

Understanding and Effectively Addressing Inequities in Health

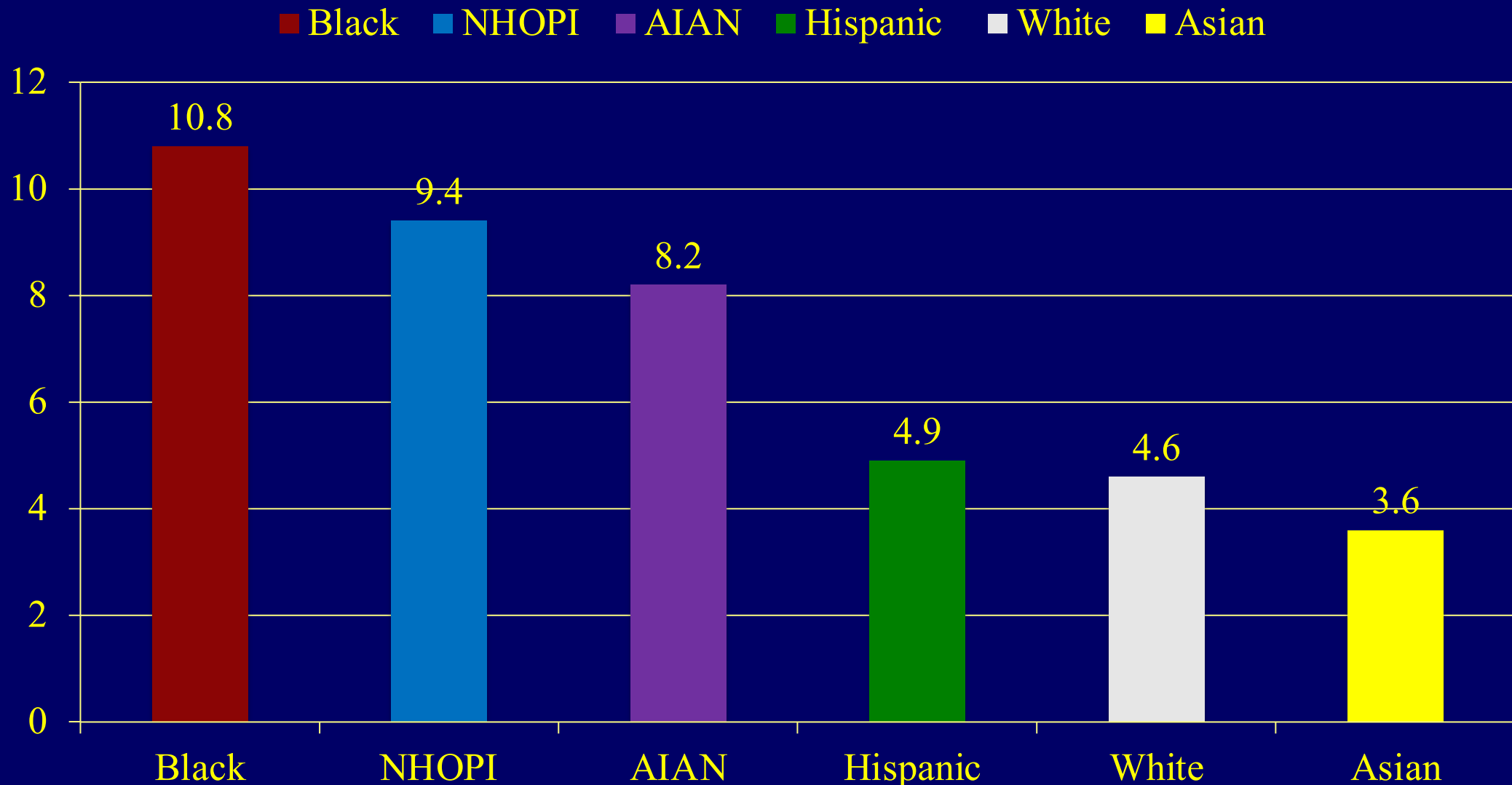
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Chair, Department of Social and Behavioral Sciences
Professor of African & African American Studies and of
Sociology

