

Racial Disparities in Health: Challenges and Opportunities

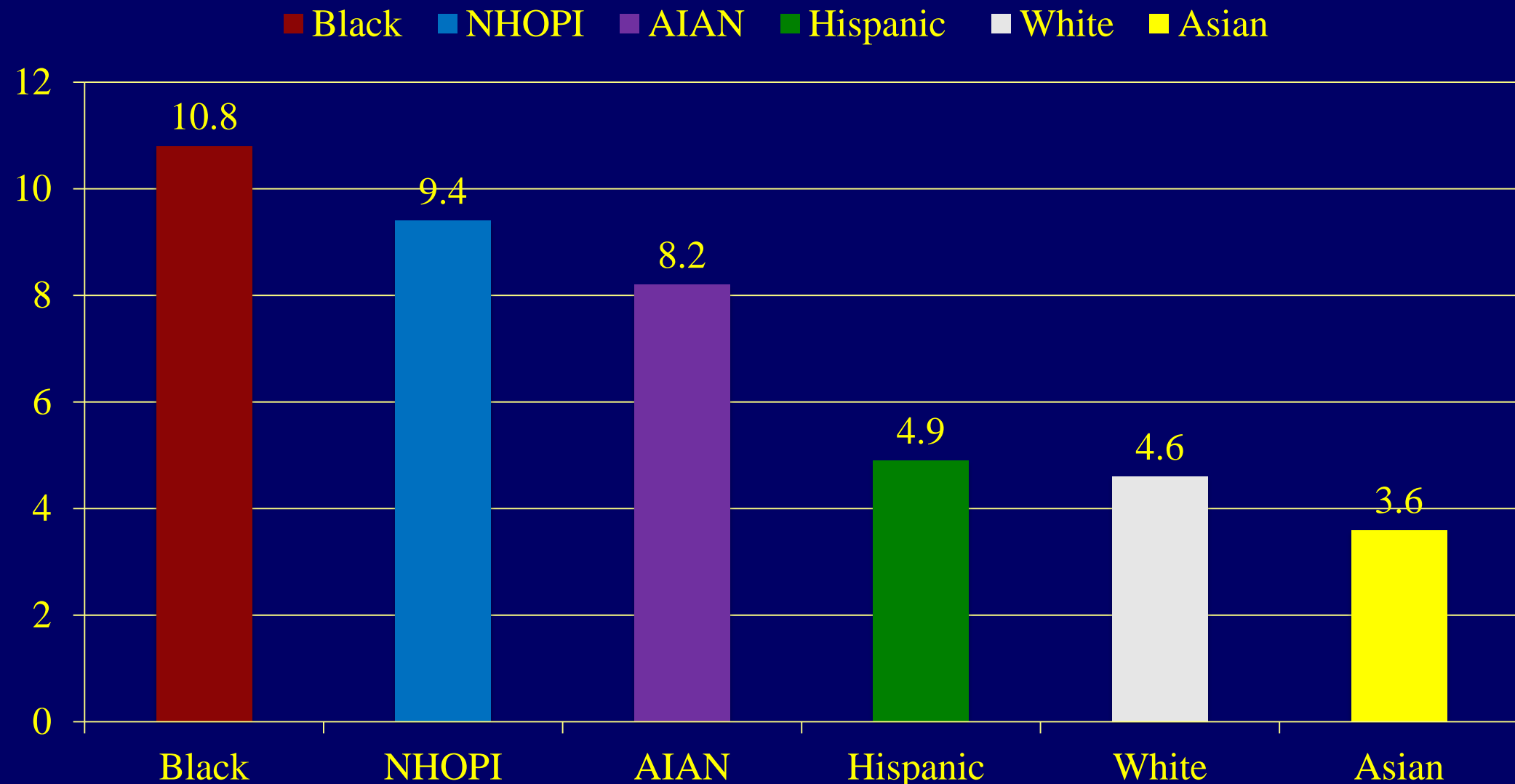
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Florence & Laura Norman Professor of Public Health
Chair, Department of Social and Behavioral Sciences
Professor of African & African American Studies and of
Sociology

Harvard University

There are large Racial/Ethnic Differences in
Health In the U.S. and Around the World

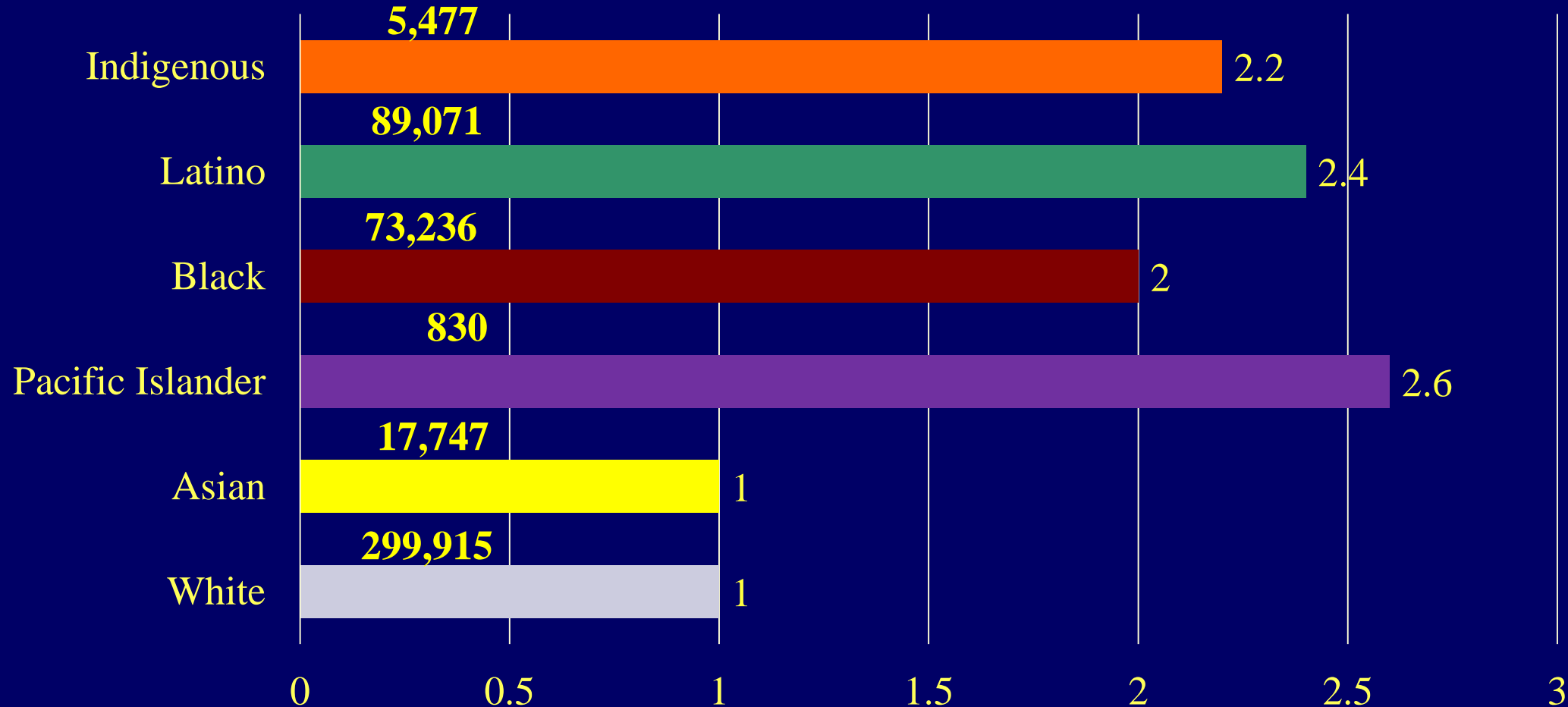
Infant Mortality in the U.S., 2018



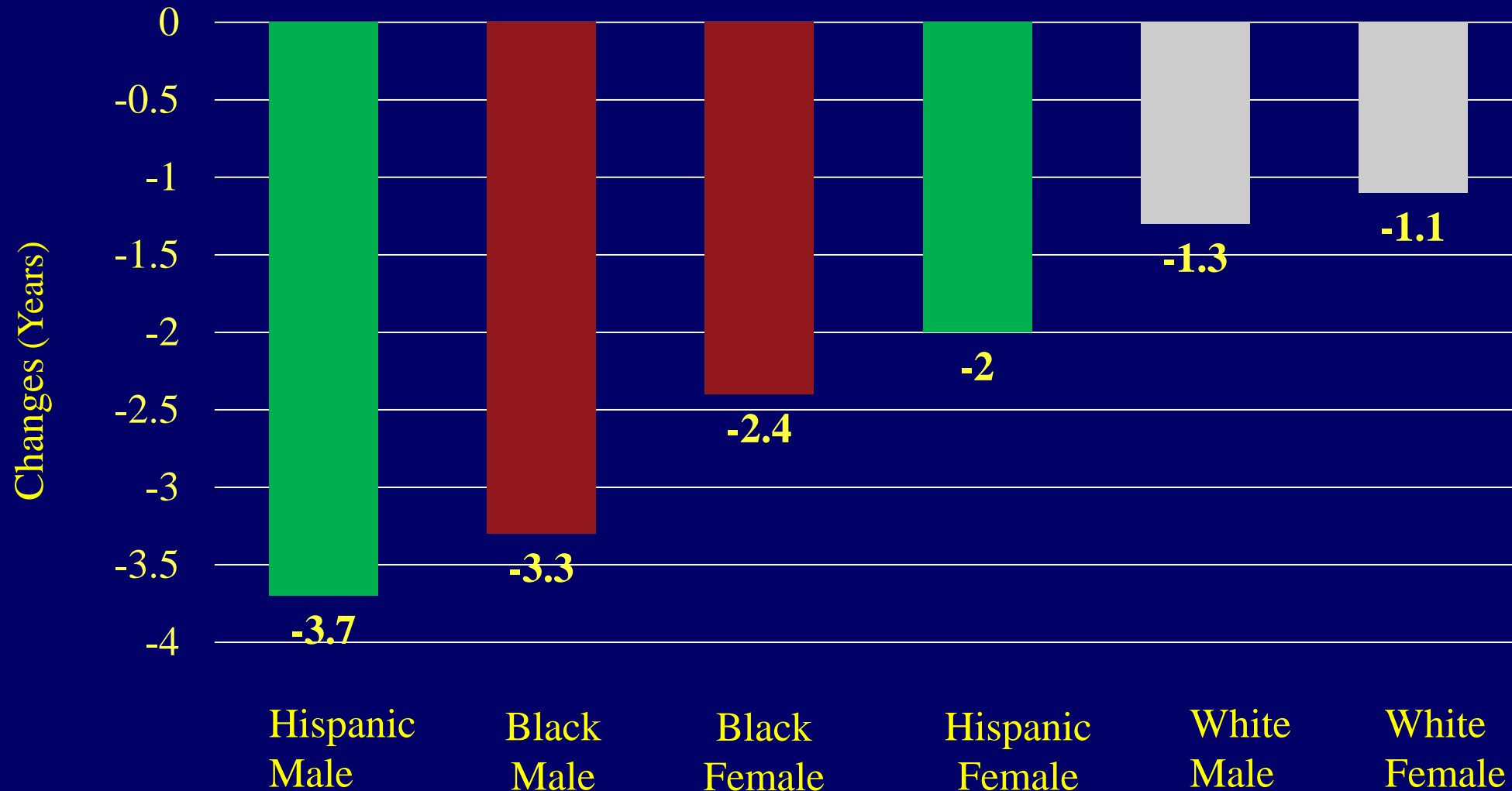
And Covid-19 Has Made These Inequities Much Worse

