

Understanding and Effectively Addressing Health Equity

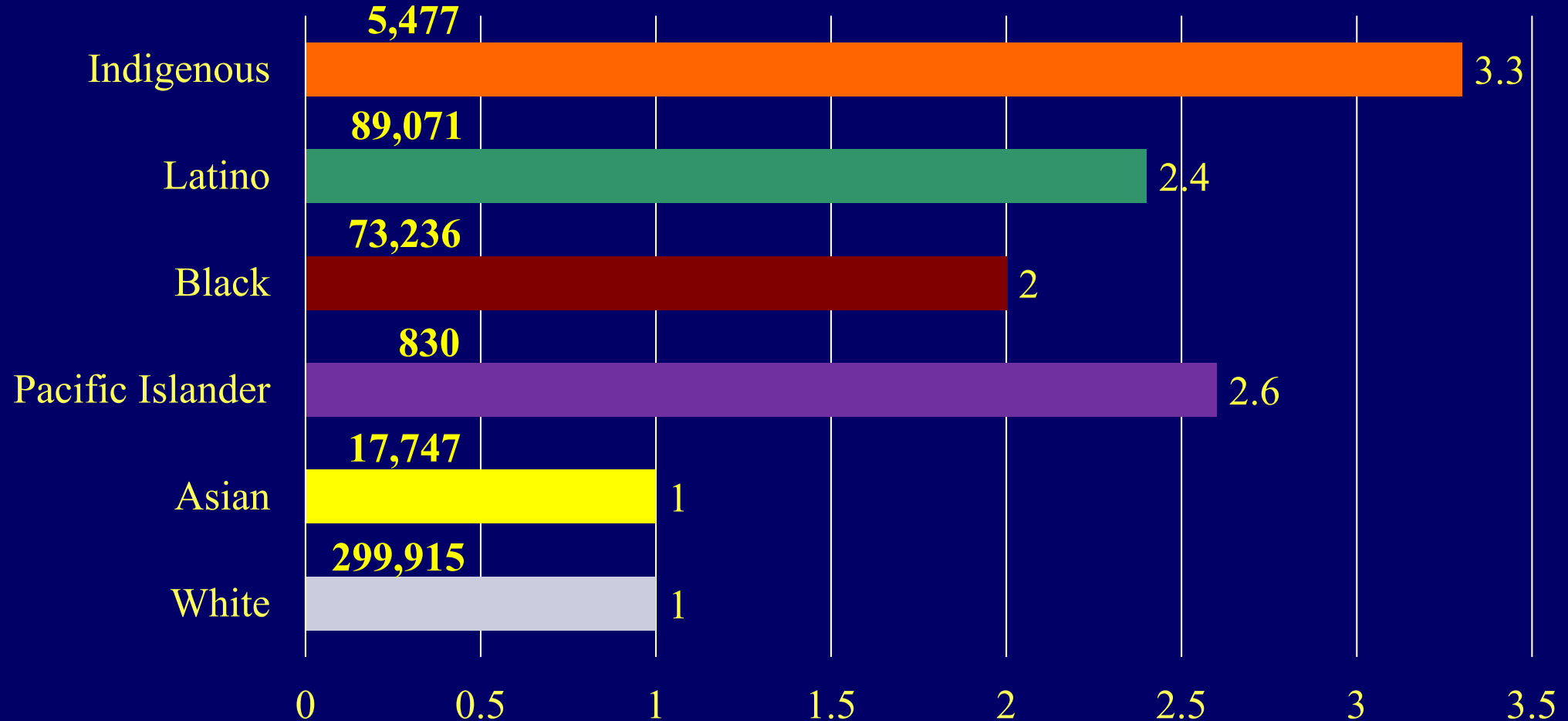
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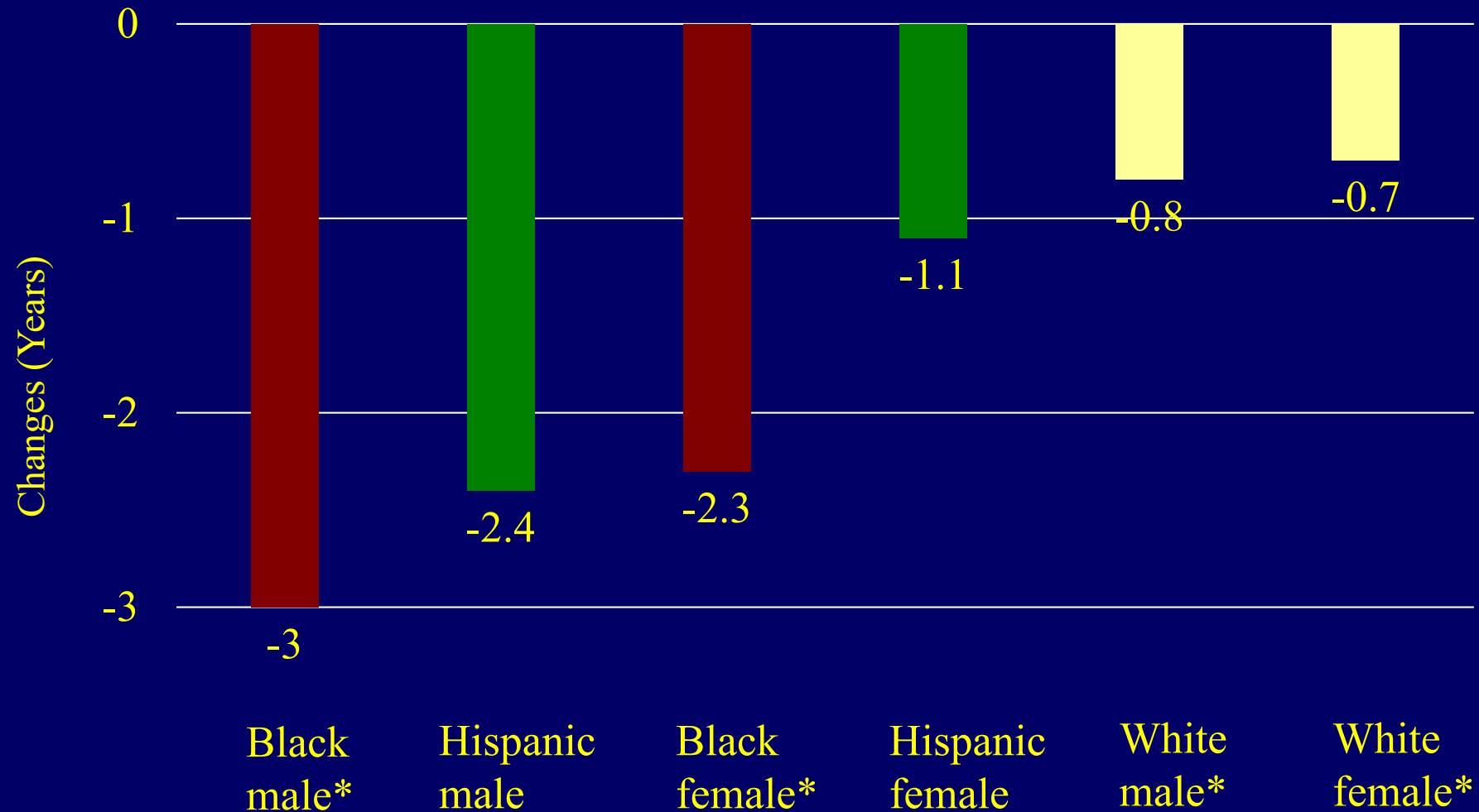
Harvard University

More Likely to Die of Covid-19 Compared to Whites

Cumulative mortality rates calculated through March 2, 2021; of more than 520,000 U.S. death, these are the numbers of lives lost groups:



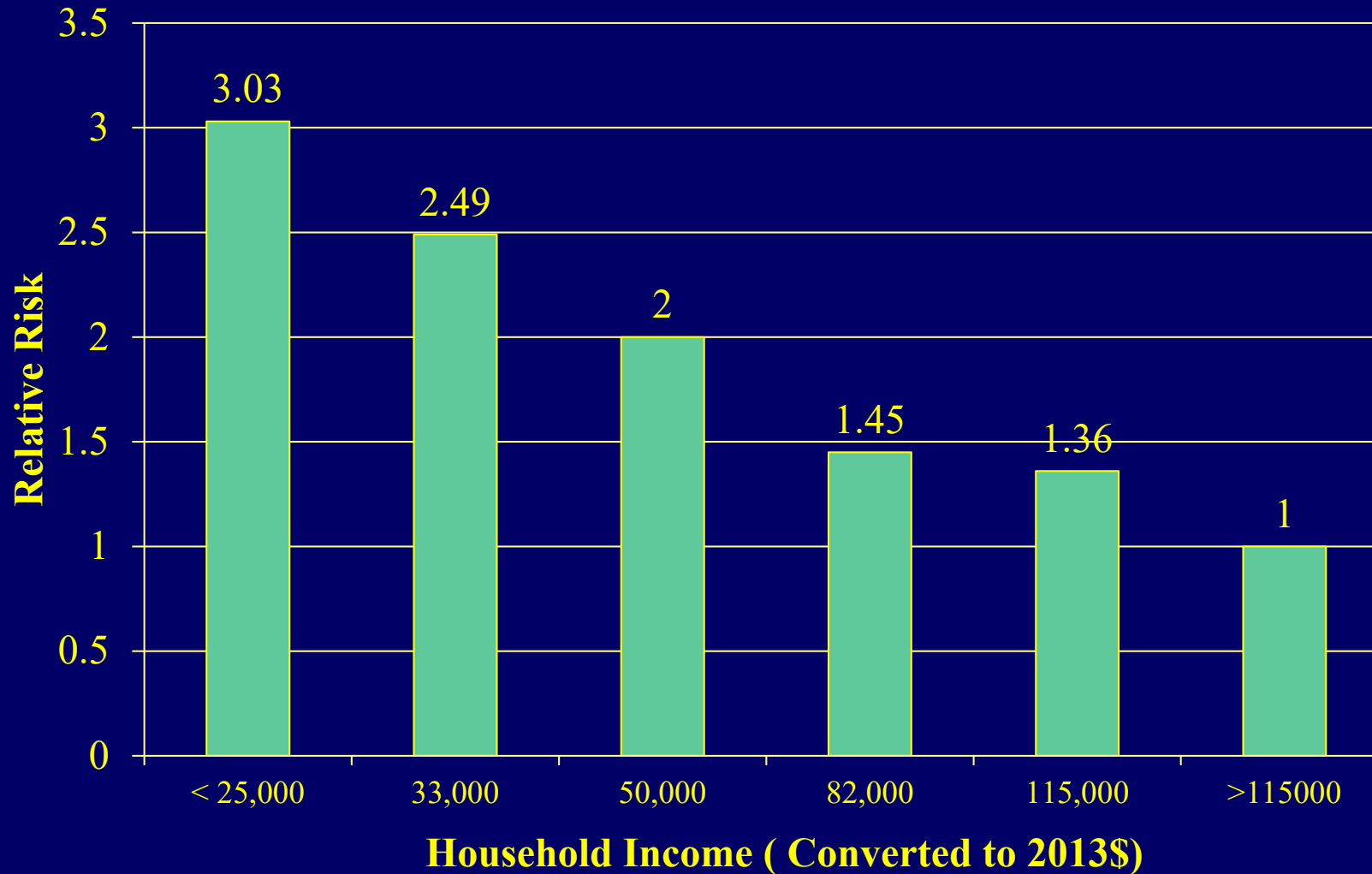
Decline: Life Expectancy at Birth, 2019-2020



What Drives these Large Racial Inequities
in Health?

