs—a situation that persists. In the 1970s alone, 76% of manufacturing firms left Milwaukee.[36,37]

Some of the largest housing protests in the 1960s were in Milwaukee, with much pushback against displacement and eviction.[38] Jones referred to Milwaukee as "the Selma of the north."[39] After the assassination of Dr Martin Luther King, Jr in 1968, Milwaukee had the largest march in the nation, challenging its black "ghetto" image, evidence of the strength of activism in the city.[39] In 1970, urban flight to the suburbs intensified.[40] Segregation is especially prevalent in the suburbs—most of which range from 85% to 98% White. Racialization of space and the limited interaction between African American and White people led to dramatic disinvestment in the city and a crumbling health care system.[39]

Environmental Contamination

Discriminatory policies in Milwaukee have created racial patterns of residential housing, and geographic location can be associated with poor health outcomes. For example, research on lead exposure in hypersegregated neighborhoods in north and central

Milwaukee, where most African Americans reside, finds disproportionate exposure.[41,42] Early childhood lead exposure has been linked to hyperactivity and sensory defensiveness, which increase classroom misbehavior. The most common reaction of schools is student suspension, which has important implications for future employment, life trajectories, and overall life chances. Lead-exposed children were twice as likely to be suspended as non-exposed children.[41] Early lead exposure also may influence later decision-making ability and criminal behavior, including firearm violence.[42]

Collins discusses the concept of environmental justice and explains that air pollution is higher in segregated African American areas, and only a few facilities account for all the pollution. Of 299 facilities in Milwaukee, 10% are heavy polluters and cause 90% of the health risk. The facilities are constructed in these areas purposively and exemplify structural racism.[43]

Economic and Social Exclusion

The 53206 ZIP code in the heart of the city of Milwaukee has been studied extensively and is described as "an ecosystem of disadvantage built on segregation, racial inequality, and historical patterns of discrimination, disinvestment, and official neglect."[44p61] Structural have resulted in fewer available resources in this area, where 95% of the residents are Black, and one-fourth of the housing units are vacant. Examples include high local unemployment due to jobs moving to White-dominated suburbs and loss of health care institutions in poor urban communities Researchers describe the 53206 ZIP code area as a racial segregation prototype, leading to multigenerational poverty, poor infrastructure, and concentrated and cumulative disadvantage.[44] Half of the working-age men are employed compared to 89.4% in the White suburbs. Twenty percent of the employed residents report income below the poverty level.[32] A high school dropout in an adjacent county composed of predominantly White residents earns about the same as a college graduate who lives in 53206. Education is mediated by the stratification system that affects different population segments and maintains inequality.[44,45]

Institutional racism through mortgage discrimination and resultant racial segregation leads to poorer health outcomes. In the 53206 ZIP code area, 75% of mortgages are high risk (subprime or high interest).[46] Most lending action is home refinancing. Mortgage discrimination and redlining still exist, although both are illegal since the 1968 Fair Housing Act.[47] Following White flight, higher paying jobs are purposely located in the suburbs, where transportation is a barrier for African Americans workers.[48] The lack of livable wages reduces economic/residential mobility.[49]

Difficulty in establishing paternity is a barrier to child support and, as Ngui demonstrated, this is higher among African Americans in low-income areas.[28] The 1996 Temporary Assistance for Needy Families (TANF) welfare policy revision was a barrier to employment and contributed to health challenges, limited education, and socioeconomic marginalization.[50] These realities serve to keep Black families in poverty. Bhatt and Schellhase surveyed clients of a Milwaukee free clinic and found that 51% said they remained uninsured because insurance was too expensive, 56% misunderstood their Medicaid eligibility, and 69% misunderstood the Affordable Care Act marketplace eligibility.[51]

Beyer et al reported that African Americans have significant disparities in breast and colorectal cancer related to hypersegregation and racist policies, which lead to poorer health outcomes.[52] This finding contrasts with Beyer's previous findings of a protective effect in all-Black neighborhoods for African American women's breast cancer survival. In this 2016 study, African American women had the poorest survival rate from breast cancer in Milwaukee and 7 counties surrounding Milwaukee, and White women had the best survival.[52] The neighborhood is thus called a "double agent" that can worsen or mitigate cancer outcomes. Another study by Zhou, Bemanian, and Beyer that examined the relationship between housing discrimination, segregation, and colorectal cancer survival found racial bias in mortgage lending, which negatively influenced colorectal cancer survival in African American women.[53]

Intervention Strategies Toward Expanding Health

Social/Ecological Factors

Research links socioecological factors to structural racism and health disparities. These factors include the impact of joblessness on physical and mental health, the lack of urban job opportunities and barriers to suburban jobs, racist housing policies, and the relation of poverty to HIV (higher rates of infection for African Americans, even with fewer partners). Education does not enhance the lives of African Americans as much as it does for White people, and there are higher rates of recidivism for African American versus White people.

