

How Racism Shapes Our Health

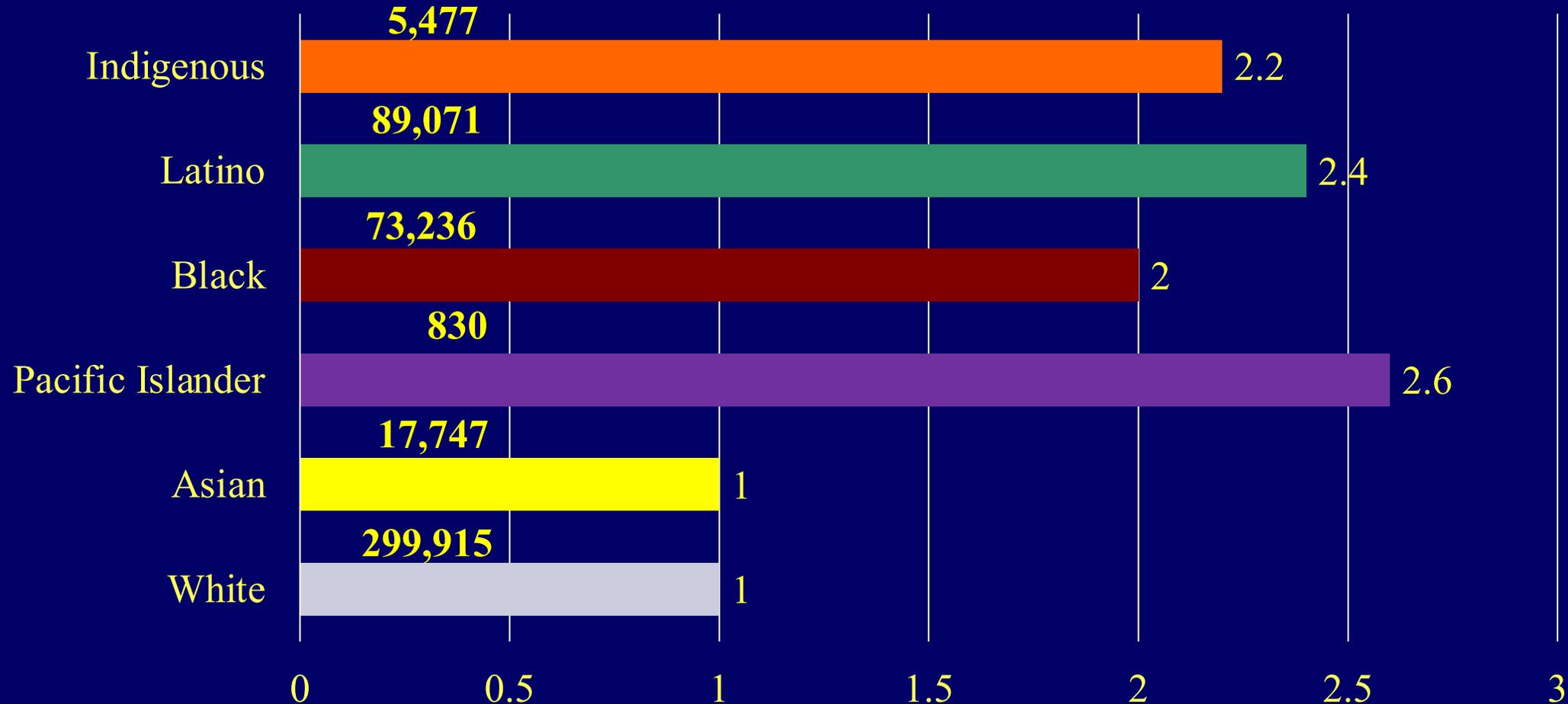
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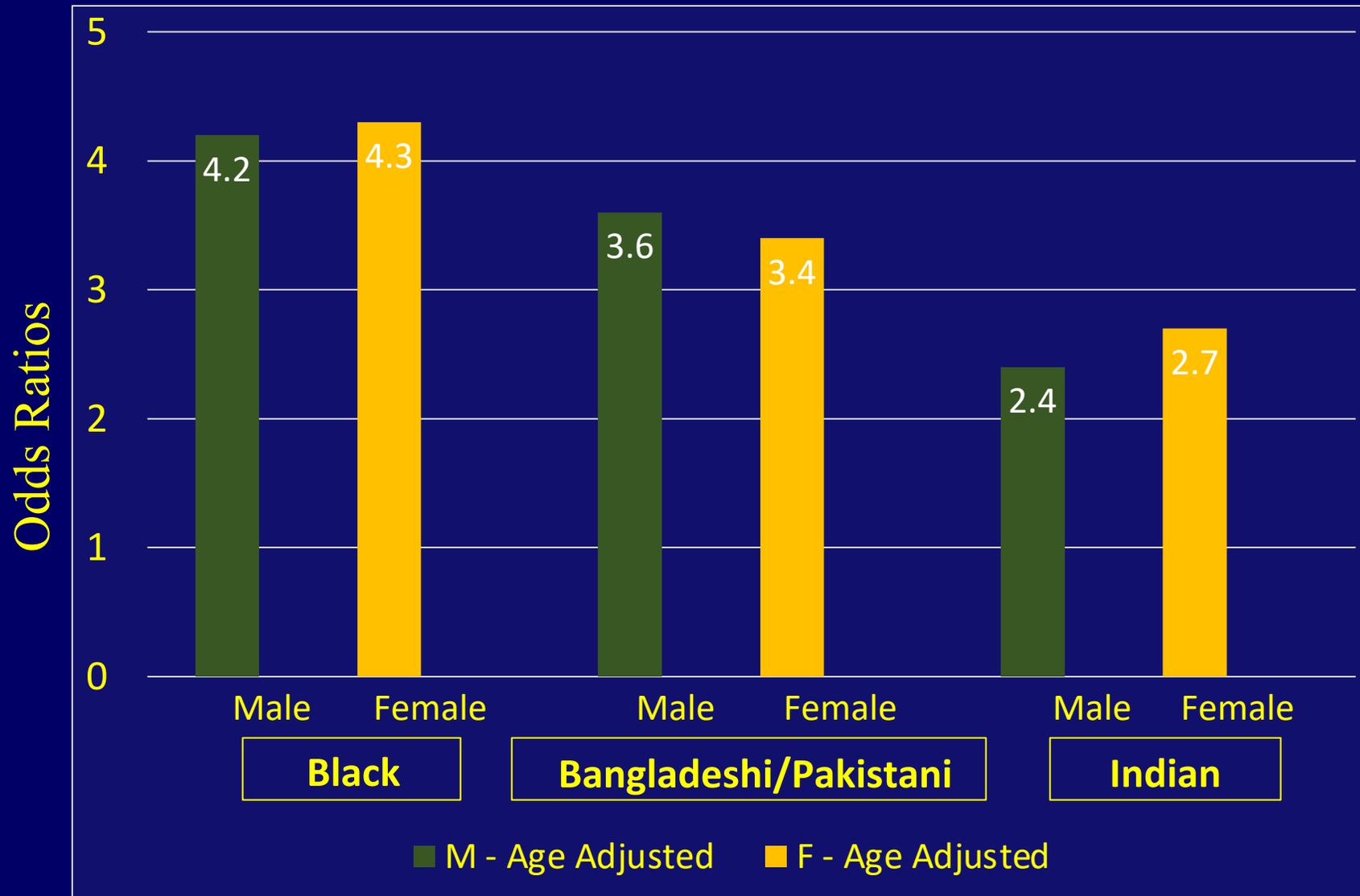
Harvard University

More Likely to Die of Covid-19 Compared to Whites

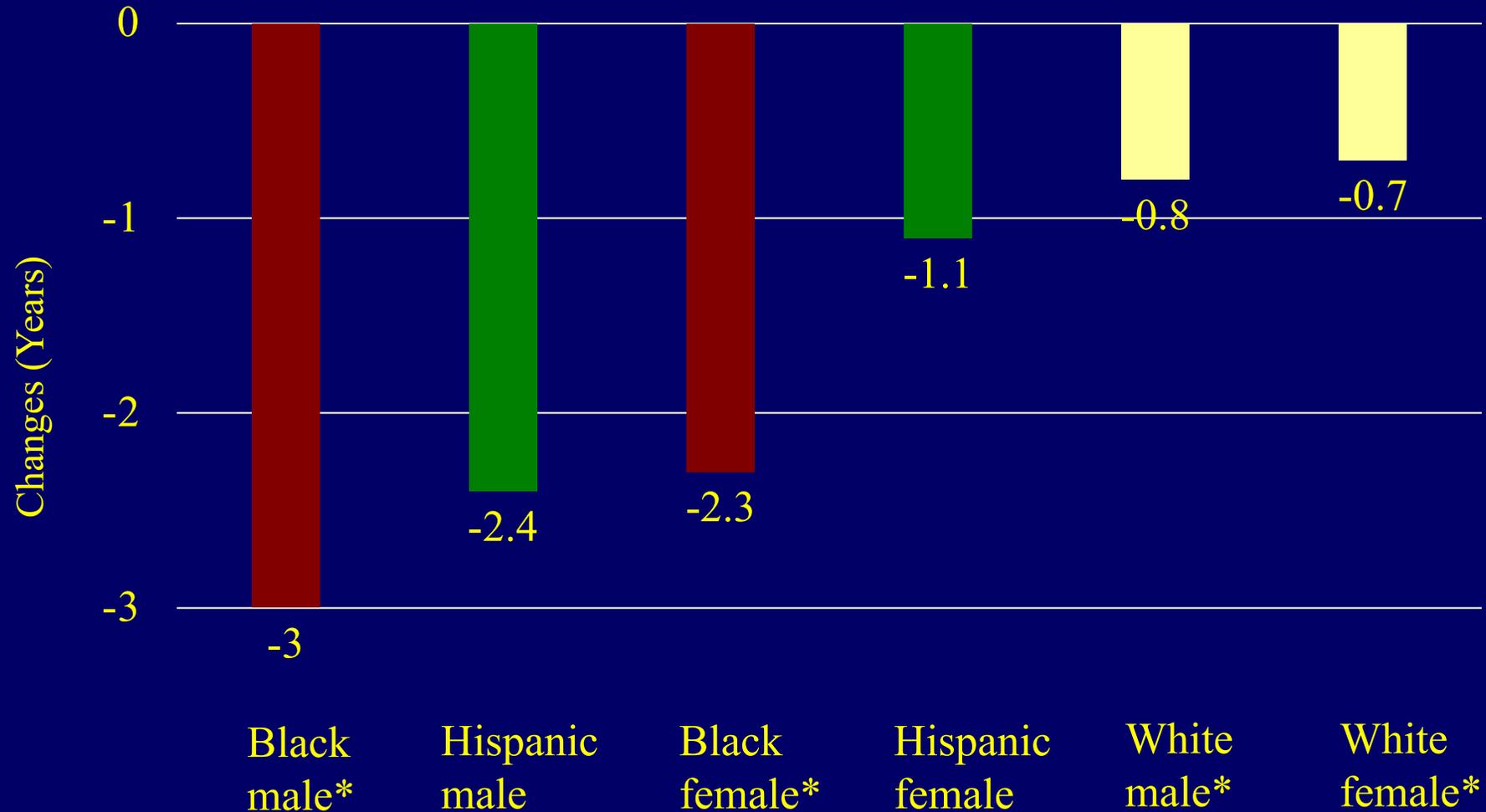
Age-adjusted ORs; Deaths through March 2, 2021, 2021; (> 520,000 U.S. deaths)