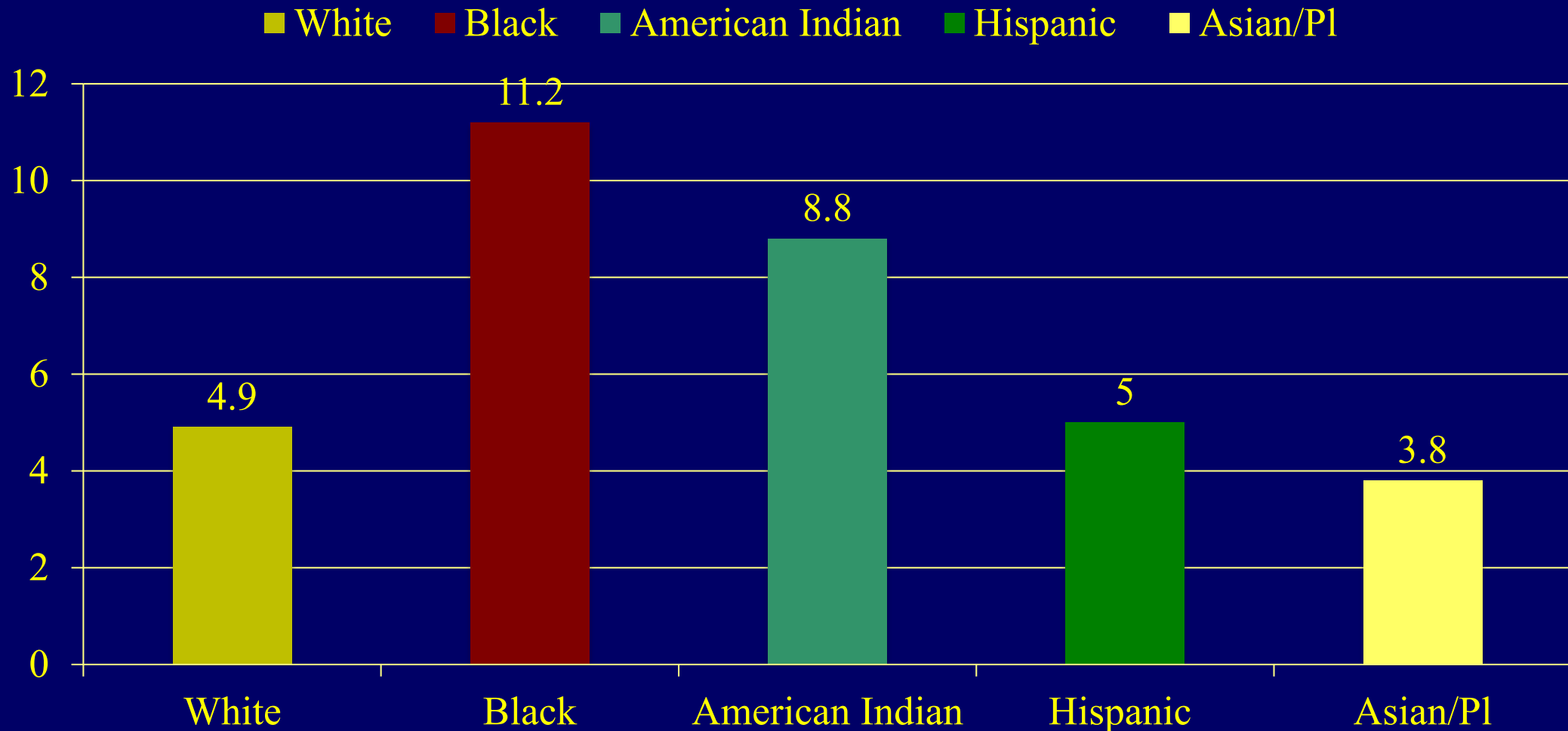
There are large Inequities in Health by
Socioeconomic Status (SES) in the U.S. and
elsewhere

Relative Risks of All-Cause Mortality by Household Income Level: U.S. Panel Study of Income Dynamics



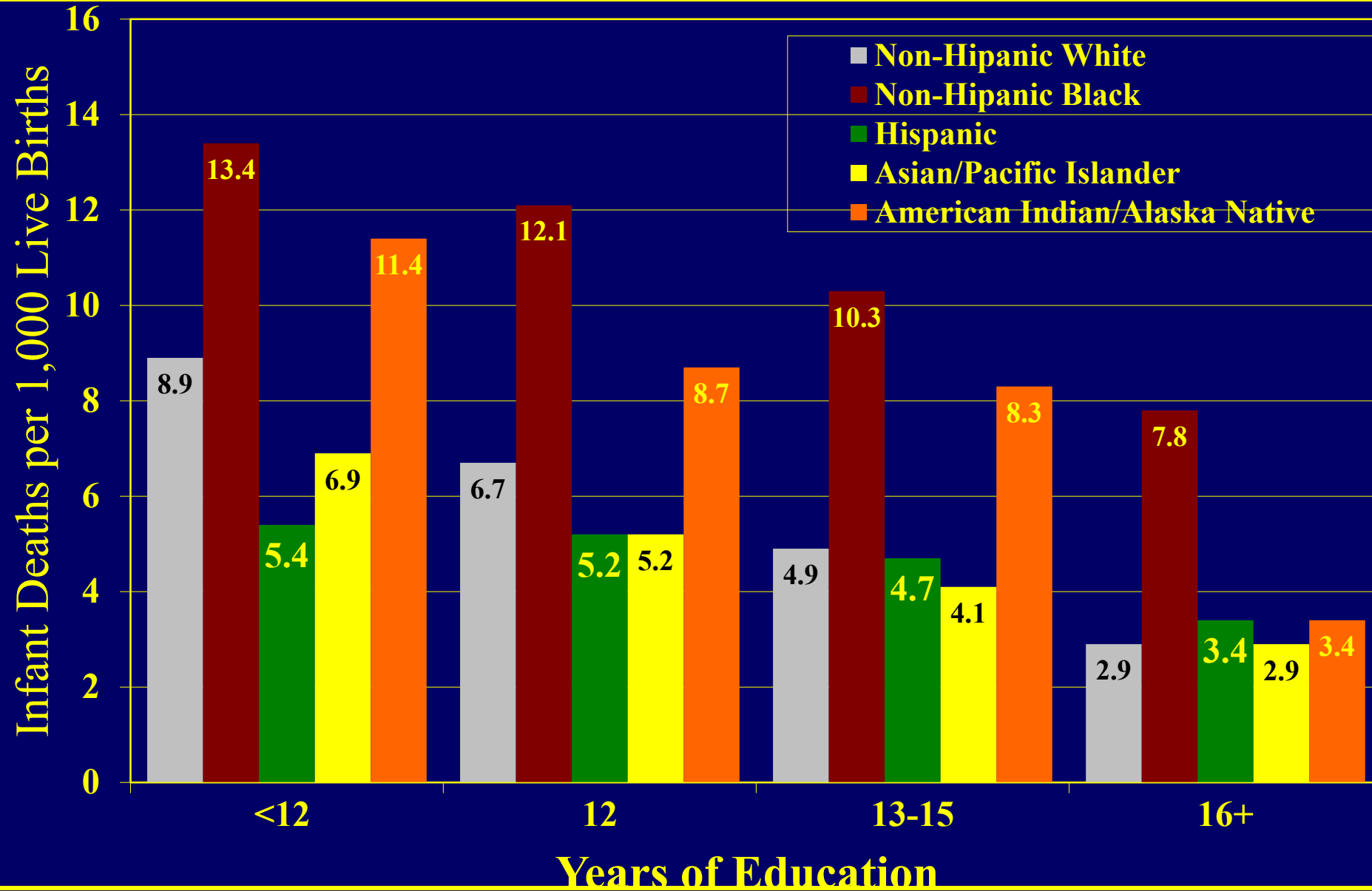
There are Large Racial/Ethnic Differences in
Socioeconomic Status

Infant Mortality in the U.S., 2016



There is an added burden of Race,
even after we take SES into account

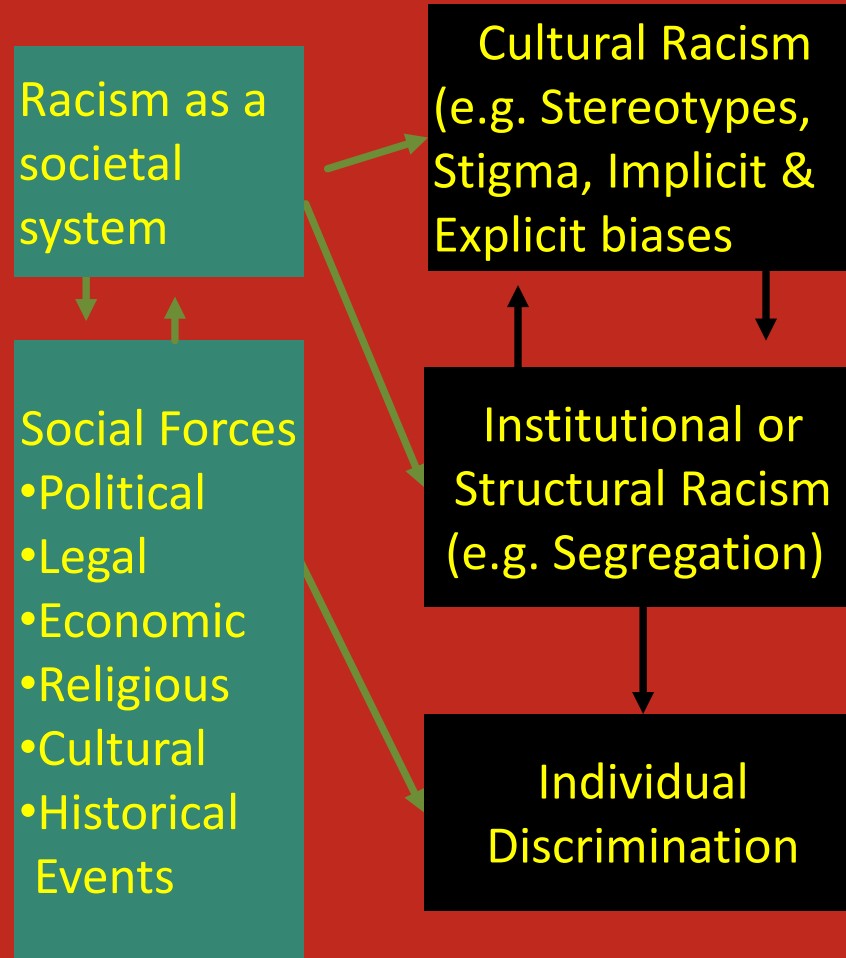
Infant Mortality by Mother's Education, 2016



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



Institutional/Structural/Systemic Discrimination

Discrimination embedded in laws and macro-level policies (past and present), can have enduring consequences for access to societal opportunities and resources

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



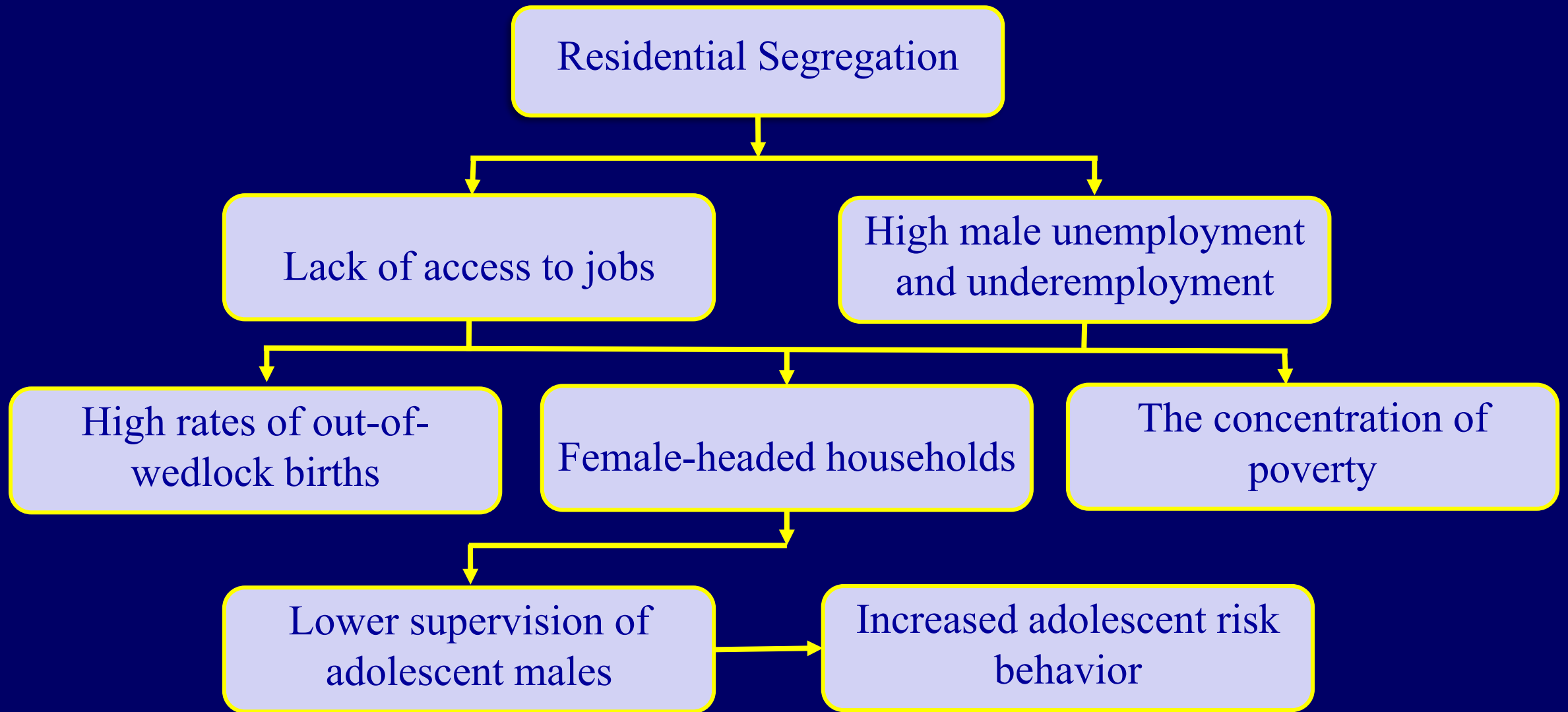
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Determinants of Family Structure

- 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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Racial Differences in Residential Environment

In the 171 largest cities in the U.S., “the sources of violent crime...are remarkably invariant across race and rooted instead in the structural differences among communities, cities, and states in economic and family organization,” p. 41



The Military & Economic Well-Being?