Harvard University

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

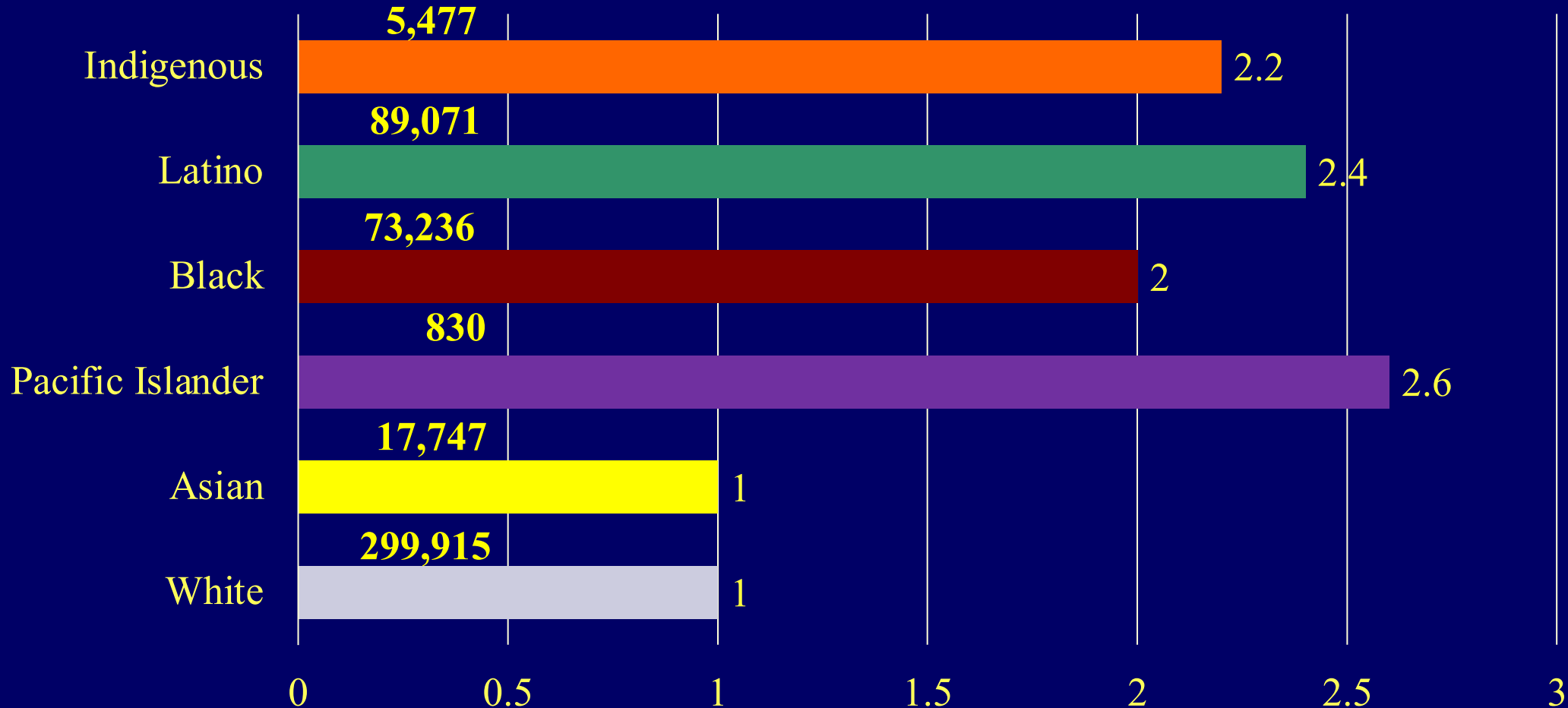
Infant Mortality in the U.S., 2018



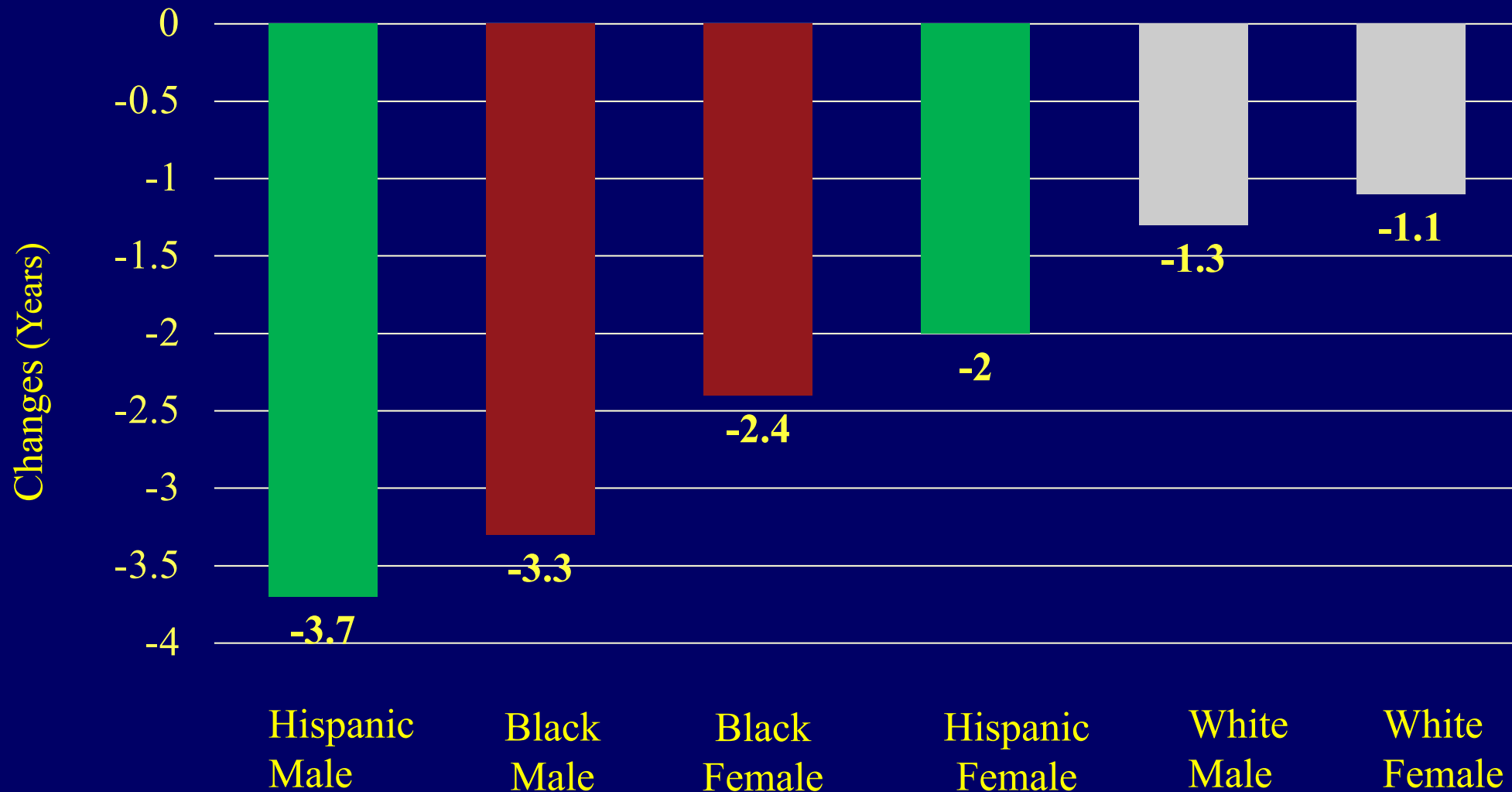
And Covid-19 Has Made These Inequities Much Worse

Death Rates for Other Races Compared to Whites

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

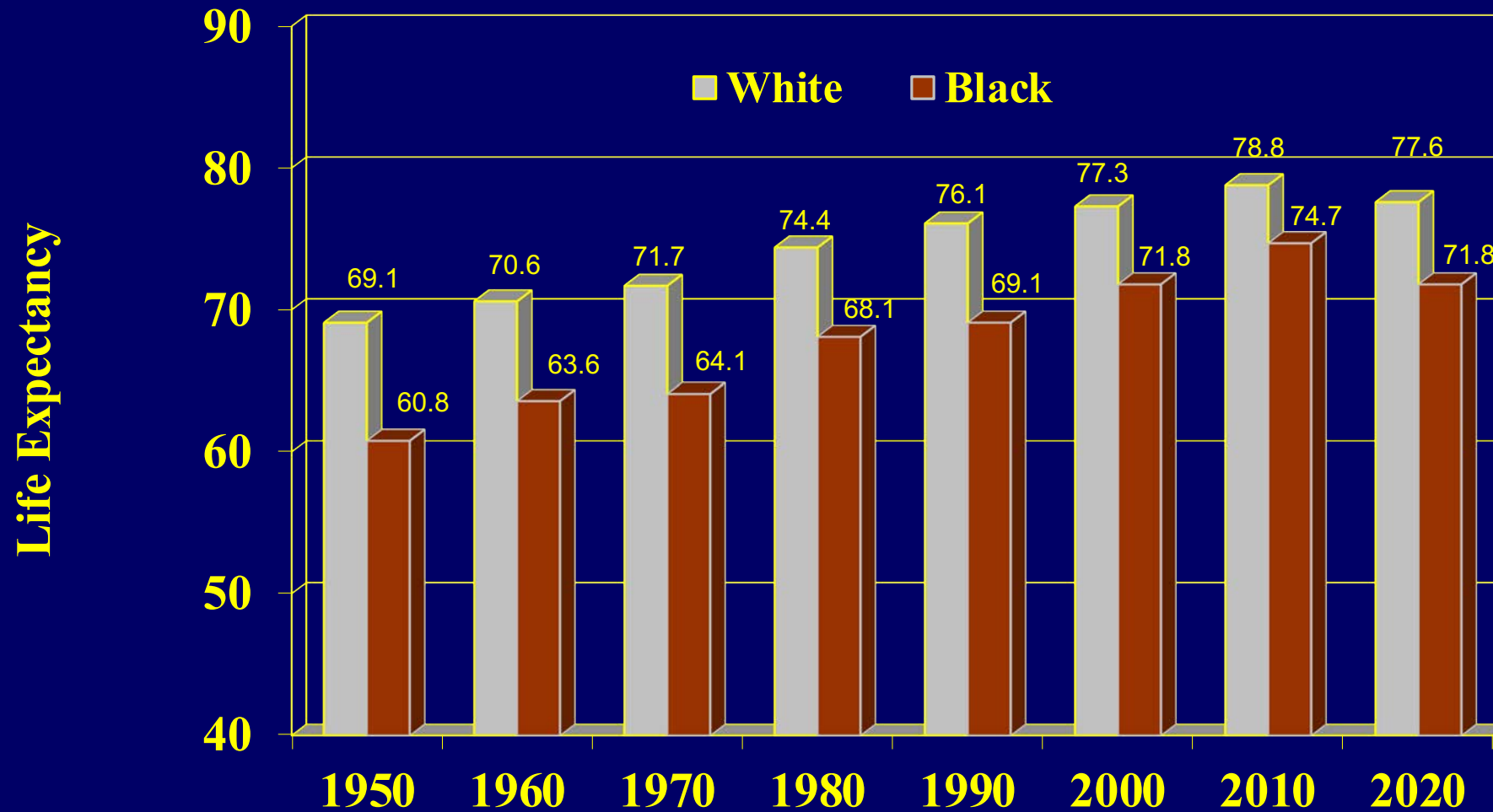


Decline: Life Expectancy at Birth, 2019-2020



Racial Inequities In Health Are
Persistent Over Time

Life Expectancy by Race, 1950-2020



What Drives these Large Racial Inequities
in Health?