Studies of older African Americans, many of whom reported daily discrimination, found that a social support intervention helped reduce disparities.[54] They also noted that many African Americans do not trust health care providers, so they underreport depression. Academic and community partners who implemented a birthing project for African American women in Milwaukee showed how young pregnant African American women found value in being mentored by older African American women throughout their pregnancy, during delivery, and postpartum.[55]

Mitigating the Impact of Racism on Health

There is limited research on factors that ameliorate racism and its health effects, but the research does suggest possible avenues for mitigating the effects of racism on health. One study examines the connections between African Americans to spirituality and faith.[56] Nurse case management for African American patients with hypertension was found to improve stress and lower blood pressure, showing that this population needs special care.[57] Goal congruence and self-efficacy also has been found to improve medication adher-

Table 2. Evidence Table (N=54 articles)

Citation	Study Population	Objectives R/t Racism	Health Factors	Main Findings
Ake et al[27]	Homeless, pregnant	AA unmet needs	Birth outcomes	Chronic stressors in AA lives impact birth outcomes
Anderson KF[17]	Blacks, Whites, others	Racism effects on stress	Mental and physical	Racism causes mental and physical stress, highest in AA
Amato et al[41]	< 3 years old	Lead exposure, old housing stock	School suspension	Early lead exposure predicts 4th grade school suspension
Bartfeld J[49]	Children on welfare	Race is a variable	Gaps in child support	Greater gaps in child support for children on welfare
Bemanian et al[16]	Liver cancer	Racial disparities	Liver cancer rates	Incidence r/t neighborhood higher in poor and AA
Bemanian et al[18]	Women w/ breast cancer	Segregation	Breast cancer survival	Higher survival AA neighborhoods
Beyer et al[19]	Screening behaviors	Neighborhood quality	Cancer screening	Cancer screening behaviors vary by neighborhood factors
Beyer et al[47]	Women w/ breast cancer	Redlining and racial bias in mortgage lending	Breast cancer survival	AA neighborhood racial bias in lending, leads to poorer breast cancer survival
Beyer et al[52]	White and Blacks	Health disparities	Breast, colorectal cancer	Poorer survival in AA
Bhagavatula et al[13]	Children	Racial disparities	Dental procedures	AA have less preventive dental procedures
Bhatt et al[51]	Urban free clinic	Barriers to enrollment	Uninsured	More uninsured AA
Boardman et al[48]	Men	Spatial mismatch, race differentials	Male joblessness	AA males from central city travel farther to low paying jobs, negative health effects from joblessness
CDC[21]	Young, AA MSM	Health disparities	HIV infections	Higher rates young AA men; community action intervention
Chaskin RJ[60]	Community organizations	Segregation	Community capacity	Organizations compete for resources; tension between short-term and long-term goals
Cichy et al[31]	AA and White	Racial differences	Reactivity to stressors	AA more reactive to physical stressors; response lasts longer, triggers stress hormones and health disadvantage
Collins MB[43]	Geographical areas	Risk-based targeting: disproportionalities	Industrial pollution	More pollution in segregated AA communities
Connell T[37]	1950s Milwaukee	Race, class and a city divided	1950s Milwaukee	Bias against southern AA migrant farmers; class, race discrimination
Czarny et al[23]	MSM	Geosocial mobile apps	HIV	Smartphones used to share HIV info for young high-risk males
DeVries et al[62]	Persons w/ disabilities	Health care experiences, perceptions	Disabilities	Operations, finances, and time are barriers
Desmond et al[38]	Pre Fair Housing Act	Neighborhood consequences	Forced displacement	History racist housing policies against AA
Ellis et al[58]	Women 50+	Health disparities	Medication self-management	Self-efficacy and goal congruence influence medication management
Emer et al[42]	Children	AA areas higher lead levels	Lead levels and firearm violence	Poor AA neighborhoods, higher lead levels correlate with increased violence
Geib P[36]	1940-1960	Housing discrimination	Southern AA migration	Southern migration later to Milwaukee; 176 manufactuers closed in 1970s, leaving urban poverty
Gibson et al[68]	2009-2014	Census tract poverty, racial disparities	HIV	HIV affects mostly AA
Gordon D[11]	AA neighborhoods	Segregation	Daily mobility	Policies cause racialization of space, but AA blamed for being inferior
Hildebrandt et al[50]	Women on welfare	Race as a variable	Welfare program unmet needs	More AA on welfare program, TANF, inadequate
Hornik et al[40]	River remediation project	Racism, suburbanization, urban blight	Environmental justice	Efficacy of using organizations vs individuals
Jang et al[15]	Mental health issues	Service use	Self-rated mental health	Disparities in mental health care
Johnson et al[29]	Infants	Racism	Fetal and infant mortality	Racism, poverty, stress, lack of transportation, substance use lead to poor outcomes
Jones WP[35]	1930s	Segregation, proletarianization	AA working class history	Southern AA farmers started civil rights movement in 1930s
Jones PD[39]	1958-1970	Race relations, civil rights, insurgency	Violence	Fr. Groppi, AA leaders march to south Milwaukee; led to 1968 Fair Housing Act
Lechuga et al[63]	Several races	Cultural predictors	HPV vaccinations	Need culturally tailored interventions
Lennon et al[64]	Younger siblings of teens	Racism	HPV immunization	Need culturally specific interventions to improve immunization rates
Levine M[44]	2000-2012 53206	Racism and police killings	Inner city distress	Police killings of unarmed AA men cause mental health problems
Levine M[32]	53206	Racism and police killings	Inner city distress	Police killings of unarmed AA men cause mental health problems
LoConte et al[65]	FQHC	Racial disparities	Colorectal cancer	Systemic multigenerational poverty
Mazul et al[30]	Low-income women	Barriers and facilitators	Prenatal care	Perceived racial discrimination is barrier for AA
Mkandawire-Valhmu et al[55]	Pregnant women	Intervention of safe spaces	Birth outcomes	AA women need safe spaces; live in stress due to racism

