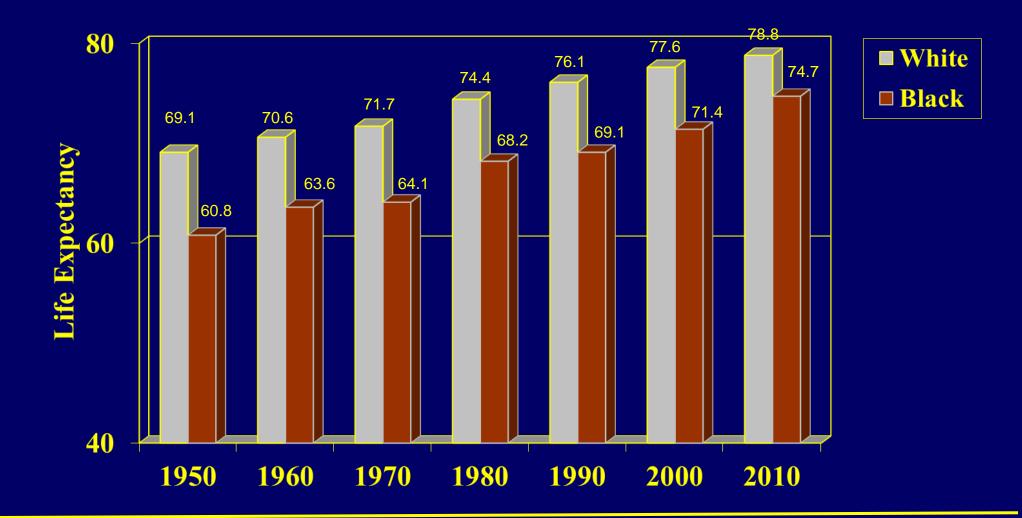
Social Inequalities in Health: The Case of Racial/Ethnic Inequities

David R. Williams, PhD, MPH

Florence & Laura Norman Professor of Public Health Chair, Department of Social and Behavioral Sciences Professor of African & African American Studies and of Sociology Harvard University Racial Inequities In Health Have Existed for a Long Time

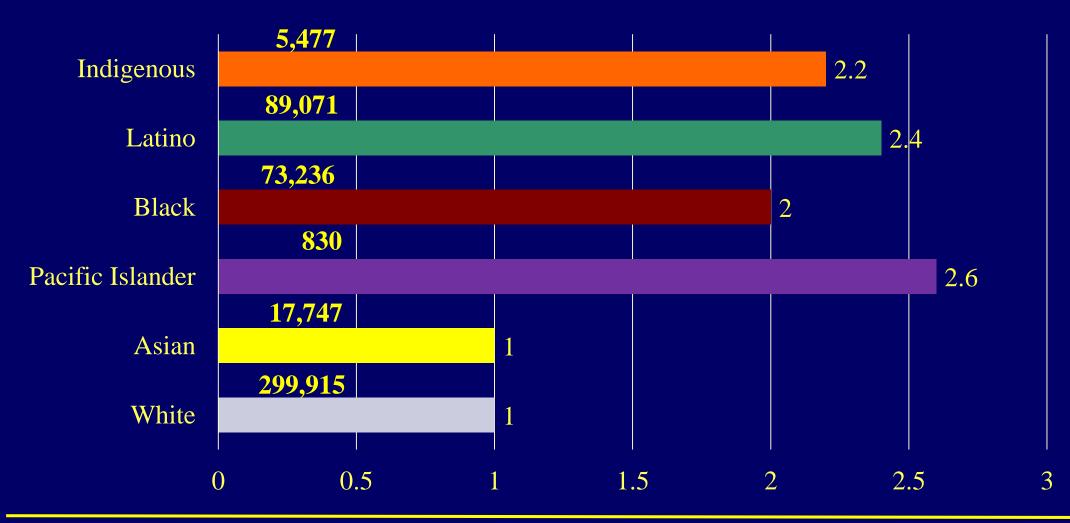
Life Expectancy Lags, 1950-2010



Source: NCHS, Health United States, 2013

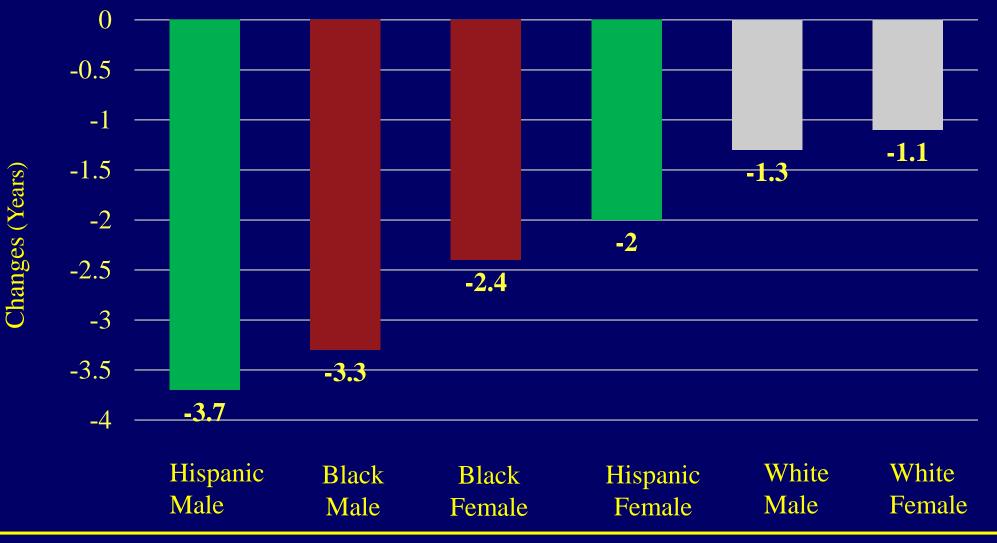
And Covid-19 Has Made These Inequities Much Worse Death Rates for Other Races Compared to Whites

Age-adjusted ORs; Deaths through March 2, 2021, 2021; (> 520,000 U.S. deaths)