Socioeconomic Status

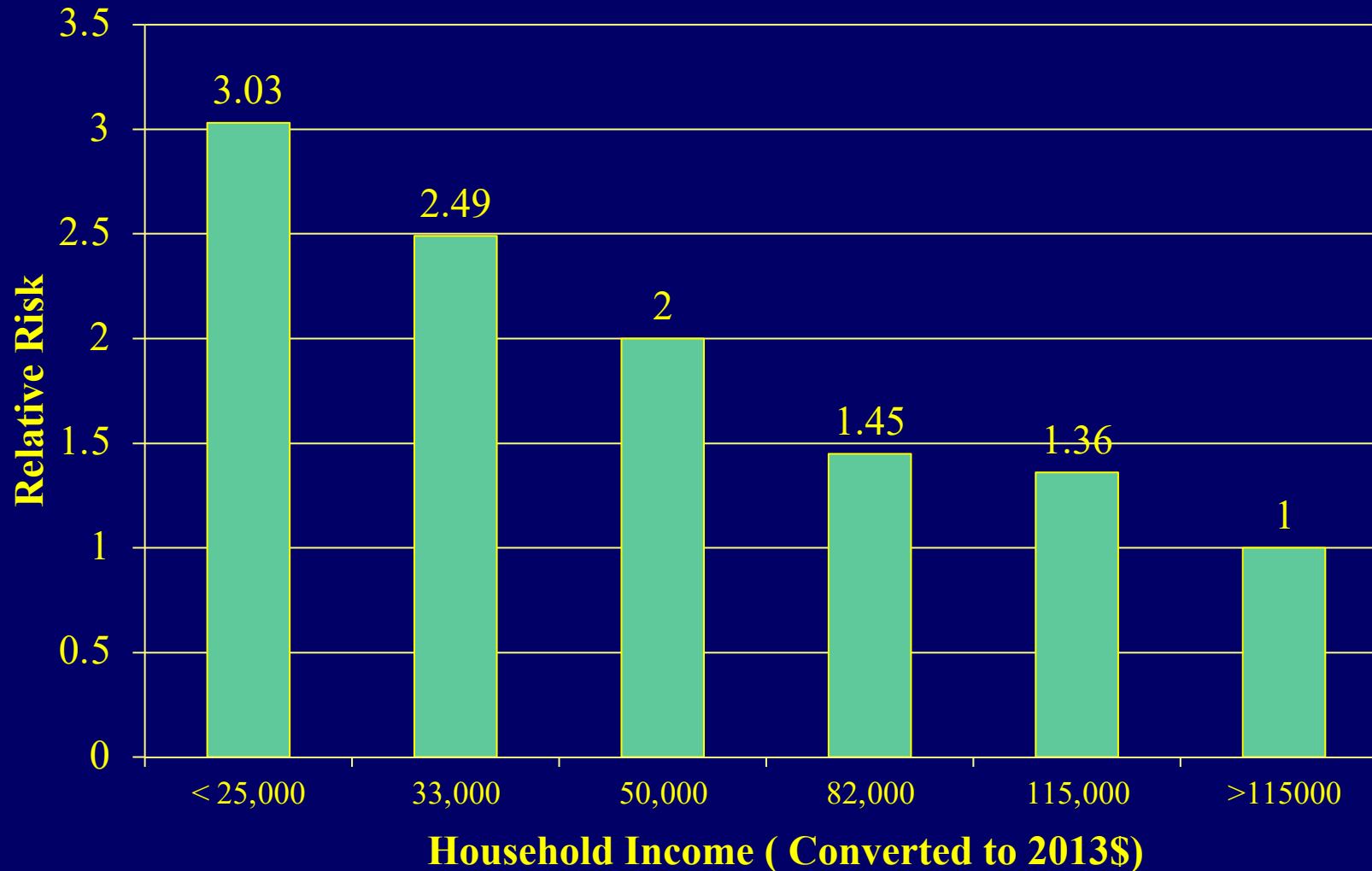
Socioeconomic Status (SES), (whether measured by income, education, occupation, poverty or wealth) is a central determinant of the distribution of valuable resources in society



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:

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



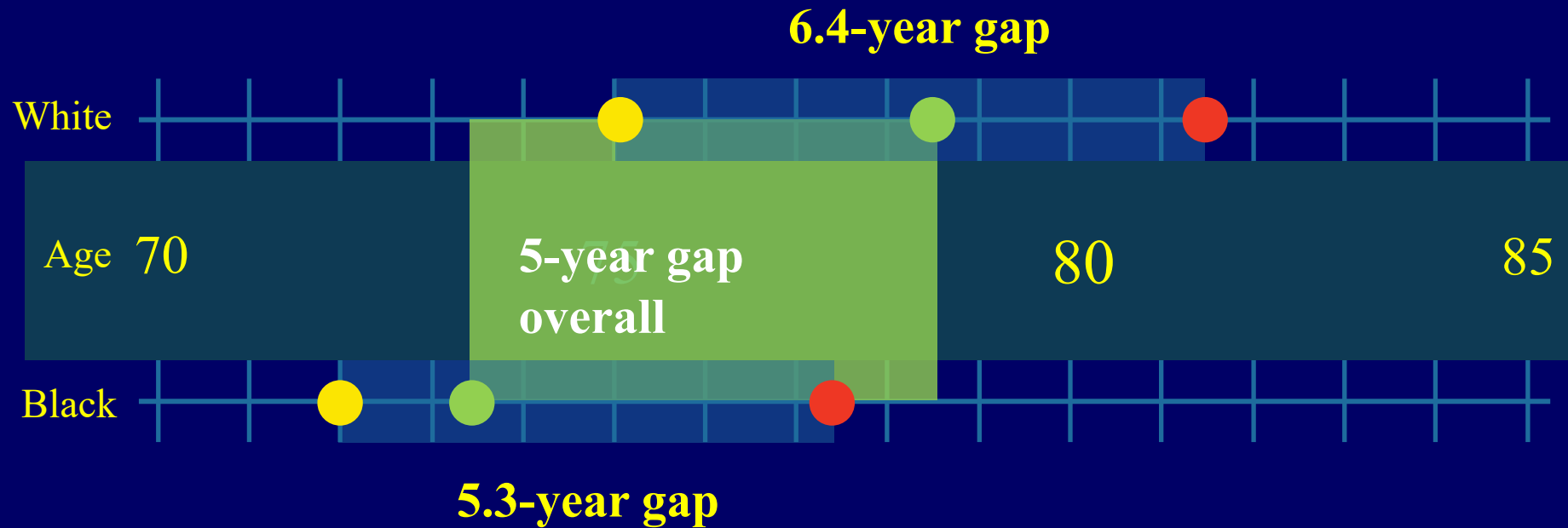
What Low Economic Status Means

We are in the same storm but in different Boats



Added Burden of Race

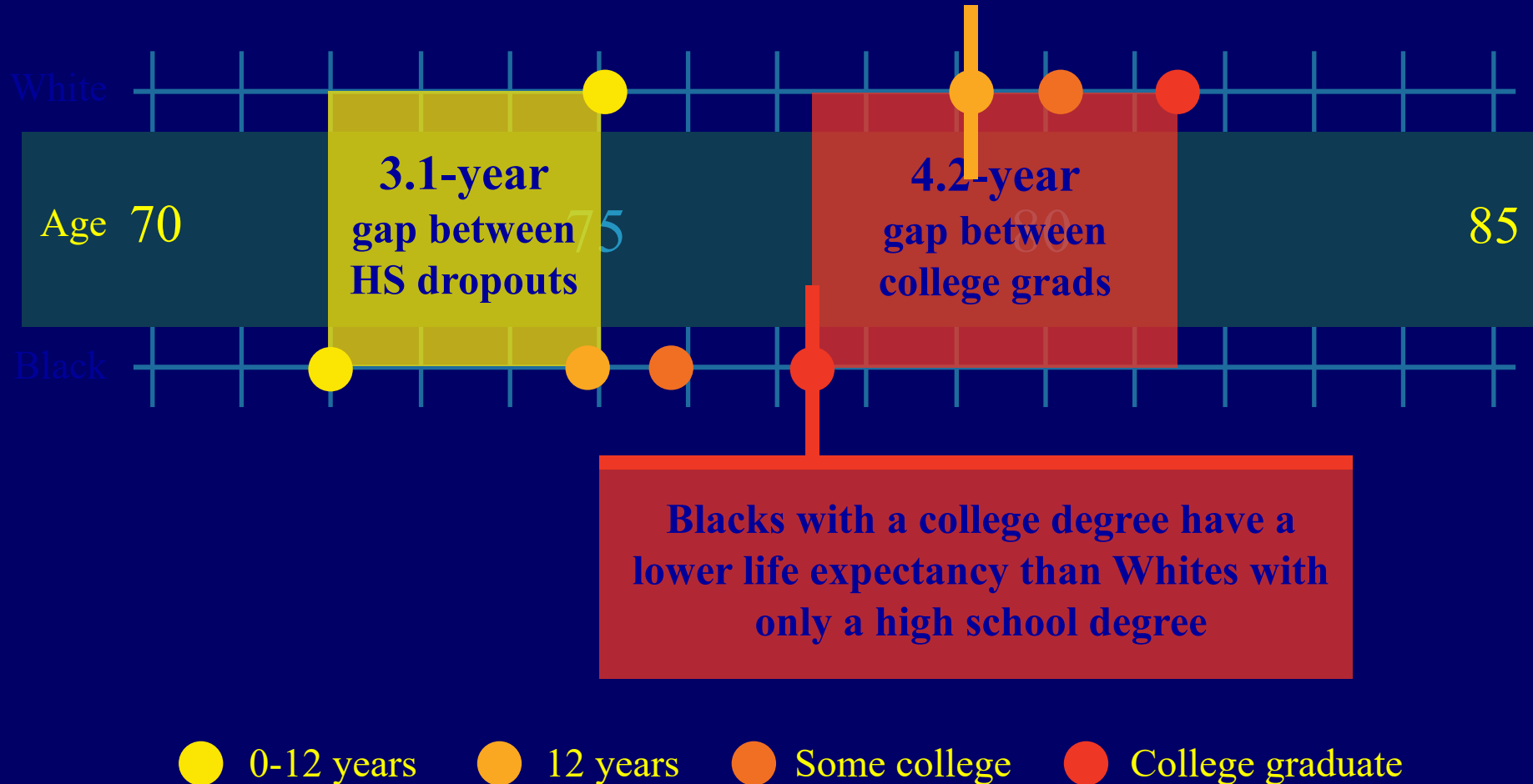
Life Expectancy at Age 25 Based on Level of Education



● Overall ● 0-12 years ● College graduate

Life Expectancy at Age 25

Race Still Matters



Why Does Race Still Matter?

Could racism be 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
- Legal
- Economic
- Religious
- Cultural
- Historical 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

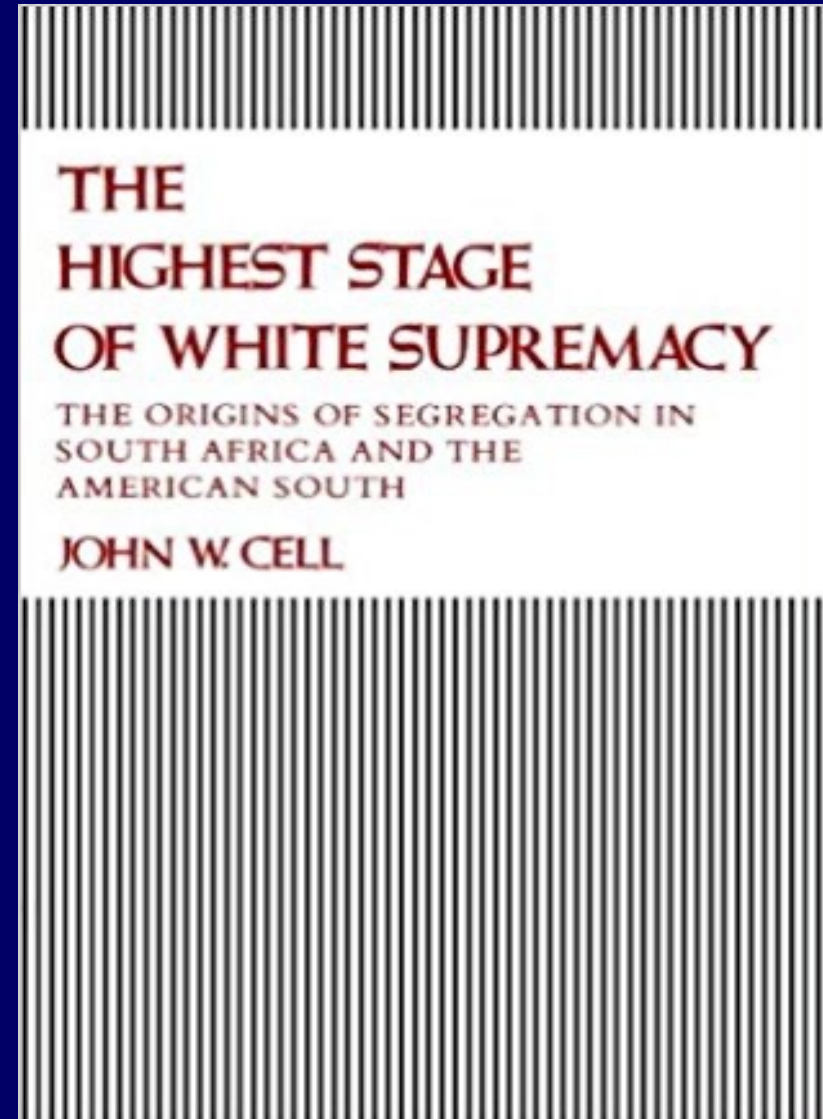
Racial residential segregation is a fundamental cause of racial disparities in health. The physical separation of the races by enforced residence in certain areas is an institutional mechanism of racism that was designed to protect whites from social interaction with blacks. Despite the absence of supportive legal statutes, the degree of residential segregation remains extremely high for most African Americans in the United States.