Covid-19 Deaths, Relative to Whites, UK



Decline: Life Expectancy at Birth, 2019-2020



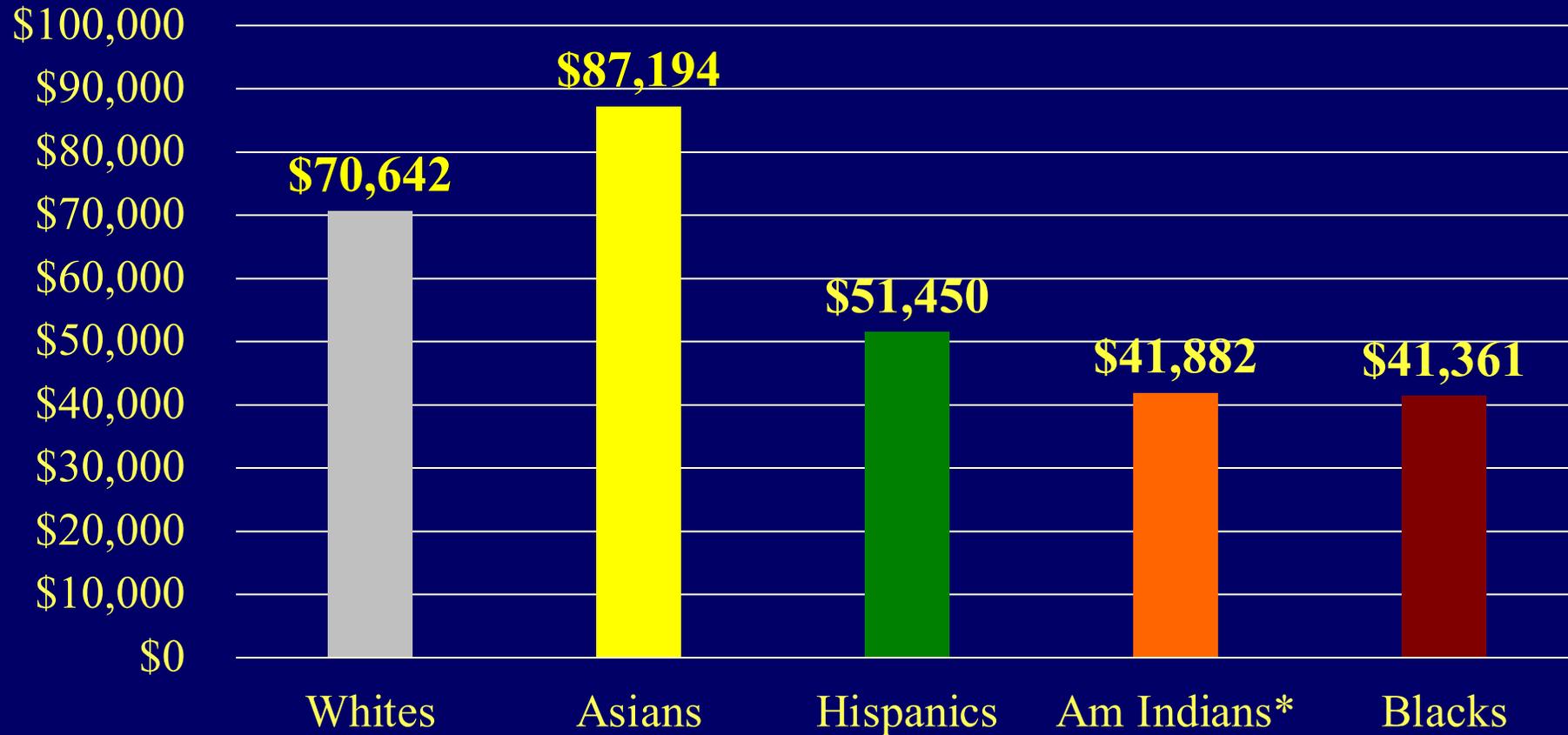
What Drives these Large Racial Inequities
in Health?

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

There are Large Racial/Ethnic
Differences in Socioeconomic Status

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

Median Household Income, 2009/10-2012/13

For every £ of weekly income that White majority earns

Other Whites earn 79p



Indians earn 86p



Pakistanis earn 57p



Bangladeshis earn 52p



Medium Household Income, 2009/10-2012/13

For every £ of weekly income that the White majority earns

Chinese earn 76p



Black Caribbeans earn 77p



Black Africans earn 60p



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

Wealth versus Income

- Home ownership
- Other real estate
- Checking, savings, money market accounts, CDs
- Vehicles
- Businesses
- IRA/Keogh, stocks, bonds, mutual funds, treasury bills
- Subtracting mortgages and debt



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



Median Wealth by Ethnic Group, 2014-16

For Every Pound of Wealth that Whites have,

1 pound 95 pence 50 pence 20 pence 10 pence 10 pence



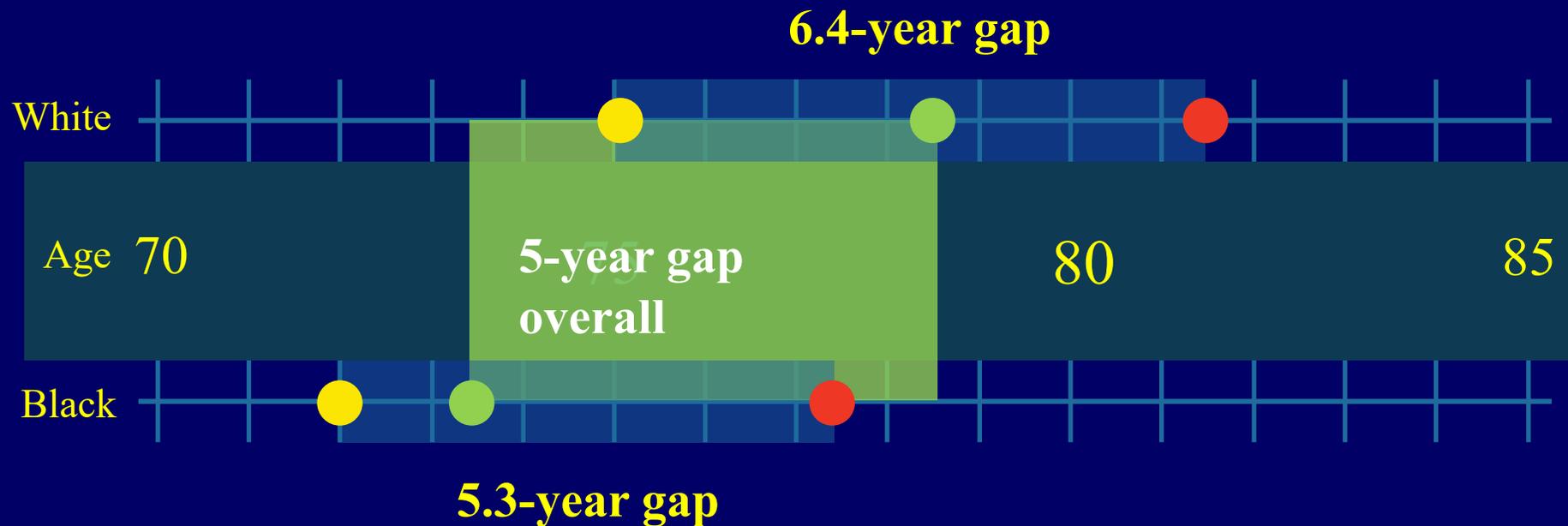
What Low Economic Status Means

We are in the same storm but in different Boats



Added Burden of Race

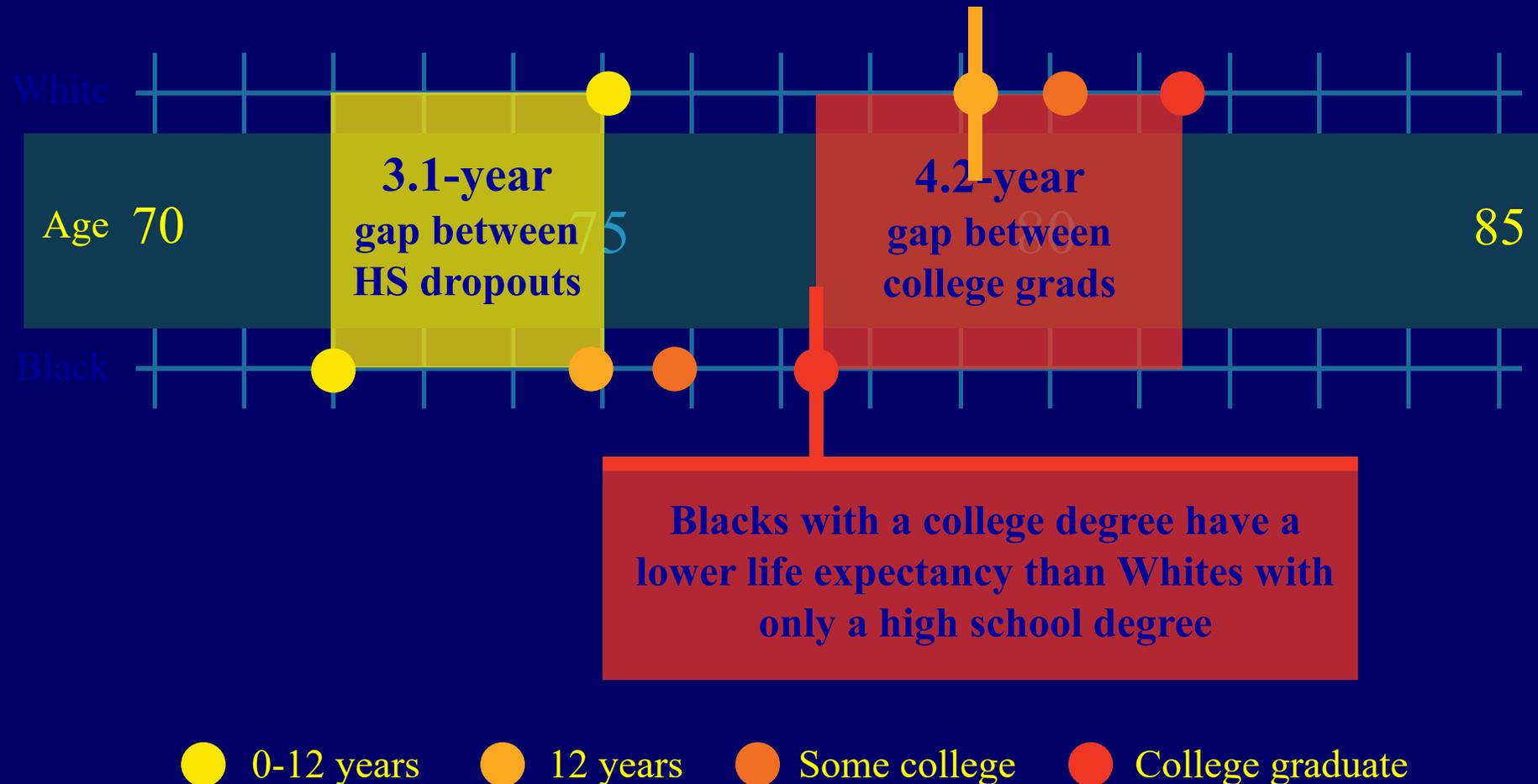
Life Expectancy at Age 25 Based on Level of Education