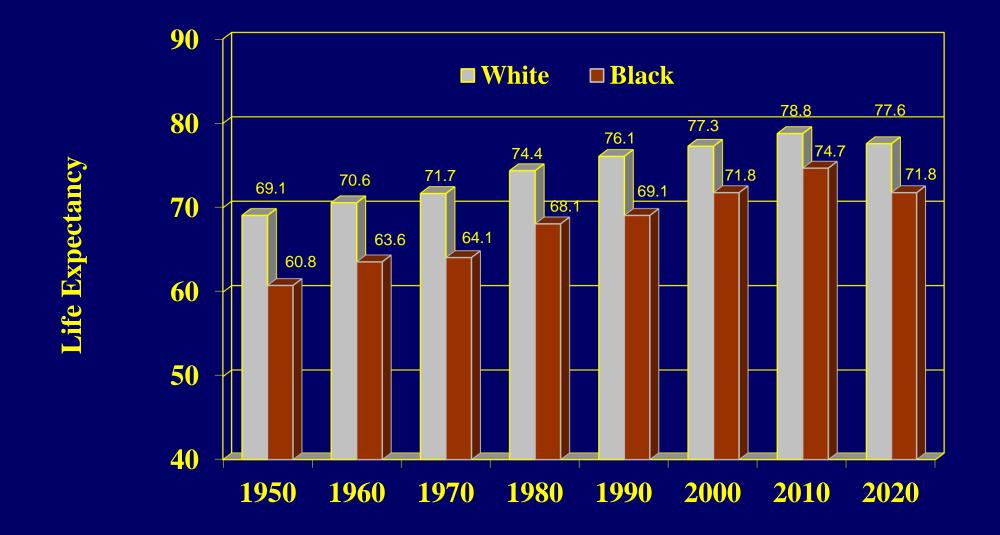
APM Research Lab, http://www.apmresearchlab.org/covid/deaths-by-race

Decline: Life Expectancy at Birth, 2019-2020



Arias et al, NVSS July 2021

Life Expectancy by Race, 1950-2020



NCHS, Health United States Chartbook, 2019; Arias et al, NVSS July 2021

What Drives these Large Racial Inequities in Health?

Socioeconomic Status

Socioeconomic Status (SES), (whether measured by income, education, occupation, poverty or wealth) is a central determinant of the distribution of valuable resources in society

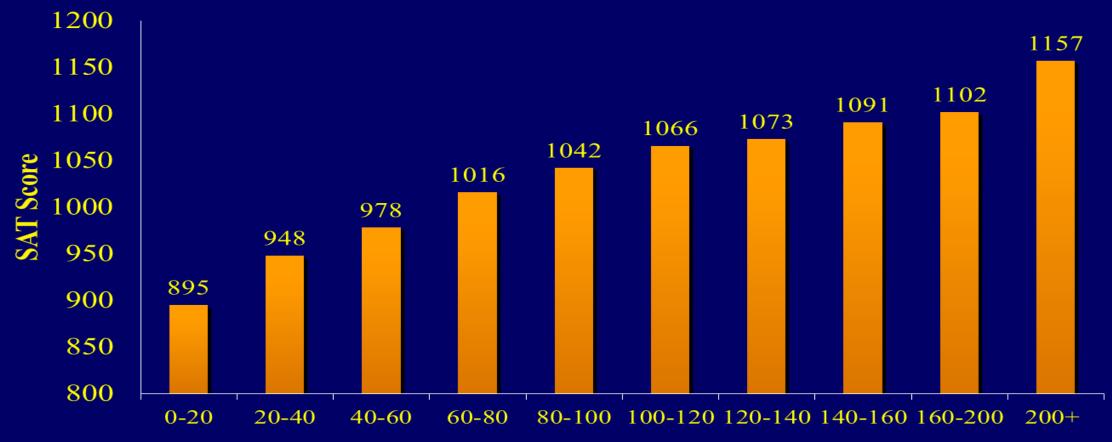


SAT = Scholastic Aptitude Test

OR Student Affluence Test?

SAT SCORE by Family Income

SAT Score (Math & Reading Only)

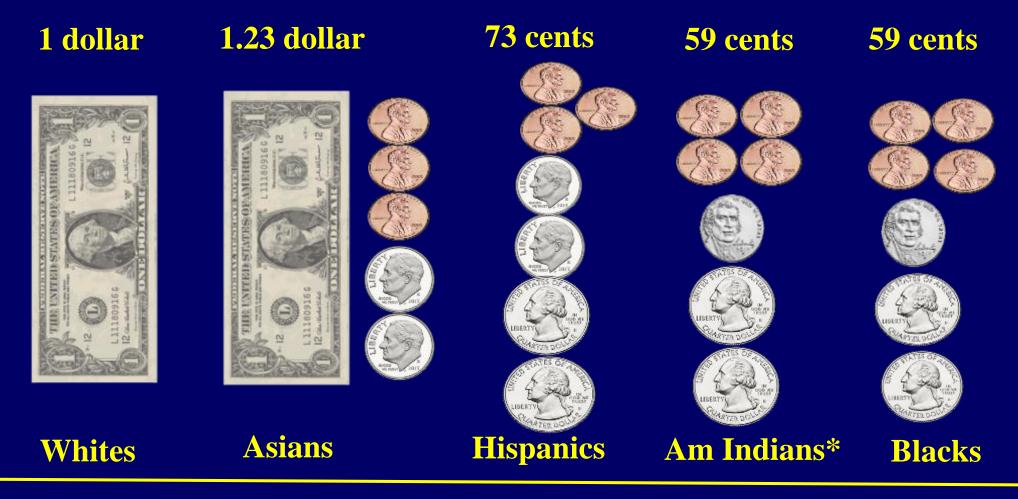


Fair Test, College Board, Wall Street Journal, Oct 7th, 2014

Race/Ethnicity is strongly related to SES

Median Household Income and Race, 2018

Racial Differences in Income are Substantial:



U.S. Census Bureau, Semega et al., 2019; * For 2017; US Census Bureau, ACS, 2017

Reducing Racial Inequity in Income is on a Treadmill: A Lot of Talk: Little Progress

- In 1978, Black households earned 59 cents for every dollar of income that White households earned
- In 2018, the gap is still 59 cents to the dollar



Large racial gaps in income markedly understate the racial gap in economic status

Median Wealth and Race, 2016

For every dollar of wealth that Whites have,



Blacks have 10 cents

Latinos have 12 cents

Other Races have 38 cents





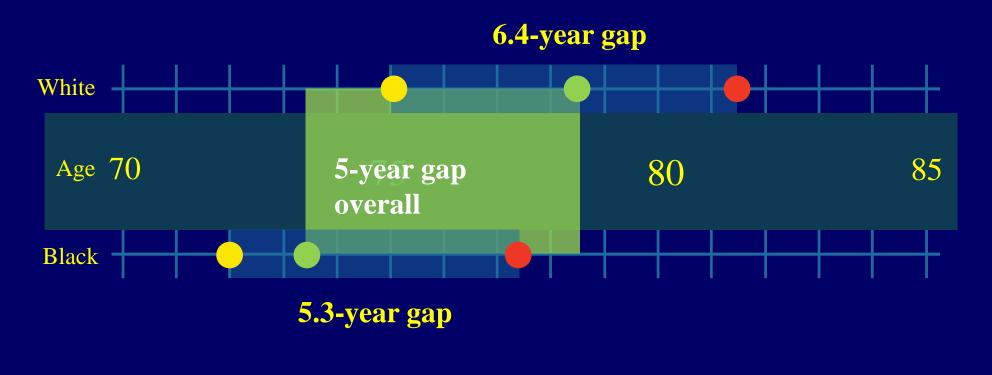
Dettling et al., FEDS Notes, Federal Reserve Board (SCF), 2017

What Low Economic Status Means We are in the same storm but in different Boats



Added Burden of Race

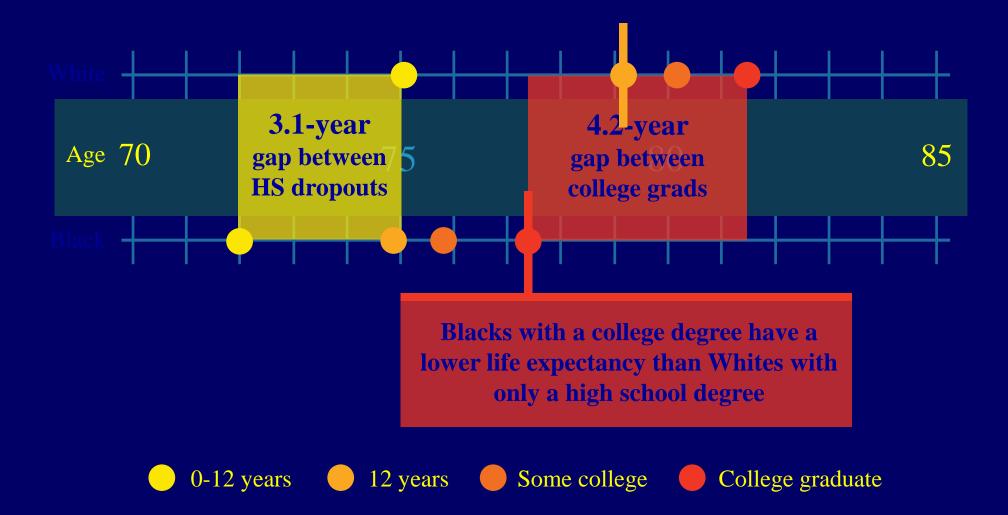
Life Expectancy at Age 25 Based on Level of Education





Murphy, NVSS 2000; Braveman, Cubbin, Egerter, Williams, Pamuk, AJPH, 2010; NLMS 1988-1998

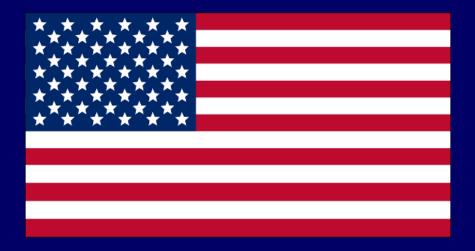
Life Expectancy at Age 25 Race Still Matters



Murphy, NVSS 2000; Braveman, Cubbin, Egerter, Williams, Pamuk, AJPH, 2010; NLMS 1988-1998

Why Racial Inequality Exists

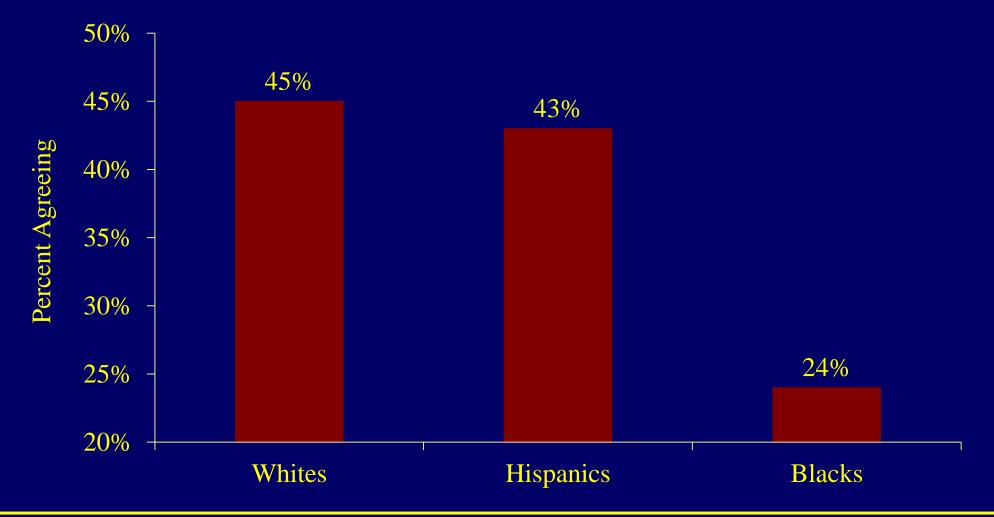
What does America Think?