Death Rates for Other Races Compared to Whites

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

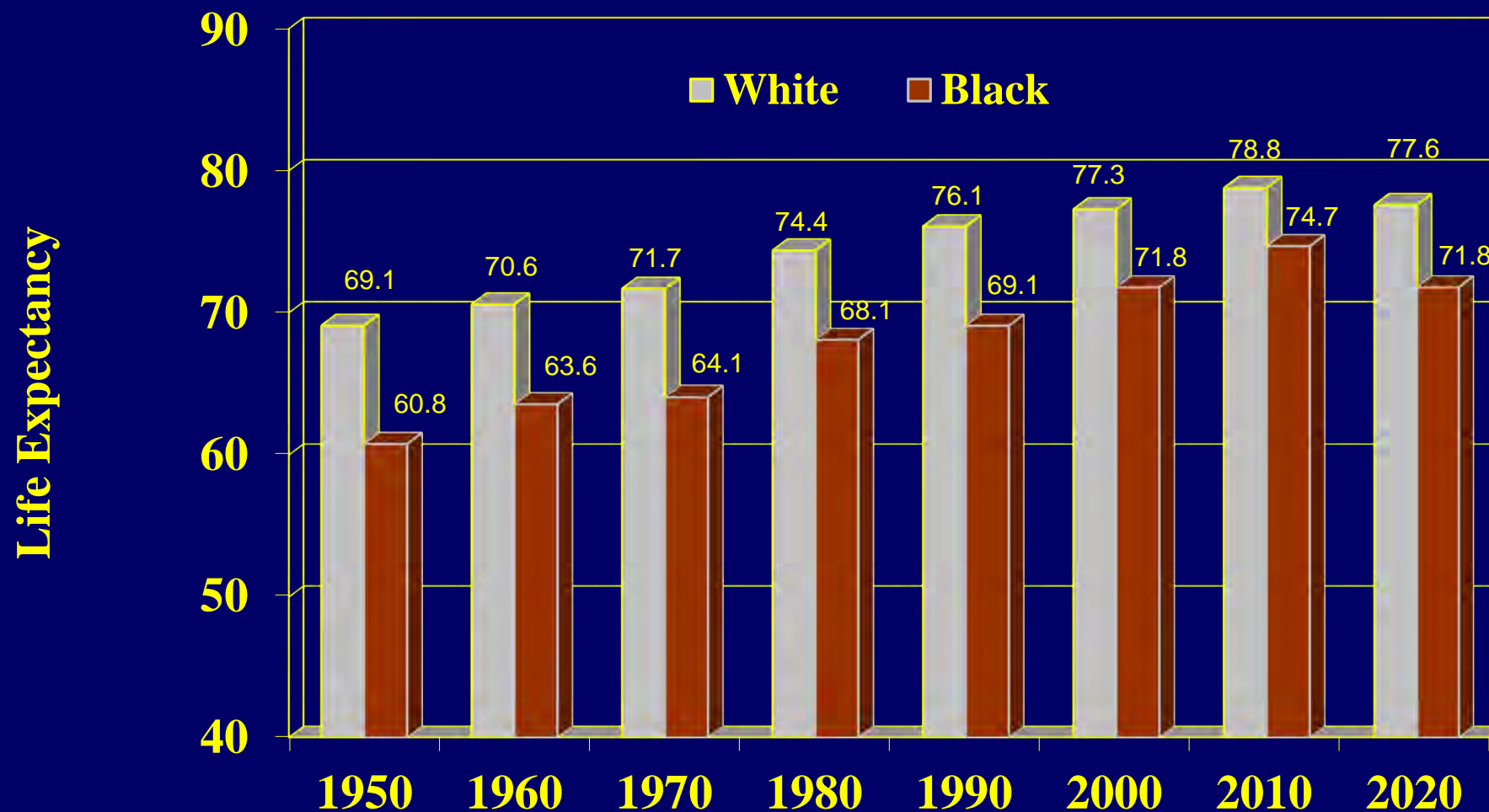


Decline: Life Expectancy at Birth, 2019-2020



Racial Inequities In Health Are
Persistent Over Time

Life Expectancy by Race, 1950-2020



What Drives these Large Racial Inequities
in Health?

Socioeconomic Status

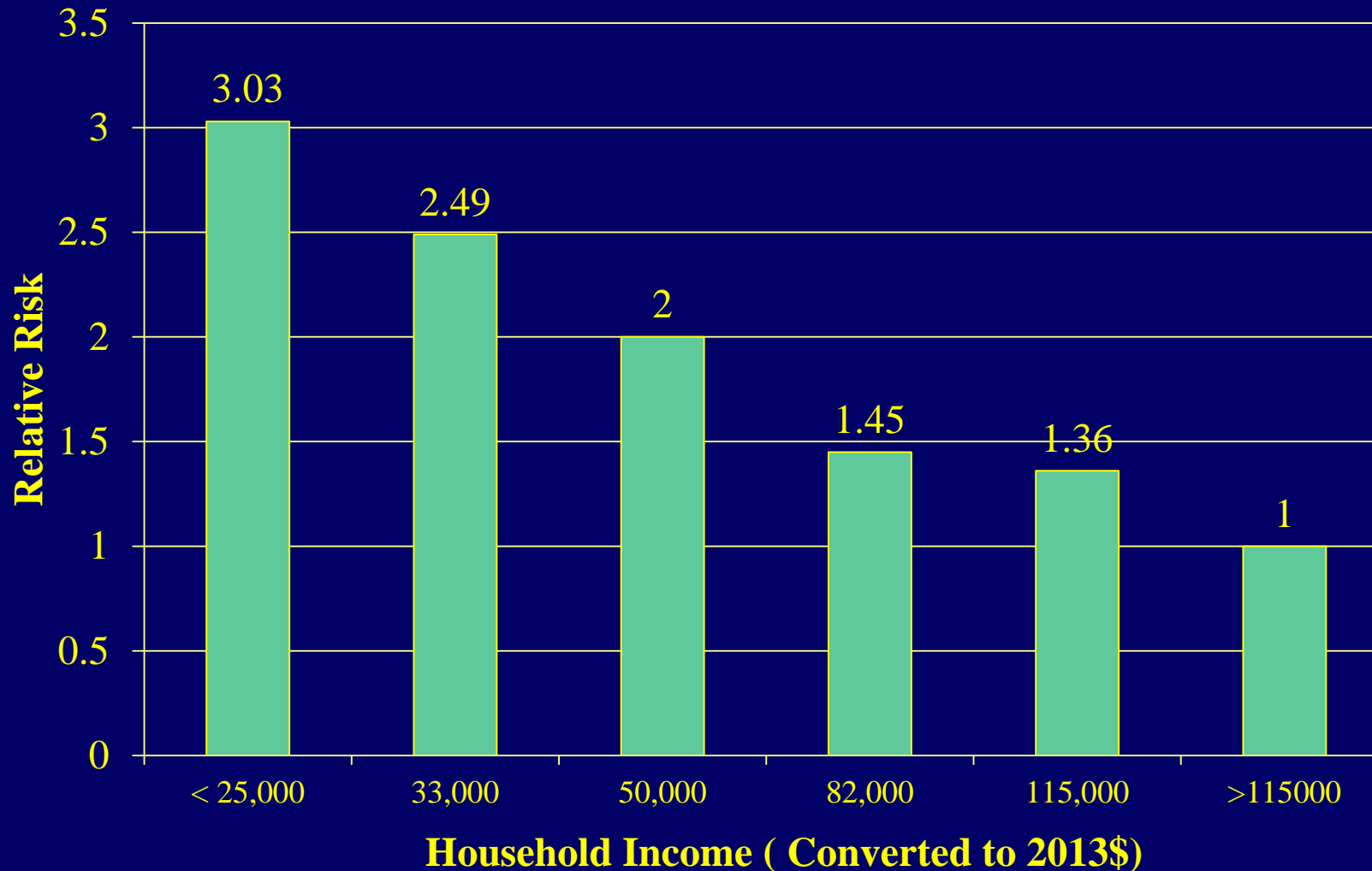
Socioeconomic Status (SES), (whether measured by income, education, occupation, poverty or wealth) is a central determinant of the distribution of valuable resources in society



There are large Inequities in Health by
Socioeconomic Status (SES) in the U.S. and
elsewhere

Relative Risks of All-Cause Mortality by Income

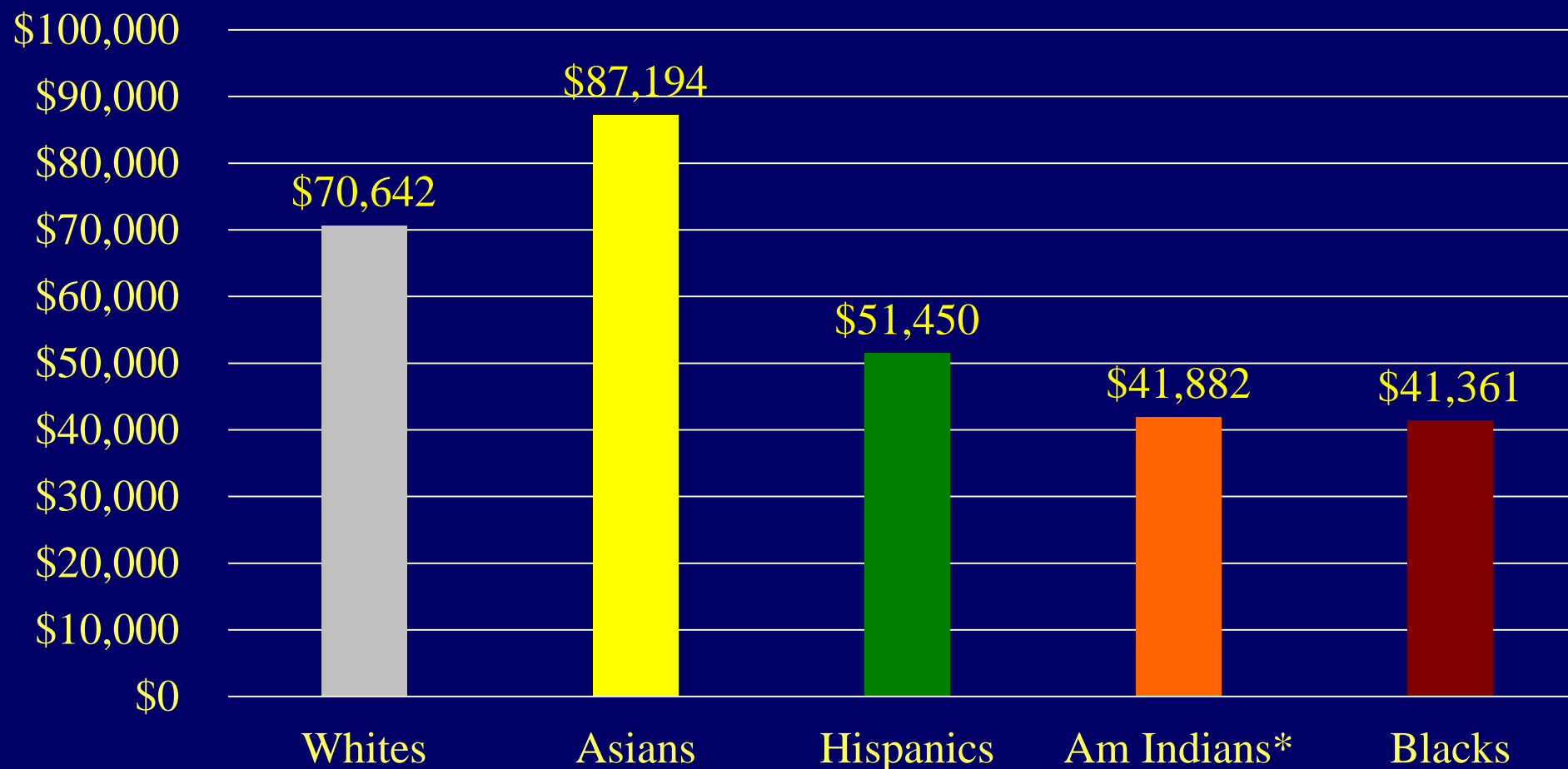
U.S. Panel Study of Income Dynamics



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

Median Household Income and Race, 2018

Racial Differences in Income are Substantial:

1 dollar



Whites

1.23 dollar



Asians

73 cents



Hispanics

59 cents



Am Indians*

59 cents



Blacks

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



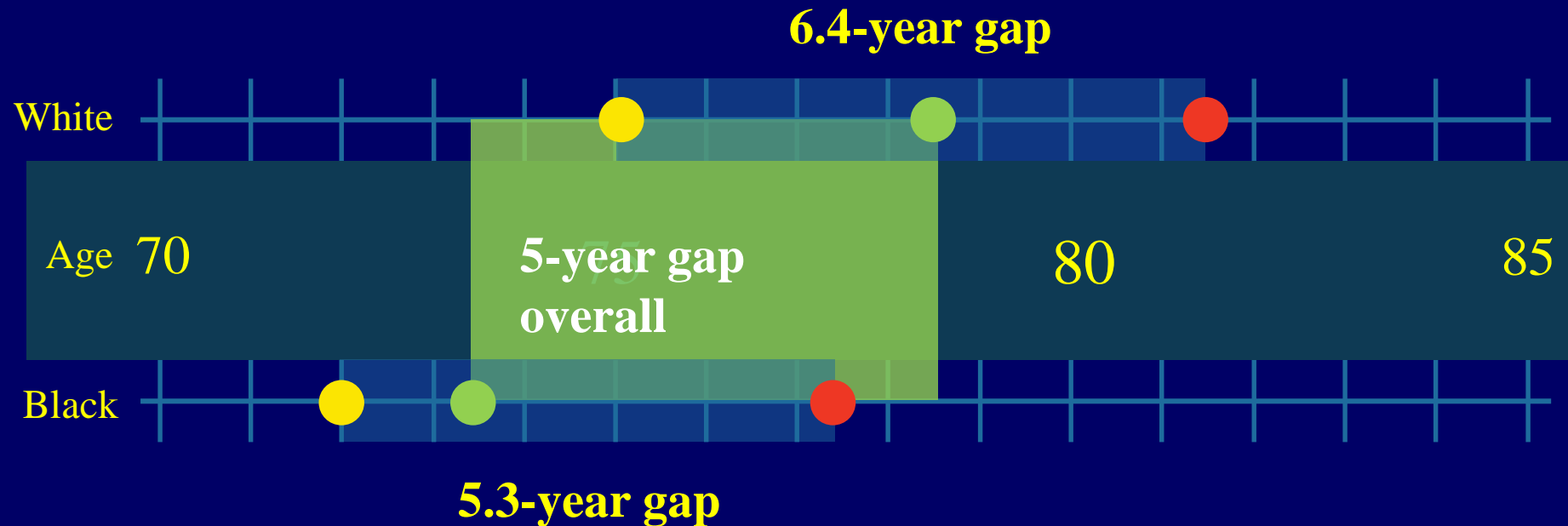
What Low Economic Status Means

We are in the same storm but in different Boats



Added Burden of Race

Life Expectancy at Age 25 Based on Level of Education

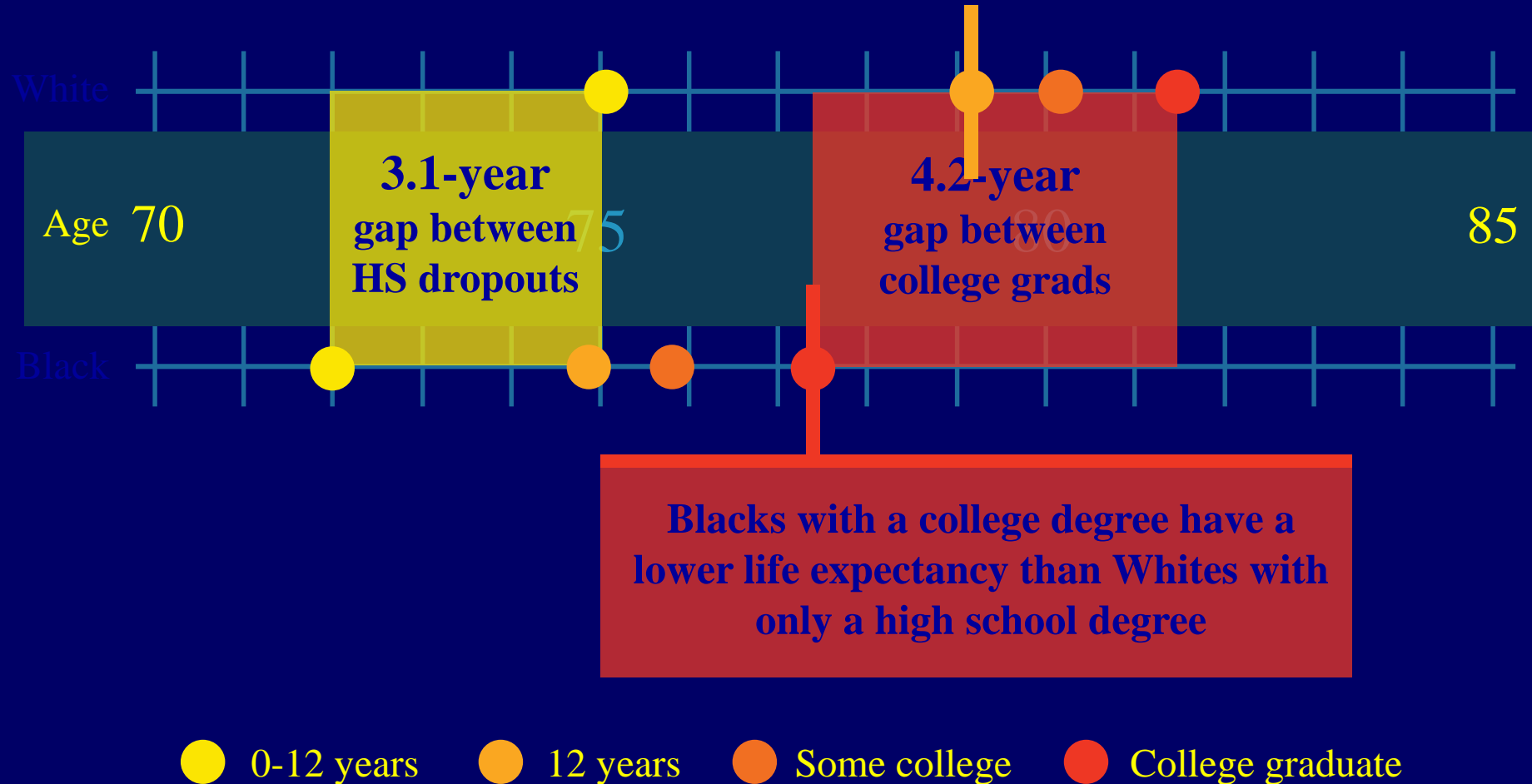


● Overall ● 0-12 years ● College graduate

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

Life Expectancy at Age 25

Race Still Matters



Why Does Race Still Matter After We Take SES into Account?

What does Scientific Research Clearly Say?

*Racism and Racial
Discrimination are alive, well,
pervasive and thriving in America
And Racism has Dramatic
Negative effects on Physical
and Mental Health*



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Racism is a critical missing piece of the puzzle to understand the patterning of racial disparities in health

The House that Racism Built

Racism as a
societal system



Social Forces

- Political
- Legal
- Economic
- Religious
- Cultural
- Historical
Events

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



The House that Racism Built

Racism as a
societal system

Social Forces

- Political
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Events

Structural or
Institutional
Racism (e.g.
Segregation)