- 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



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

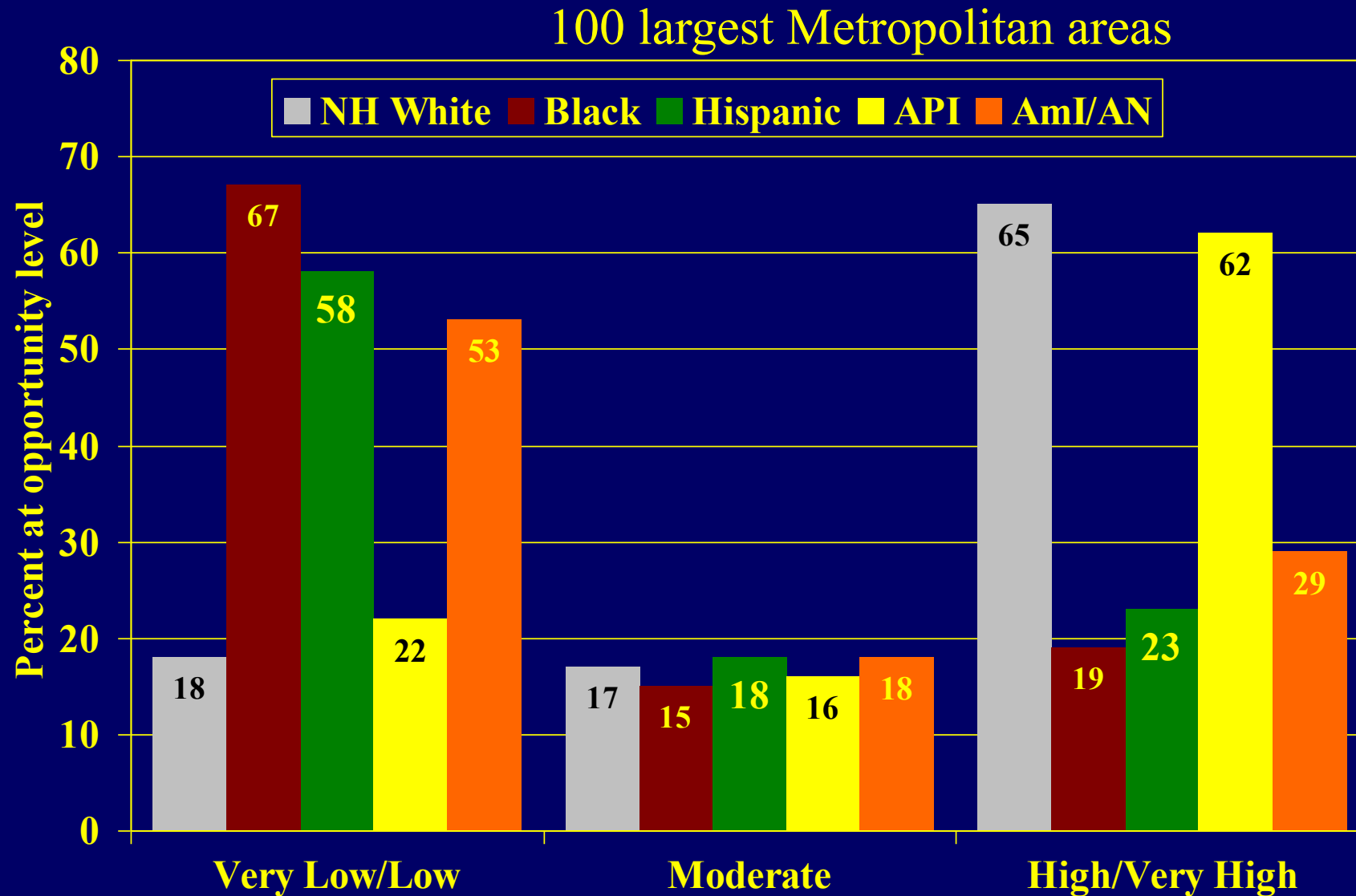


Neighborhood Opportunity Index

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



*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

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”



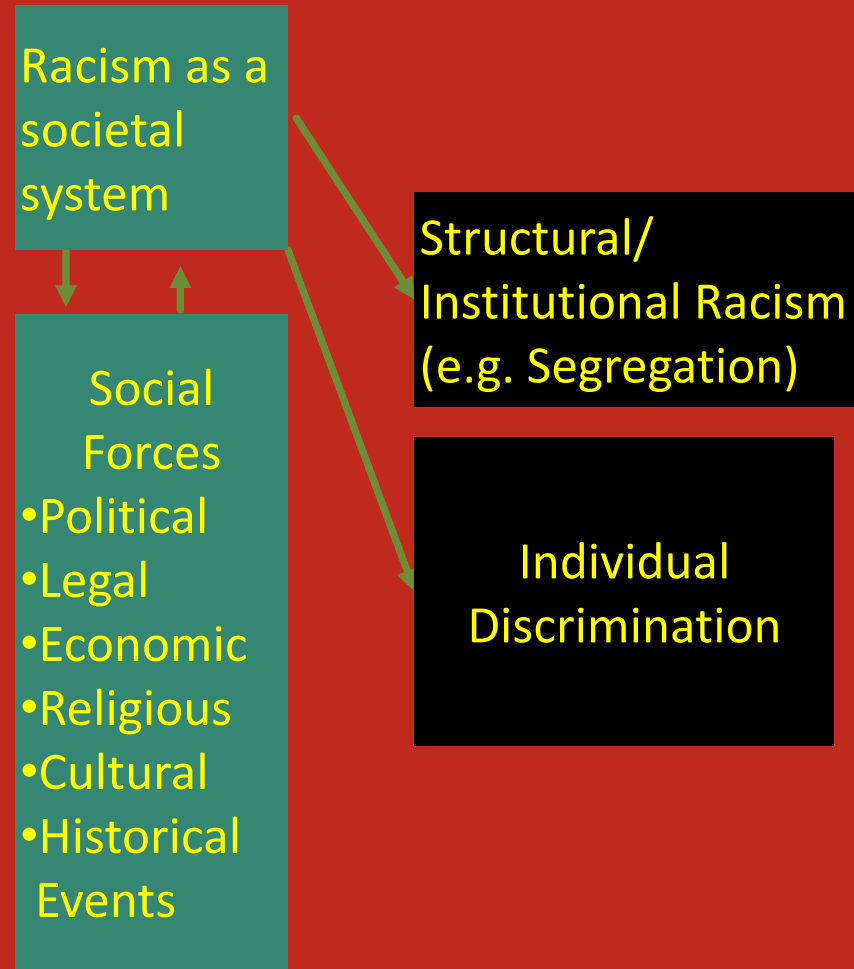
Segregation, SES, Stress and Health

Lower economic status, living in disadvantaged, segregated, neighborhoods leads to higher levels of exposure and greater clustering of:

1. Economic Stressors
2. Psychosocial Stressors
3. Physical & Chemical Stressors



The House that Racism Built



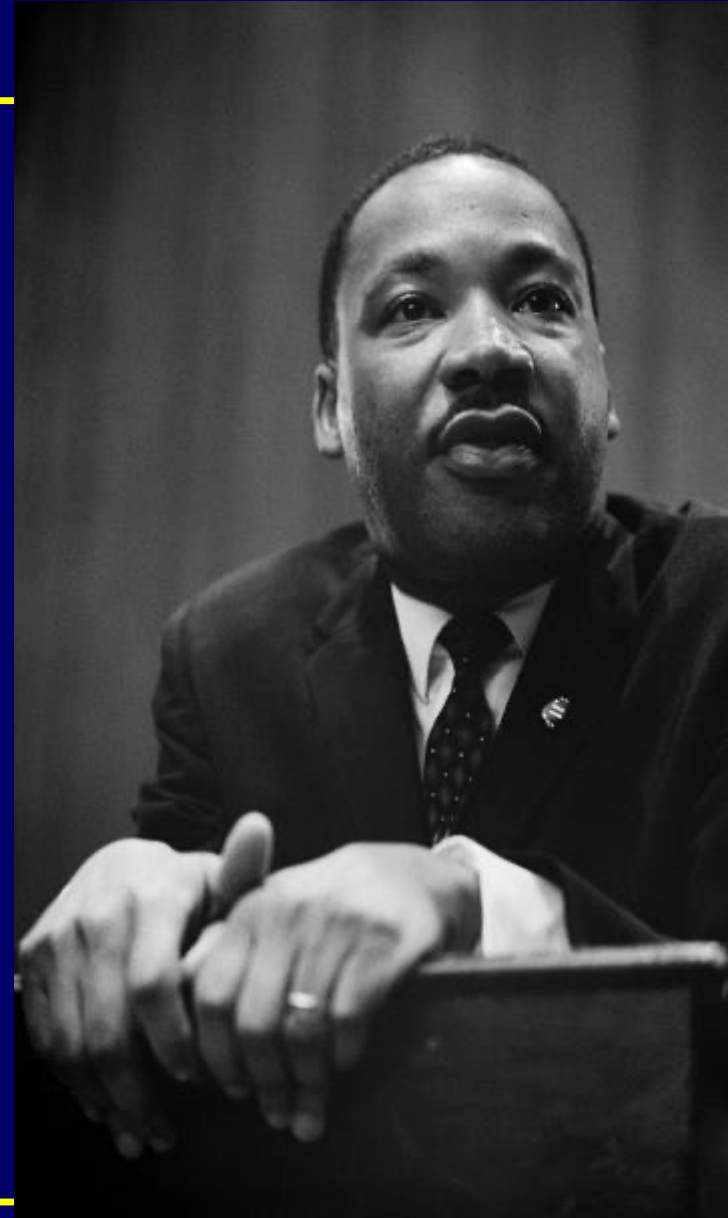
Individual Discrimination

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 and Health

Incident

- Metabolic Syndrome
- CVD outcomes
- Breast cancer
- Type 2 diabetes

Nicotine dependence
Binge eating
Smoking & drug use
At-risk drinking

CAC (coronary artery calcification)
IMT (intima media thickness)
Visceral fat
HRV
Atrial fibrillation

Adult onset asthma
Nocturnal amb. BP
Cognitive function
Increases in SBP,
DBP

Sleep duration
Sleep quality

Inflammation (CRP, IL-6, e-selectin)
Cortisol
Telomere length
Allostatic load

Waist circumference
Obesity
Weight gain

Breast cancer screening
Cervical cancer screening
Lower adherence
Delays in seeking
treatment

DSM Disorders
Emotional Distress
Well-being
Changes in personality

Concept of Microaggressions



Prof Chester M. Pierce

“What the reader must bear in mind is that these assaults to black dignity and black hope are incessant and cumulative. Any single one may not be gross. In fact, the major vehicle for racism in this country is offenses done to blacks by whites in this sort of gratuitous, never-ending way. These offenses are microaggressions.”