MS Online Pictures; Photo by Unknown Author

Solution to Inequality: More Effort

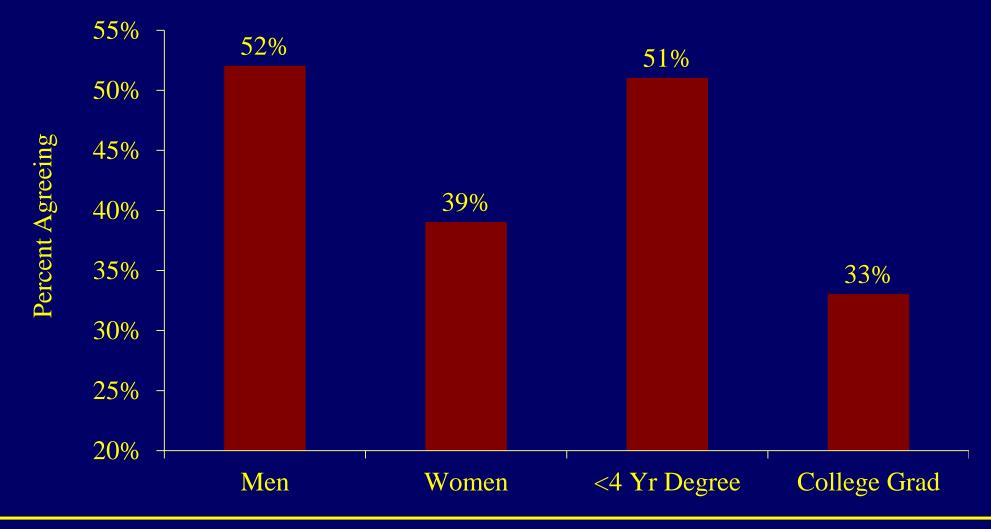
Blacks would do as well as whites if they only tried harder



Vandermaas-Peeler et al, 2018, Pub Relig Res Institute, American Values Survey

Solution to Inequality: More Effort, Whites

Blacks would do as well as whites if they only tried harder



Vandermaas-Peeler et al, 2018, Pub Relig Res Institute, American Values Survey

What does Scientific Research Clearly Say?

Racism and Racial Discrimination are alive, well, pervasive and thriving in America

The House that Racism Built

Racism as a societal system

Social Forces

Political
Legal
Economic
Religious
Cultural
Historical Events

Williams, Lawrence, Davis, Vu, 'Understanding how Discrimination Can Affect Health,' HSR, 2019

Racism Defined

- Racism: an organized system that,
 - -- categorizes and ranks
 - -- devalues, disempowers, and

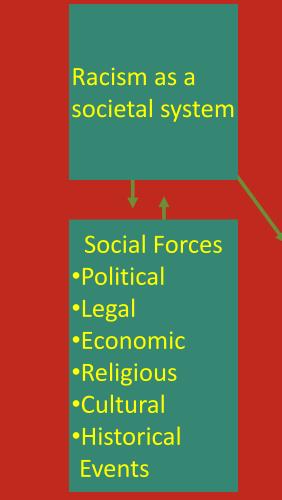


- -- differentially allocates opportunities/resources
- The development of racism is typically undergirded by an ideology of inferiority in which some population groups are regarded as being inferior to others
- This leads to the development of
 - -- negative attitudes/beliefs (prejudice and stereotypes) to out-groups, and

-- differential treatment (discrimination) by individuals and social institutions

Bonilla-Silva, 1996; Williams 2004

The House that Racism Built



Structural or Institutional Racism (e.g. Segregation)

Williams, Lawrence, Davis, Vu, 'Understanding how Discrimination Can Affect Health,' HSR, 2019

US: Centrality of Segregation in Creating Racial Inequities

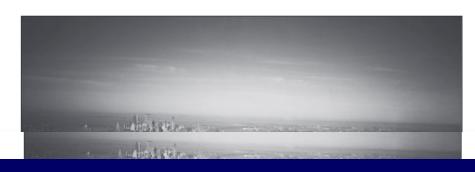
VIEWPOINT

Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health

David R. Williams, PhD, MPH^a Chiquita Collins, PhD^b

SYNOPSIS

Racial residential segregation is a fundamental cause of racial disparities in health. The physical separation of the races by enforced residence in certain



areas is an institutional mechanism of racism that was designed to protect whites from social interaction with blacks. Despite the absence of supportive legal statutes, the degree of residential segregation remains extremely high for most African Americans in the United States. extremely high for most African Americans in the United States. Segregation refers to restricted residence to particular areas based on race
It includes the forced removal and relocation of

indigenous peoples
Reflects institutionalized isolation & marginalization of racial populations

David R Williams & Chiquita Collins, Public Health Reports, 2001

Racial Segregation Is ...

- One of the most successful domestic policies of the 20th century
- "the dominant system of racial regulation and control" in the U.S

THE HIGHEST STAGE OF WHITE SUPREMACY

THE ORIGINS OF SEGREGATION IN SOUTH AFRICA AND THE AMERICAN SOUTH

JOHN W. CELL

How Segregation Works

Segregation is like a burglar at mid-night. It slips into the community, awakens no one, but once it shows up, valuables disappear:

- Quality Schools
- Safe playgrounds
- Good jobs
- Healthy environment
- Safe housing
- Transportation
- Healthcare



Pixabay.com

Racial Differences in Residential Environment

In the 171 largest cities in the U.S., there is not even one city where whites live in equal conditions to those of blacks



"The worst urban context in which whites reside is considerably better than the average context of black communities."