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

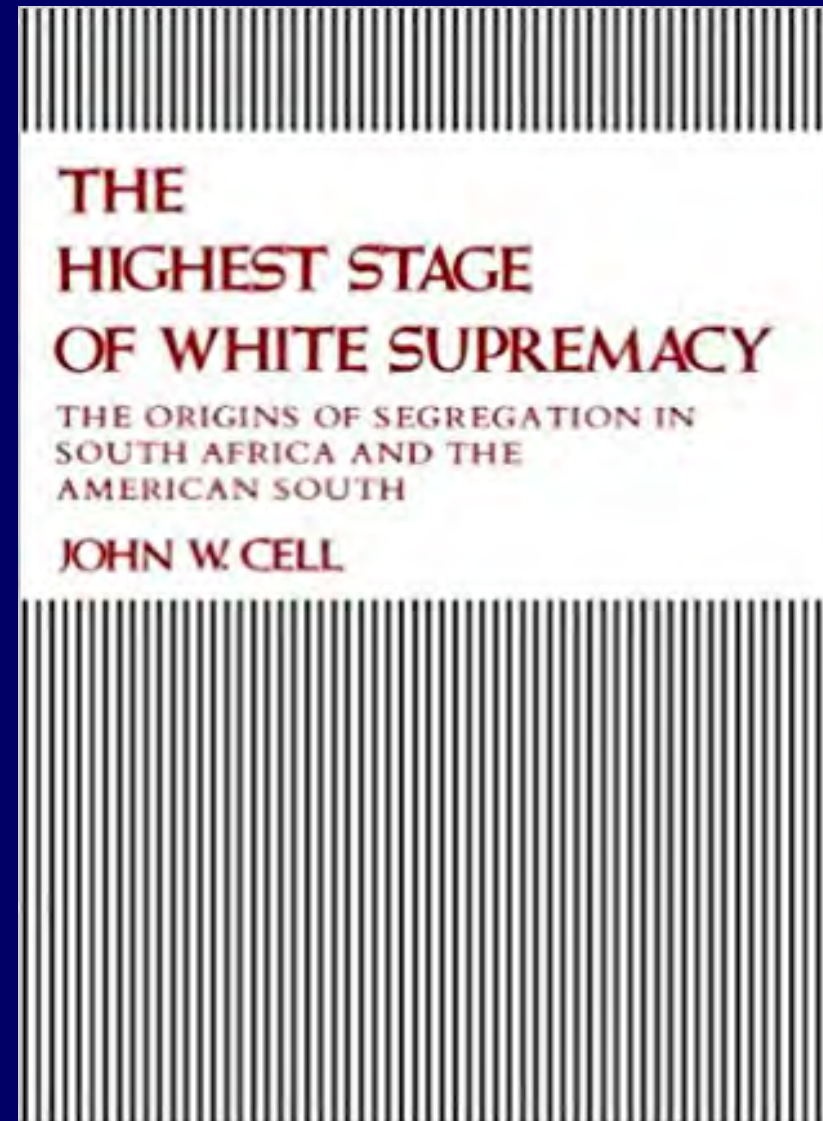
SYNOPSIS

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

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

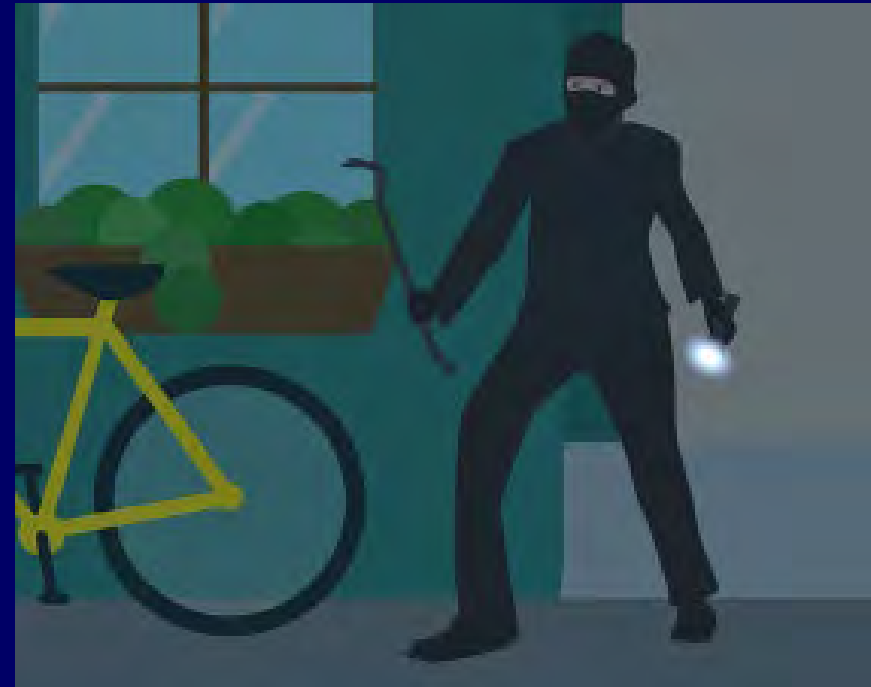


John Cell, 1982

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



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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



William Julius Wilson

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



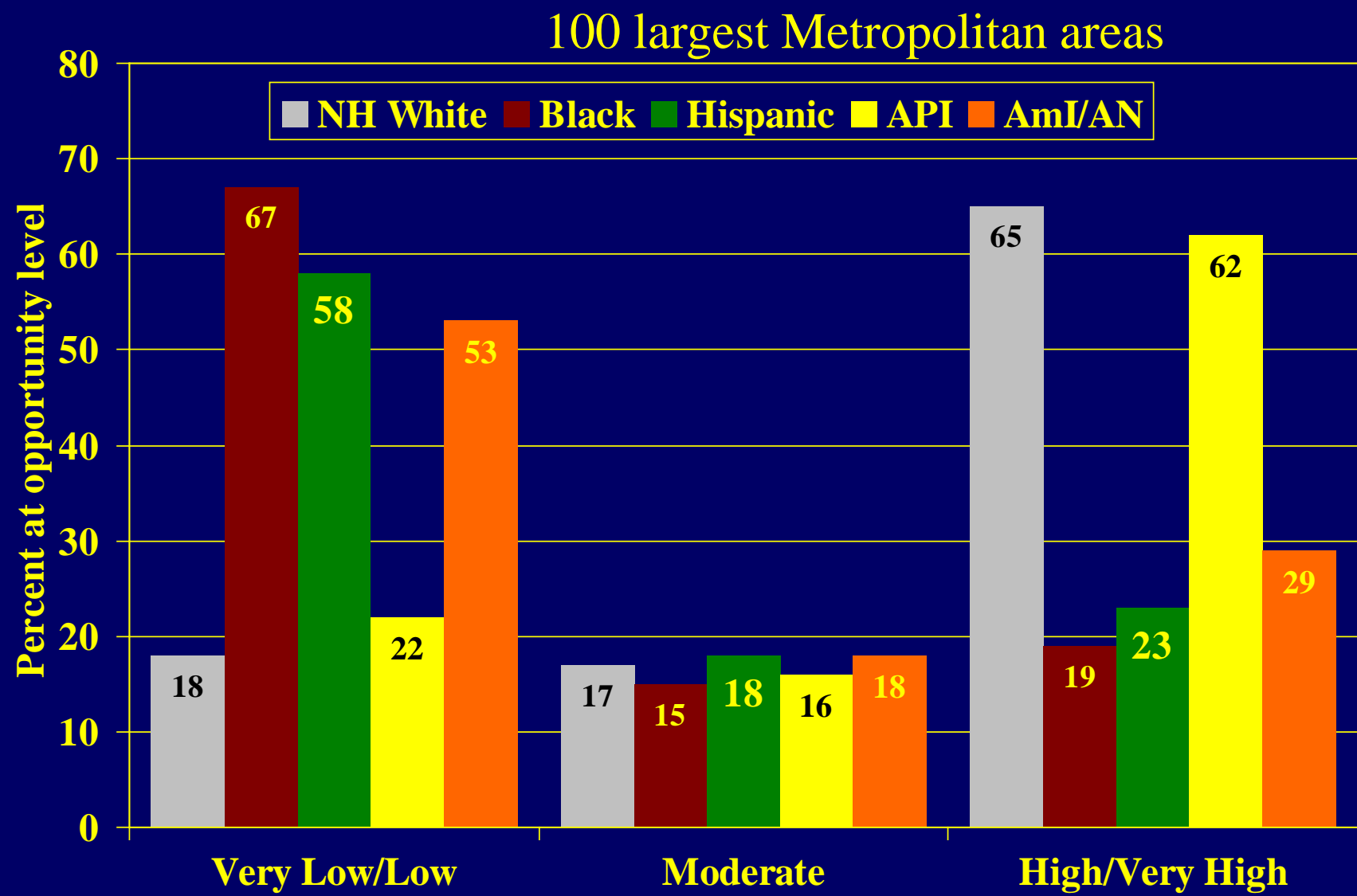
Robert Sampson

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



Dolores Acevedo-Garcia

*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

*Segregation Leads to Higher Exposure
to a Broad Range of Stressors*

Blacks & US-born Latinos Have Higher Levels Than Whites of:

- ...Major Life Events (eg, death of loved ones, unemployment)
- ...Financial Stressors (eg, unable to pay bills, unable to get necessities)
- ...Relationship Stressors (eg, others make too many demands on you)
- ... Neighborhood Stress (eg, home broken into; robbery)



Segregation and Chemical Exposures



Compared to Residents in Low Segregated Areas, those in Segregated Areas,

- have higher rates of being dumped on & poisoned (in their homes, neighborhoods, playgrounds, parks, jobs & schools)
- breathe air that is 3 times more toxic
- breathe in more pollution than they cause
- have almost twice the density of oil and gas wells (but are underrepresented in the oil and gas workforce)
- have more natural gas leaks
- are more likely to live close to 'dirty energy': (coal plants, oil refineries, and petrochemical facilities)
- mothers and their babies have more bad pregnancy outcomes linked to heat and pollution
- have fewer resources to recover from heat waves, poor air quality, flooding & other impacts of climate change



Air Pollution and Educational Outcomes

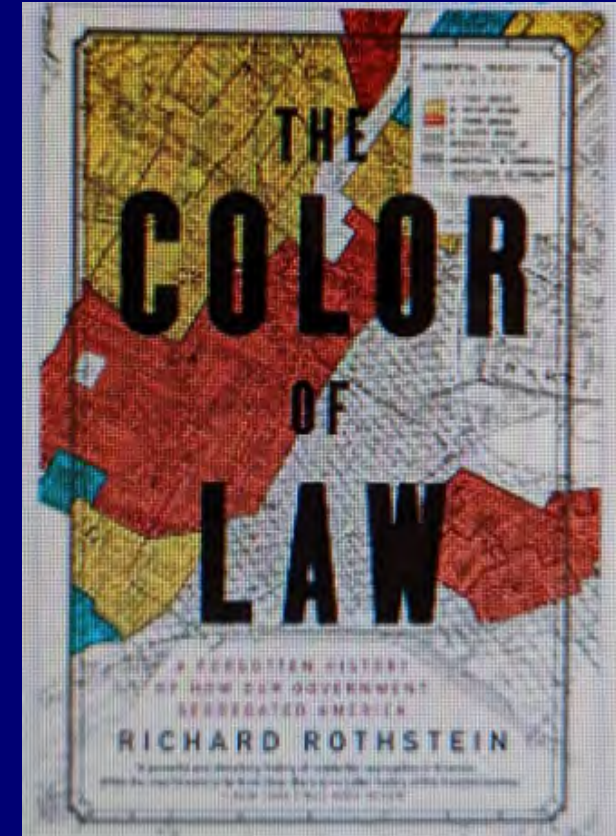
- Study of 6080 elementary school children (K to 6th grade)
- Exposure to air pollution linked to less progress in reading over time
- Average deficit equivalent to 1.5 weeks of learning delay per year
- Air pollution exposure diminishes the efficacy of literacy intervention sessions during the school year



Segregation and Medical Care

Characteristics of Segregated Communities

- Concentration of Black and Brown low-income populations
- Elevated levels of preexisting comorbidities
- Epidemic of poorly controlled chronic diseases
- Shortage of primary care providers
- Severe shortage of specialists
- Reduced ability to transfer patients for specialty care
- Resulting delays in care & receipt of sub-optimal care