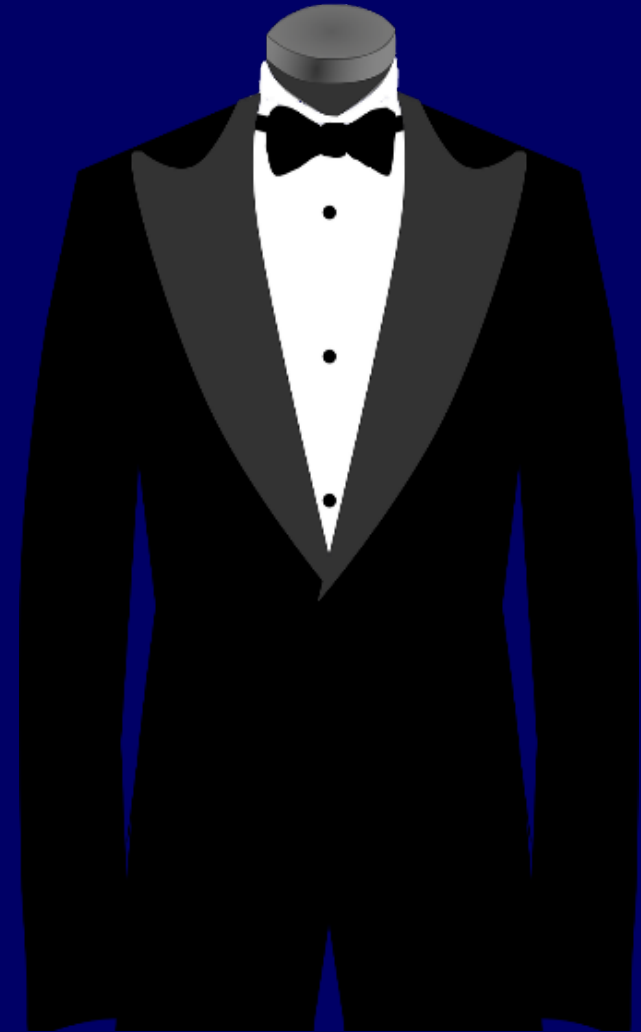
- Black men in the military earn more than civilian peers
- The command and control, bureaucratic structure of the military has created a more race-blind environment than larger society
- Military benefits include family housing, day care centers, school-age activity centers



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 opportunities & resources can eliminate disparities in marriage**



Segregation, SES, Stress and Health

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

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

and

There is also the stress of interpersonal discrimination



Individual Discrimination

Experiences of discrimination are
an added source of Toxic Stress

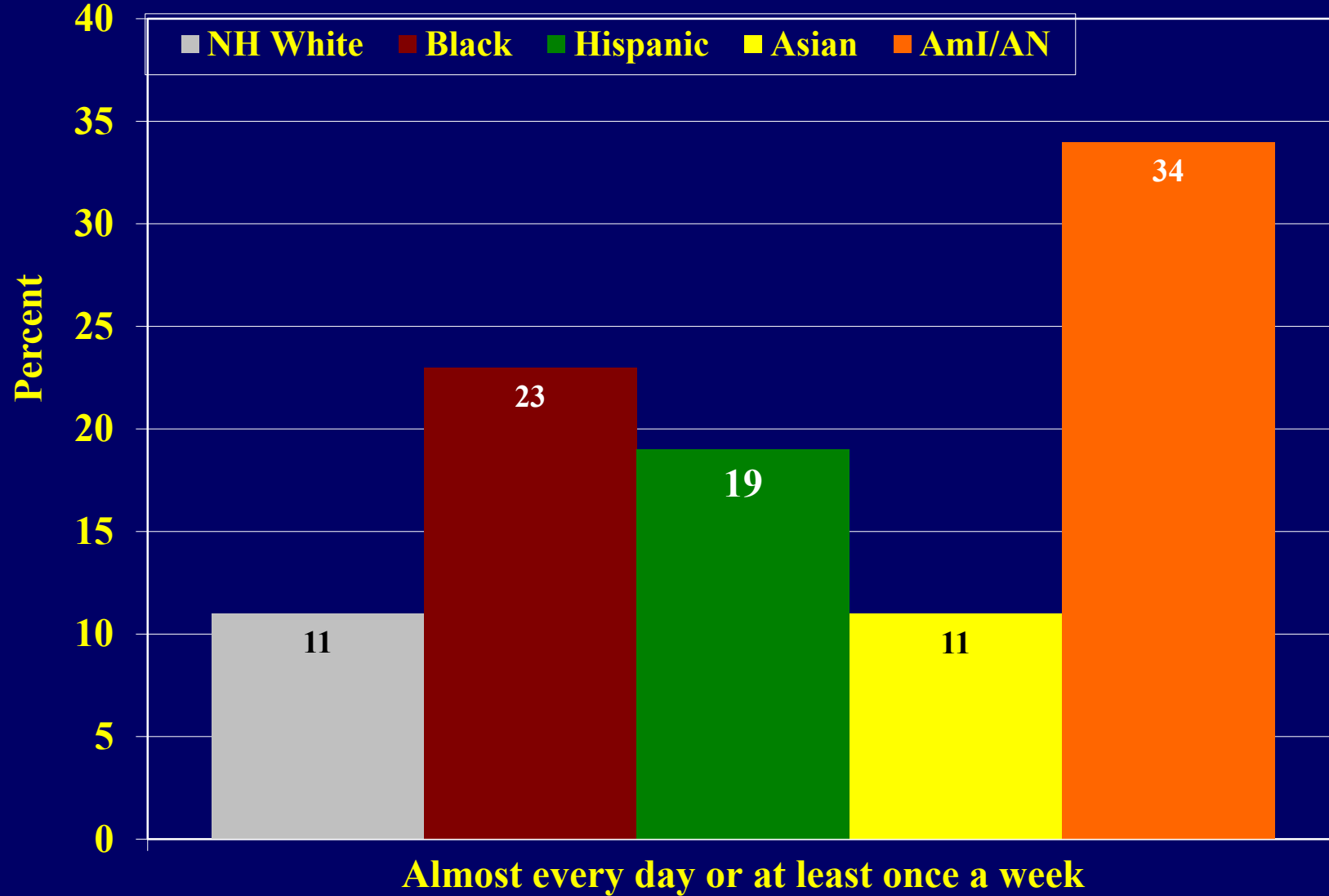
Every Day Discrimination

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, 2015



American Psychological Association, Stress in America, 2016



Discrimination & Health: Tene Lewis

- **Everyday Discrimination: positively associated with:**
 - coronary artery calcification (Lewis et al., Psy Med, 2006)
 - C-reactive protein (Lewis et al., Brain Beh Immunity, 2010)
 - blood pressure (Lewis et al., J Gerontology: Bio Sci & Med Sci 2009)
 - **lower** birth weight (Earnshaw et al., Ann Beh Med, 2013)
 - cognitive impairment (Barnes et al., 2012)
 - poor sleep [**object. & subject.**] (Lewis et al, Hlth Psy, 2012)
 - mortality (Barnes et al., J Gerontology: Bio Sci & Med Sci, 2008).
 - visceral fat (Lewis et al., Am J Epidemiology, 2011)
-

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.”

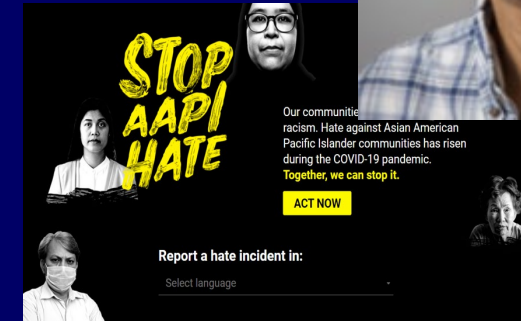
Pierce CM. Psychiatric problems of the black minority. In American Handbook of Psychiatry, Vol 2 edited by G Caplan; Basic Books 1974.)This paper references his earlier work (1970) on this topic

Asian Americans: Increasing Targets of Hate

3,795 incidents reported to the Stop AAPI Hate center, March, 2020 to Feb, 2021.

Hate incidents reported are a fraction of hate incidents that actually occur.

- Verbal harassment: 68%
- Shunning: 21% (deliberate avoidance of Asian Americans)
- Physical assault: 11%
- Civil rights violations: 9% (at workplace, refusal of service, barred from transportation)
- Online harassment: 7%



**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



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 - 1

- 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 Stops and Mother's Health - 2

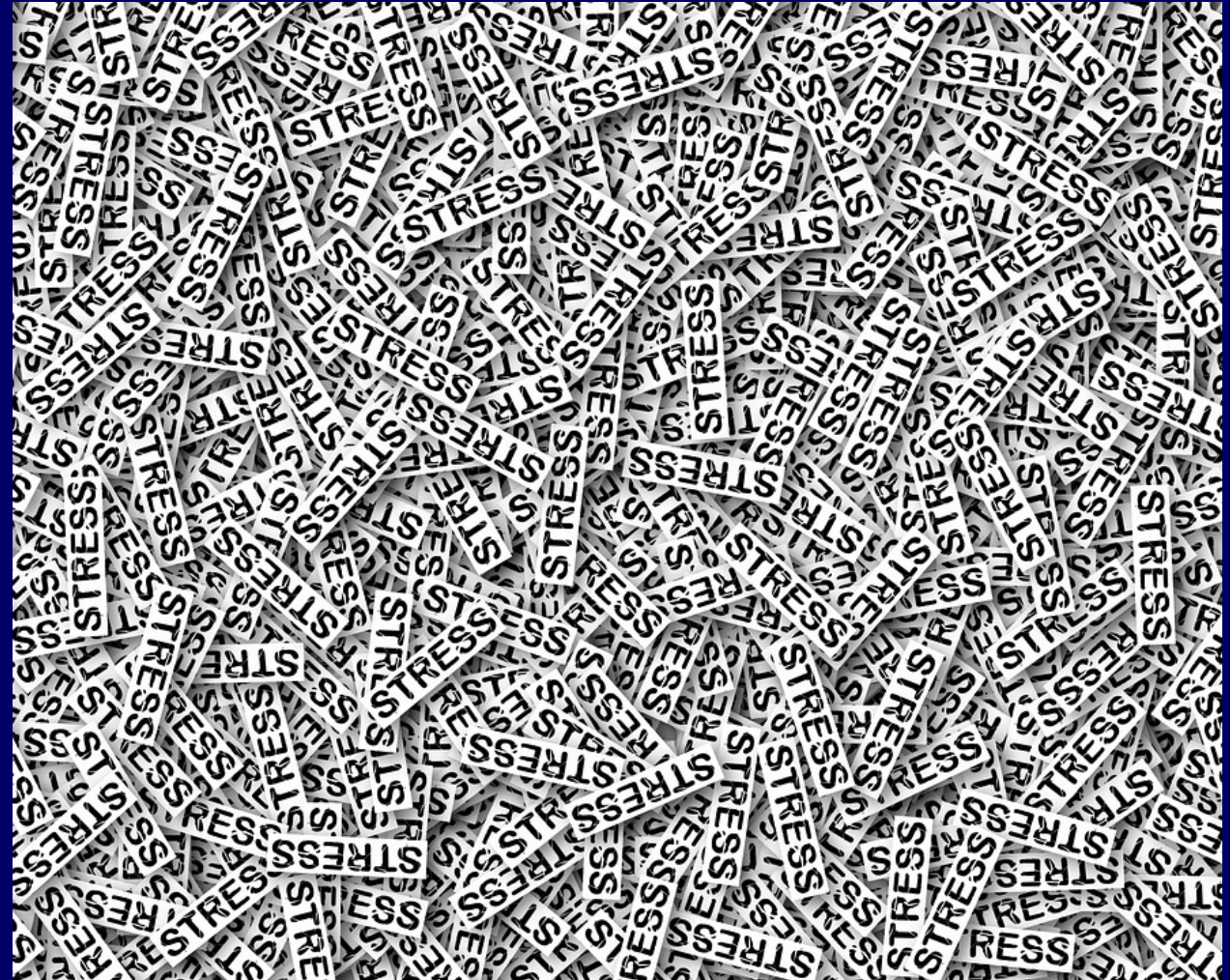
- Intrusive stops (frisked, bags/pockets searched) are especially strong predictors of maternal sleep problems.
- Male youth stops linked to mom's anxiety-related sleep problems.
- Female youth stops linked to mom's depression-related sleep problems.
- Police contact can widen racial inequities in sleep and contribute to racial disparities in mental and physical health.