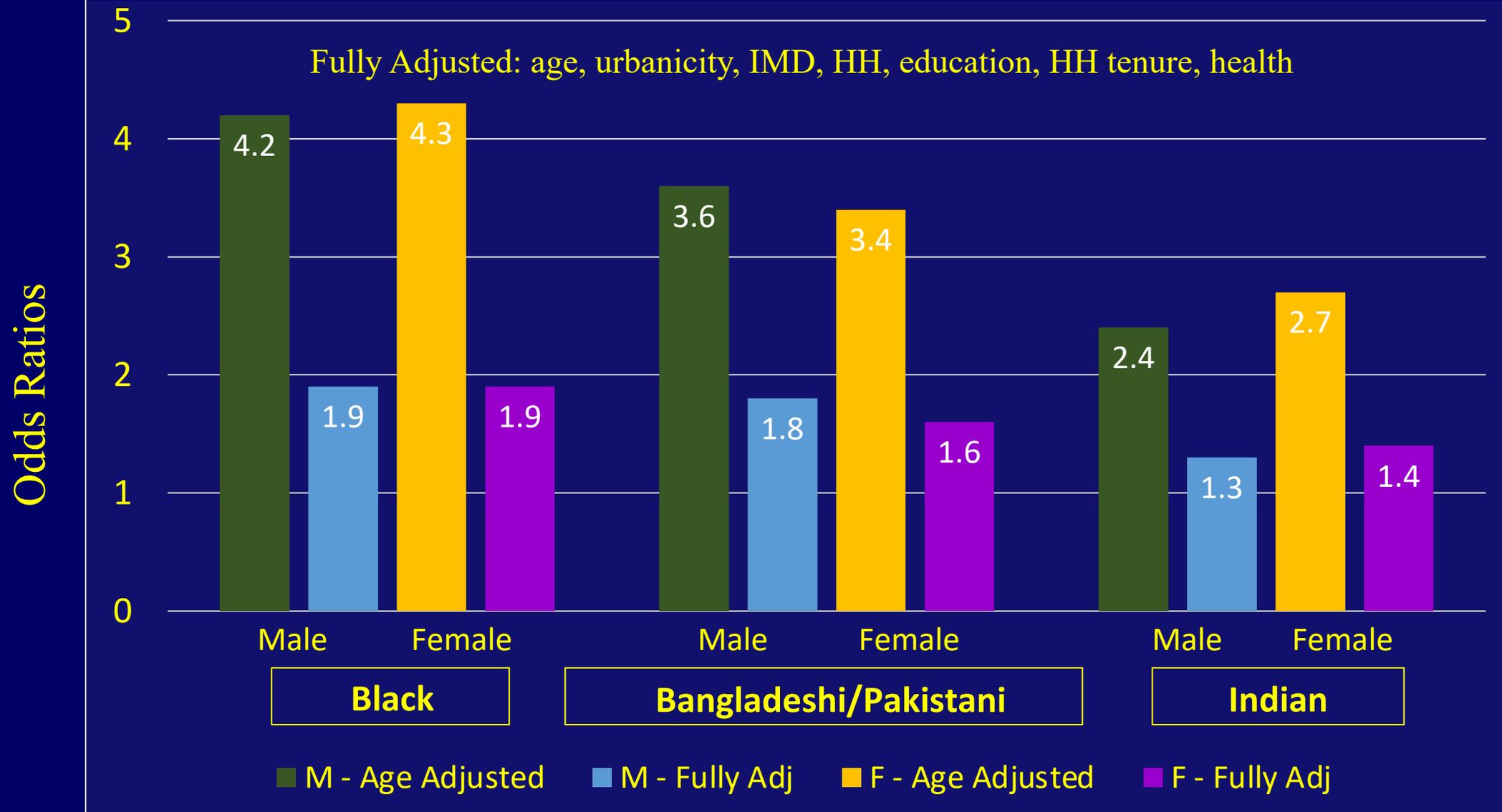
● Overall ● 0-12 years ● College graduate

Life Expectancy at Age 25

Race Still Matters



Covid-19 Deaths, Relative to Whites



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
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- Historical Events

Institutional Racism (e.g. Segregation)

*Individual vs
Institutional/Structural/Systemic
Discrimination*

Place Matters



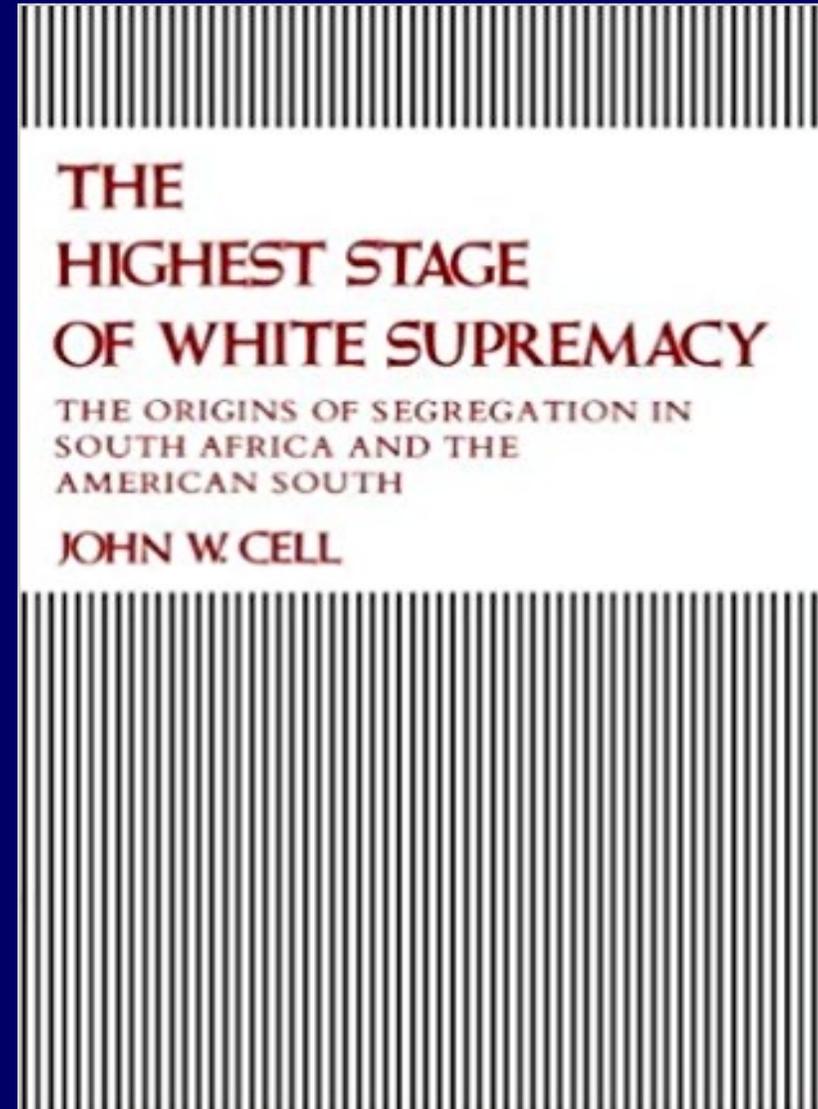
Residential Segregation

(restricted residence to particular areas based on race)
is an example of institutional racism

- **As is the** forced removal and relocation of indigenous peoples
- **The institutionalized isolation and marginalization of racial populations has adversely affected life chances in multiple ways**

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

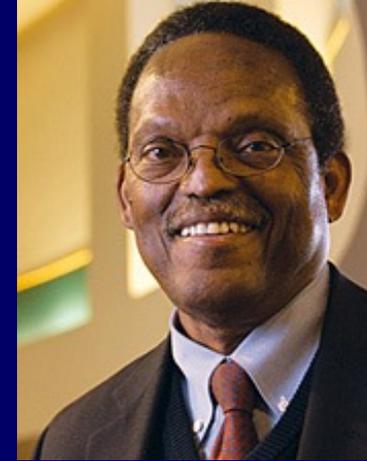
Segregation is like a toxic emission produced by an industrial plant. Like carbon monoxide it is often imperceptible but causes illness and death as valuable resources disappear:

- Quality schools
- Safe playgrounds
- Good jobs
- Healthy air, water, etc.
- Safe housing
- Transportation
- Healthcare



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.”



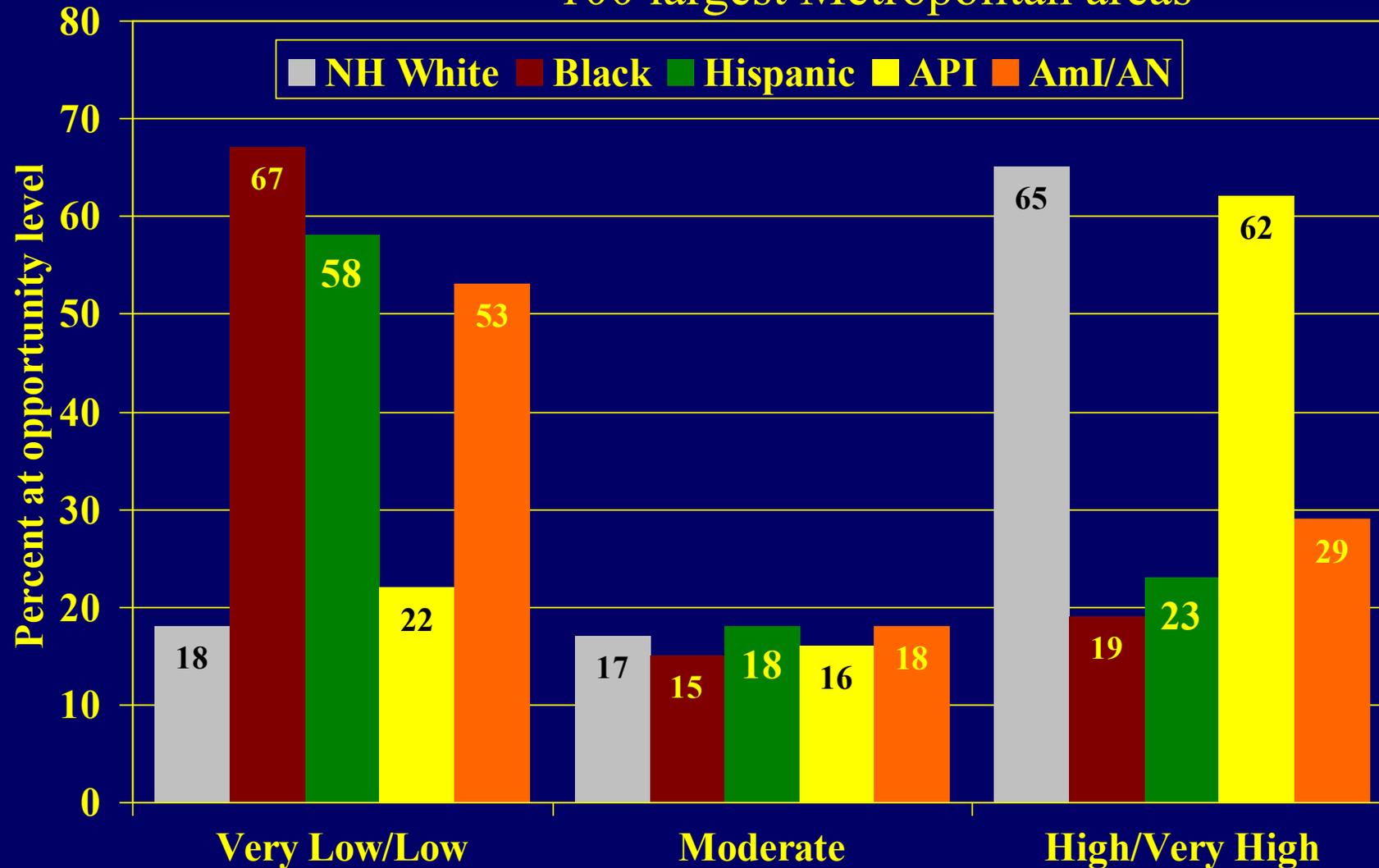
Neighborhood Opportunity Index

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



*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)