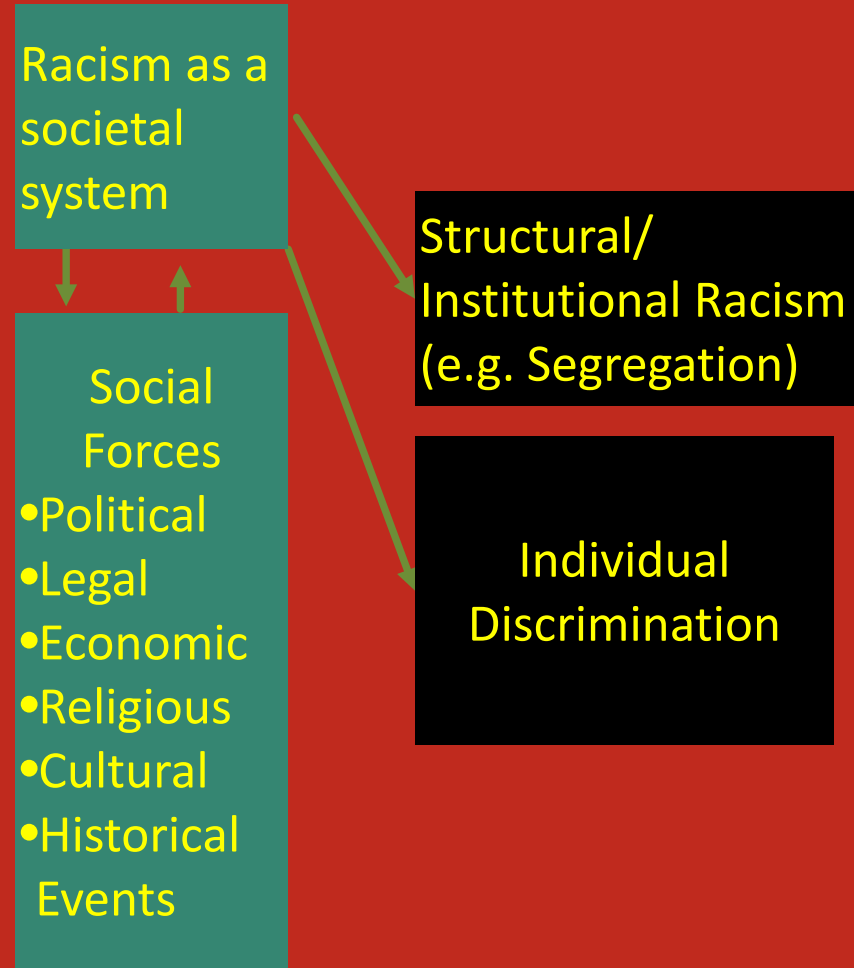


Inequities by Design

- Racial inequities in SES and resources that matter for life & health do not reflect a broken system
 - Instead, they reflect a carefully crafted, dynamic interconnected system, functioning as planned – successfully implementing social policies and practices that are rooted in racism
 - They are not accidents or acts of God
 - Racism has produced a truly “rigged system”
-



The House that Racism Built



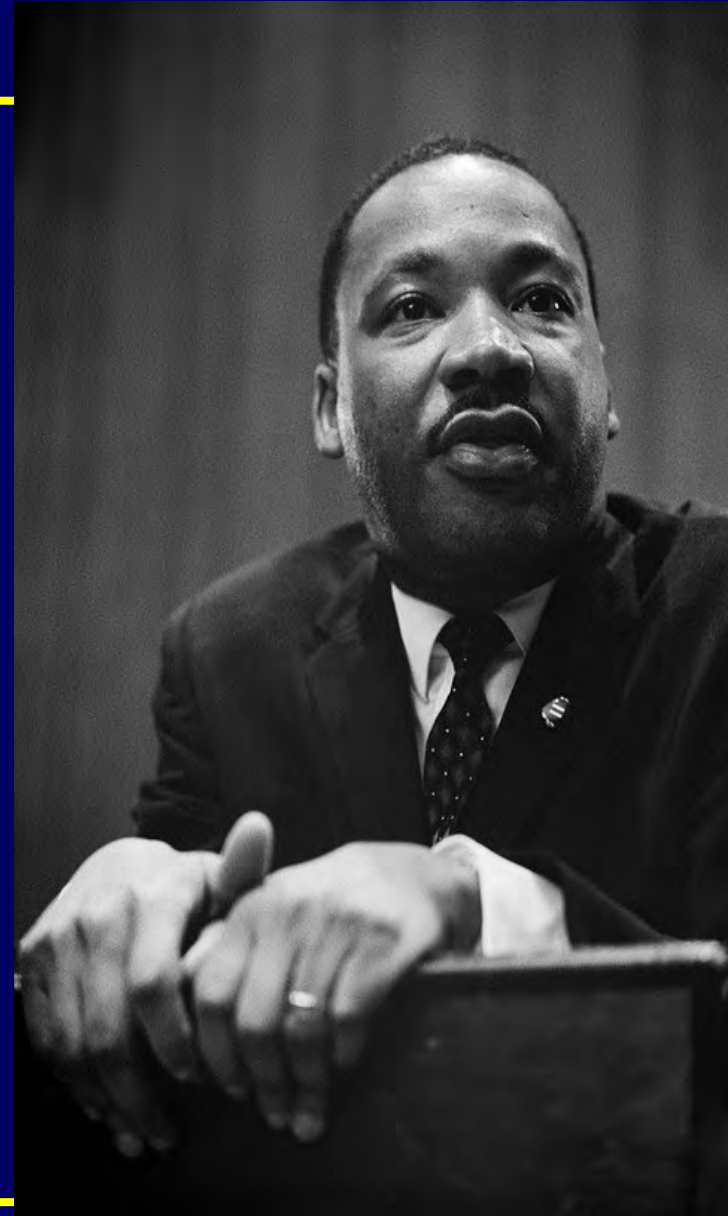
Individual Discrimination

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?

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 anxiety-related sleep difficulties.



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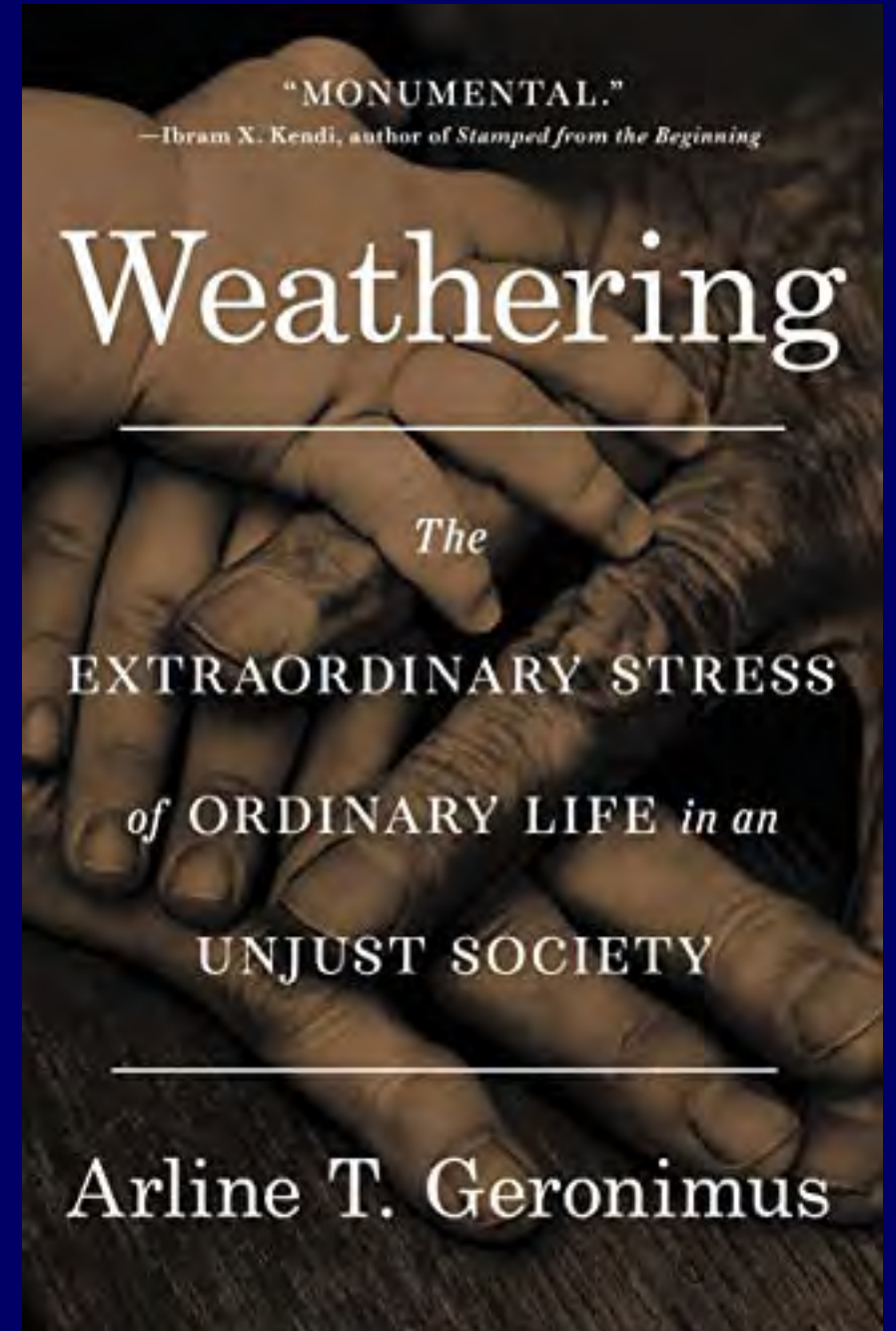
Police Violence and Health

- 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

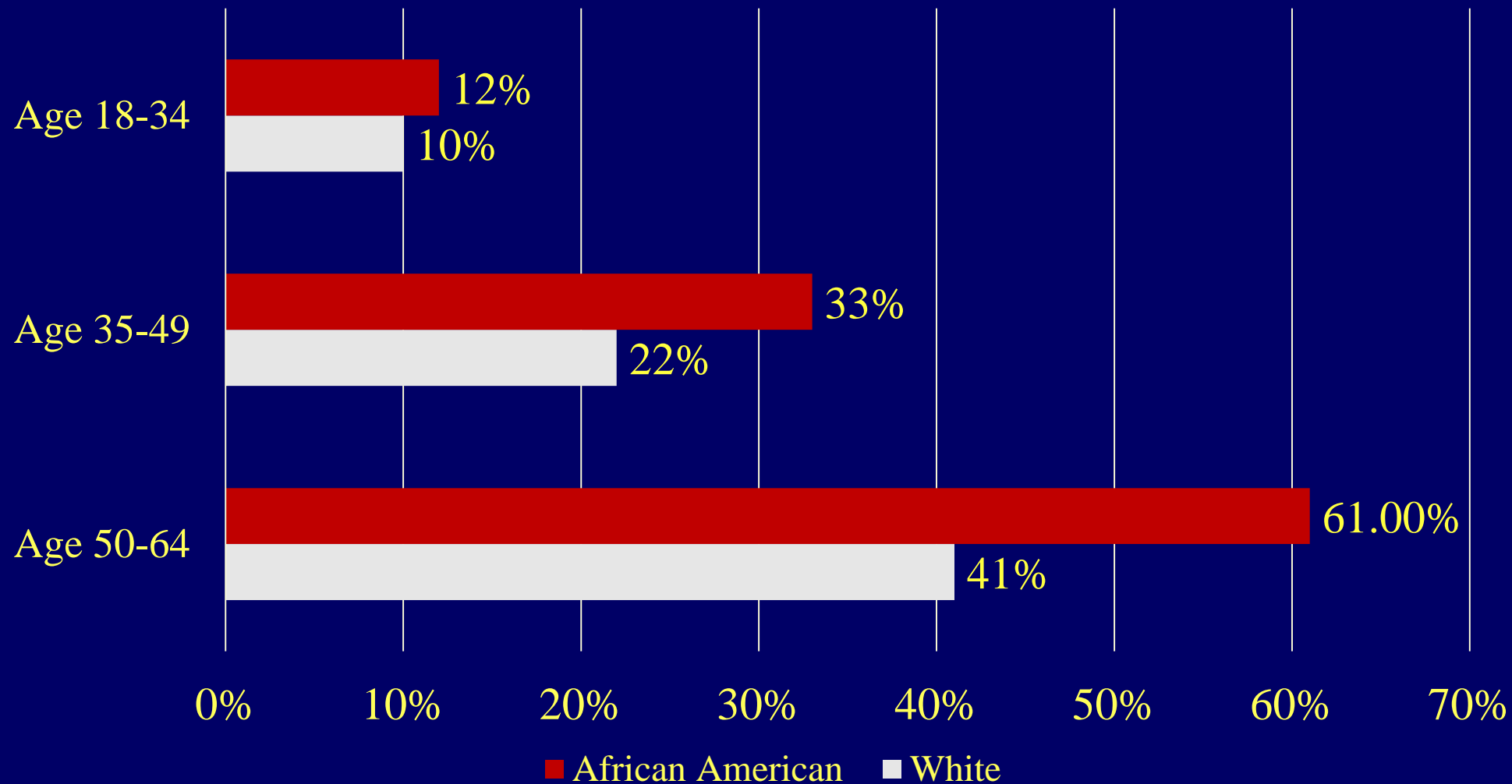


Consequences of the
cumulative exposure to
discrimination and other
stressors:

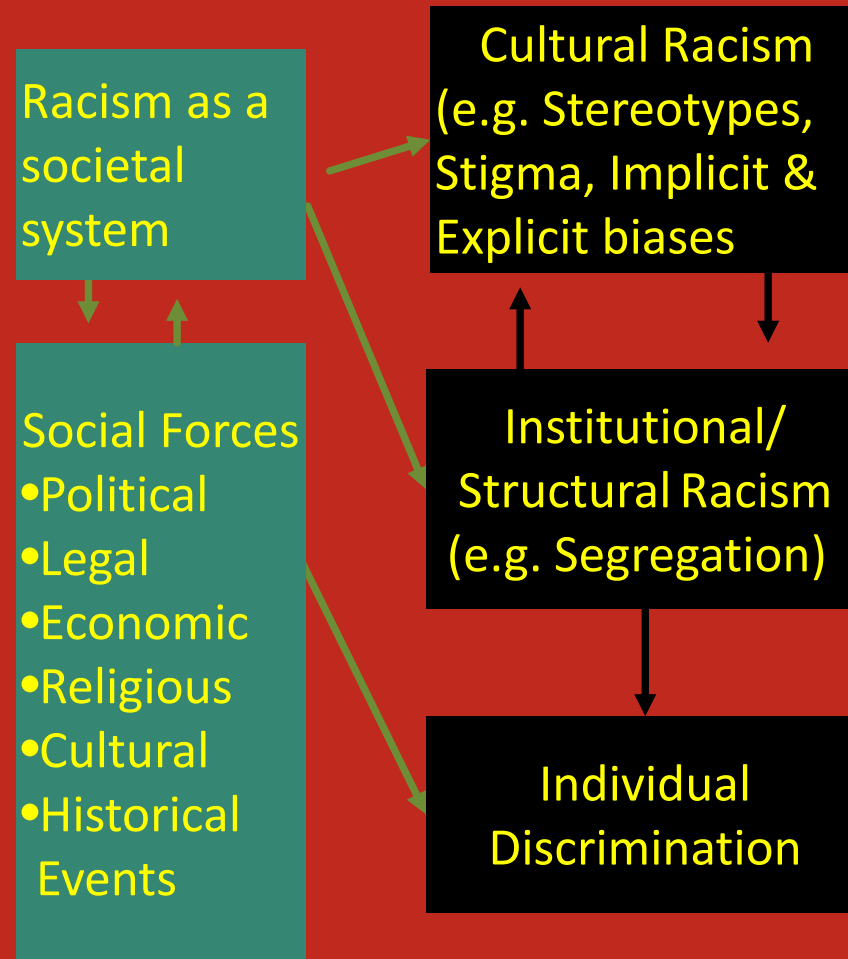
“Accelerated Aging”
“Premature Aging”
Biological “Weathering”
Earlier Onset of Chronic
Disease



Earlier Onset of High Blood Pressure



The House that Racism Built



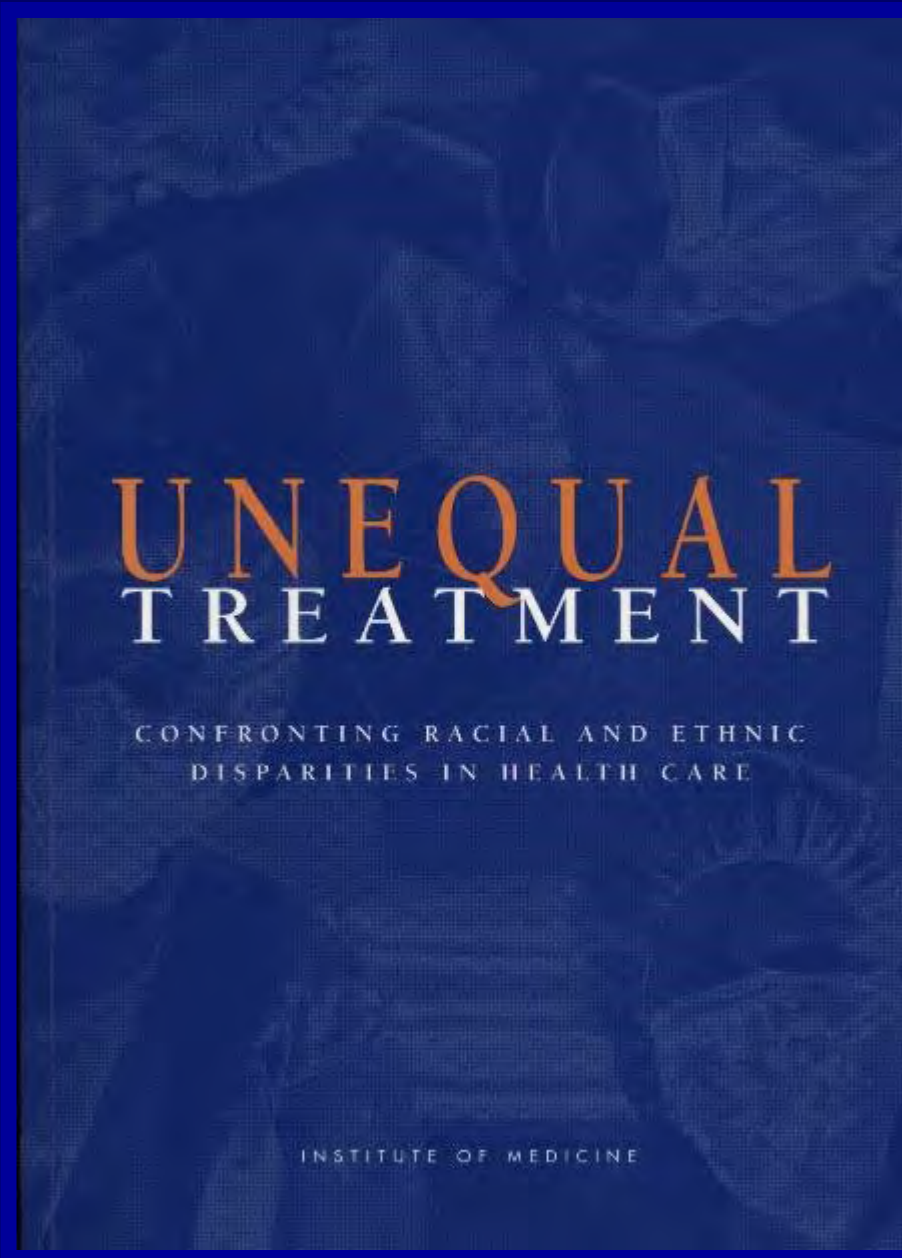
Negative stereotypes about race remain
deeply embedded in our culture

These Stereotypes Trigger Racial
Discrimination that Reduces Access to
Societal Resources



Implicit Bias Exists in Medical Care





Populations of
color receive
poorer quality
medical Care

Recent Studies

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 Brad Greenwood, et al. PNAS, 2020
- Biggest drop in deaths in complex births and in hospitals that deliver more black babies
- No difference between MD race & maternal mortality

Fewer Prescriptions for Cancer Patients

- Study of 318, 549 Medicare Patients
- Older Black and Hispanic patients with advanced cancer are less likely than white patients to get opioid medications for pain in the last weeks of life
- When Black and Hispanic patients received opioids, they tended to receive lower doses
- Black patients were also more likely to undergo urine drug screening
- Black men experienced the greatest inequality for both opioid access and urine drug testing



And What Our Society and most
Institutions are Doing is not
Working

In Isolation, Diversity Training is
Not Effective

Our Diversity Training Programs Don't Work

- Research studies reveal little positive effects of diversity training programs on the careers of women and minorities
- In a review of over 900 studies of antibias interventions, Paluck & Green found little evidence that diversity training reduces bias
- Yes, training can increase knowledge about diversity and attitudes toward diversity, but to the extent that it triggers positive changes, they are small and short-term



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Limits of Implicit Bias Training

Before and after scores on the IAT test from over 400 studies found:

- Observed effects of the IAT on reducing implicit bias were small
- There were even weaker effects on reducing explicit bias
- Other evidence also suggests that some participants learn to game the test



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Reducing Racial Bias Among Health Care Providers: Lessons from Social-Cognitive Psychology

Diana Burgess, PhD^{1,2}, Michelle van Ryn, PhD, MPH^{1,3}, John Dovidio, PhD⁴, and Somnath Saha, MD, MPH⁵

Multiple Prejudice-reducing Strategies:

- Stereotype replacement
- Counter-stereotype imaging
- Individuation
- Perspective taking
- Increasing interracial contact

The Devine Solution

- Implicit biases viewed as deeply engrained habits that can be replaced by learning multiple new prejudice-reducing strategies
- Non-black adults were motivated to:
 - ✓ Increase their awareness of bias against blacks
 - ✓ Increase their concerns about the effects of bias
 - ✓ Implement multiple strategies
 - ✓ These were effective in producing substantial reductions in bias that remained evident three months later



Model Program

- Patricia Devine's Model
- Extensive 12-week curriculum
- Homework exercises to complete
- Observed effects were stronger for persons concerned about discrimination
- Effects stronger for those who completed the homework exercises



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What Else Can We Do?