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Unprecedented Levels of Stress

Stressors linked to Covid-19 are an added burden of source of *stressful life experiences*



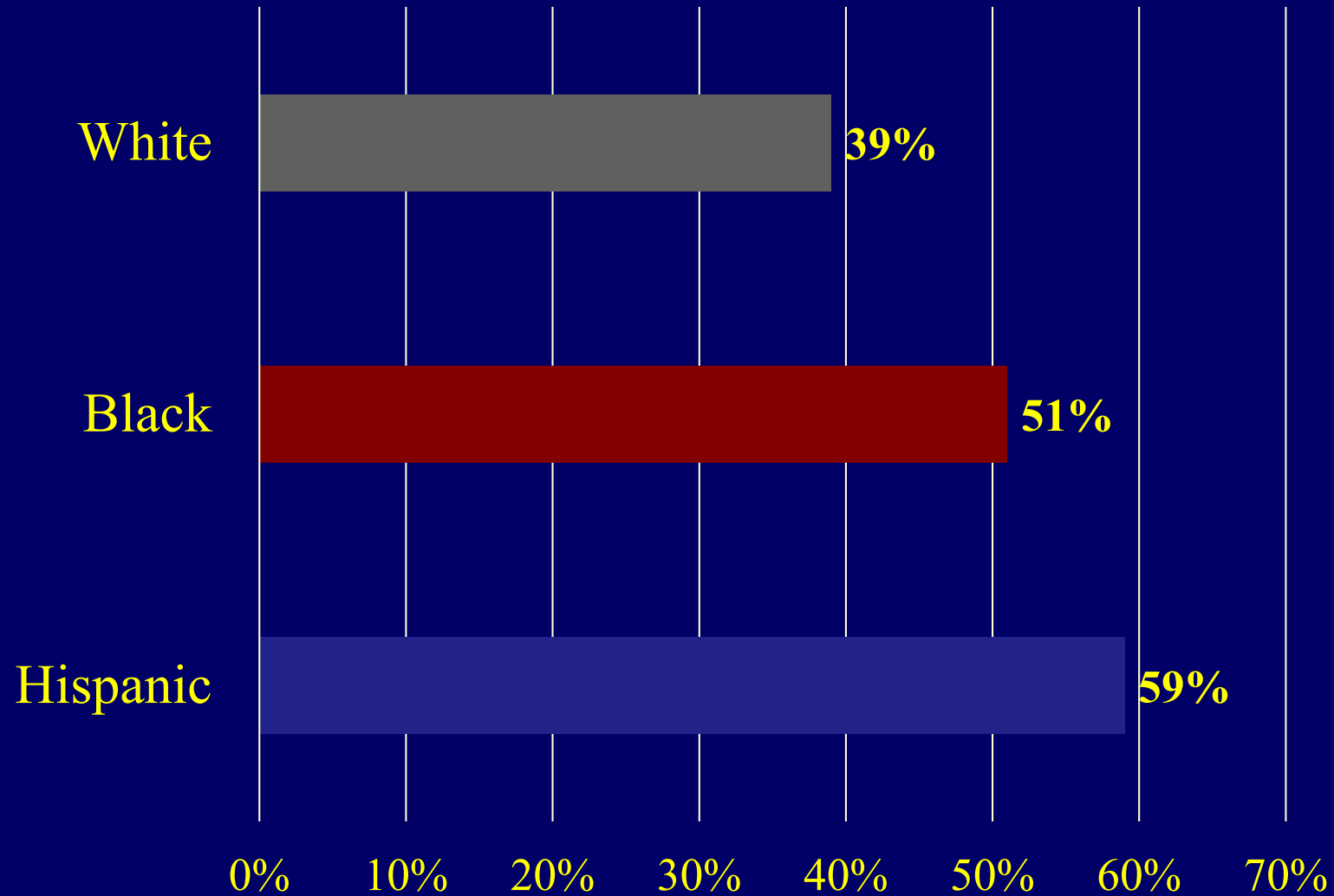
Covid-19 and Populations of Color

As a result, communities of color are thus likely to experience more trauma, leading to more emotional and physical symptoms such as anxiety, helplessness, nausea and headache, causing them to seek more stress-relief and soothing outlets

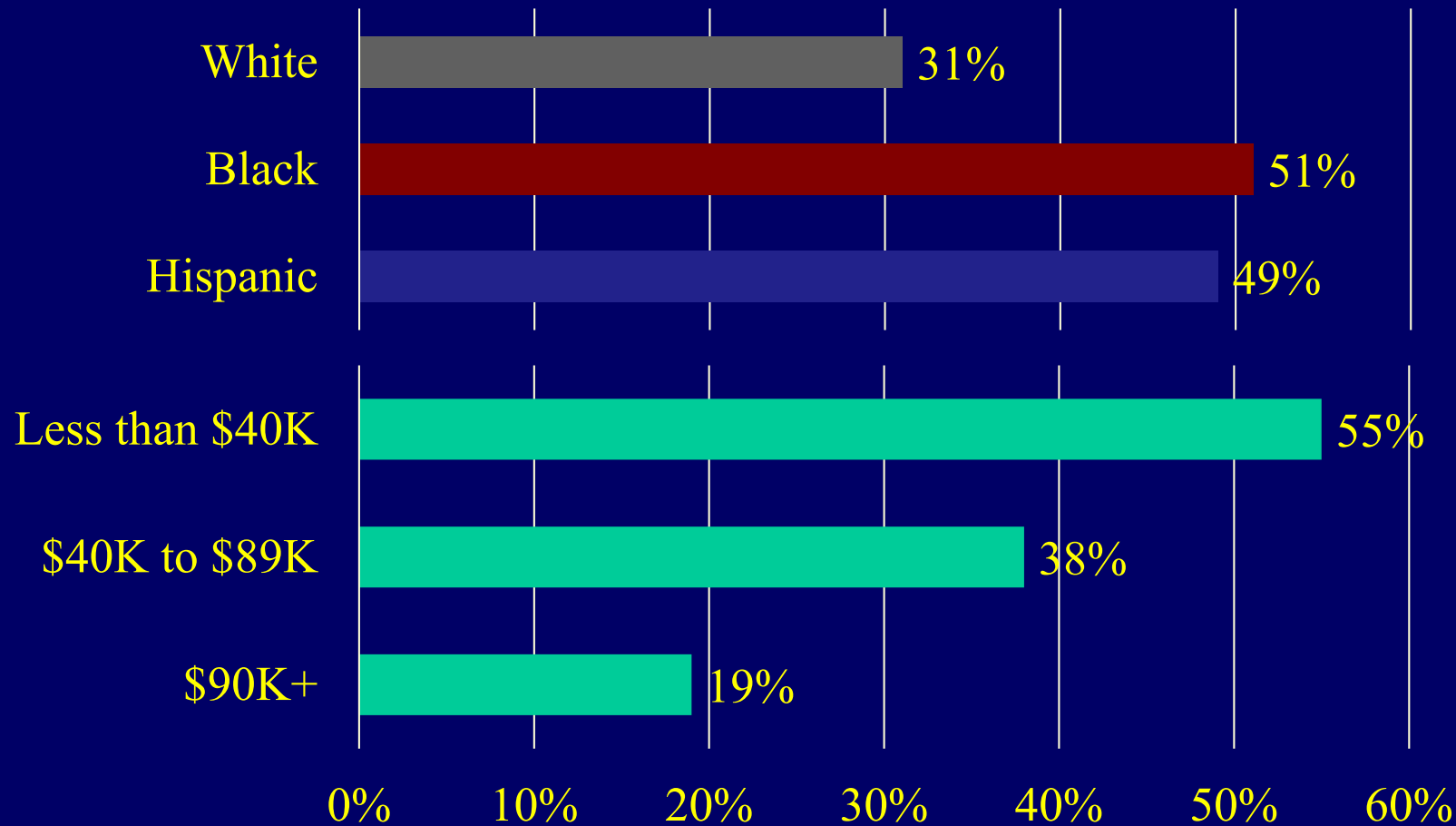


Covid-19 is also a major source of economic stress on the health of the most vulnerable

Family lost Job or Income due to Pandemic



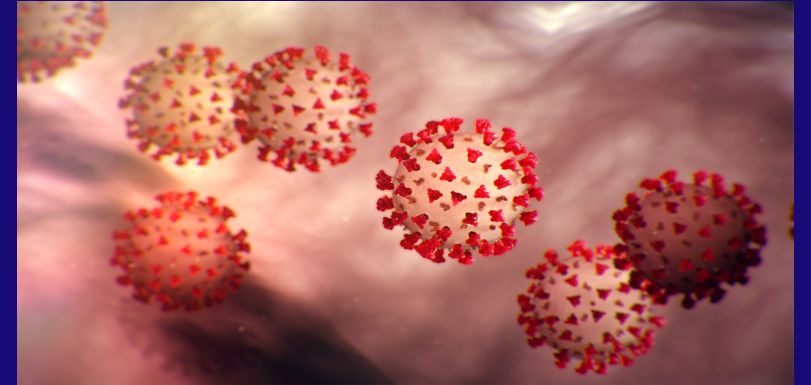
Had Trouble Paying Basic Living Expenses Past 3 Months