Pierce CM. Psychiatric problems of the black minority. In American Handbook of Psychiatry, Vol 2 edited by G Caplan; Basic Books 1974.)This paper references his earlier work (1970) on this topic

**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

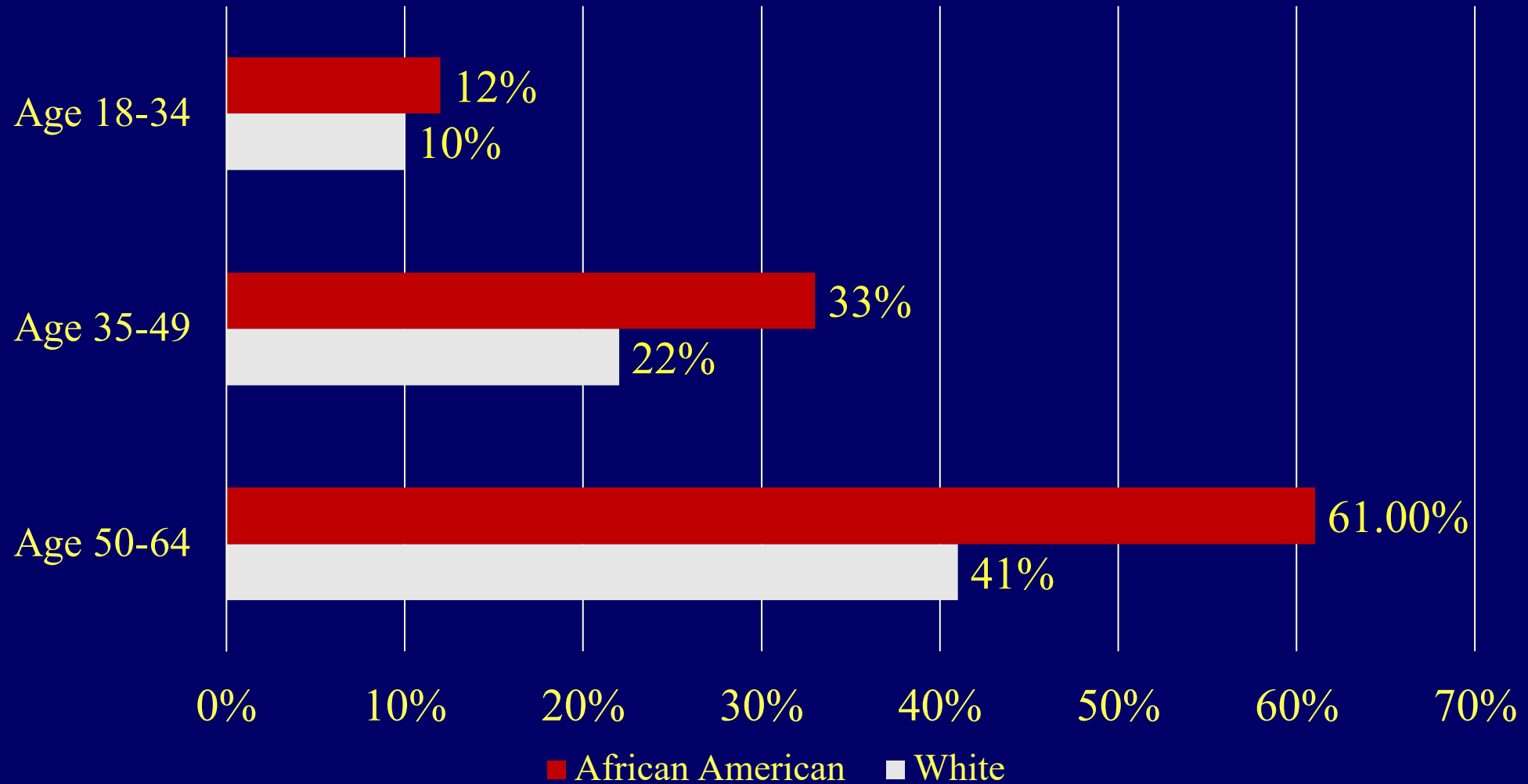
“Accelerated Aging”

“Premature Aging”

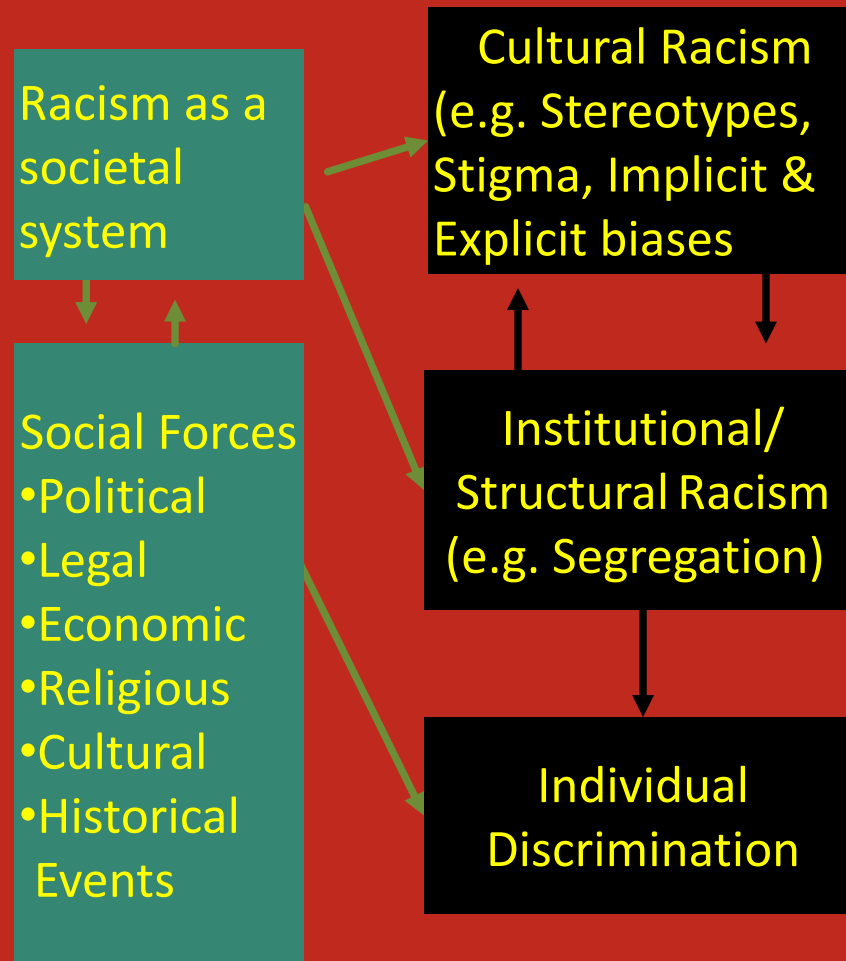
Biological “Weathering”