Strategy Number 1

Building More Health into the Delivery of Medical Care



Building More Health into the Delivery of Medical Care

Ensuring Access to Care for All

Building More Health into the Delivery of Medical Care

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



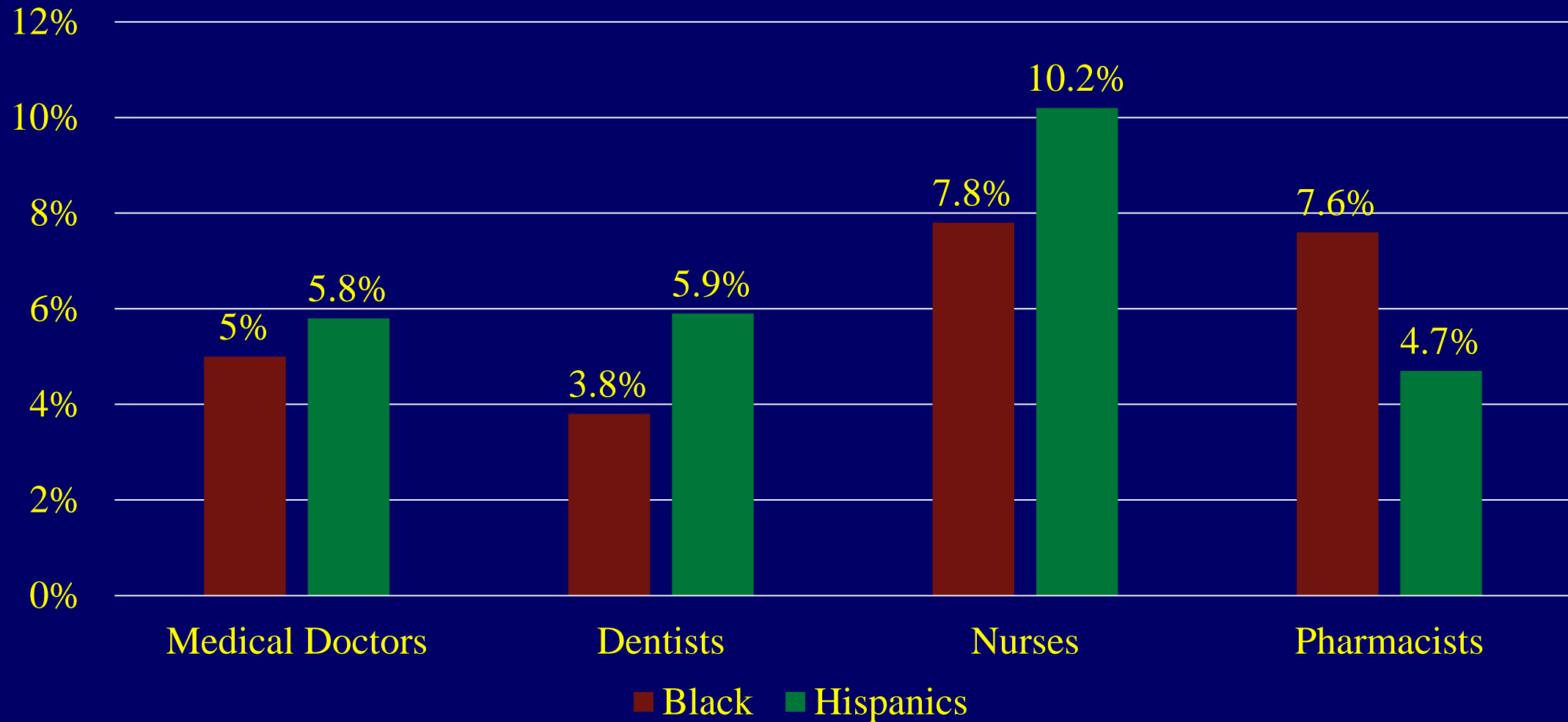
Black Doctors and Black Health

Men who saw a Black Doctor

- ✓ 29% more likely to talk about other health problems
- ✓ 47% more likely to do screening for diabetes
- ✓ 56% more likely to get a flu vaccine
- ✓ 72% more likely to do screening for cholesterol



Huge Shortage of URMs in the Health Professions



Provider Cultural Competence

- Study of 437 people living with HIV/AIDS and 45 providers
- Created 20-item scale, self-rated cultural competence
- Racial disparities were found in the receipt of ARVs, self-efficacy and viral suppression among patients of low cultural competence providers
- Minority patients whose providers were high (vs low) on cultural competence, more likely to be on ARVs, have high self-efficacy and report complete ARV adherence
- When cultural competence was high, no racial disparities



Cultural Competence Scale (Selected)

- Family & friends as important to health as doctors
- Social history contributes to how I care for patients
- I am familiar with lay beliefs my patients have
- I ask my patients about alternative therapies they use
- I find out what patients think is cause of their illness
- I involve patients in decisions about their health care

Building More Health into the Delivery of Medical Care

Provide Care that Addresses the Social context

Care that Addresses the Social context



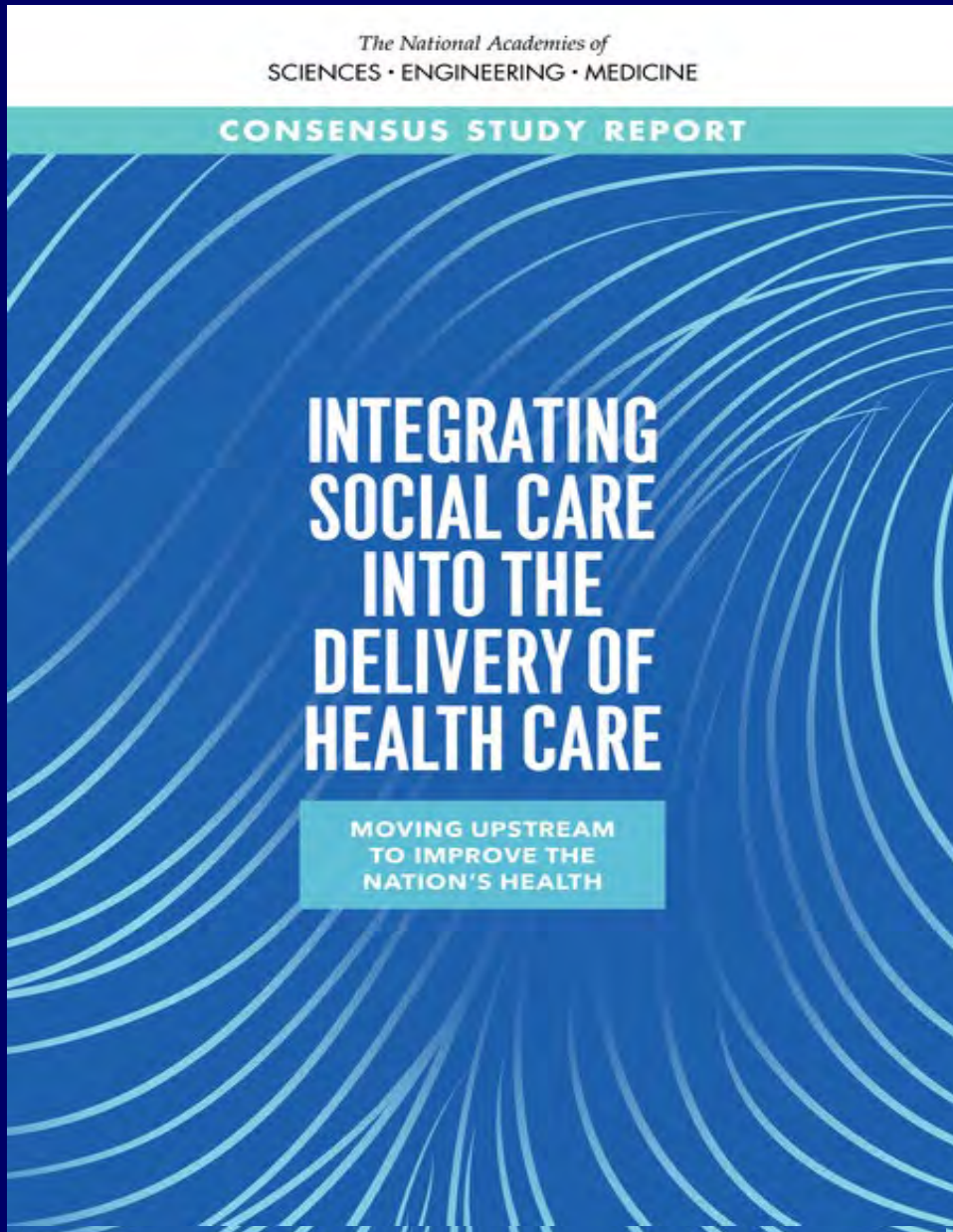
*Why treat illness
and send people
back to live in the
same conditions
that made them sick
in the first place?*

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



Recent Report: National Academy of Medicine



Many opportunities for health care systems and professionals to address the social needs of patients

Strategy Number 2

SUPPORT

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



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

Strategy Number 3

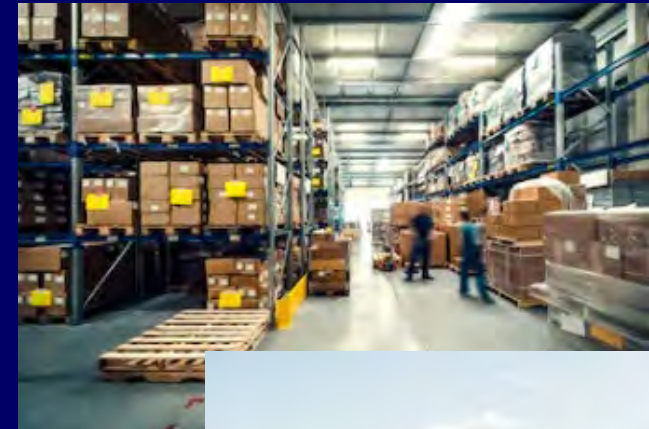
Create Communities of Opportunity to minimize, neutralize and dismantle the systems of racism that create inequities in health



Reducing Inequities

Address Place-Linked Determinants of Health

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



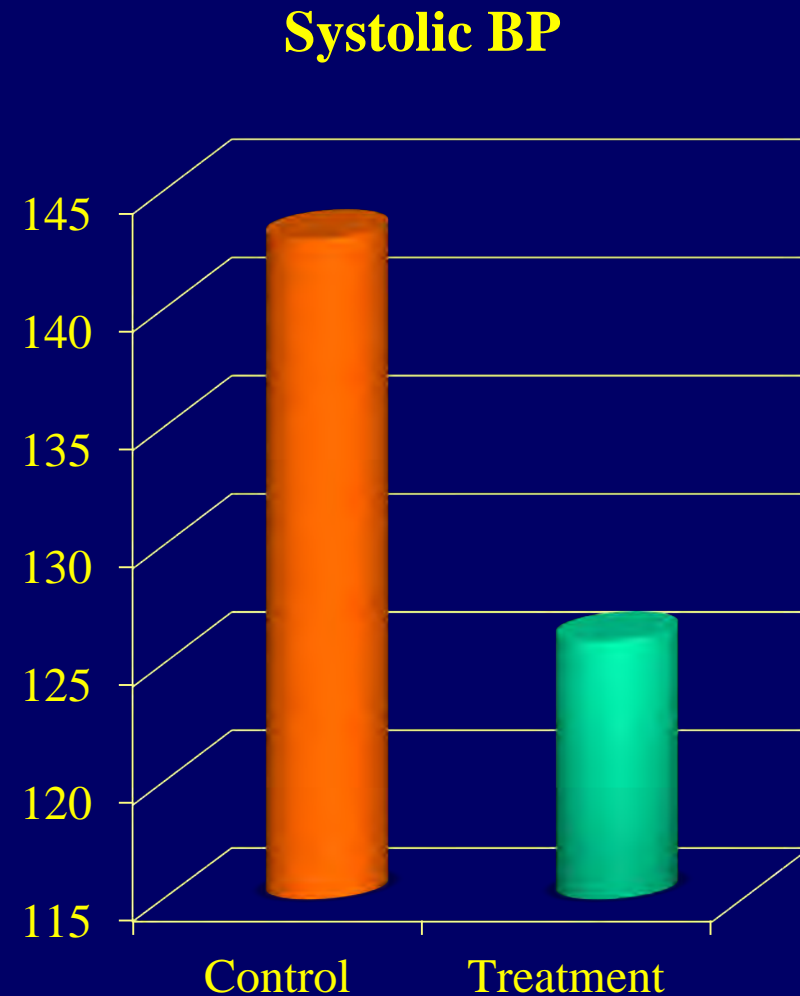
Carolina Abecedarian Project (ABC)

- 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



Communities of Opportunity

Improve Neighborhood and Housing
Conditions

A Striking Example
of Neighborhood
Transformation:

Atlanta's East Lake,
district



purposebuiltcommunities.org

Implementing the Purpose Built Model



Strong local leadership. A proven national model. Best in class partners.