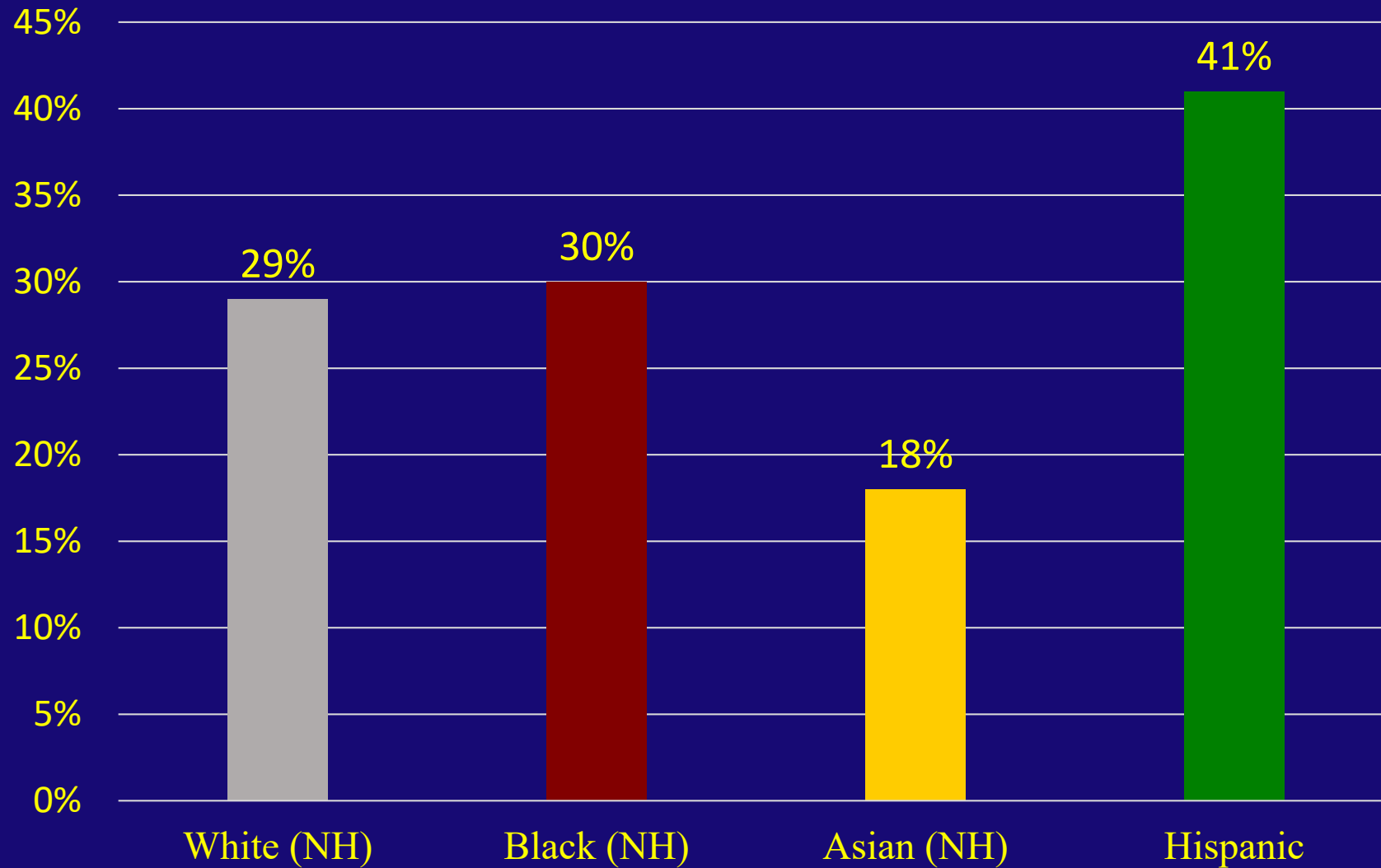
The Stress of Covid-19 & Mental Health

Study of 5,412 adults interviewed June 24-30, 2020

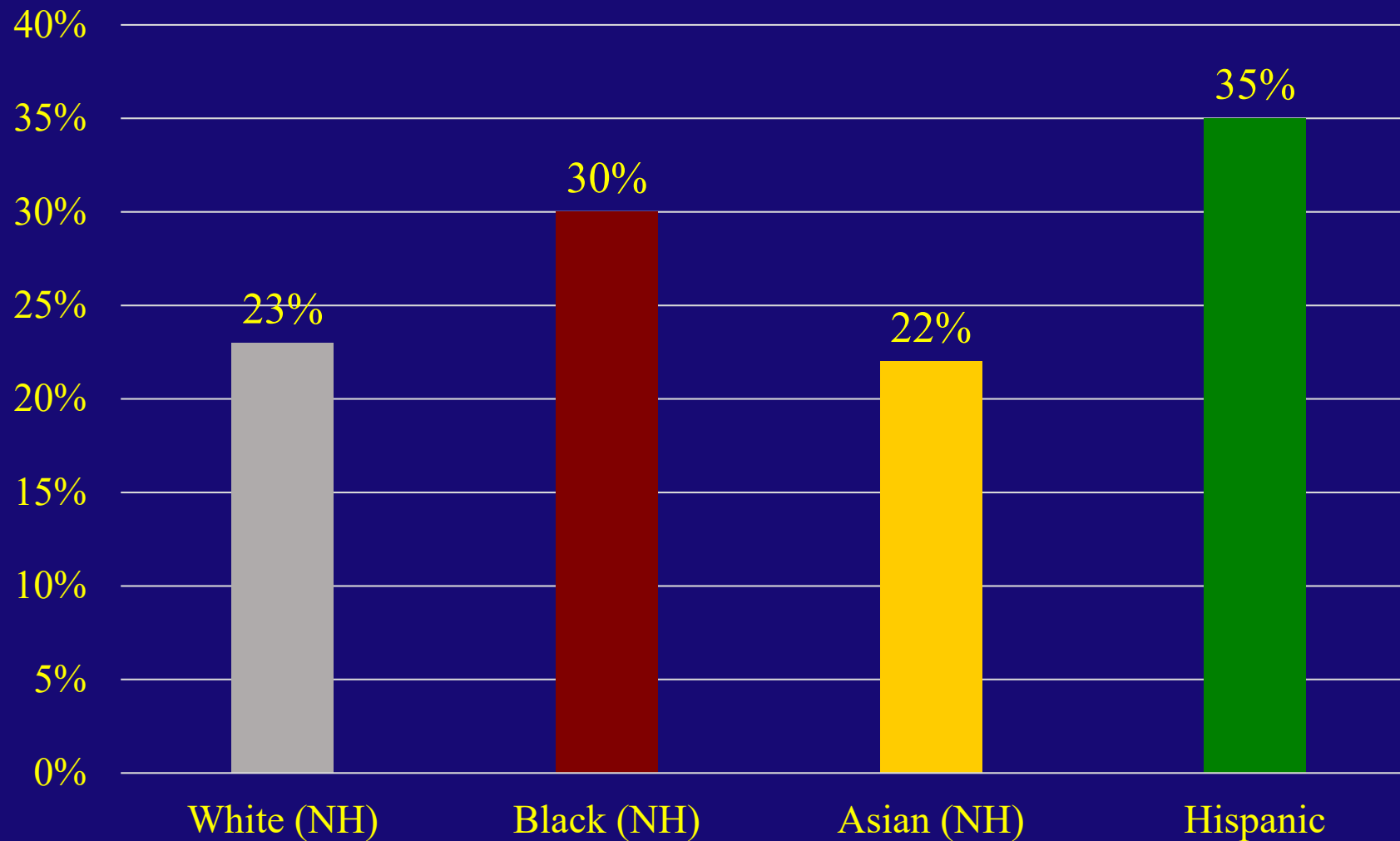
- 41% reported at least one adverse mental or behavioral health problem
- 31% symptoms of anxiety depressive disorder
- 26% trauma & stressor-related disorder (TSRD) linked to the pandemic
- 13% increased substance use to cope with stress related to Covid-19
- 11% seriously considered suicide in past 30 days