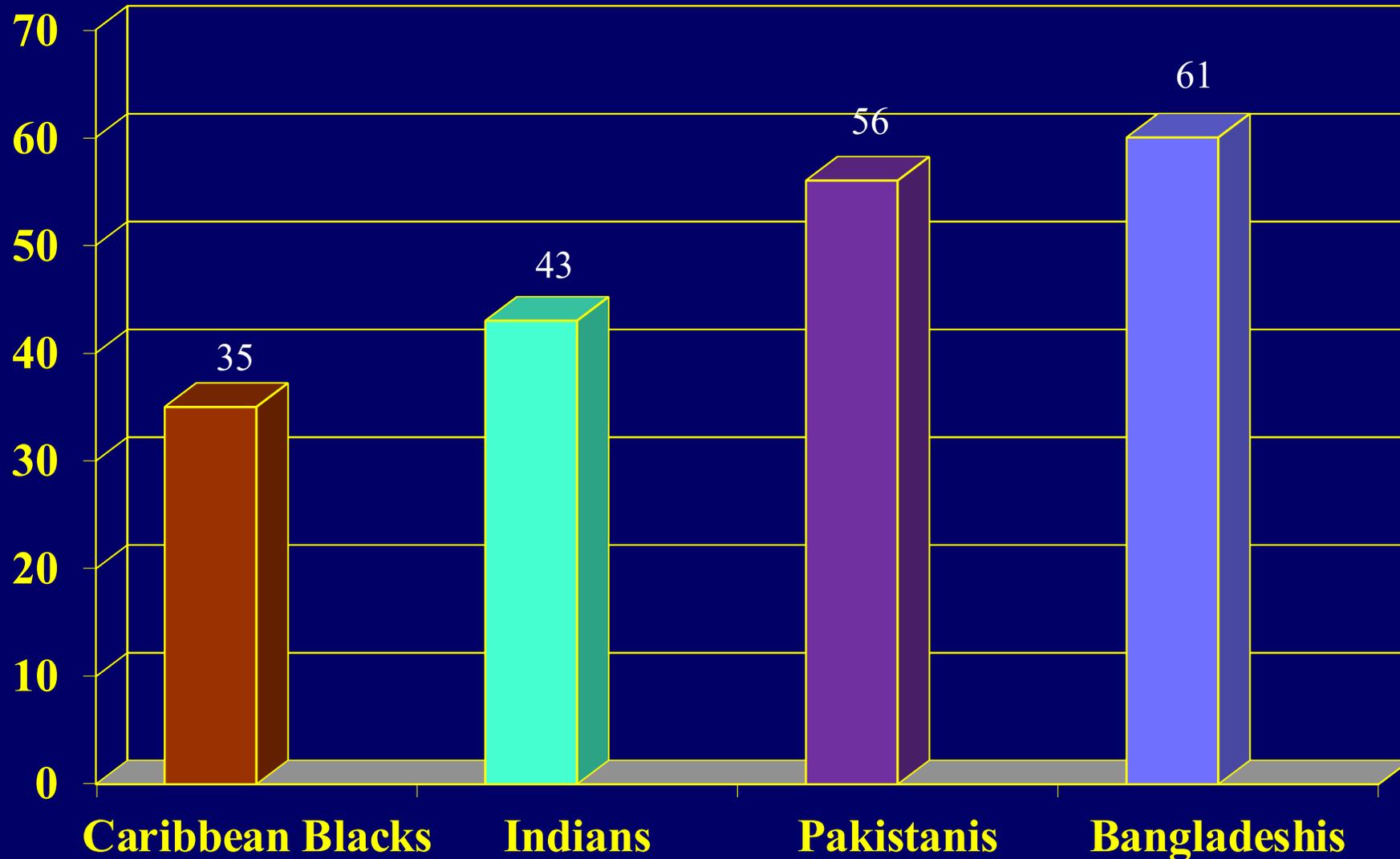
- **Why?** They live in neighborhoods that differ in access to opportunity
- **Black boys do well in neighborhoods with** good resources (low poverty) **and good race-specific factors** (high father presence, less racial bias)
- **The problem:** there are essentially no such neighborhoods in America

Residential Segregation in Western Europe

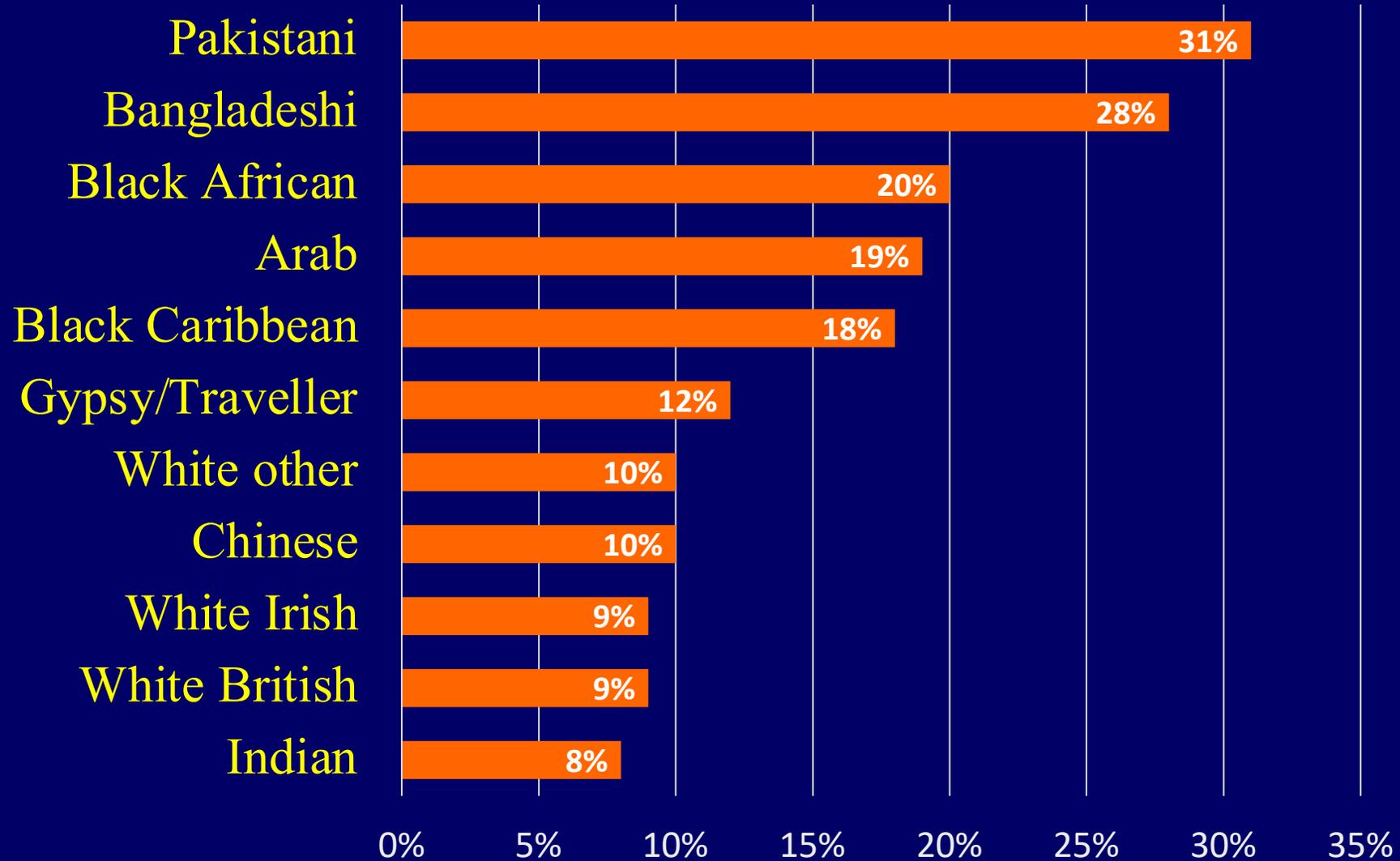
- Levels of segregation in Europe are rising compared to the steady or falling levels in North America
- Patterns of Segregation in Europe:
 1. Religion: Segregation greater for Muslims than for other religious groups
 2. Skin Color: After religion, segregation is greater for darker skinned nationalities



Segregation in Britain

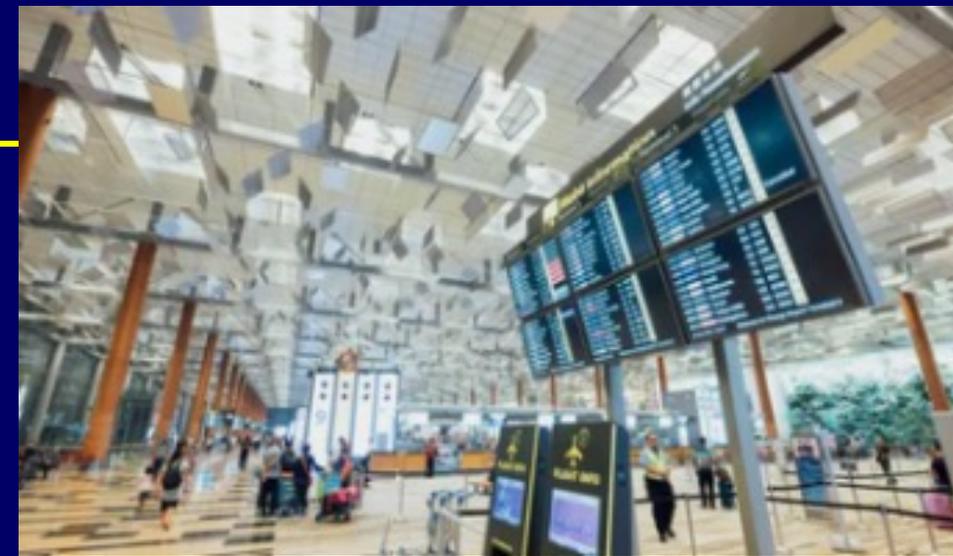


Percentage of Ethnic Group Living in Most Deprived 10% of Neighbourhoods England 2015



Inequities by Design

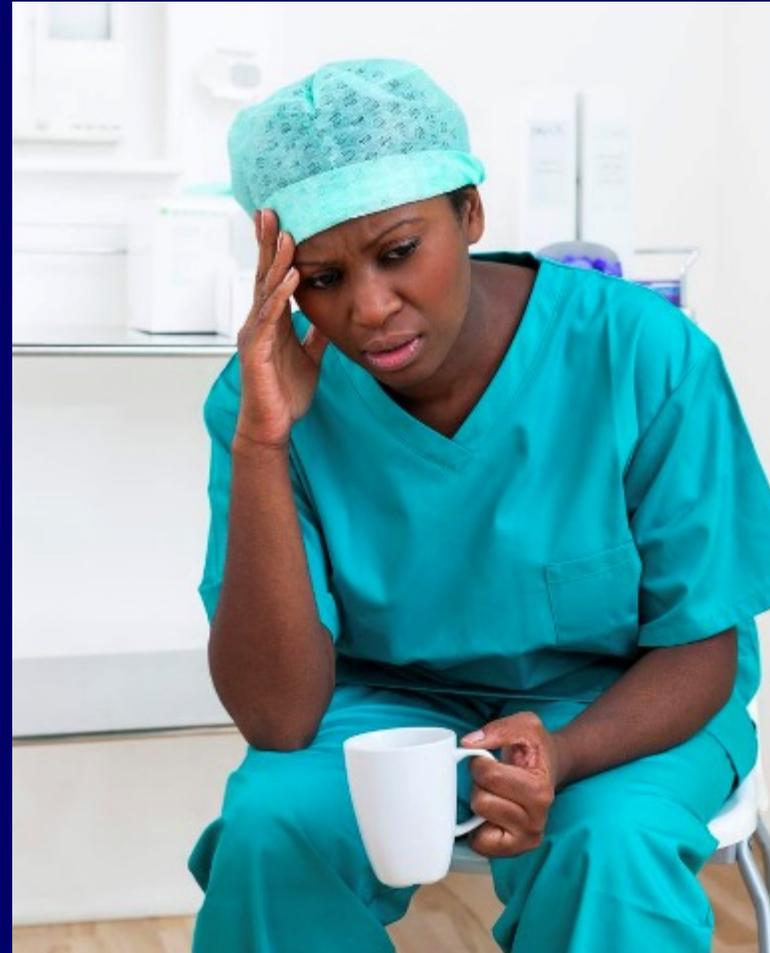
- Racial inequities in SES that matter for life & health not reflect a broken system
- Instead, they reflect a carefully crafted system, functioning as planned – successfully implementing social policies, many of which are rooted in racism
- They are not accidents or acts of God
- Racism has produced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