Earlier Onset of Chronic Disease

Earlier Onset of High Blood Pressure



The House that Racism Built



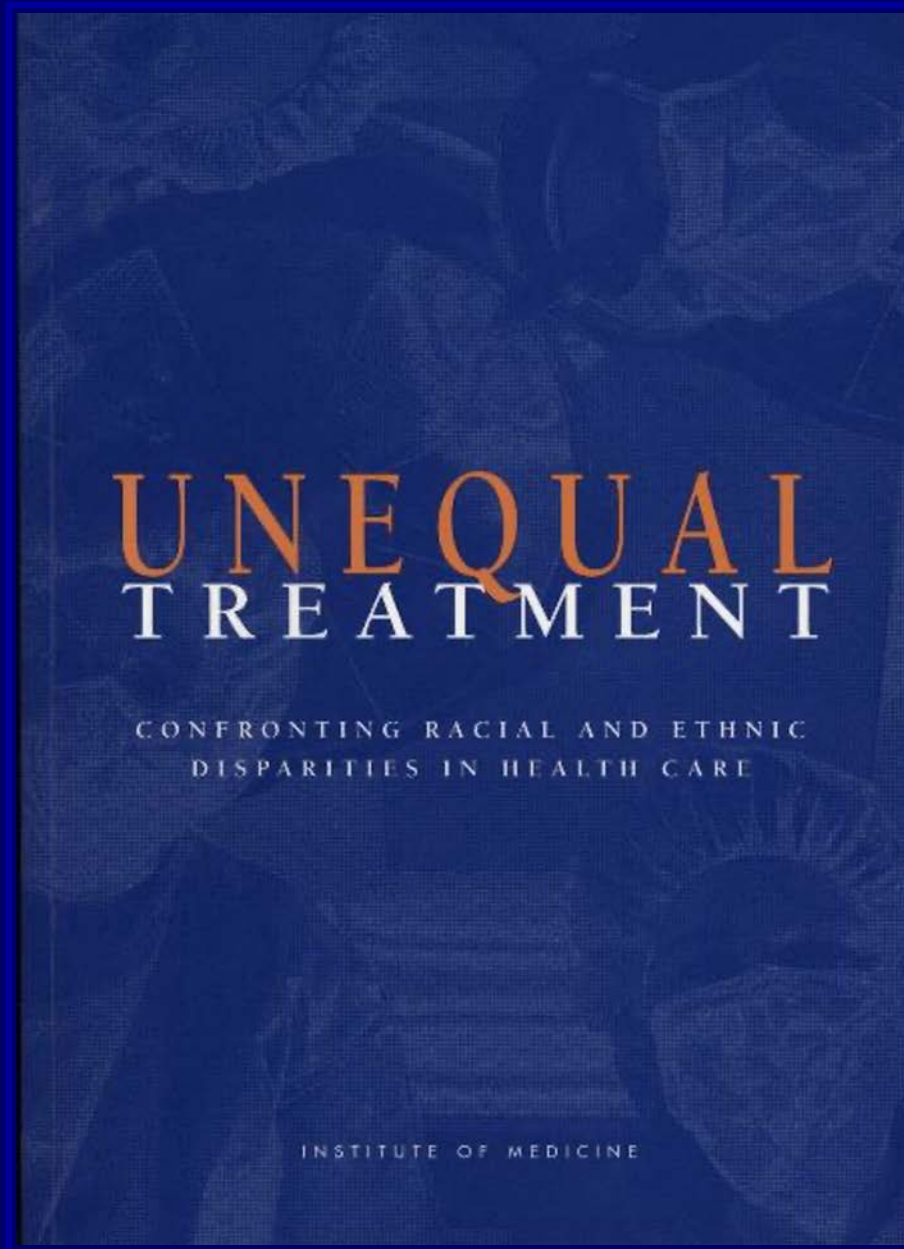
Negative stereotypes about race remain
deeply embedded in our culture

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

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?

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



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

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

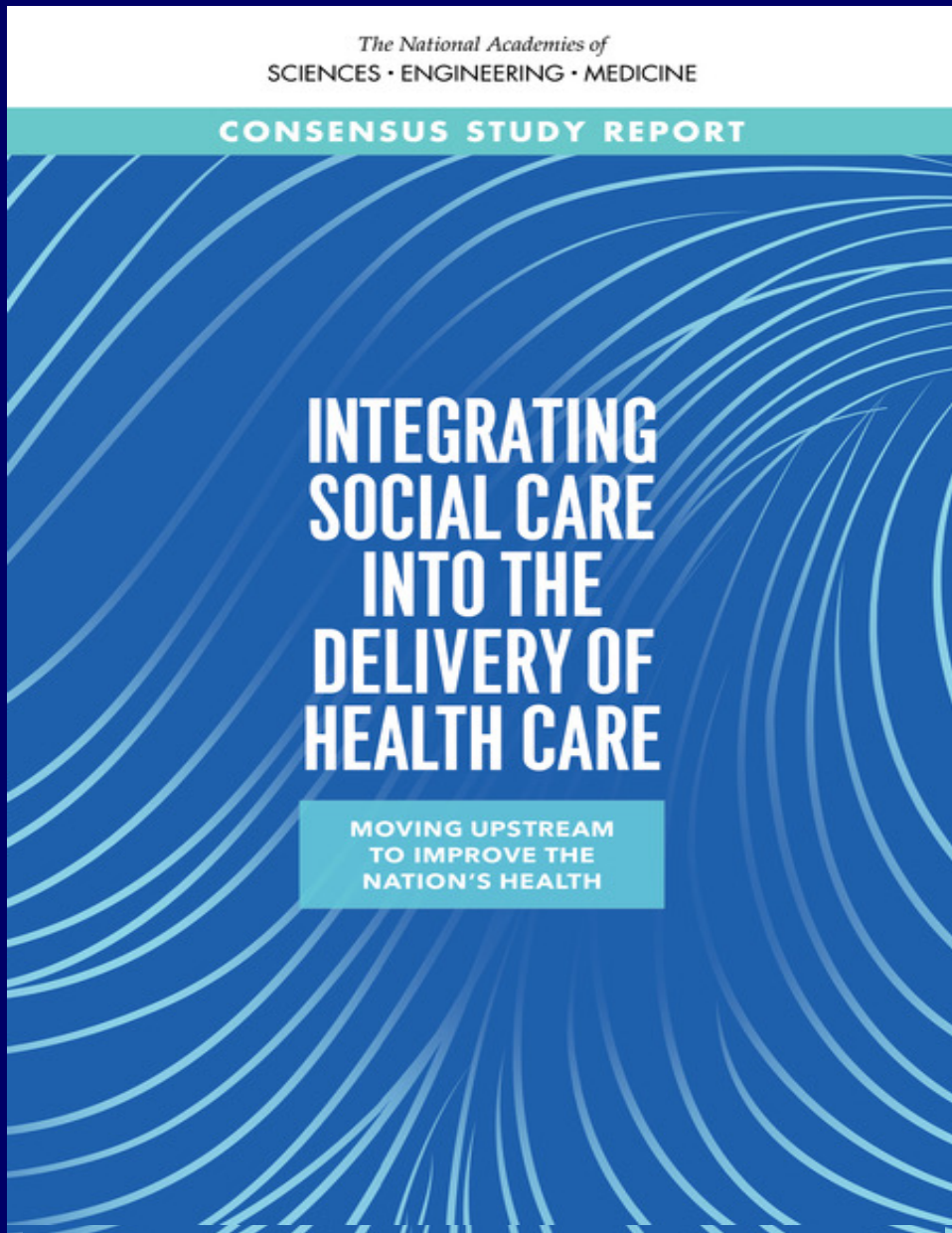
Provide Care that Addresses the Social context

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?*

Recent Report: National Academy of Medicine



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

Nurse Family Partnership

- Nurses visit pregnant teens: prenatal and post-natal
- Nurses enhance parents' economic self-sufficiency by addressing vision for future, subsequent pregnancies, parenting, educational and job opportunities.
- Three randomized control trials: (Elmira, NY; Memphis, TN; Denver, CO)
- Control group receives prenatal care
- Improved prenatal behaviors, pregnancy outcomes, maternal employment, relationships with partner.
- Reduces child abuse and neglect, subsequent pregnancies, welfare and food stamp use
- *\$17,000 return to society for each family served*



Service Delivery and Social Context

• 244 low-income hypertensive patients, 80% black, randomly assigned to:

- Routine Care: regular hypertensive care from MD
- Health Education: Routine care, plus weekly clinic meetings for 12 weeks run by health professional.
- Outreach Intervention: Routine care, plus home visits by lay health workers*. Provide info on BP, discussed family difficulties, finances, job opportunities, and, as appropriate, provided support, advice, referral, and direct assistance.