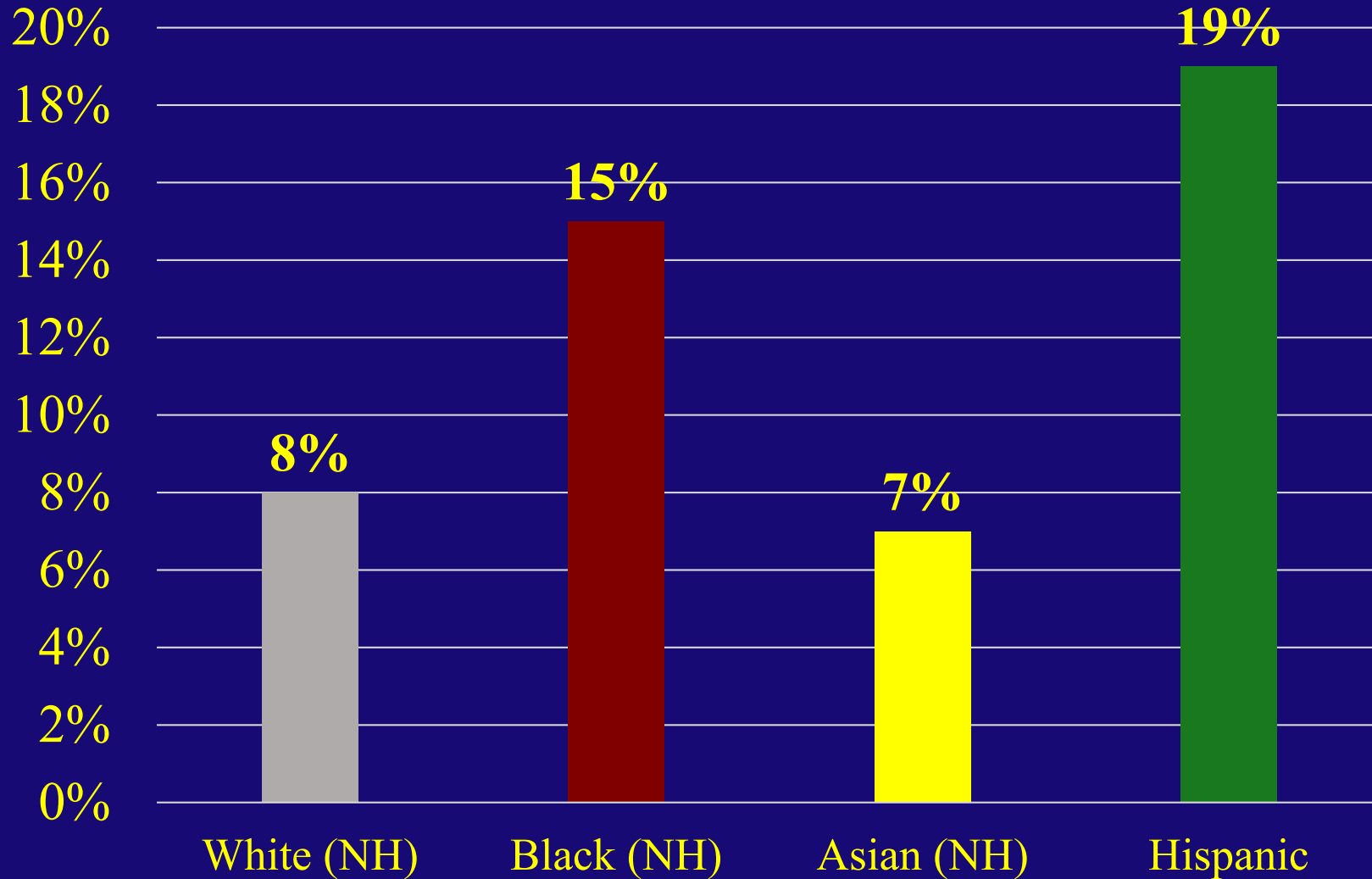
Symptom of Anxiety/Depressive Disorder



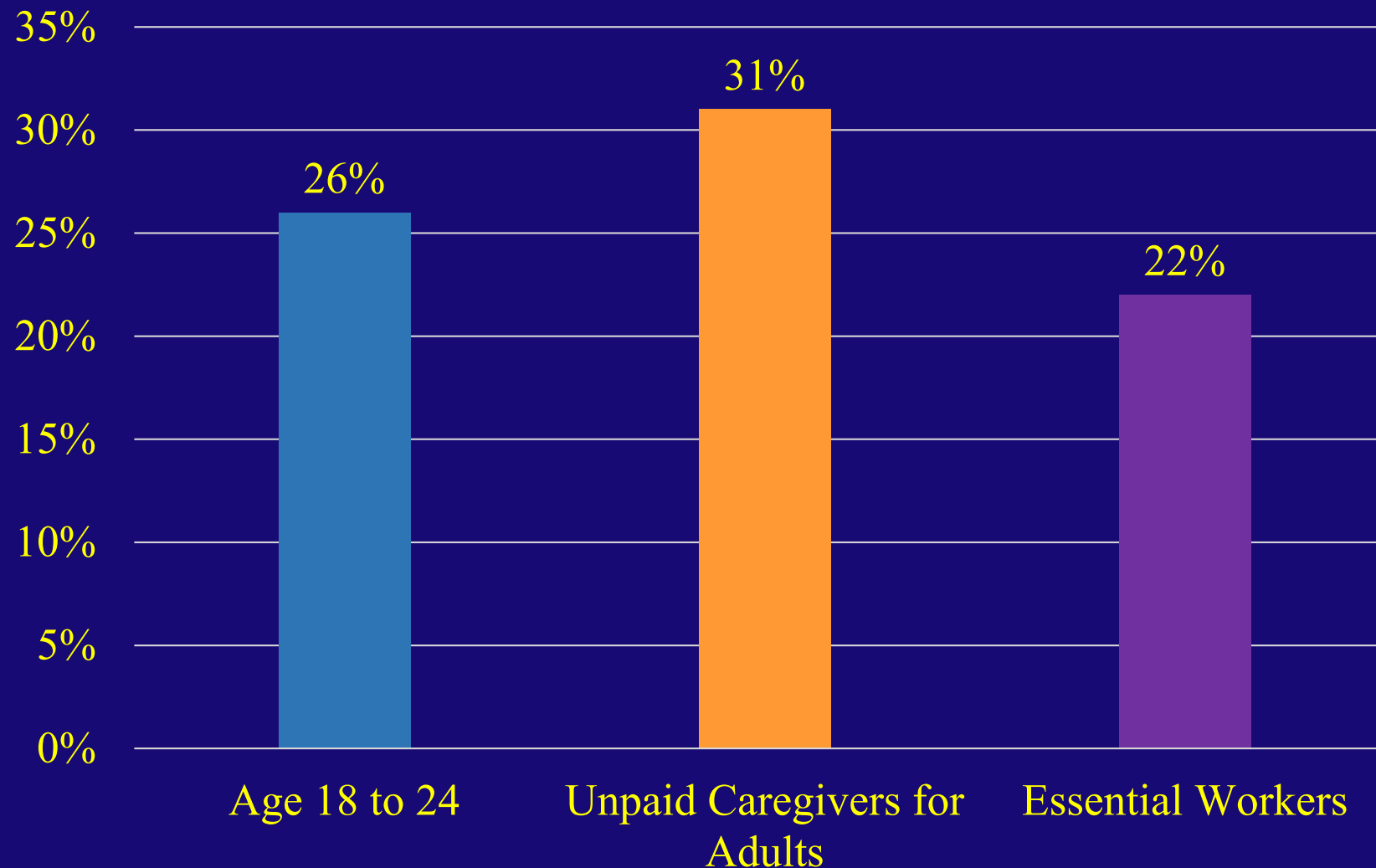
Started or Increased Substance Use to Cope with Pandemic- related stress



Seriously Considered Suicide in Last month



Seriously Considered Suicide in last Month



Covid-19 and Populations of Color

It has aggravated their vulnerability to mental health issues

There has been increased experiences of

- the death of loved ones, grief, loss
- experiencing the suffering of loved ones
- anxiety and fear of getting infected by the disease
- decrease of social support systems
- fear of racial bias and discrimination in disease testing and treatment



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Consequences of the cumulative exposure to
discrimination and other stressors

“Accelerated Aging”

“Premature Aging”

Biological “Weathering”

Earlier Onset of Chronic Disease

Biological Weathering

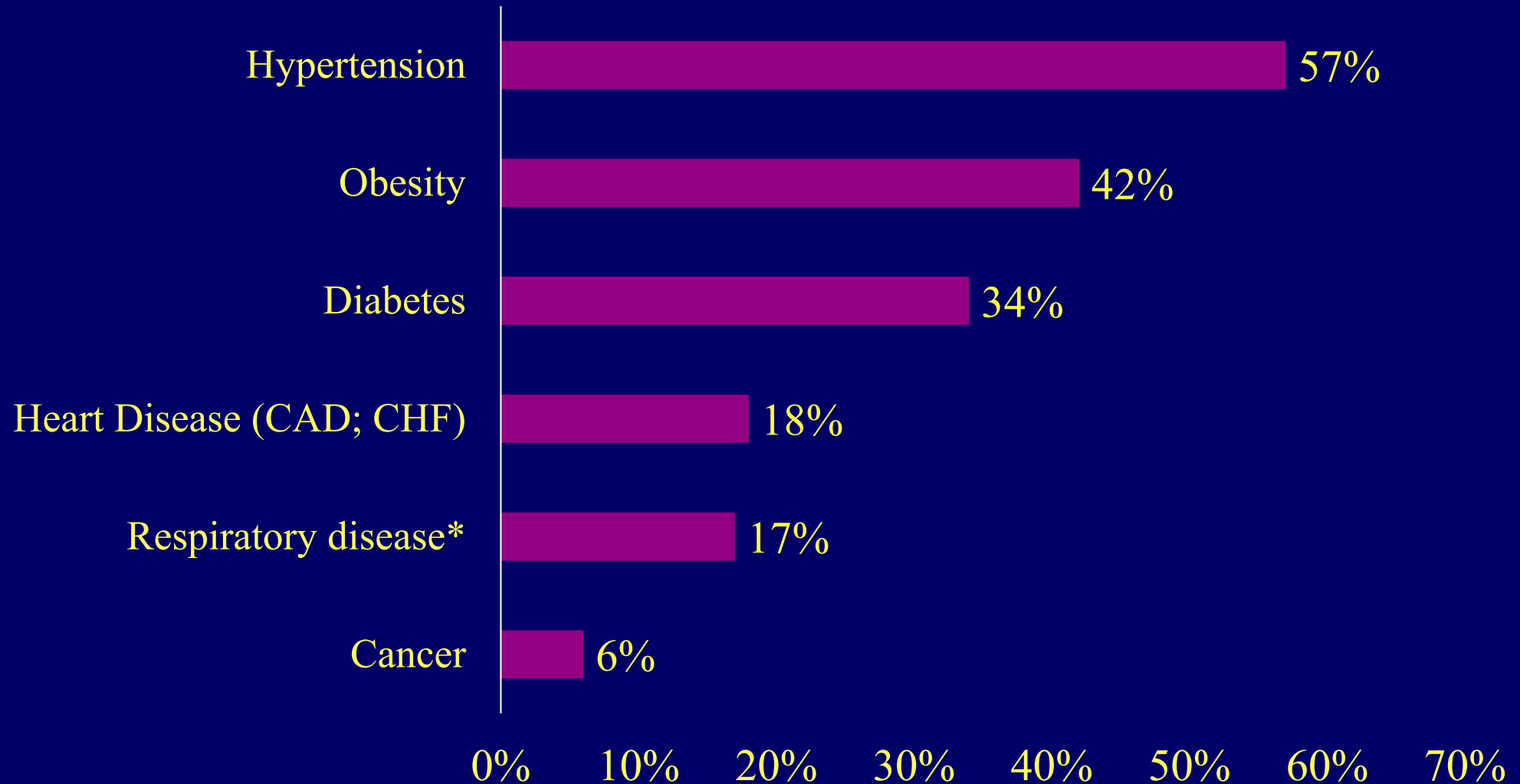
- Chronological age captures duration of exposure to risks for groups living in adverse living conditions
- U.S. blacks are experiencing greater physiological wear and tear, and are aging, biologically, more rapidly than whites
- It is driven by the cumulative impact of repeated exposures to psychological, 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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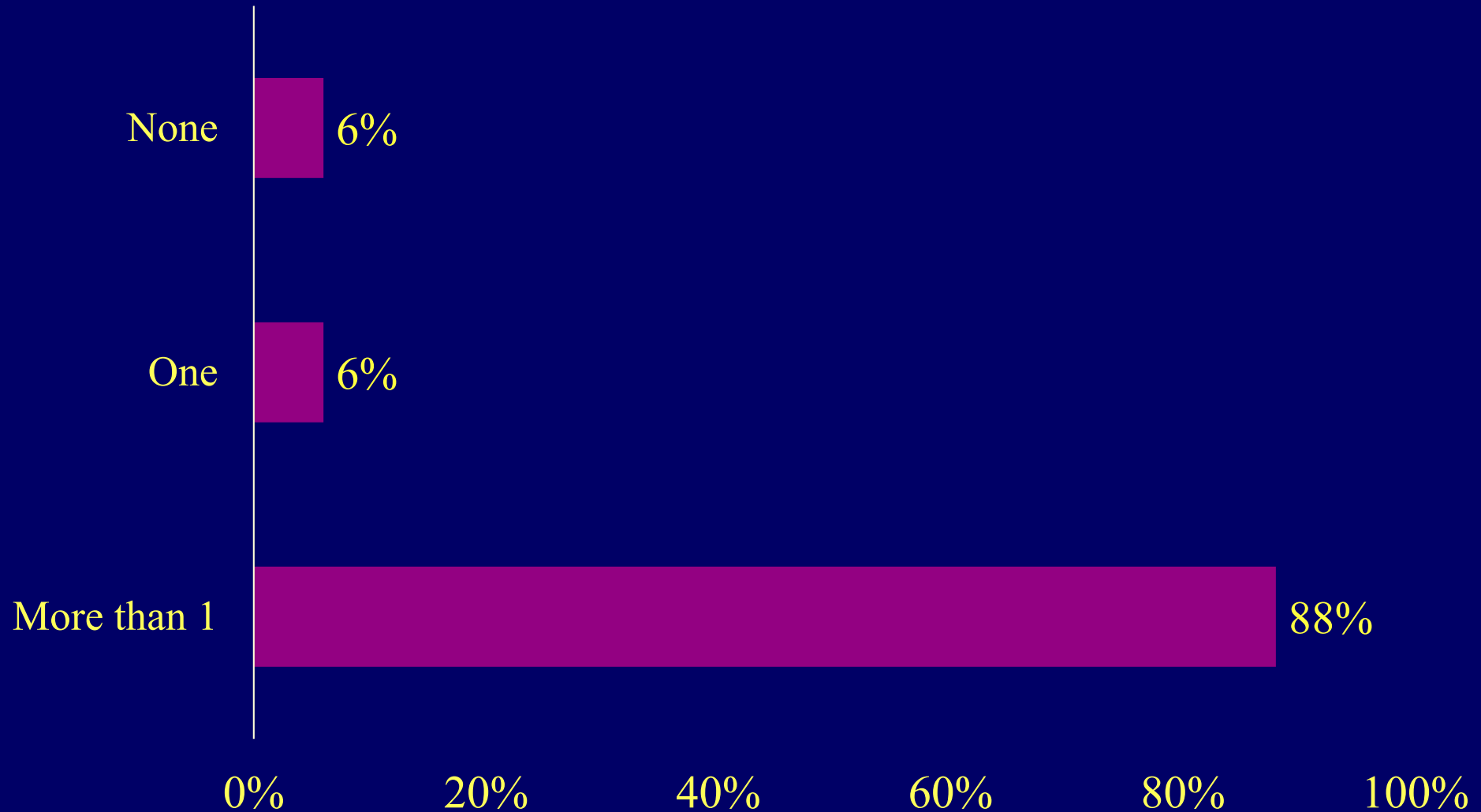
Comorbidities of Covid-19 Patients