continued on page 138

Table. Evidence Table (N=54 articles) *continued from page 137*

Citation	Study Population	Objectives R/T Racism	Health Factors	Main Findings
Mohiuddin et al[14]	2004-2008	Urban hospital	Asthma deaths	Race increases asthma deaths separate from income, education
Ngui et al[20]	Paternity status	Racial disparities	Birth outcomes	Paternity related to preterm birth in AA
Ngui et al[28]	Paternity status	Racial disparities	Infant mortality (IM)	Paternity, race and welfare reform increase IM
Pawasarat et al[46]	53206	Mortgage lending	Housing crisis	Lending is low, home ownership low
Quinn et al[22]	Young AA MSM	Racism and homonegativity	MSM AA men PreP use for HIV prevention	Racial disparity in PreP use due to discrimination from providers
Quinn L[45]	53206	Neighborhood indicators	Neighborhood need	AA ZIP code high unemployment, high incarceration
Salm Ward TC[25]	Low income women	Structural racism	Prenatal care	Structural racism barrier to prenatal care
Schmidt D[34]	Neighborhoods	Housing discrimination	Neighborhood quality	1970s redlining led to disinvestment in communities
Sims et al[26]	Infant mortality	Health disparities	Infant mortality	AA IM 2x that of Whites; lack of access prenatal care
Singh et al[61]	Black and White women	Racial disparities	Invasive breast cancer	AA women less access to health care
Warren-Findlow et al[54]	Middle-aged and older women	Social relationships	Emotional well-being	Psychosocial support critical in AA families helps health disparities
Warren-Findlow et al[59]	Secondary data	Social ties	Self-rated physical health	Family support improves physical health
Williams et al[56]	Older AA	Segregation and conflict	Spiritual well-being	AA church most important place of support; faith and health are connected
Wiese A[69]	1960s	Racism and housing	Racism and housing	Housing protests; policy borders of AA neighborhoods then stereotyped the "ghetto"
Zabler et a[57]	Low-income	Case management	Hypertension	Improves stress and hypertension
Zhou et al[53]	Colorectal cancer survivors	Housing discrimination	Colorectal cancer	Living by other AA has protective effect

Abbreviations: AA, African American; R/t, related to; CDC, Centers for Disease Control and Prevention; MSM, men who have sex with men; HPV, human papillomaviurs; TANF, Termporary Assistance for Needy Families; FQHC, Federally Qualified Health Center; PreP, pre-exposure prophylaxis.

ence in African American patients;[58] and the role of social-emotional ties in guiding interventions shows family ties as an important part of health care for aging African American adults.[59]

Another set of research examines capacity building at the neighborhood level, including individuals, formal organizations, and relationships. For example, case studies of the Harambee neighborhood in Milwaukee describe a collaborative organized around the goal of providing livable wages. A collaboration of 5 organizations planned to revitalize an industrial park and formed an economic development corporation to encourage investment in businesses and housing in Harambee. However, there were tensions and competition between existing and newer organizations. Competition between organizations for resources and leadership can be a barrier to collaboration.[60] The work of Beyer suggests that stronger neighborhood and family support contributes to better health outcomes.[52]