Segregation, SES, Stress and Health

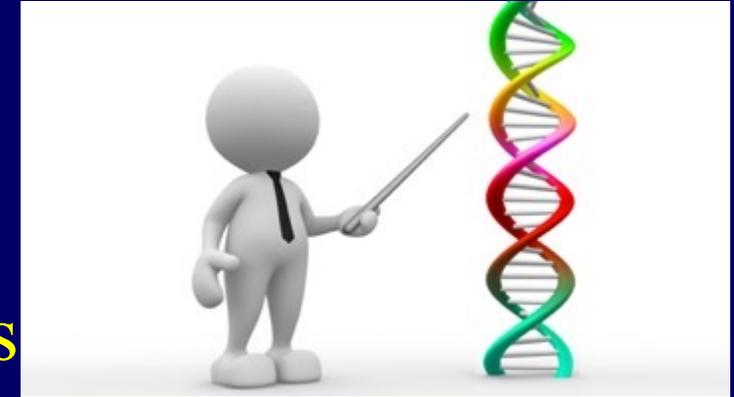
Lower economic status, living in disadvantaged, segregated, neighborhoods leads to higher levels of exposure and greater clustering of:

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



Distinctive Social Contexts: Research Implications

- Race/ethnicity captures the clustering of stressors over time and occupancy of distinctive residential and occupational environments
 - How are normal adaptive and regulatory systems affected by the accumulation of adversity?
 - To what extent does biological adaptation to their residential environments lead minorities to have some biological profiles that are different from other groups and some distinctive patterns of interactions (between biological and psychosocial factors)?
-



CDC



CDC

The House that Racism Built

Racism as a societal system

Social Forces

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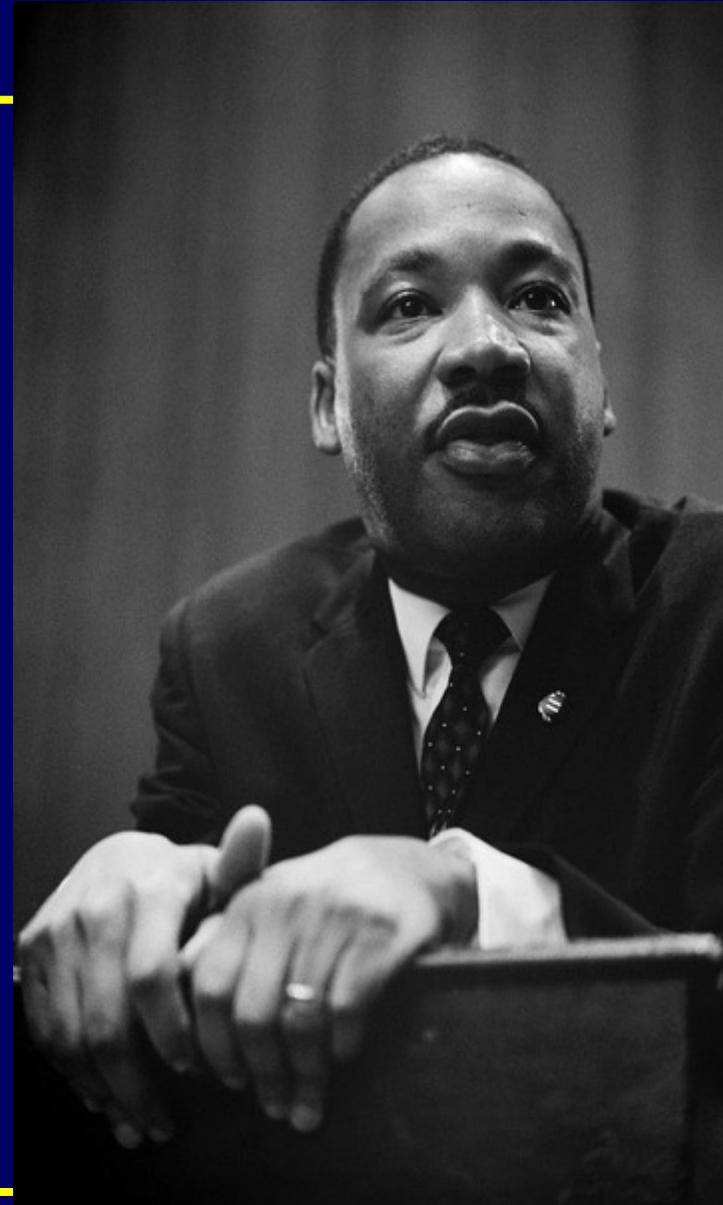
Institutional Racism (e.g. Segregation)

Individual Discrimination

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]



Individual Discrimination

Experiences of discrimination are
an added source of Toxic Stress

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

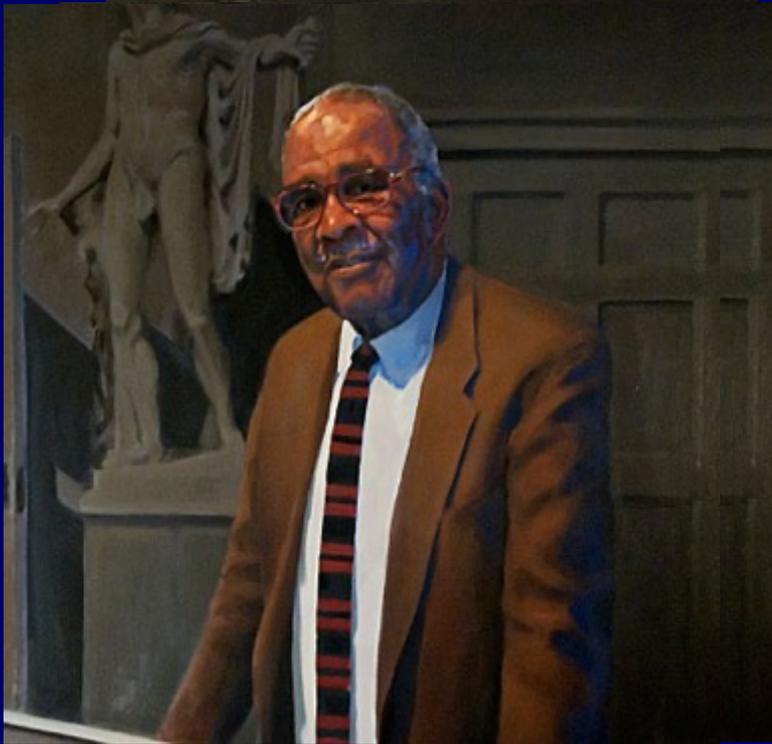
Inflammation (CRP, IL-6, e-selectin)
Cortisol
Telomere length
Allostatic load

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**

Online Discrimination and Mental Health

- Study of 264 youth, aged 14 to 18
- Victimization in texts, chats, forums, online games, social network sites, etc
- After adjustment for age, gender, ethnicity, other adolescent stress, and offline discrimination

- Online individual discrimination was positively related to depression and anxiety symptoms



Exposure to Traumatic Videos

- Study of black and Latinx adolescents (11-19 years old)
- Assessed viewing race-related, traumatic images or videos online: seeing persons from own ethnic group 1) beaten, 2) arrested or detained, or 3) being shot by the police
- Exposure to online traumas in prior year linked to higher PTSD and depressive symptoms
- Need to assess and facilitate coping with race-related materials



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



Community Bereavement

- Racial differences in health = Blacks have more deaths of friends and relatives earlier in childhood and throughout the life course
- Compared to Whites,
 - Black children: 3 times as likely to lose mother by age 10
 - Black adults: twice as likely to lose child by age 30 and spouse by age 60
- Loss of social ties: unique stressor, earlier & more frequent, that affects health across the life course



Consequences of the cumulative exposure to discrimination and other stressors

“Accelerated Aging”

“Premature Aging”

Biological “Weathering”

Earlier Onset of Chronic Disease

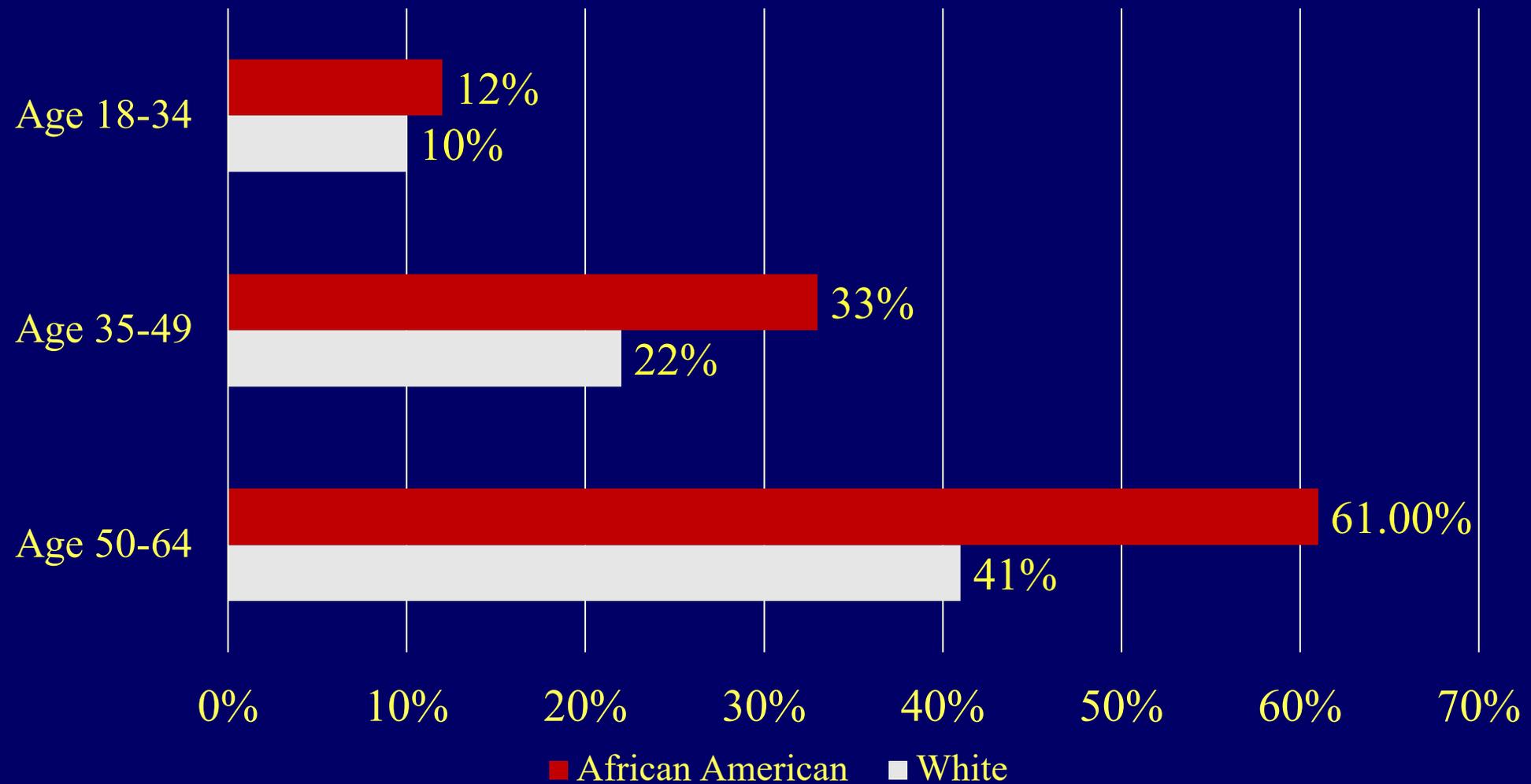
Biological Weathering

- Chronological age captures duration of exposure to risks for groups living in adverse living conditions
- U.S. blacks are experiencing greater physiological wear and tear, and are aging, biologically, more rapidly than whites
- It is driven by the cumulative impact of repeated exposures to psychological, social, physical and chemical stressors in their residential, occupational and other environments, and coping with these stressors
- Compared to whites, blacks experience higher levels of stressors, greater clustering of stressors, and probably greater duration and intensity of stressors