Neighborhood Opportunity Index

- 1. Institutions: number & quality of schools, early childhood centers
- 2. Influences shaping norms and expectations: (high school graduation rate, adults with high skill jobs)
- 3. Economic Resources: income, home ownership, employment, public assistance
- 4. Environmental Quality: air, water, soil pollution, hazardous waste sites
- 5. Resources for health: green space, healthy food outlets, walkability

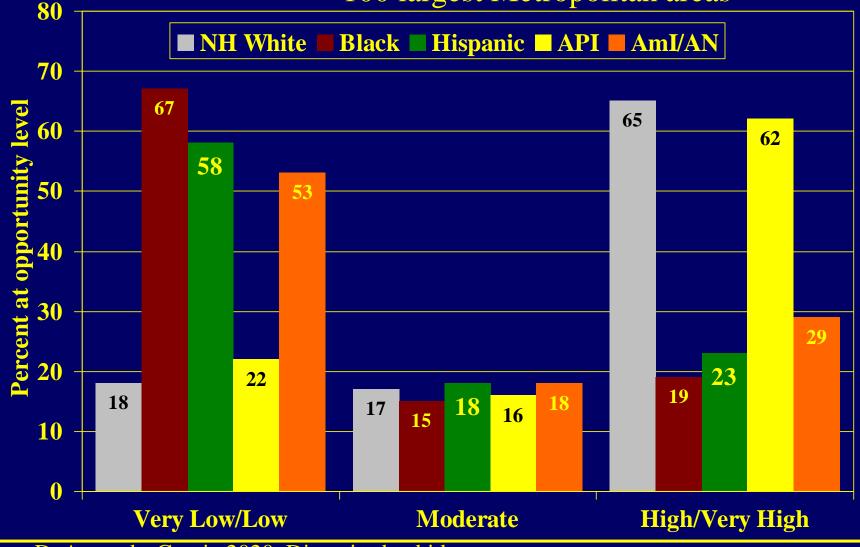






Percentage of Children at Neighborhood Opportunity Level

100 largest Metropolitan areas



D. Acevedo-Garcia 2020, Diversitydatakids.org

Segregation is the central driver of the Large Racial/Ethnic Differences in SES

Residential Segregation and SES

A study of the effects of segregation on young African American adults found that the elimination of segregation would erase black-white differences in:

Earnings

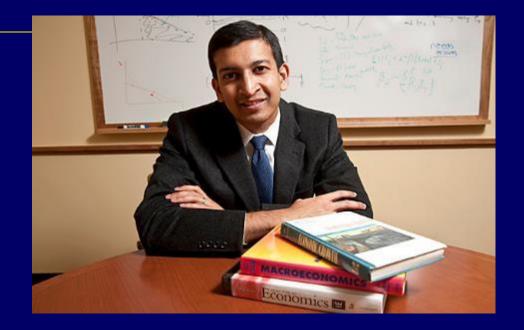


- High School Graduation Rate
- Unemployment

And reduce racial differences in single motherhood by two-thirds

An Intergenerational Study

- Inequity usu. studied in one generation
- Intergenerational analysis, linking parents & kids, US pop,1989-2015
- Black boys have lower earnings than white boys in 99% of Census tracts in America (controlling for parental income)



- Why? They live in neighborhoods that differ in access to opportunity
- Black boys do well in neighborhoods with good resources (low poverty) and good race-specific factors (high father presence, less racial bias)
- The problem: there are essentially no such neighborhoods in America

Raj Chetty et al, 2020, *Quarterly Journal of Economic Research, 2020.* The Opportunity Atlas

Inequities by Design

 Racial inequities in SES that matter for life & health do not reflect a broken system



- Instead, they reflect a carefully crafted system, functioning as planned – successfully implementing social policies, many of which are rooted in racism
- They are not accidents or acts of God
- Racism has produced a truly "rigged system"

The House that Racism Built



Structural/ Institutional Racism (e.g. Segregation)

Individual Discrimination

Williams, Lawrence, Davis, Vu, 'Understanding how Discrimination Can Affect Health,' HSR, 2019

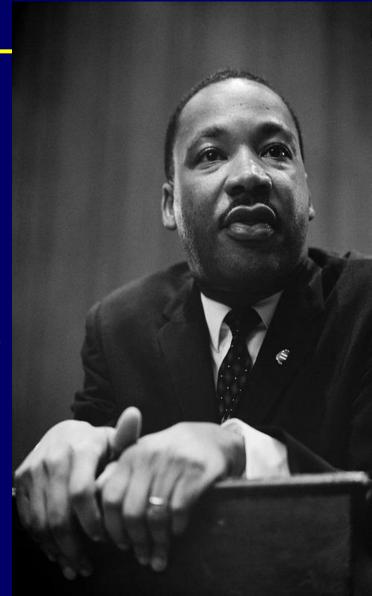
Individual Discrimination

Experiences of discrimination are an added source of Toxic Stress

MLK Quote

"... Discrimination is a hellhound that gnaws at Negroes in every waking moment of their lives declaring that the lie of their inferiority is accepted as the truth in the society dominating them."

Martin Luther King, Jr. [1967]



Every Day Discrimination

In your day-to-day life how often do these happen to you?

- You are treated with less courtesy than other people.
- You are treated with less respect than other people.
- You receive poorer service than other people at restaurants or stores.
- People act as if they think you are not smart.
- People act as if they are afraid of you.
- People act as if they think you are dishonest.
- People act as if they're better than you are.
- You are called names or insulted.
- You are threatened or harassed.



What do you think was the main reason for these experiences?

Williams, Yu, Jackson, Anderson, J Health Psychology, 1997

Everyday Discrimination is Associated With:

- -- coronary artery calcification
- -- inflammation (C-reactive protein)
- -- inflammation (IL-6)
- -- blood pressure
- -- lower birth weight
- -- cognitive impairment
- -- poor sleep
- -- mortality
- -- visceral fat
- -- shorter telomere length
- -- arterial stiffness
- -- incident CVD events



Tene Lewis

Sources: Lewis et al., Psy Med, 2006; Lewis et al., Brain Beh Immunity, 2010; Lewis et al., J Gerontology: Bio Sci & Med Sci 2009; Earnshaw et al., Ann Beh Med, 2013; Barnes et al., 2012; Lewis et al, Hlth Psy, 2012; Barnes et al., J Gerontology: Bio Sci & Med Sci, 2008; Lewis et al., Am J Epidemiology, 2011; Hailu et al, Ann Epi, 2020; Bromfield et al, Hlth Psych, 2020; Everson-Rose et al, AJE, 2015; Kershaw et al, Hlth Psych, 2016

Hidden Ways in which Stressors linked to Race and Racism Adversely affect Health

Worry About Safety of Children

- Study of black women found that most live with a heavy burden of stress due to concern about the racism their children might experience
- Over 70% were very concerned:
 - -- that their children might be harmed by
 - the police
 - -- that their children might get stopped in
 - a predominantly white neighborhood



Police Stops and Mother's Health

- A study of over 3,000 mothers in 20 cities (Fragile Families Study)
- 23% of urban youth are stopped by the police by the age of 15
- Mothers of youth who were stopped by the police are more than twice as likely to report both depression- and anxietyrelated sleep difficulties.