Theoretical Gaps/ Barriers to Help/Research

Race is often included as a variable in studies but is not necessarily theorized or connected to discrimination or health care barriers. For example, there is a connection between racism and maternal/birth outcomes, but participants are hesitant to identify this issue. Similarly, African American women have poorer breast cancer outcomes and disparities regarding access to health care, including obtaining mammograms and quality treatment.[61] Barriers to care reported for disabled persons include race,[62] and Bhatt reported race as a barrier to health insurance under the Affordable Care Act.[51] Additionally, health beliefs and lack of trust in health care providers affect access to immunization.[63] For example, culturally tailored interventions are needed to increase human papillomaviurs (HPV) immunization,[64] and Federally Qualified Health Centers (FQHC) are associated with increased colorectal screening.[65]

DISCUSSION

The research focused on the effects of racism on health has grown considerably based on patterns made apparent by looking at health/ill-health measures, community factors in health, intervention strategies, and theoretical gaps. While not typically studied in direct relation to health, racism is an explanatory factor in studies of physical and mental disease among African Americans.

Racism creates stress and limits access to mitigating resources, such as wealth and employment. Studies found measurable differences in health between African American and White populations in a wide variety of diseases. Research suggests that being African American is related to the risk for ill-health. Socioecological factors related to race affect health, including segregation, poverty, inadequate housing, transportation, unemployment, and limited health care access. Community factors contribute to situations of risk for ill-health, while at times also mediating circumstances through strong family/neighbor care. Interestingly, in the studies reviewed, race is included primarily as a categorical factor, and studying racism itself is uncommon. Structural racism is difficult to measure, so

research often considers situational factors like neighborhood segregation or poverty. Finding better measures of racism and the impact of mutual supports systems are gaps that needs to be addressed.

Using science to theorize the centrality of White dominant culture and its impact on health disparities is essential to deconstructing racism. Nonetheless, successful interventions are more challenging to sustain despite Milwaukee's strong community organizing tradition. Racism has so systematically attacked the spirit of cooperation, interdependence, and connectedness endemic to African culture that it is very difficult for individuals in the community to experience the wholeness and wellness needed to thrive.

Addressing decades of systematic disinvestment requires shifting resources while dismantling the privileges of being White, and this cannot be done by African Americans alone. It takes commitments of medical systems and health care providers and a new definition of health. Those with power must eradicate structural racism. Race becomes not a factor in health; rather, we recognize that racism is a disease—a public health crisis to which we must attend. The Milwaukee County Board of Supervisors created the Milwaukee County's Office on African American Affairs (OAAA) in 2016 to address disparities affecting African American residents. The OAAA was successful throughout 2018 in normalizing conversations among top leaders about race, racism, and the role government entities play in resolving racial inequities and created a roadmap for developing a countywide racial equity initiative with full leadership support. In May 2019, Milwaukee County declared racism a public health crisis and launched a racial equity instructor-led training and the Racial Equity Ambassador Program to guide this work.

Making this declaration ensured Milwaukee County would not focus solely on the symptoms of the problems in the community (disparities in housing, transportation, food access, education, youth engagement, and criminal justice) but rather on the root cause: racism. This public commitment has created a transformational shift in the organization, most recently in spring 2020, with the passage of a local racial equity ordinance. It resolved that by achieving racial equity, the county will eliminate health and opportunity gaps along racial lines and increase the success of all groups by distributing resources justly across all communities. Milwaukee has seen a rise of Black political leaders committed to improving health outcomes. Milwaukee County took a leading role in tracking data on COVID-19 disease and death factored by race and the resulting policy initiatives to ensure that vaccinations are provided equitably.[66]

CONCLUSIONS

This scoping review demonstrates the need for further research on racism and health that explicitly measures racism as contributing to systemic health disparities. Our analysis contributes to the literature by reviewing research specific to Milwaukee, Wisconsin, institutional and structural racism, and racialized policies. These studies reviewed reveal worse health outcomes for African American patients in many areas of health and wellness, demonstrating the impact of place on health in a hypersegregated city and state.

The racial divide exists, and African Americans are less likely to participate if viewed simply as study subjects, making it urgent that African American researchers lead the work. Structural racism extends into the field of education, as evidenced by the disparate doctoral degree achievement.[67] Another concern is the amount of research on individual attitudes rather than the system of racism. Finally, there is a lack of accountability and responsibility to dismantle the system of racism and acknowledge its role in health disparities. While Milwaukee's efforts exemplify steps toward change, they must be coupled with research and practice, including the adverse effects of systemic racism and its connections to health.

Funding/Support: This work was supported by grants from the Milwaukee County Office of Arican American Affairs and Advancing a Healthier Wisconsin through the Medical College of Wisconsin, as well as Fromkin Memorial Grant from the University of Wisconsin-Milwaukee.

Financial Disclosures: None declared.

Appendix: Available at wmjonline.org.

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