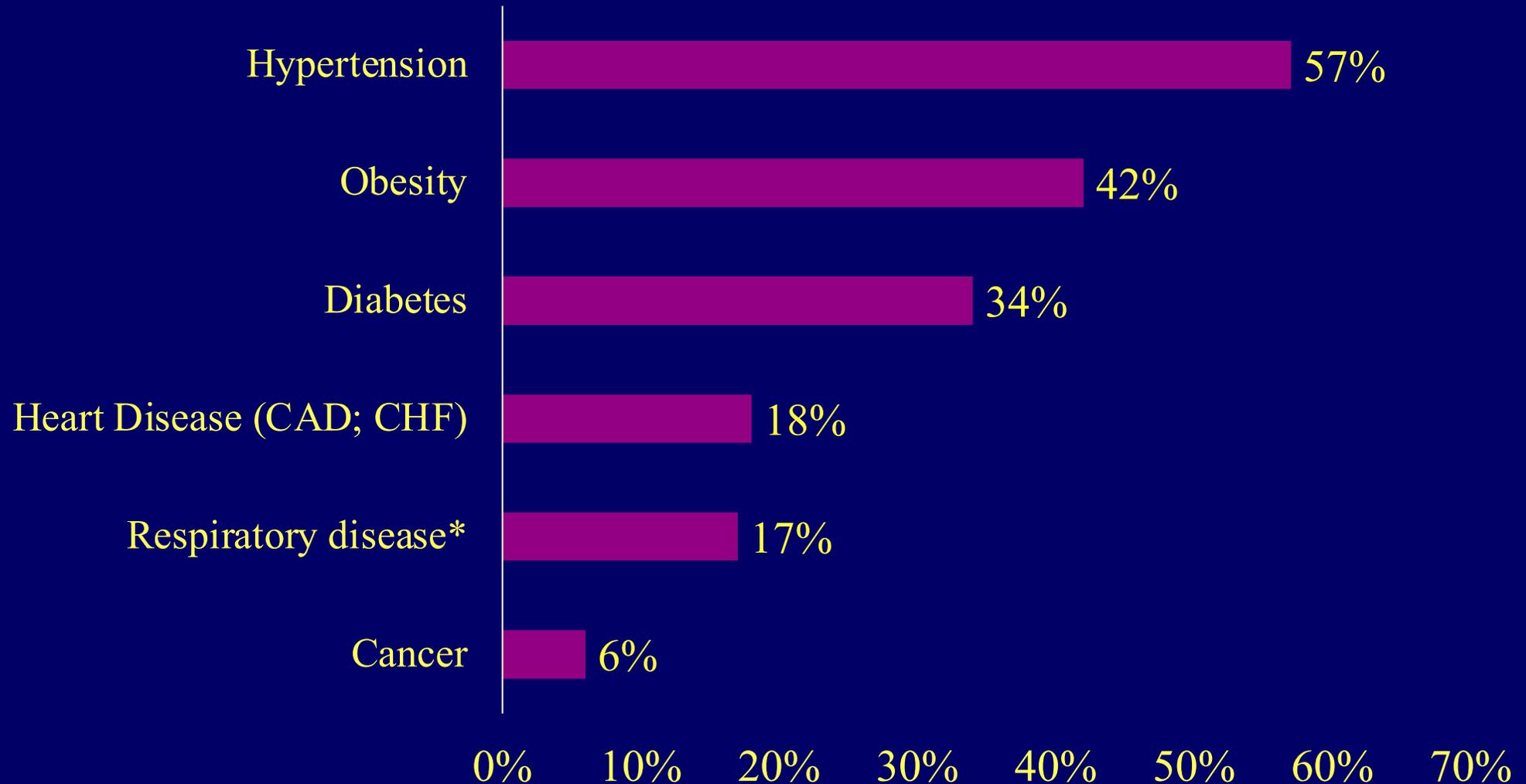
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Earlier Onset of High Blood Pressure

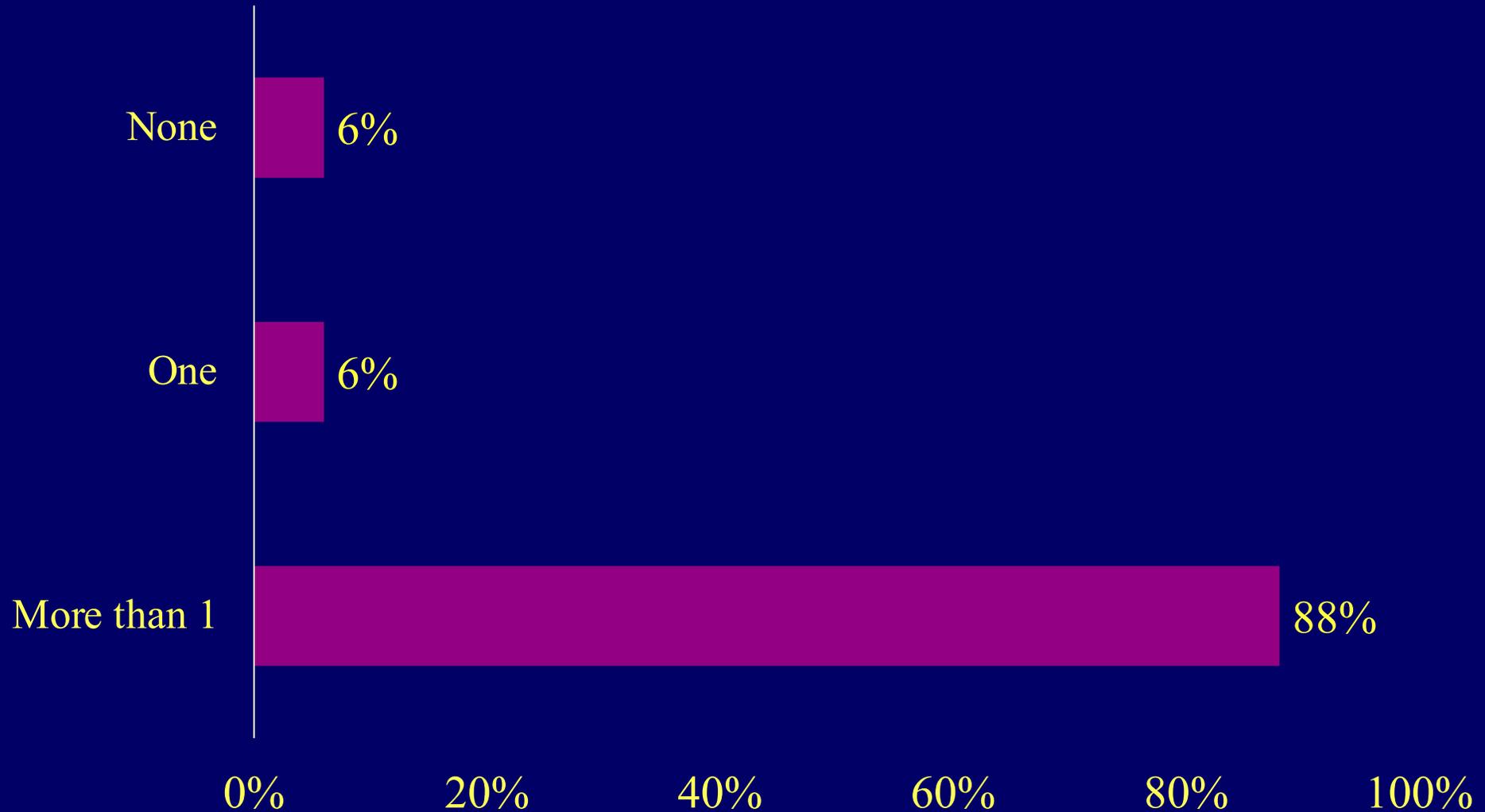


Comorbidities of Covid-19 Patients

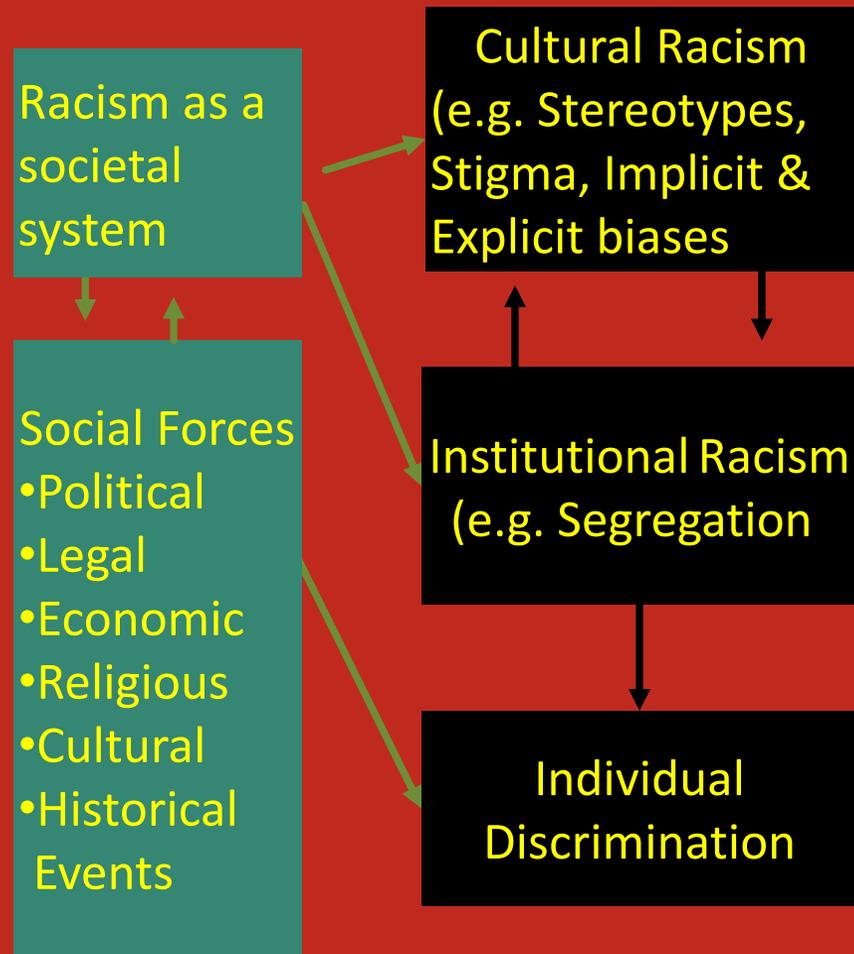
5,700 patients, 12 NY hospitals, March 1 to April 4; Av age :63



Number of Comorbidities, Covid-19 Patients



The House that Racism Built



Negative stereotypes about race
remain deeply embedded in our culture

Negative Stereotypes Trigger Racial Discrimination



*Where do Negative Racial Stereotypes
come from?*

Racial Stereotypes in Our Culture

- BEAGLE Project
- 10 million words
- Sample of books, newspapers, magazine articles, etc. that average college-level student would read in lifetime
- Allows us to assess how often Americans have seen or heard words paired together over their lifetime

Stereotypes in Our Culture

BLACK	poor	.64	WHITE	wealthy	.48
BLACK	violent	.43	WHITE	progressive	.41
BLACK	religious	.42	WHITE	conventional	.37
BLACK	lazy	.40	WHITE	stubborn	.32
BLACK	cheerful	.40	WHITE	successful	.30
BLACK	dangerous	.33	WHITE	educated	.30
FEMALE	distant	.37	MALE	dominant	.46
FEMALE	warm	.35	MALE	leader	.31
FEMALE	gentle	.34	MALE	logical	.31
FEMALE	passive	.34	MALE	strong	.31