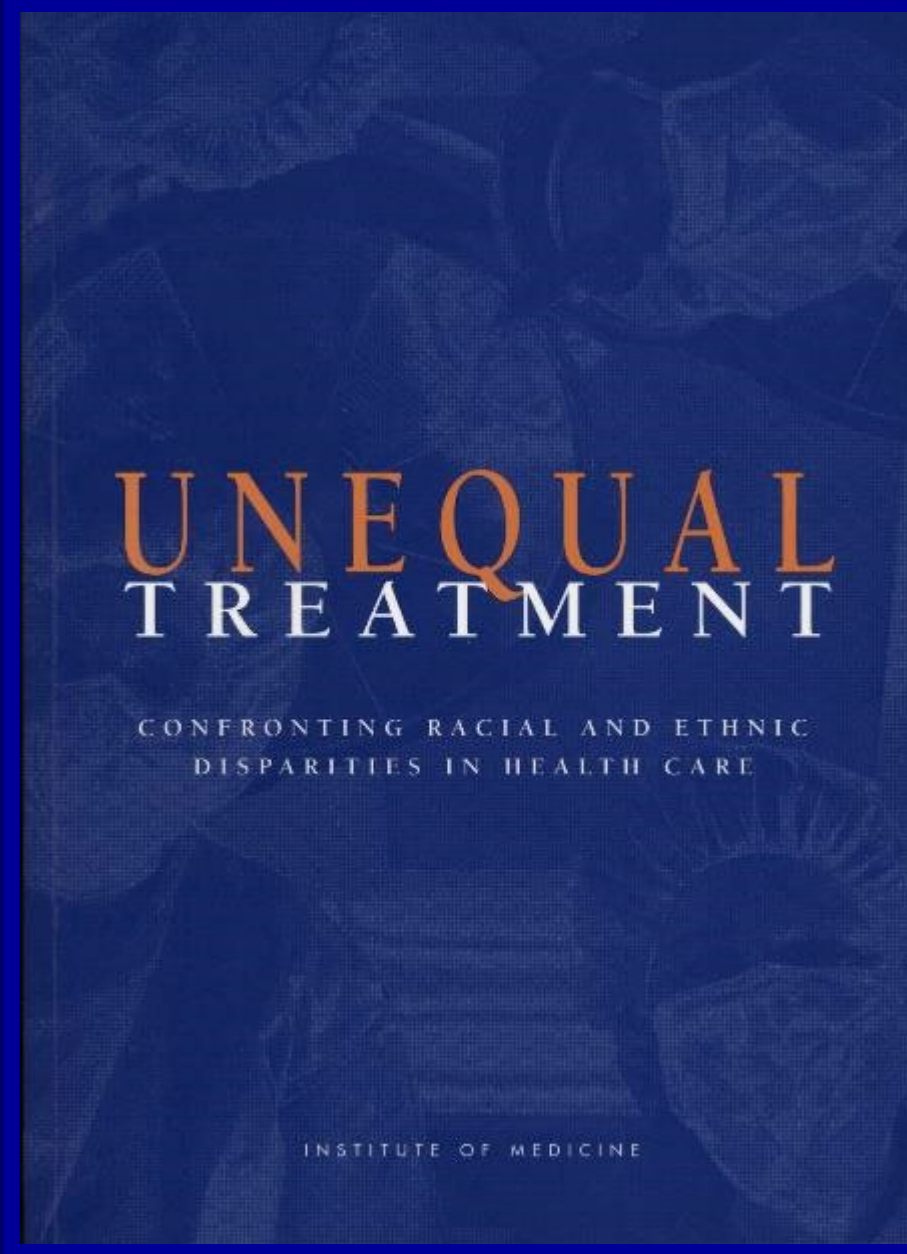
5,700 patients, 12 NY hospitals, March 1 to April 4; Av age :63



Safiya Richardson et al. JAMA, April 22, 2020 *(Asthma 9%, COPD 5%, sleep apnea 3%)

Number of Comorbidities, Covid-19 Patients





Populations of
color receive
poorer quality
medical Care

Race and Access to Specialty Care

- Analysis of 10 years of data (2008 to 2017) of all patients admitted for heart failure (HF) at BWH
- Compared to Whites, Blacks and Latinos were less likely to be admitted to cardiology and more likely admitted to general medicine service (GMS)
- Admission to GMS linked to higher 30-day readmission rates
- On cardiology service, patients have better outcomes and better amenities (private rooms, etc)
- Women and older age (>75) were also less likely to be admitted to cardiology
- Results adjusted for covariates (eg, neighborhood SES, comorbidity, insurance, and having seen a cardiologist or PCP)



The Science is Overwhelming

- 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
- Observed effects were stronger for persons concerned about discrimination
- Effects stronger for those who completed the homework exercises



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Promising Strategies

- Training alone will not change the workplace environment without larger organizational changes
- Multi-dimensional diversity initiatives that include not only implicit biases but structural discrimination
- Recruiting decision-makers to identifying and participating in finding solutions
- Put leaders in close contact with people from different racial/ethnic groups



Priority

Renewed Investments in Eliminating Inequities in the
Receipt of High Quality Care

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

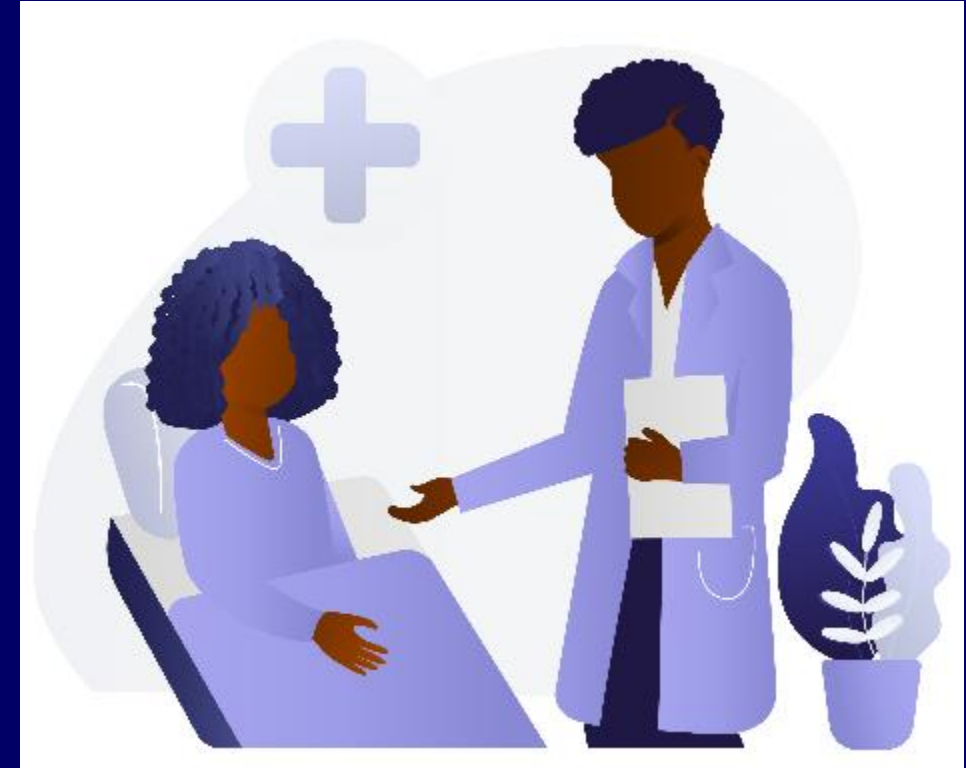
Men who saw a Black Doctor

- ✓ 29% more likely to talk other health problems
- ✓ 47% more likely to do 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)



Black Illustrations

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 Future of Nursing 2020–2030

Charting a Path
to Achieve Health Equity

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The National Academies of
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VICTORIA L. TIASE, New York-Presbyterian Hospital

WINSTON WONG, UCLA Kaiser Permanente Center for Health Equity

NATIONAL ACADEMY OF MEDICINE

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Statement of Task

The Robert Wood Johnson Foundation asked the National Academy of Medicine to chart a path for the nursing profession to create a culture of health, reduce health disparities, and improve the health and well-being of the nation by preparing an evidence-based and nonpartisan report to examine...

The role of nurses in improving the health of individuals, families, and communities by addressing SDOH

The role of the nursing profession in assuring voices of individuals, families, and communities are incorporated into design and operations of clinical and community health systems

System facilitators and barriers to improving health and achieving a workforce that is diverse

The importance of nurse well-being and resilience in ensuring the delivery of high-quality care and improving community health

The training and competency-development skills needed to prepare nurses

The role of nurses in response to emergencies due to natural & man-made disasters and the impact on health equity

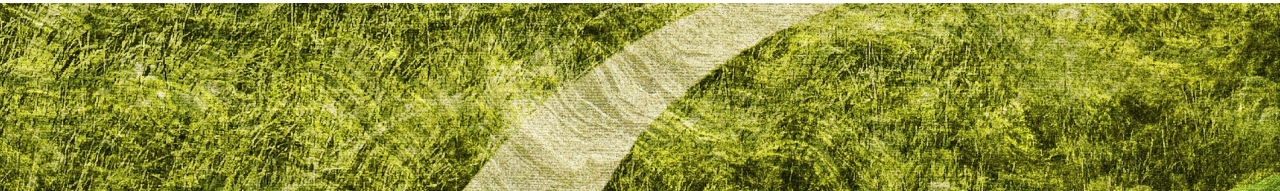
Why Nursing?

- Nurses have long been advocates for health equity and worked to address the root causes of poor health.
- Nurses are present in a wide range of settings outside of traditional health care facilities, working directly in communities to provide care in schools, workplaces, and prisons.
- They make home visits to families, provide primary care to school-age children, administer vaccines, provide health education, coordinate health care services within and across settings, and educate people on preventive measures for staying healthy
- Nurses routinely work with people who have had adverse life experiences, including not only medical challenges but also such social stressors such as trauma, lack of food, or homelessness.
- Nurse practitioners (NPs) working in primary care are often the only providers caring for low-income or uninsured people, Medicaid beneficiaries, and historically disadvantaged groups in both rural and urban populations who cannot always easily access a physician.

Some Key Messages



- **Prepare Nurses to Understand and Tackle Health Equity**
- **Value Nurses' Contributions**
- **Permanently remove nurse practice barriers**
- **Fully support nurses**
- **Bold action is needed to advance nurse readiness**
- **Value community and public health nursing**



Key Message:

Nurses need to leverage their own power to advance health equity by making sure they are well prepared to bridge medical and social needs; taking care of their own mental and physical health so they can care for others; and advocating for policies that address poverty, racism and other conditions that stand in the way of health and well-being.

**CREATE A SHARED AGENDA TO
ADDRESS SDOH AND ACHIEVE
HEALTH EQUITY**

Nurse leaders at every level and across all settings can strengthen the profession's long-standing focus on social determinants of health and health equity to meet the needs of underserved individuals, neighborhoods, and communities and to prioritize the elimination of health inequities.

Nurses, educators, and health care leaders have a responsibility to address structural racism, cultural racism, and discrimination within the nursing profession across educational and practice settings, and to build structures and systems that promote inclusivity and health equity.



Recommendation for Nursing Organizations to Create a Shared Agenda

In 2021, all national nursing organizations should initiate work to develop a shared agenda for addressing social determinants of health and achieving health equity. This agenda should include explicit priorities across nursing practice, education, leadership, and health policy engagement.

Key Message:

Employers must support nurse well-being so they can in turn support the well-being of others.

FULLY SUPPORT NURSES

All environments in which nurses work affect the health and well-being of the nursing workforce. Ultimately, the health and well-being of nurses influence the quality, safety, and cost of the care they provide, as well as organizations and systems of care. The COVID-19 crisis has highlighted the shortcomings of historical efforts to address nurses' health and well-being.

Structural racism, cultural racism, and discrimination exist within nursing as in other professions. Nurses of color experience discrimination and bias within the workplace and educational systems, compounded by the lack of diversity among the nursing workforce and faculty. Nurses, educators, and health care leaders have a responsibility to address structural racism, cultural racism, and discrimination within the nursing profession across educational and practice settings,

Nurse leaders have a responsibility to address discrimination based on identity (e.g., sexual orientation, gender), place (e.g., rural, urban), and circumstances (e.g., disabled, mental health condition) within the nursing profession and to help build structures and systems at the societal level that address these issues to promote health equity.



Recommendation to Promote Nurses' Health and Well-Being

By 2021, nursing education programs, employers, nursing leaders, licensing boards, and nursing organizations should initiate the implementation of structures, systems, and evidence-based interventions to promote nurses' health and well-being, especially as they take on new roles to advance health equity.

Recommendation to Strengthen Nursing Education

Nursing education programs, including continuing education, and accreditors and the National Council of State Boards of Nursing should ensure that nurses are prepared to address social determinants of health and achieve health equity.