Unsplash.com

Police Violence and Health

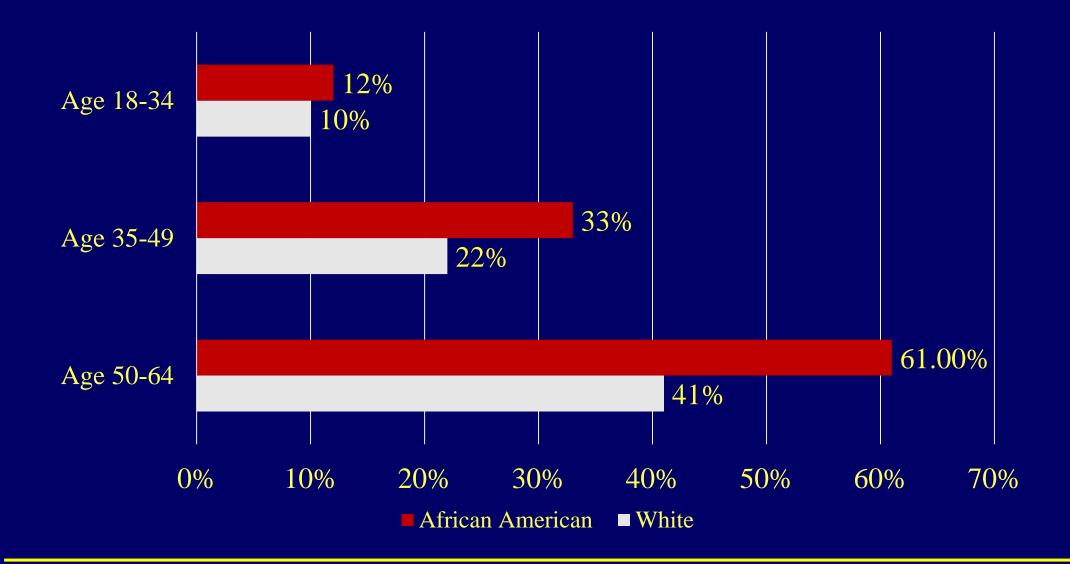
- Frequent media reports of incidents of police violence directed to black, Latino, and Native American communities
- These are stressors that negatively affect health of larger community
- Recent national, quasi-experimental study:
- Police killings of unarmed blacks lead to declines in mental health among blacks in general population for 3 months after event
- No effect on whites



Consequences of the cumulative exposure to discrimination and other stressors

"Accelerated Aging" "Premature Aging" Biological "Weathering" Earlier Onset of Chronic Disease

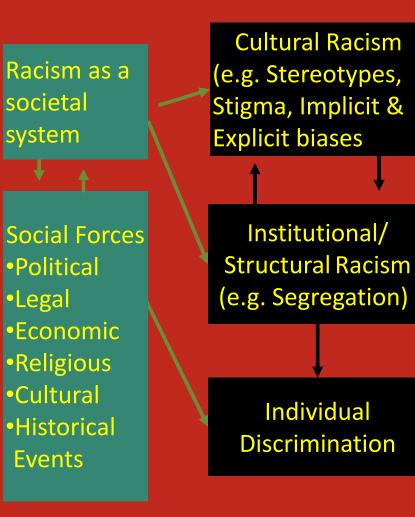
Earlier Onset of High Blood Pressure



Behavioral Risk Factor Surveillance System, 2015

The House that Racism Built





Williams, Lawrence, Davis, Vu, 'Understanding how Discrimination Can Affect Health,' HSR, 2019

Negative stereotypes about race remain deeply embedded in our culture

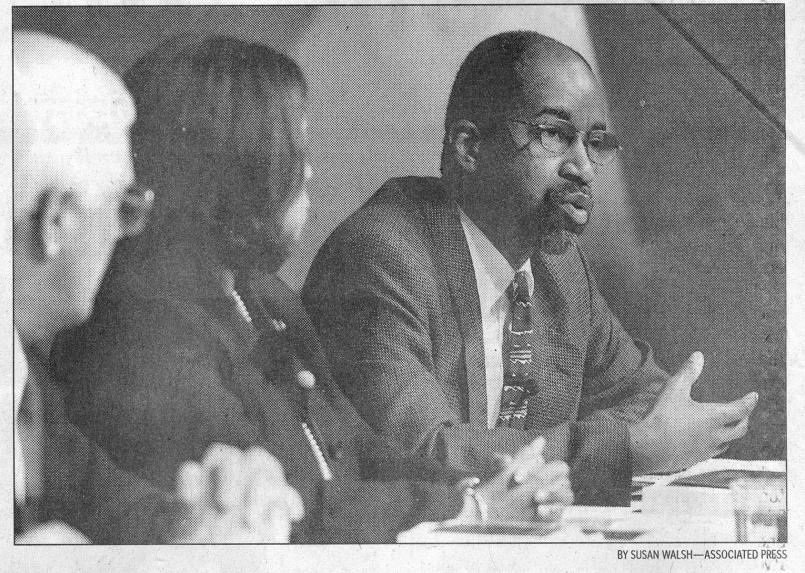
These Stereotypes Trigger Racial Discrimination that Reduces Access to Societal Resources



UNEQUAL TREATMENT

CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTH CARE Racial Bias in Medical Care

INSTITUTE OF MEDICINE



David Williams, a University of Michigan professor, right, says: "We have a health care system that is the pride of the world, but this report documents that the playing field is not even."