Stereotypes in Our Culture

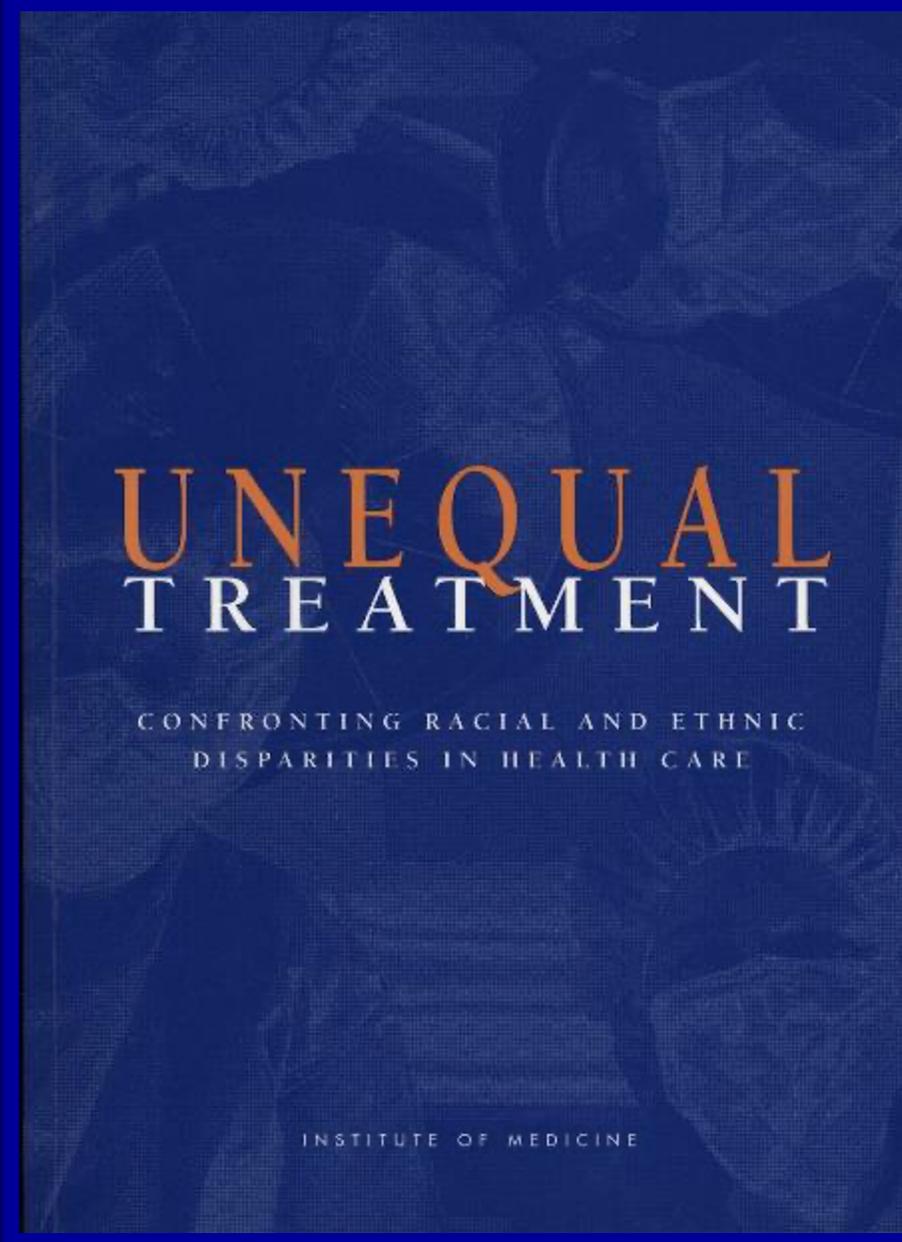
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BLACK	cheerful	.40	WHITE	successful	.30
BLACK	dangerous	.33	WHITE	educated	.30
BLACK	charming	.28	WHITE	ethical	.28
BLACK	merry	.28	WHITE	greedy	.22
BLACK	ignorant	.27	WHITE	sheltered	.21
BLACK	musical	.26	WHITE	selfish	.20

Implicit Biases are:

- Normal, natural, subtle and often subconscious
- Universal: all humans have them
- Developed naturally through routine social interactions and exposure to culture (media, etc.)
- Guide our expectations and interactions with others
- Can become harmful when assumptions and generalizations about a group affect our interactions with an individual
- Even the most well-meaning individual can harbor deep-seated biases
- Not the only type of discrimination

Implicit Bias In Medical Care

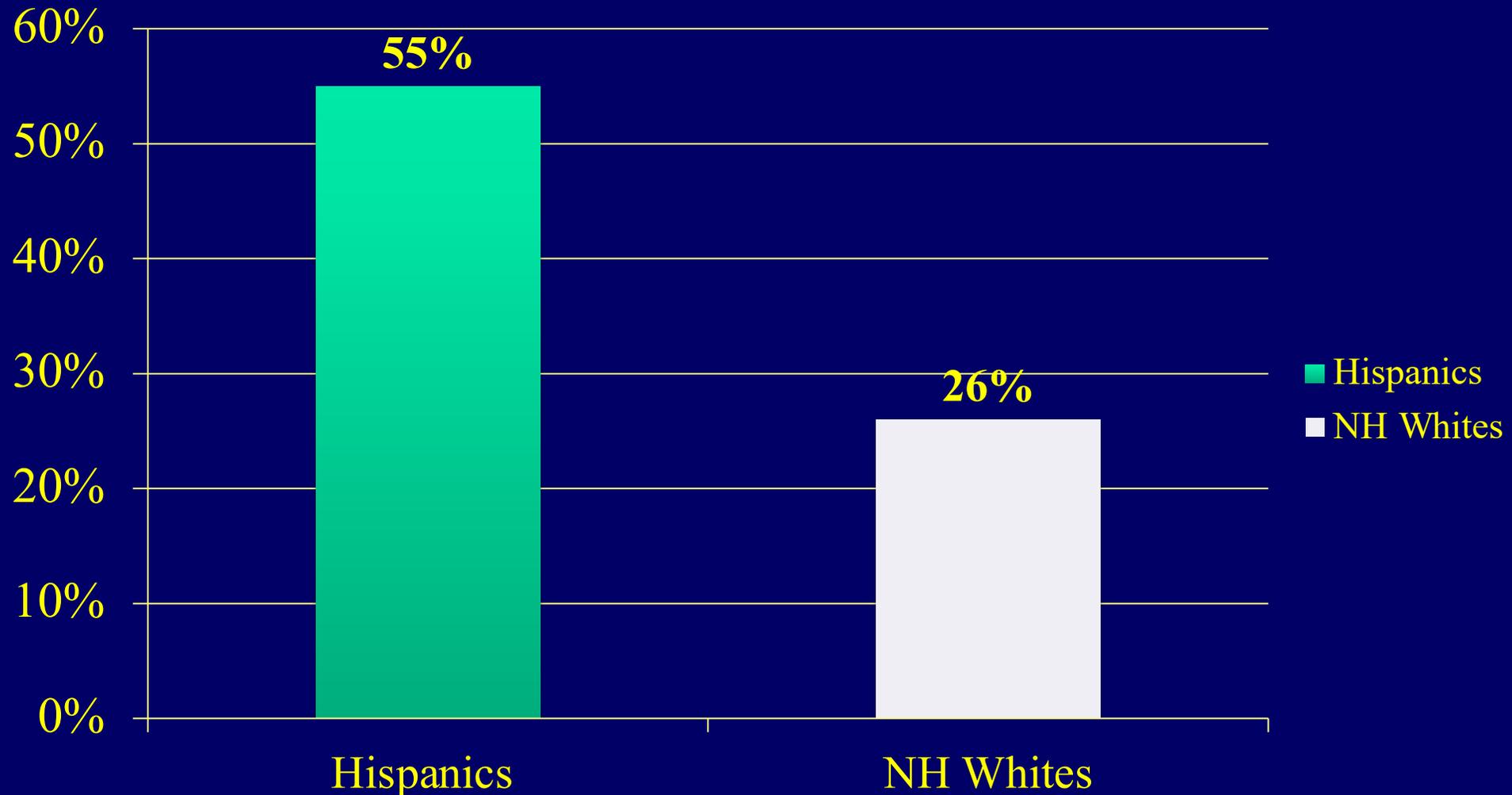




Racial Bias in Medical Care

Ethnicity and Pain Medicine

Percent of Patients with broken bone receiving no analgesia



Implicit Bias & Care for Blacks

More Implicit bias associated with:

- more clinician verbal dominance*
- less patient centered dialogue
- lower patient positive affect*
- lower perception of respect from clinician*
- less patient liking of clinician*
- lower trust and confidence in clinician
- less likely to recommend clinician to others*
- less perception of clinician as participatory*
- longer visits and slower speech (compensation for mistrust?)



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



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

Building More Health into the Delivery of Medical Care

Diversifying the Workforce to meet the Needs of
all Patients

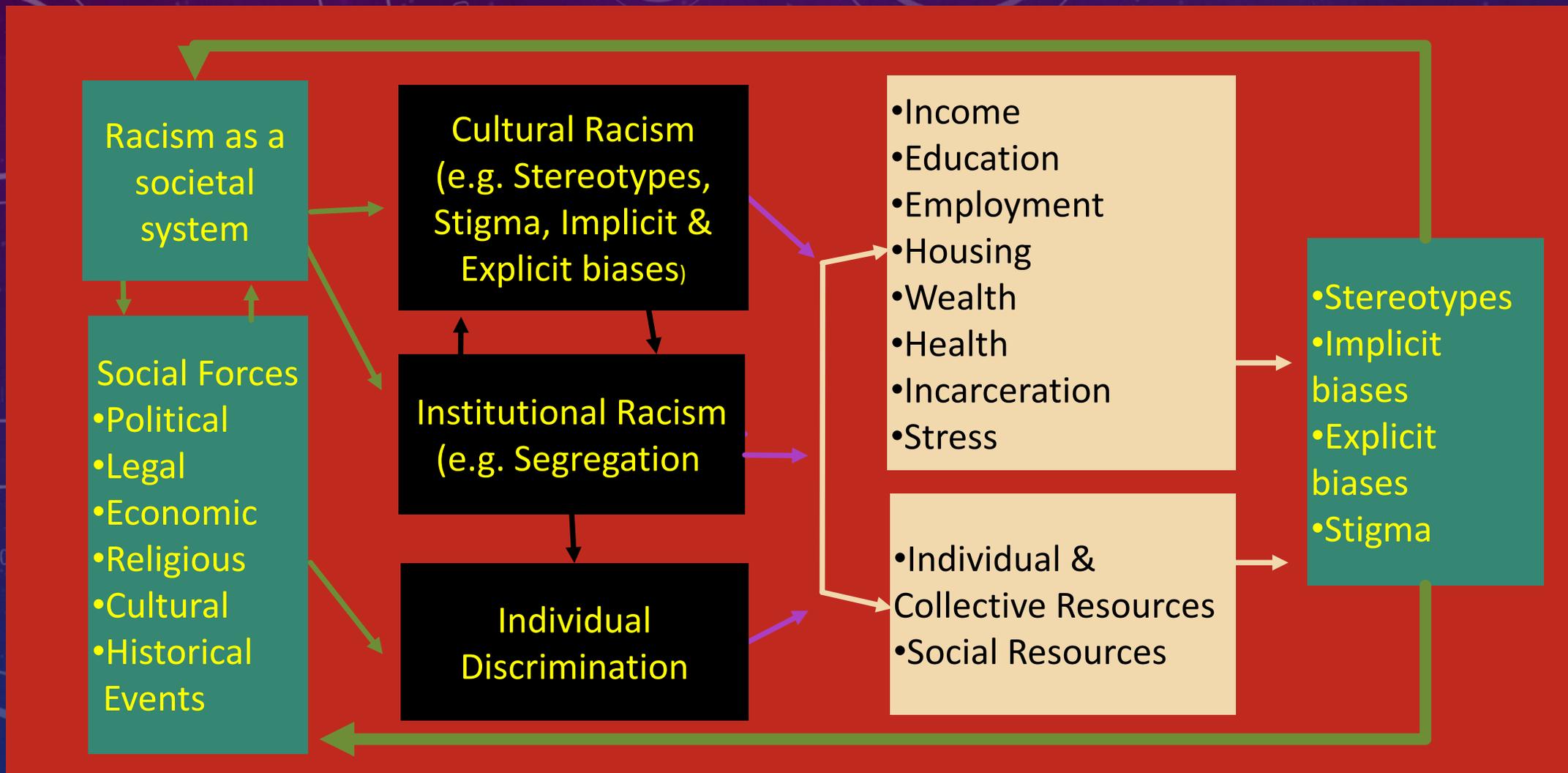
Progress (or lack thereof) in Medicine

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

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

The House that Racism Built



What Else Can We Do?