*Recruited locally, 1 month training to address social & medical needs of hypertensive patients



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Service Delivery and Social Context: Results

After 7 months, patients in the outreach group:

1. Knew twice as much about BP as those in other two groups. Outreach group patients with more knowledge were more successful in BP control.
2. Were more compliant with taking their BP medication than patients in the health education intervention group. Moreover, good compliers in the outreach group were twice as successful at controlling their BP as good compliers in the health education group.
3. Were more likely to have their BP controlled than patients in the other two groups.

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



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Protest, Advocacy, Empowerment

- Native youth in Canada have one of highest rates of youth suicide globally
- But between 1987-1992, more than half of 196 First Nation communities had no youth suicides
- Study identifies 5 markers of challenging the government for
 - ✓ titles to land
 - ✓ right of self-governance
 - ✓ control over services (education, healthcare, police and fire)
- and having a building for cultural activities



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Protest, Advocacy, Empowerment - II

The study found:

1. Each indicator of advocacy, protest, empowerment and cultural affirmation was associated with lower risk of youth suicide and,
2. A strong dose-response relationship between the number of markers and the prevalence of suicide



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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





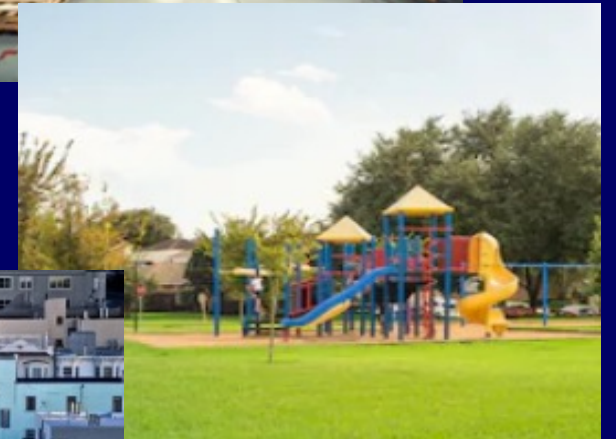
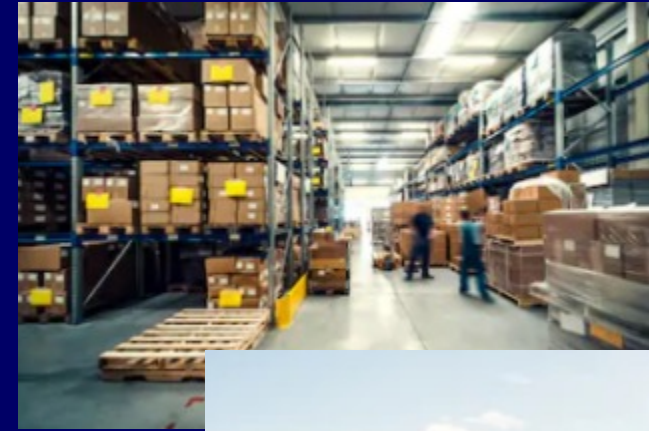
There's More to Health than Health Care



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



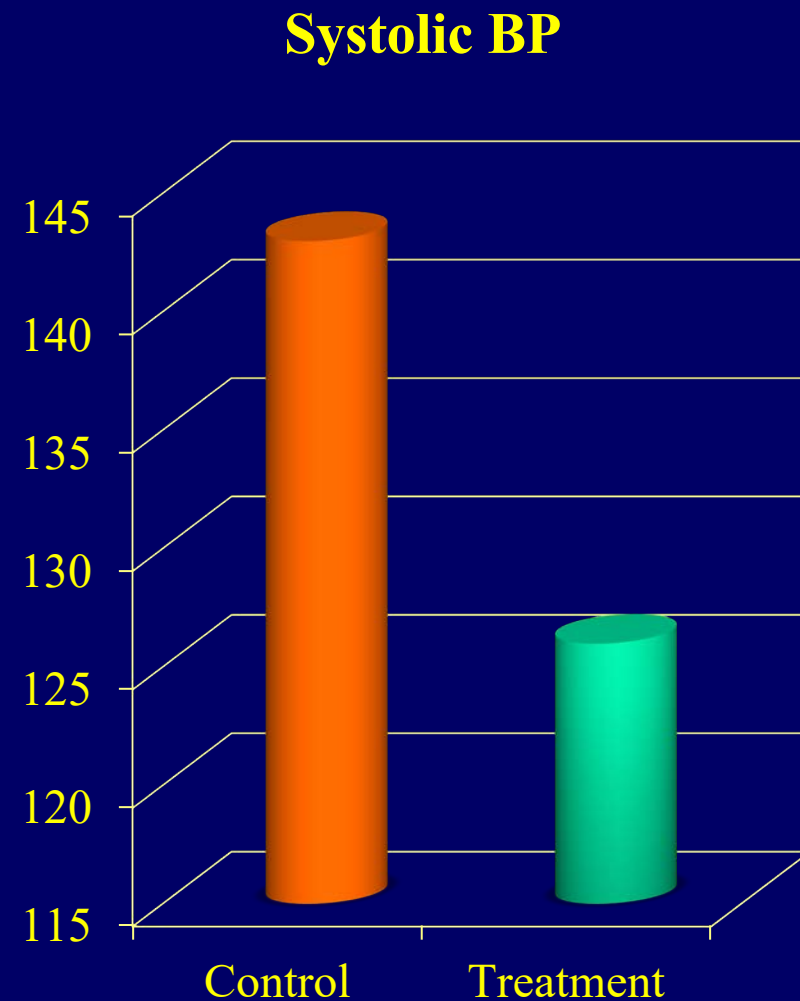
Carolina Abecedarian Project (ABC)

- 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

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)



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A Striking Example
of Neighborhood
Transformation:

Atlanta's East Lake,
district



purposebuiltcommunitie.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

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 support, social services, workforce development, recreation, wellness

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



Reduce Life Expectancy Gap by 50% by 2030



Rush Anchor Mission Initiative: Increase Local Hiring

Hire locally
and develop
talent



- Employment Preference Initiative
- Career ladder development

Rush Anchor Mission Initiative: Use Local Labor

Utilize local
labor



- Local labor for capital projects
- Apprenticeship
- Diversity hiring and contracts

Rush Anchor Mission Initiative: Buying Local

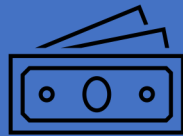
Buy and
source locally



- Local purchasing program
- Prime vendor engagement

Rush Anchor Mission Initiative: Increase Local Investments

Invest locally
and retirement
readiness



- Impact investing in local communities
- 403(b) plan auto-escalation and enrollment
- Working credit
- Payroll card
- Fifth Third eBus (financial education)

Rush Anchor Mission Initiative: Employees Volunteering Locally



- Employee engagement in local communities
- Leveraging employee expertise (e.g., teaching skills class)

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

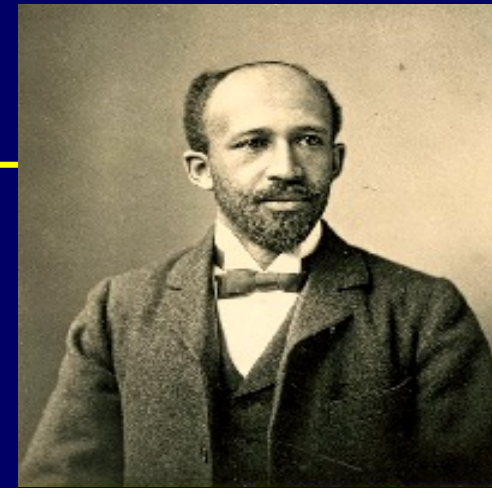
- We need to raise awareness levels of the challenges (health and social) faced by disadvantaged racial/ethnic populations
 - We need to build the science base that will guide us in developing the political will to address racial and other social inequities in health
 - We need to build empathy, that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



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.