Washington Post, 2002

Race of MD & Newborn Survival

- Study of 1.8 million hospital births Florida from 1992 to 2015
- •When cared for by white doctors, black babies are 3 times more likely than white newborns to die in the hospital
- Disparity cut in half when black babies are cared for by a black doctor
- Biggest drop in deaths in complex births and in hospitals that deliver more black babies
- •No difference between MD race & maternal mortality

What Can We Do?





Ensuring Access to Care for All

Diversifying the Workforce to meet the Needs of all Patients

Physician Race & Health Care

- A RCT of 1,300 Black men
- Recruited from barbershops and flea markets
- Given a coupon for a free health care screening at a Saturday clinic for
 - -- blood pressure,
 - -- body mass index,
 - -- cholesterol,
 - -- diabetes



- Men randomized to see black doctors or not
- \$50 incentive for clinic attendance
- Free Uber rides if need for transportation

Alsan, Garrick, Graziani, American Economic Review, 2019 Black Illustrations

Black Doctors and Black Health

- Men who saw a Black Doctor
- ✓ 29% more likely to talk about other health problems
- ✓ 47% more likely to do screening for diabetes



 \checkmark 56% more likely to get a flu vaccine

✓ 72% more likely to do screening for cholesterol

Alsan, Garrick, Graziani, American Economic Review, 2019

Progress (or lack thereof) in Medicine

- In 2014, there were 27 fewer African American males in the first year of Medical School than there had been in 1978 (36 years earlier)
- In the mid-1960s, 2.9% of all practicing physicians in the US were black
- In 2019, 5% of MDs were black (6% were Hispanic; 0.3% Indigenous)



MS Online Pictures; Photo by Unknown Author

AAMC, Altering the Course, 2015; Deville et al. JAMA Internal Med, 2015; AAMC, 2019

Provide Care that Addresses the Social context

Care that Addresses the Social context



Why treat illness and send people back to live in the same conditions that made them sick in the first place?

Recent Report: National Academy of Medicine

The National Academies of SCIENCES • ENGINEERING • MEDICINE

CONSENSUS STUDY REPORT

INTEGRATING Social care Into the Delivery of Health care

MOVING UPSTREAM TO IMPROVE THE NATION'S HEALTH Many opportunities for health care systems and professionals to address the social needs of patients

Medical Legal Partnership

- Enables MDs to refer to unique specialists: on-site attorneys
- Most low-income persons face legal issues that affect their quality of life and their management of disease



- Adding lawyers to medical team can screen and assist families for these social problems that affect care
- Stressors addressed: unhealthy housing, immigration, income, food, education access, disability, family law
- Child with asthma, in moldy apartment, will not get well, regardless of meds, if conditions not improved

Strategy Number 2

Identifying and Supporting Protective factors and Resilience Resources

Discrimination, Social Ties, Biomarkers

- 331 Black adolescents in 9 rural counties in Georgia
- Discrimination assessed at age 16, 17, and 18
- Stably high levels of discrimination as a teen linked to higher biomarkers (overnight cortisol, epinephrine, norepinephrine, SBP, DBP, CRP, BMI) at age 20
- Social support: 11 item caregiver emotional & instrumental support and 4 item measure of peer support
- High social support (caregiver and peer) erased the negative effect of high discrimination on biomarkers



Religion & Discrimination: A Balm in Gilead?

- Prospective analyses of the National Study of Black Americans found that multiple aspects of religious engagement:
 - -- religious attendance
 - -- church-based social support
 - -- seeking religious guidance in everyday life
- reduced the negative effects of experiences of discrimination on mental health



Uhsplash.com

Moving Further Upstream: Implementing Policies to Reduce Social Inequities in Health



There's More to Health than Health Care



Strategy Number 3

Create Communities of Opportunity to minimize, neutralize and dismantle the systems of racism that create inequities in health



Reducing Inequities Address Place-Linked Determinants of Health

- Enrich the quality of <u>neighborhood</u> environments
- Increase <u>economic development</u> in poor areas
- Improve <u>housing quality</u> and the <u>safety of neighborhood</u> environments



Communities of Opportunity

- Invest in early Childhood
- Reduce Childhood Poverty
- Enhance Income and Employment Opportunities for Youth and Adults
- Improve Neighborhood and Housing Conditions



- Enhance economic opportunities to build strong families/reduce disparities in marriage
- Raise Awareness levels of Racial Inequities and Build Political Will to Address them

David R Williams & Lisa Cooper, Int J Environmental Res & Public Health, 2019

Carolina Abecedarian Project (ABC)

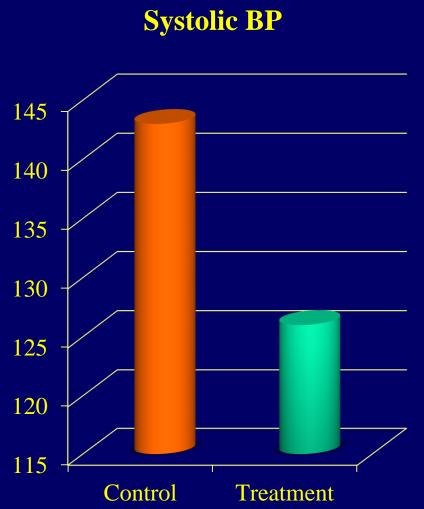
- 1972-77, economically disadvantaged children, birth to age 5, randomized to an early childhood program
- 80% of children Black



- Program offered a safe and nurturing environment, good nutrition and pediatric care
- At age 21, fewer symptoms of depression, lower marijuana use, more active lifestyle, and better educational & vocational assets
- In mid-30's, lower levels of risk factors for CVD & metabolic disease. Effects stronger for males

Carolina Abecedarian Project (ABC)