Strategy

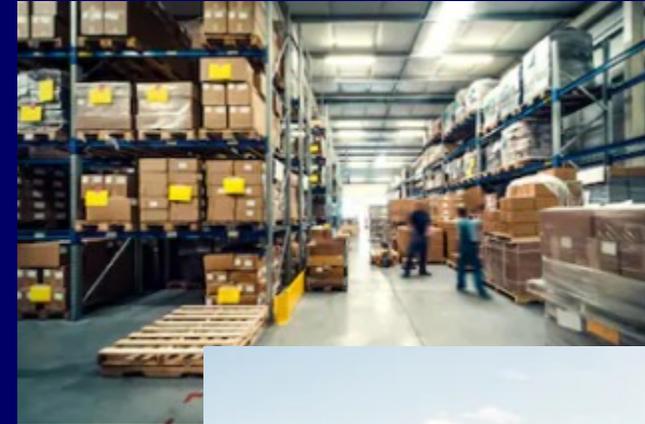
Create Communities of Opportunity to minimize, neutralize and dismantle the systems of racism that create inequities in health



Reducing Inequalities

Address Place-Linked Determinants of Health

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



Communities of Opportunity

- Invest in early childhood programs
- 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



Increased Income Leads to Improved Health

- Civil Right Policies
- Earned Income Tax Credits (EITC)
- Social Security implementation and cost of living adjustments
- Conditional Cash Transfer Programs
- Additional Income to Native American Communities



Communities of Opportunity

Building Strong Families

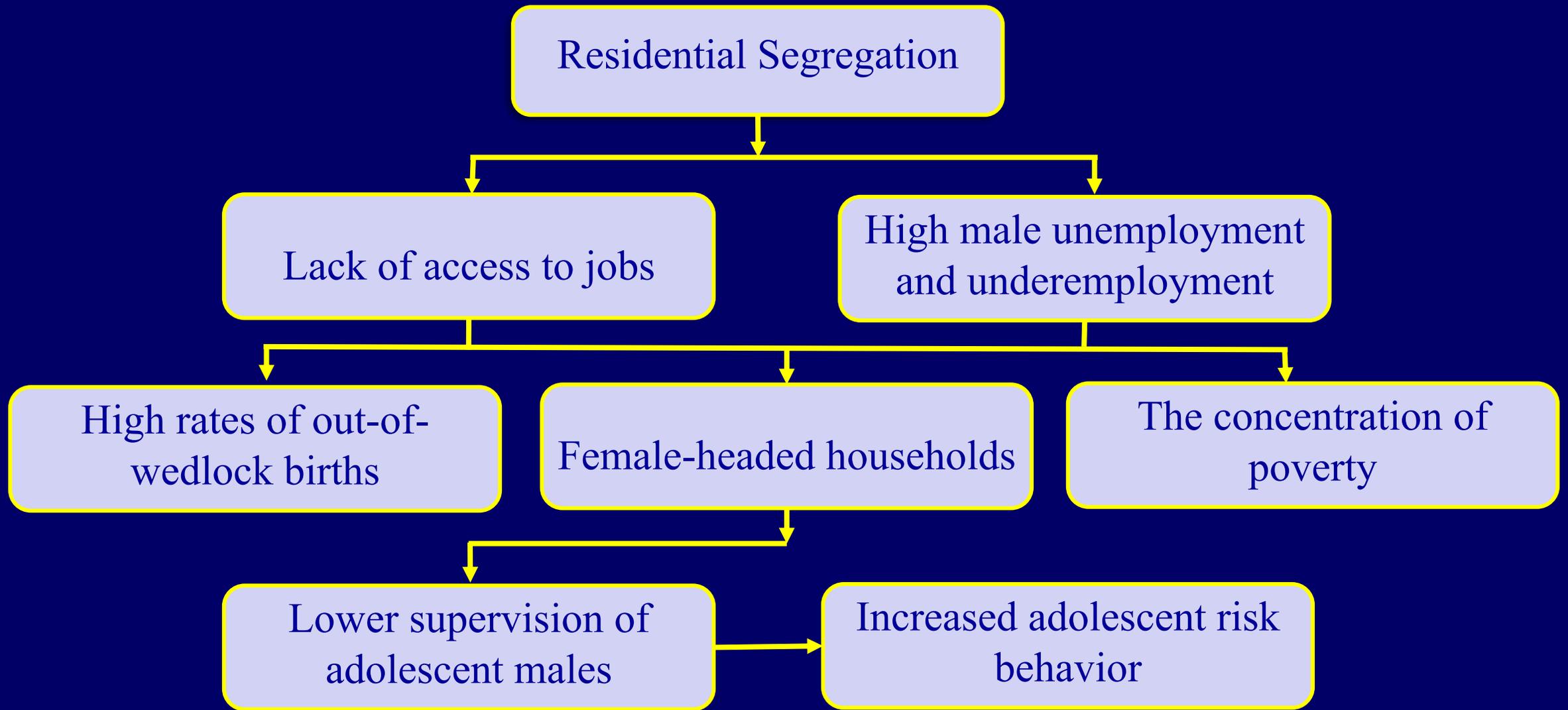
Family Structure: how do we intervene?

Determinants of Family Structure

- Economic marginalization of males (high unemployment & low wage rates) is a central determinant of high rates of female-headed households.
- Marriage rates are positively related to average male earnings.
- Marriage rates are inversely related to male unemployment

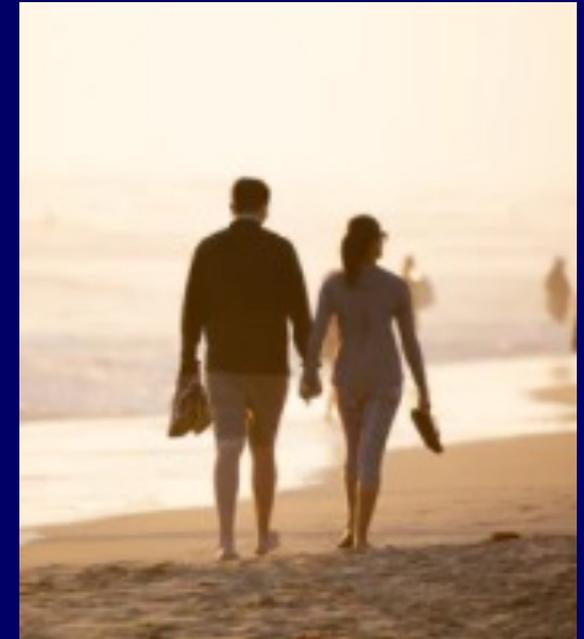


Segregation and Family Structure - 1



Segregation and Family Structure - 2

- Association between male unemployment, poverty and family structure with adolescent risk behavior (violence, homicide) is identical in sign and magnitude for Blacks and Whites in the U.S.
- Racial differences in adolescent risk behavior driven by racial inequities at the neighborhood level in availability of jobs, concentrated poverty, opportunities for marriage and family structure



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The Military & Economic Well-Being?

- Black men in the military earn more than civilian peers
- The command and control, bureaucratic structure of the military has created a more race-blind environment than larger society
- Military benefits include family housing, day care centers, school-age activity centers



Learning from the Military

Active duty military service:

1. **Promotes** marriage over cohabitation
 2. **Increased the likelihood of 1st** marriage
 3. **Leads to** greater stability of marriage
- **Effects** greater for blacks than for whites
 - **Economic resources can eliminate disparities in marriage**



Purpose Built Communities

- Based on efforts in Atlanta's East Lake district
 - Purpose Built Communities uses integrative strategies including cradle-to-college educational opportunities, mixed-income housing, early child development programs, employment support and recreational opportunities
 - Community engagement and philanthropy
 - **Key:** addressing all of the challenges faced by disadvantaged communities simultaneously
 - Purpose Built Communities in Atlanta, New Orleans, Indianapolis, Charlotte, among others
-

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

Reducing Inequities in Health

*We need to build on individual and
community resources and resilience
factors*

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?

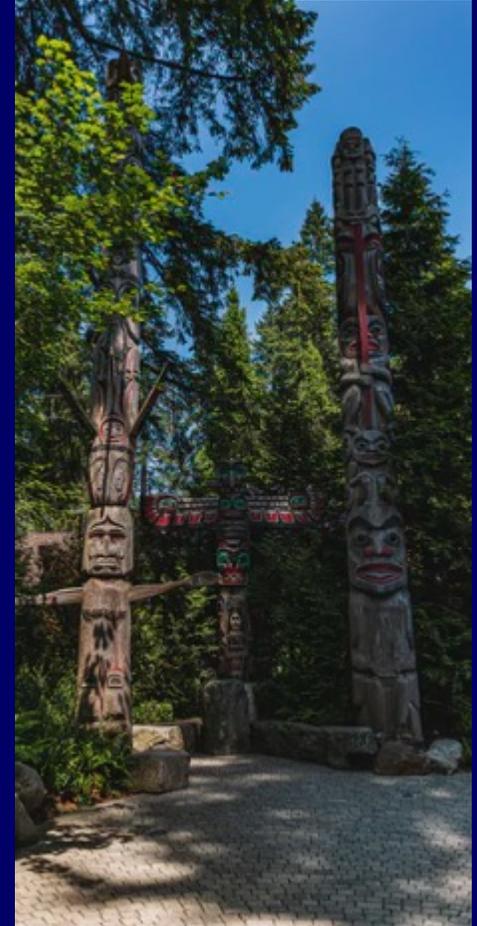
- Prospective analyses of the National Study of Black Americans found that multiple aspects of religious engagement:
 - religious attendance
 - church-based social support
 - seeking religious guidance in everyday life
- reduced the negative effects of experiences of discrimination on mental health



Uhsplash.com

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



Unsplash.com

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



Unsplash.com

What Is Holding Us Back?

What are the Barriers we have to Address?



What elephant?

Tomassi

3 Communication Challenges

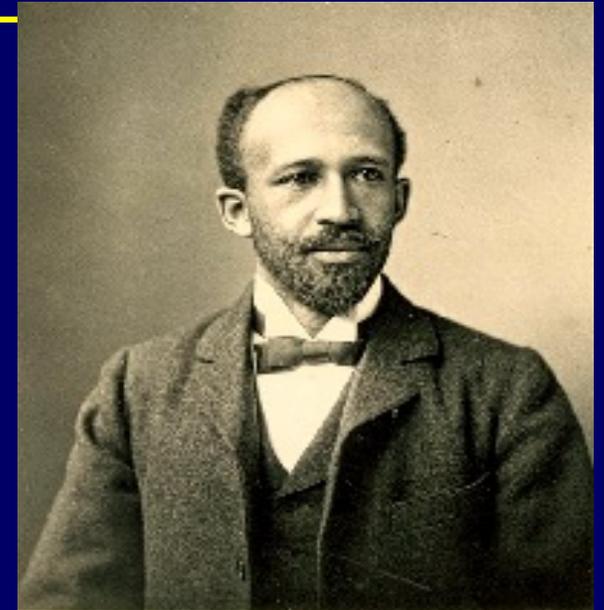
- We need to raise awareness levels of the problem of inequities in health
 - We need to build the science base that will guide us in developing the political will to address racial and SES inequities in health
 - We need to build empathy, that is, identify how to tell the story of the challenges of the disadvantaged in ways that emotionally connect and resonate with the public
-

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



<https://www.phila.gov/personnel/Jobs/NonCivilServiceJobOpps.html>

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

“There is nothing so unfair as the equal treatment of unequal people.”

- Plato paraphrased