Building More Health into the Delivery of Healthcare

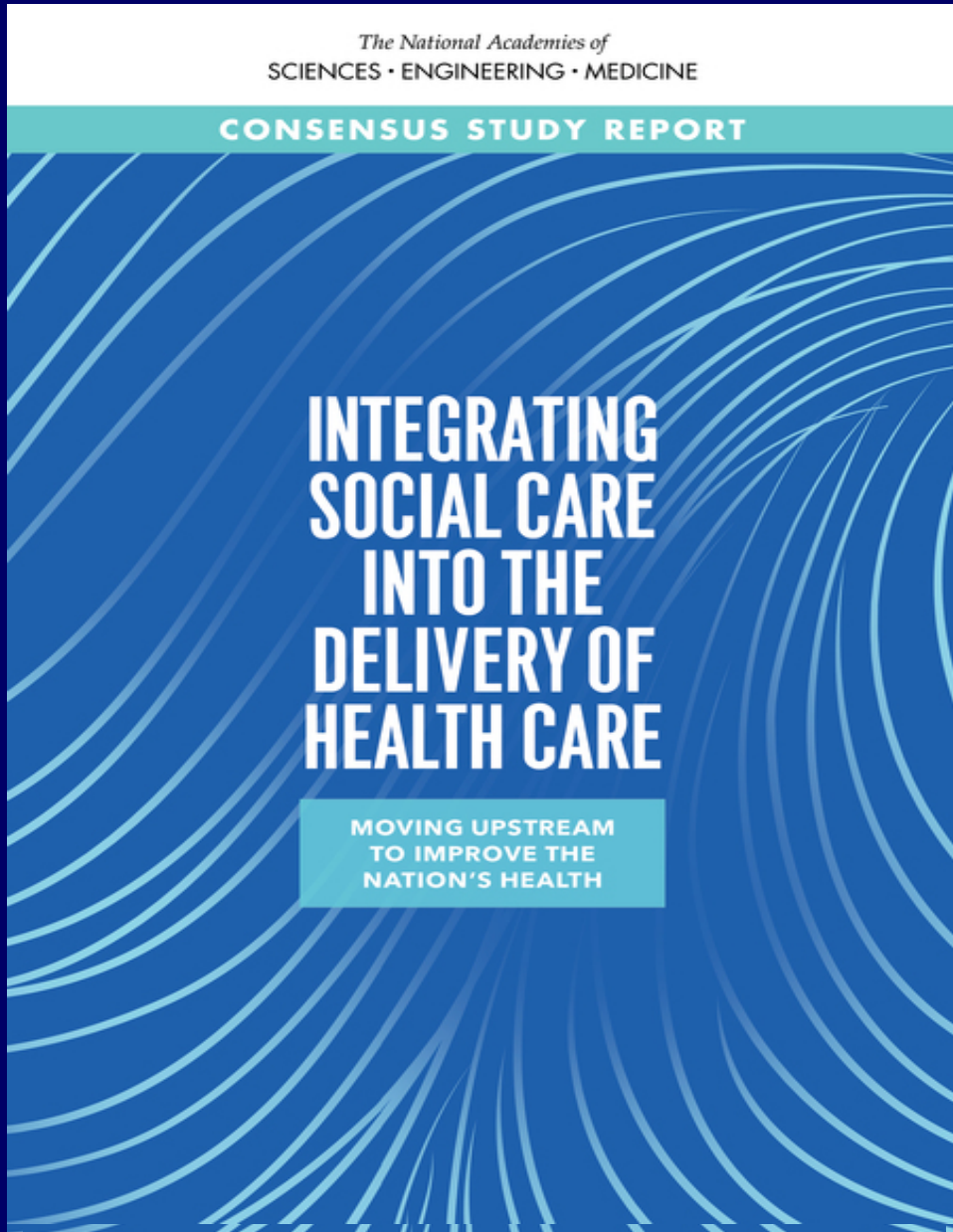
Providing Care that Addresses the Social context

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

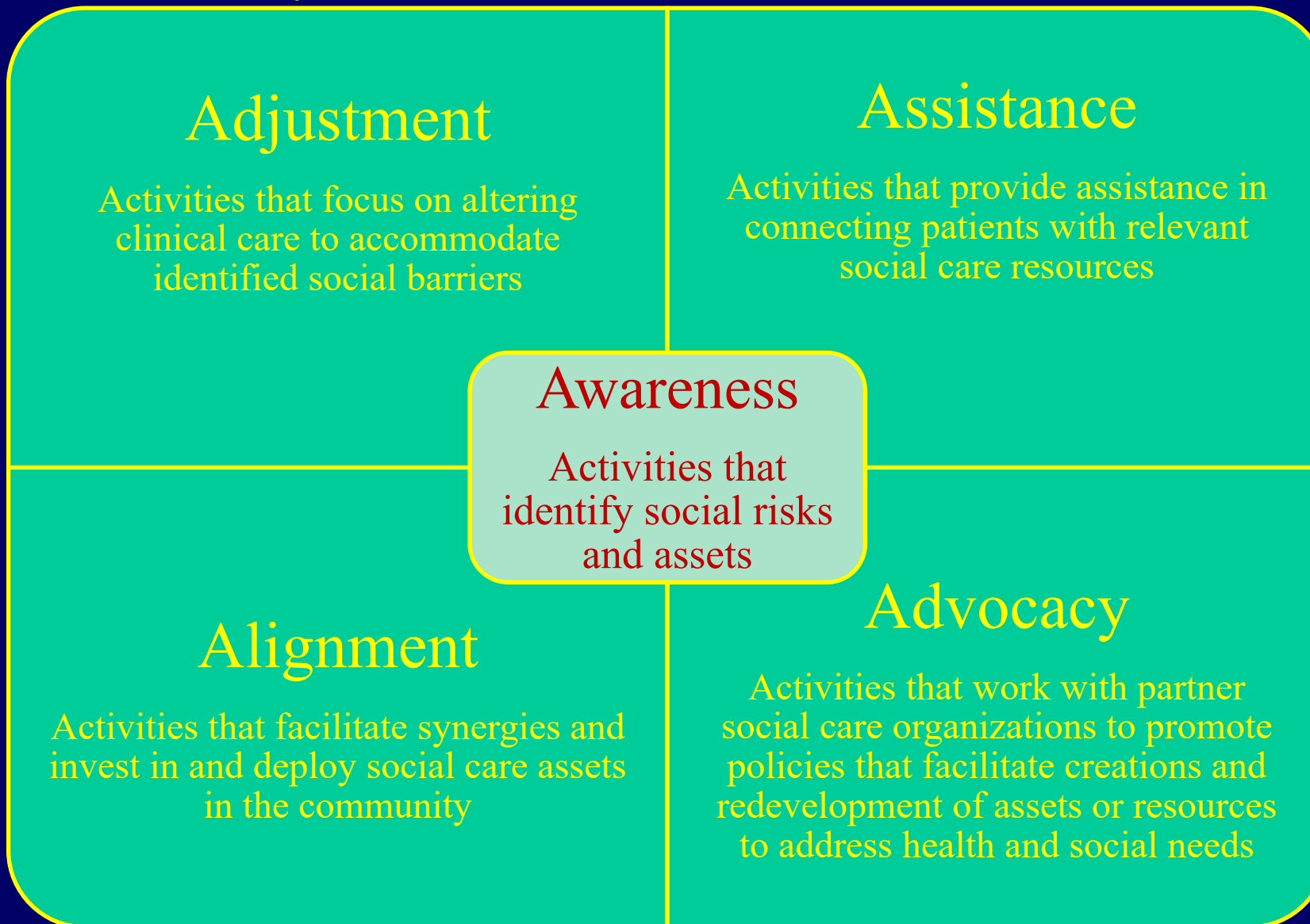


Many opportunities for health care systems and professionals to address the social needs of patients

The 5 As: Health Care System Activities that Address Social Needs

Individuals

Communities



Transportation-Related Examples

Awareness

- Ask patients about their access to transportation



Adjustment

- Reduce the need for in-person health care appointments by using other options such as telehealth appointments



Assistance

- Provide transportation vouchers so that patients can travel to health appointments; vouchers can be used for ride-sharing services or public transit



Alignment

- Invest in community ride-sharing



Advocacy

- Work to promote policies that fundamentally change the transportation infrastructure within the community



Center for Health & Wellness, Wichita, KS

- A state-of-the-art primary health care facility
- Illustrates how barriers to health care for African Americans can be reduced
- Started in 1998 and directed by nurse practitioner, Arneatha Martin
- Almost 8,000 sq. ft. & 6 exam rooms, the center sees about 15,000 patients annually
- Less than 30% of patients are insured
- Uses sliding fee scale for uninsured & provides uncompensated care to the very poor



Center for Health and Wellness: Innovation

- Clients of center know that their insurance & economic status are unrelated to quality and quantity of care they will receive
 - Dramatically communicated to every client in that questions about insurance coverage or payment for care are not raised at the end of the health care visit, when the individual has already received all their needed medical care
 - Clients can pay for services by volunteering at the clinic; \$10 deducted from bill for every hour volunteered at the center
 - Clients also deduct from bill for each hour spent in health education classes.
 - Points earned by expectant mothers for each prenatal appointment kept can be used to shop in the center's Stork's Nest – a room full of baby supplies
-

Long-term Strategy

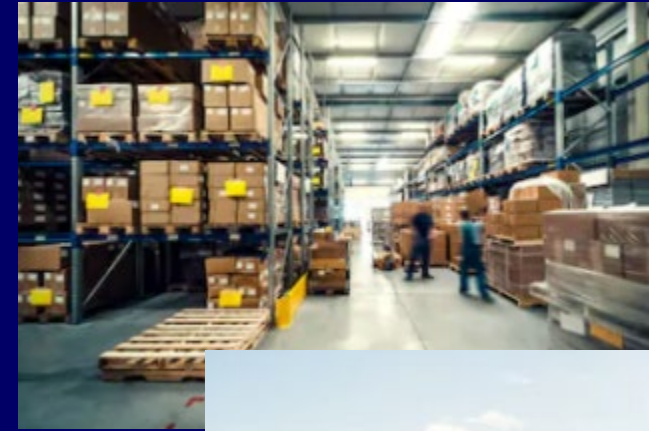
Create Communities of Opportunity to minimize, neutralize and dismantle the systems of racism that create inequities in health



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 programs
- Reduce Childhood Poverty
- Enhance Income Opportunities
- Prioritize workforce development 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



Workforce Development

- Mentoring Elementary School students
 - Create internships for High School Students
 - Job-training Opportunities
 - Pipeline Programs to be health professionals
- For the Employed
- Reducing attrition from entry-level jobs
 - Create opportunities to advance from entry-level, frontline jobs
 - Reduce trust deficit of employees vs their companies
 - Mentoring/Sponsorship to support the advancement of employees of color



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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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Reducing Inequities in Health

We need to build on individual and community resources and resilience factors that can mitigate the negative effects of stressors on health

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



Religious Attendance & Mortality: Nurses

- Large study (75,534), 20 yr follow-up, time varying measures, rigorous methods
- Attendance more than once a week associated with a

33% lower risk of all-cause mortality
(12% lower for whites; 36% lower for blacks)

27% lower risk of CVD mortality

21% lower risk of cancer mortality
(breast and colorectal cancer)

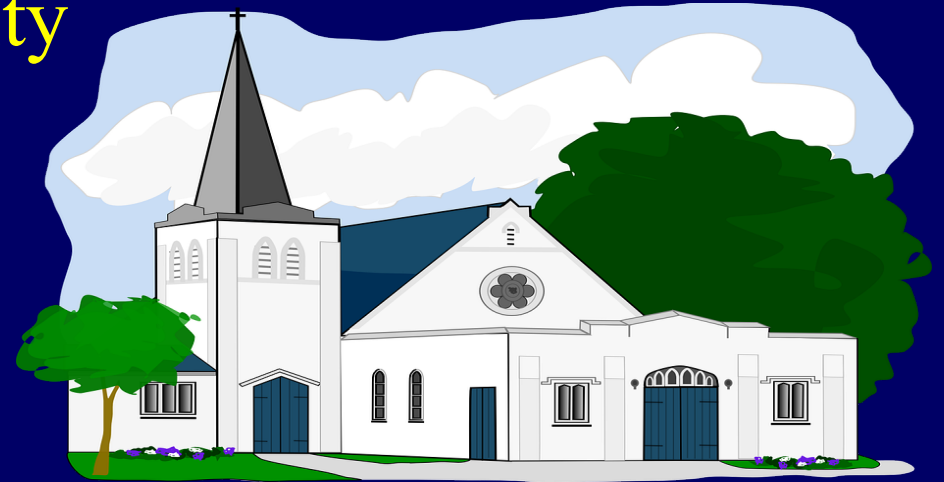
Mediators of the association:

Depressive symptoms: 11%

Smoking: 22%

Social support: 23%

Optimism: 9%



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

Martin Luther King



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.



The Future of Nursing 2020–2030

Charting a Path
to Achieve Health Equity

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