- Example: systolic BP 143 mm Hg in male controls vs. 126mm Hg in the treatment group
- One in 4 males in control group met criteria for metabolic syndrome compared to none in the treatment group
- Lower BMI at zero to 5 yrs equals a lower BMI in their 30s



Campbell et al. AJPH, 2008; Campbell et al, Science, 2014

Communities of Opportunity

Improve Neighborhood and Housing Conditions

Moving to Opportunity

- The Moving to Opportunity Program randomized families with children in high poverty neighborhoods to move to less poor neighborhoods.
- 10 to 15 years later, movers had lower levels of obesity, severe obesity & diabetes risk (HbA1c)



Unsplash.com

A Striking Example of Neighborhood Transformation:

Atlanta's East Lake, district



purposebuiltcommunitie.org

Implementing the Purpose Built Model



East Lake Meadows - 1995

<u>Safety</u>

- 18x national crime rate
- 90% of families victims of a felony each year
- \$35 million a year drug trade

Housing

- 100% public housing
- 1400 residents in 650 apartments
- 40% of units unlivable

Employment

- 13% employment
- 59% of adults on welfare
- Median income of \sim \$4,500

Education

- One of lowest performing schools in Georgia
- 5% of 5th graders meet state math standards
- 30% graduation rate

Villages of East Lake - Present

<u>Safety</u>

- 73% reduction in crime
- 90% lower violent crime

Housing

- High-quality, privately managed housing
- Mixed-income (50% public housing, 50% market rate)
- 1400 residents in 542 apartments

Employment

- 75% employment in public housing, remainder in job training, elderly or disabled
- Median income of ~ \$15k in public housing households

Education

- ~ 1500 in Pre-K through 10^{th}
- 98% meet or exceed state standards
- A top performing school in Atlanta and the state

Principles of Purpose Built Communities

- Address all challenges faced by poor communities simultaneously
- (work across silos of education, housing, public safety, child care, employment, and nutrition)
- Comprehensive, integrated, place-based solutions
- Independently run, cradle-to-college high-quality education
- Quality mixed-income housing
- Affordability for low-income households
- Services: employment, social services, workforce development, recreation, wellness



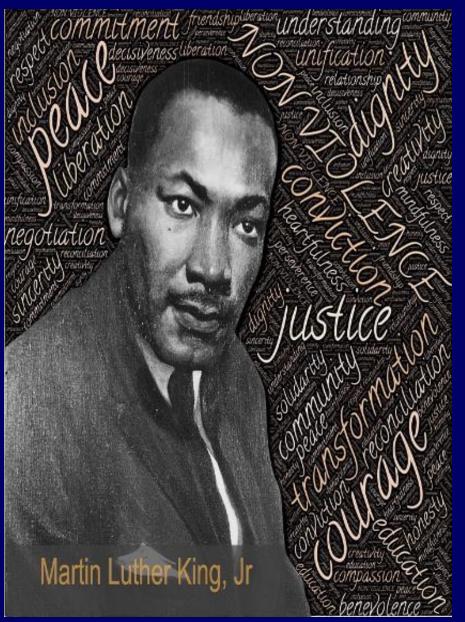
• The creation of communities of opportunity to reverse racial injustice will be beneficial to people of all races • Policies that benefit communities of color will improve conditions for everyone, including many poor and working class whites

Work

MS Online Pictures

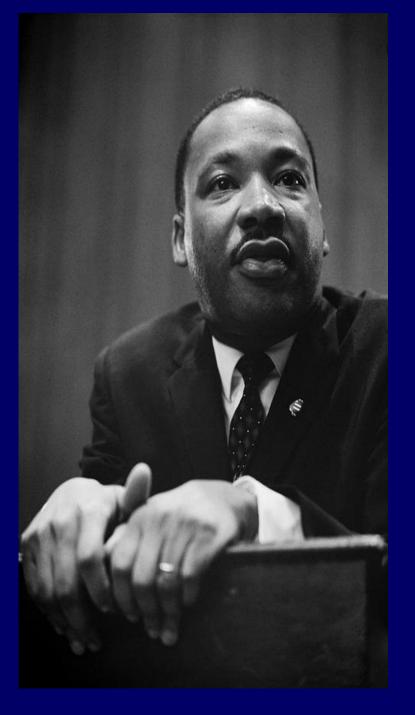
R Godsil & S. Waldeck, The New Tipping Point, Emory Law Journal, 2021.





"It may well be that we will have to repent in this generation. Not merely for the vitriolic words and the violent actions of the bad *people*, but for the *appalling* silence and indifference of the good people...

Martin Luther King



The time has come for us to build a healthier America, where: Every child can develop normally, free from poverty, abuse and neglect





Every child can be ready for academic success when they begin school, and have access to school environments that support academic, emotional, and physical well-being



Photos Source: MS Online Pictures

Everyone can breathe clean air that is free from tobacco and other pollutants



We can build a healthier America where: Everyone has access to and can afford to obtain nutritious food

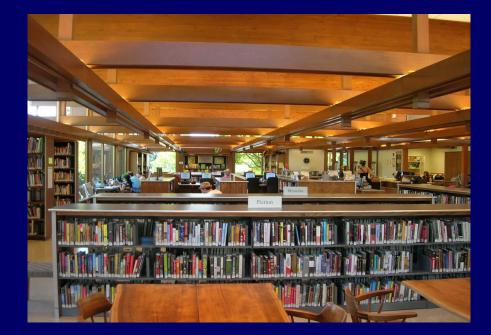


Everyone has the opportunities to be physically active



Everyone can live in well-maintained neighborhoods, that are safe and that have access to appropriate goods and services





Everyone has access to high-quality, affordable housing





Everyone has access to reliable, safe, affordable and accessible means of public or private transportation



Everyone has received the training and skills to create business opportunities or to obtain a decent job that pays a living wage



Everyone can work in healthy occupational environments, free from physical or chemical exposures that are harmful to health



Everyone has access to high-quality medical care





Everyone has equitable opportunities and is hopeful and optimistic about the future



Photos Source: MS Online Pictures



Photo Source: MS Online Pictures

Yes, Together, We Can!