East Lake Meadows - 1995

Safety

- 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 ~\$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

Safety

- 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 10th
- 98% meet or exceed state standards
- A top performing school in Atlanta and the state

Keys to Purpose Built Communities Model

- Mixed-Income Housing
- Cradle-to-College High Quality Education, with local control
- Community Wellness & Resources
- Economic Vitality
- Defined Neighborhood
- A Community Quarterback



Purpose Built Communities provides free technical assistance to any community that wants to replicate their model

An Innovative Initiative from a Healthcare Institution

Rush University Medical Center Equity Framework

Example of a Comprehensive
Approach to Reducing Inequities in
Socioeconomic Status and Health
by an Academic Medical Center



Keys to Rush University Med Center Equity Framework

- Rush leaders become aware of 14-16 year gaps in life expectancy (LE) between neighborhoods in service area
- Low LE neighborhoods: racially segregated with concentrated poverty
- Change mission from exclusive focus on health care delivery to improving health of community
- Recruited the 5 other health systems to join
- Created listening sessions to hear from community, and committed to shared decision-making with community
- Rush directs its business enterprise to promote community wealth-building and economic vitality



Reduce Life Expectancy Gap by 50% by 2030



Rush Anchor Mission Initiative: Local Economic Impact

Invest locally
and develop
talent



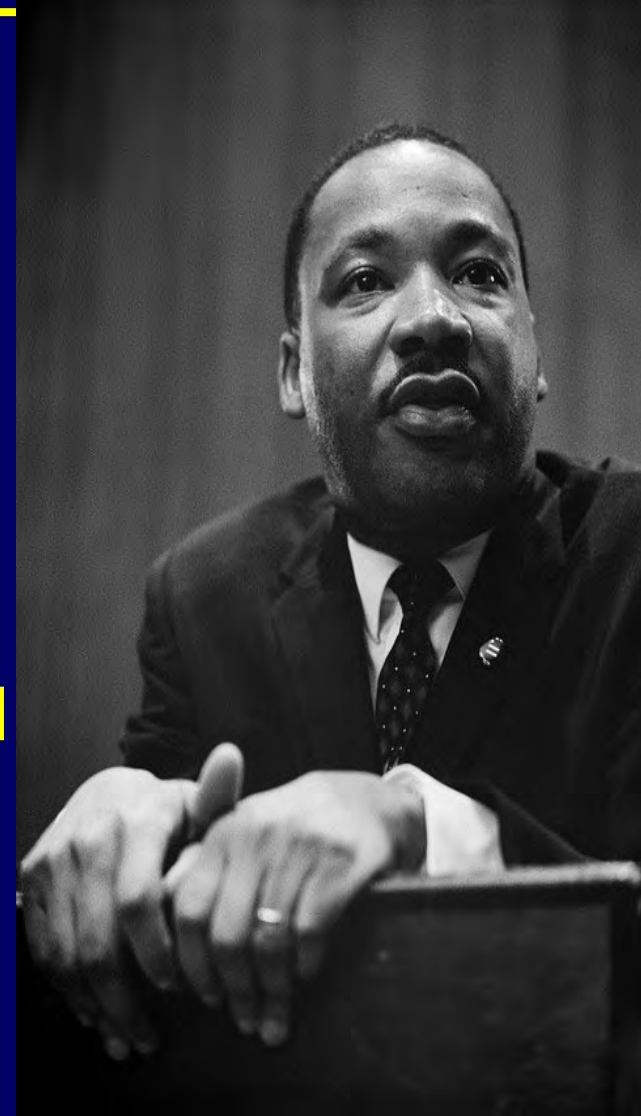
- Employment Preference Initiative
- Using local labor for capital projects
- Career ladder development
- Apprenticeship Initiatives
- Local purchasing program
- Impact investing in local community
- Financial education locally
- Incentivize employee volunteering
- Leveraging employee expertise (e.g., teaching skills class) in local communities

What Is Holding Us Back?

What are the Barriers we have to Address?

Self-Deception on a Large Scale

“The majority of white Americans consider themselves sincerely committed to justice for the Negro. They believe that American Society is essentially hospitable to fair play and to steady growth toward a middle-class utopia, embodying racial harmony. But unfortunately, this is a fantasy of self-deception and comfortable vanity. Overwhelmingly, America is still struggling with irresolution and contradictions. It has been sincere and even ardent in welcoming some change. But too quickly apathy and disinterest rise to the surface when the next logical steps are to be taken.”



Martin Luther King, Where Do We Go From Here: Chaos or Community?, 1967

3 Challenges linked to Communication

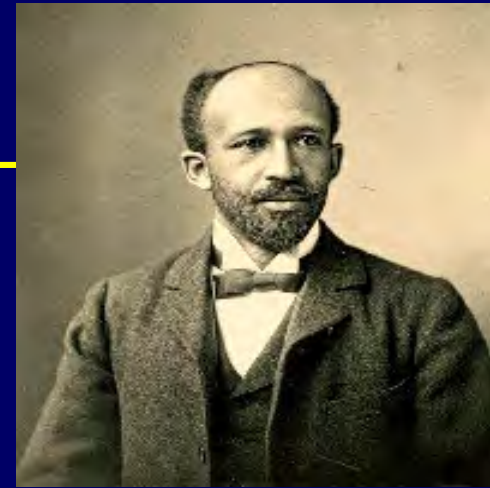
- We need to raise awareness levels of the challenges (health and social) faced by disadvantaged racial/ethnic populations
 - We need to build the science base that will guide us in developing the political will to address racial and other social inequities in health
 - We need to build empathy, that is, identify how to tell the story of the challenges of the disadvantaged in ways that resonates with the public
-



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The Need to Build Empathy

The Real Challenge



An Empathy Gap?

“The most difficult social problem in the matter of Negro health is the peculiar attitude of the nation toward the well-being of the race. There have... been few other cases in the history of civilized peoples where human suffering has been viewed with such peculiar indifference”

W.E. B. Du Bois, 1899 [1967] p.163

Recent Review on Empathy Gap

- Studies of empathic responses in brain activity when viewing suffering of persons of one's own race vs. members of another race
- Racial ingroup bias consistently found in brain imagery studies in Europe, Africa, Asia, and the U.S.
- Stronger empathic neural response to the pain of same race versus other race individuals, using a variety of stimuli
- This racial bias in neural responses more consistent than self-reports of empathy



Lack of Empathy, Evident Early in Life

- Mainly white 5-, 7- and 10-year olds rate pain of black and white children
- No racial bias at age 5
- Children show weak bias (blacks feel less pain) at age 7
- At age 10 children rate pain of black child less than white one (strong, reliable racial bias)
- Unrelated to social preference (would like to be friends with)
- We may need to start empathy training very young



http://www.huffingtonpost.com/2013/10/17/racial-empathy-gap_n_4118252.html

Benefits of Inclusive Policies

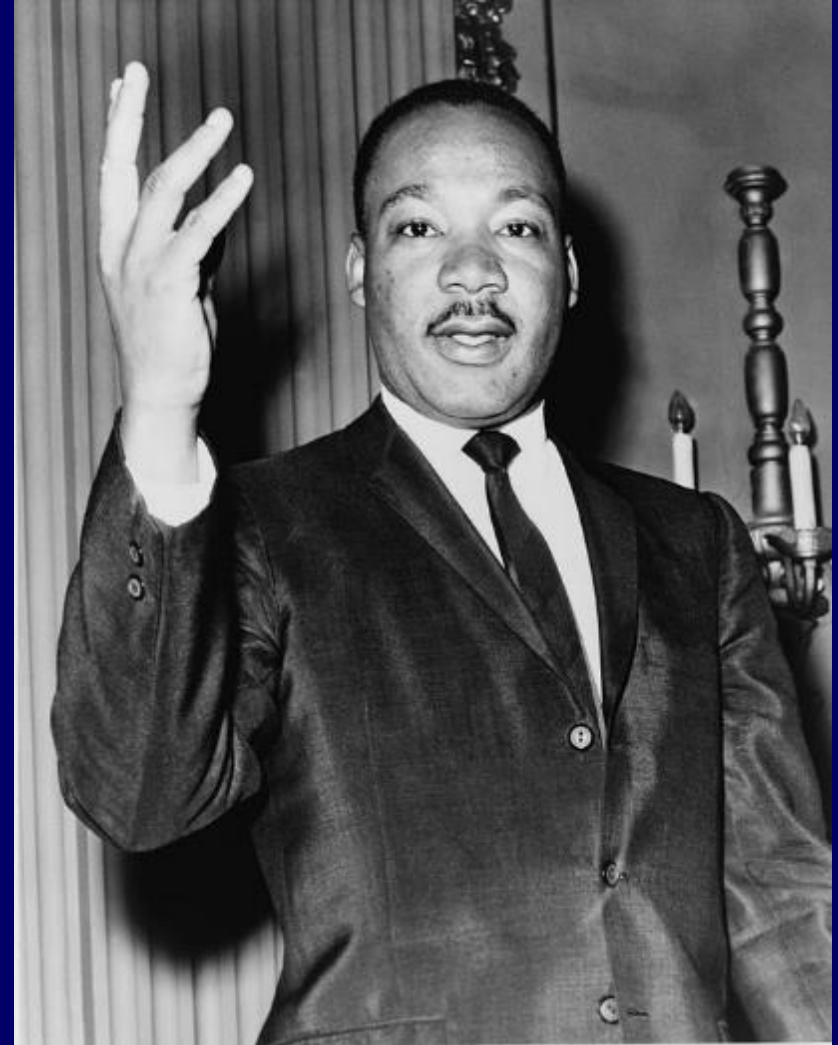
- The creation of communities of opportunity to reverse racial injustice will be beneficial to people of all races
- Policies that benefit communities of color will improve conditions for everyone, including many poor and working class whites



MS Online Pictures

“History will have to record that the greatest tragedy of this period of social transition was not the strident clamor of the bad people, but the appalling silence of the good people.”

Martin Luther King





A Call to Action

“Each time a man stands up for an ideal, or acts to improve the lot of others, or strikes out against injustice, he sends forth a tiny ripple of hope, and those ripples build a current which can sweep down the mightiest walls of oppression and resistance.”

- Robert F. Kennedy

Further Reading

David R Williams & Lisa A. Cooper, “*Reducing Racial Inequities in Health: Using What We Already Know to Take Action.*” International Journal of Environmental Research and Public Health, 16 (4), 606, 2019.