## Racism and Health Mini-Medical School 2021



#### Marshala Lee, MD, MPH



# Did You Know

- African Americans have higher death rates than Whites for 12 of the 15 leading causes of death.
- Blacks and American Indians have higher age-specific death rates than Whites from birth through the retirement years.
- Minorities get sick sooner, have more severe illness and die sooner than Whites
- Hispanics have higher death rates than whites for diabetes, hypertension, liver cirrhosis & homicide



### Health Rankings Dr. David Williams

- 1980 = 11<sup>th</sup> on Life Expectancy
- 2014 = 35<sup>th</sup> on Life Expectancy
- U.S. Ranked behind South Korea, Greece, Cyprus, and Lebanon
- And it is not just the minorities doing badly!
- In 2014, White America would be = 34<sup>th</sup>
- In 2014, Black America would be 96<sup>th</sup>



## **Social Determinants of Health**



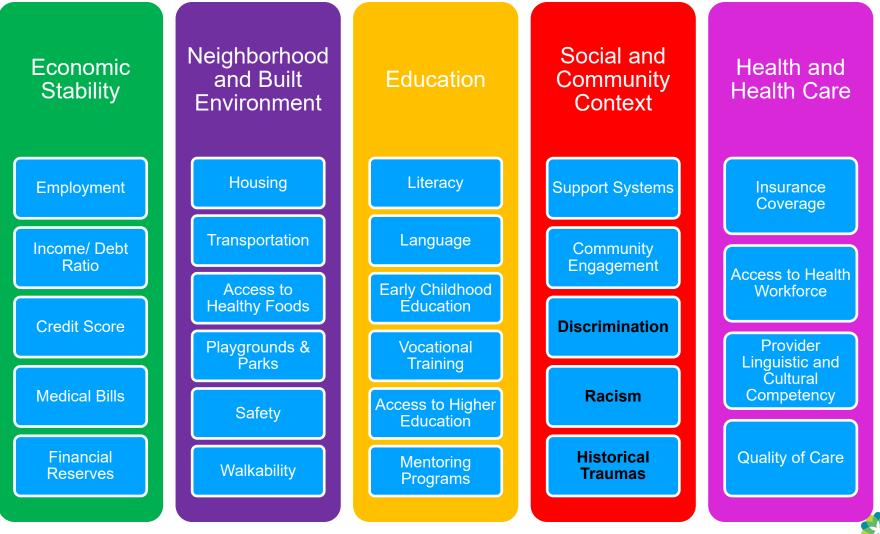
### Social Determinants of Health





### **Social Determinants of Health**

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### **Why Place Matters**

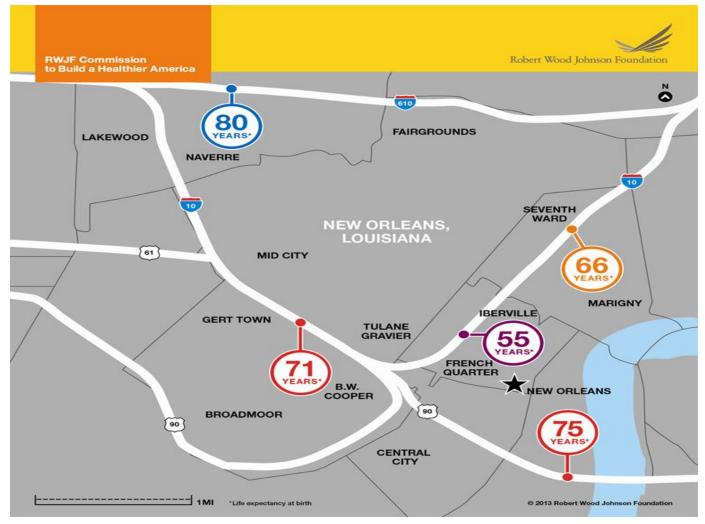
Where you live determines access to:

- High-quality schools
- Job opportunities
- Safe, affordable & healthy housing
- Fresh produce & nutritious food
- Safe to exercise, walk or play outside
- Toxins (from highways, factories & other)
- Quality primary care and good hospitals
- Affordable, reliable, public transit
- Social cohesion and social capital





### Where you Live Matters

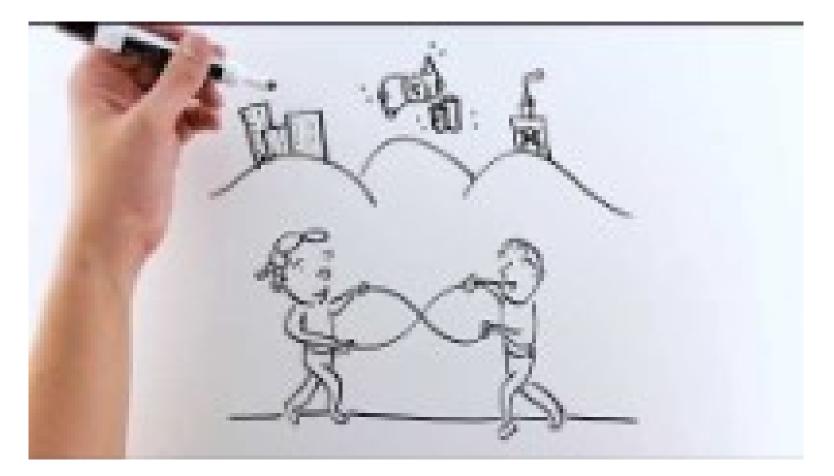


### It Matters A LOT for your Health



# The Cliff of Good Health

#### by Dr. Camara Jones



https://youtu.be/to7Yrl50iHl





## **Health Disparities**



# Health Inequity

- Differences in health status between more and less socially and economically advantaged groups, caused by *systematic* differences in social conditions and processes that effectively determine health.
- Health inequities are *avoidable*, *unjust*, and therefore *actionable*.



# **Health Inequities**

"Of all the forms of inequality, injustice in health care is the most shocking and inhumane."

-- Martin Luther King Jr.



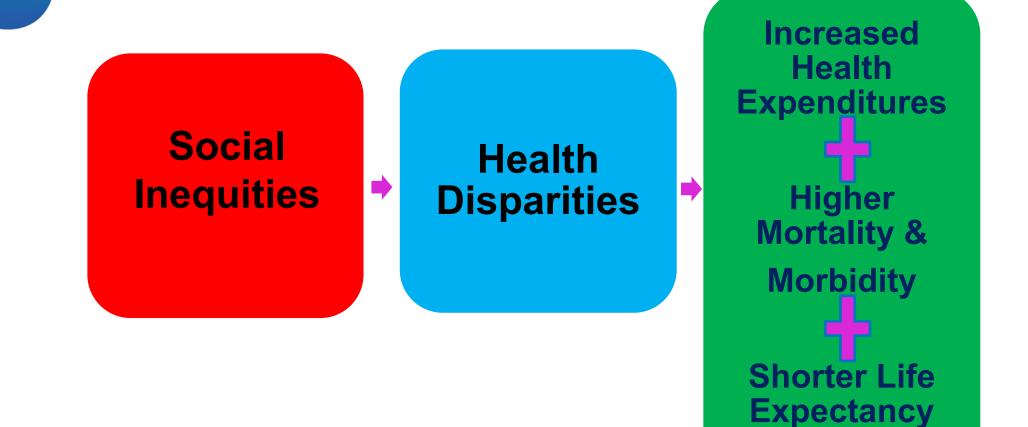
# Social Inequities

#### Health Inequities/Disparities

Differences in the incidence and prevalence of health conditions and health status between groups based on:

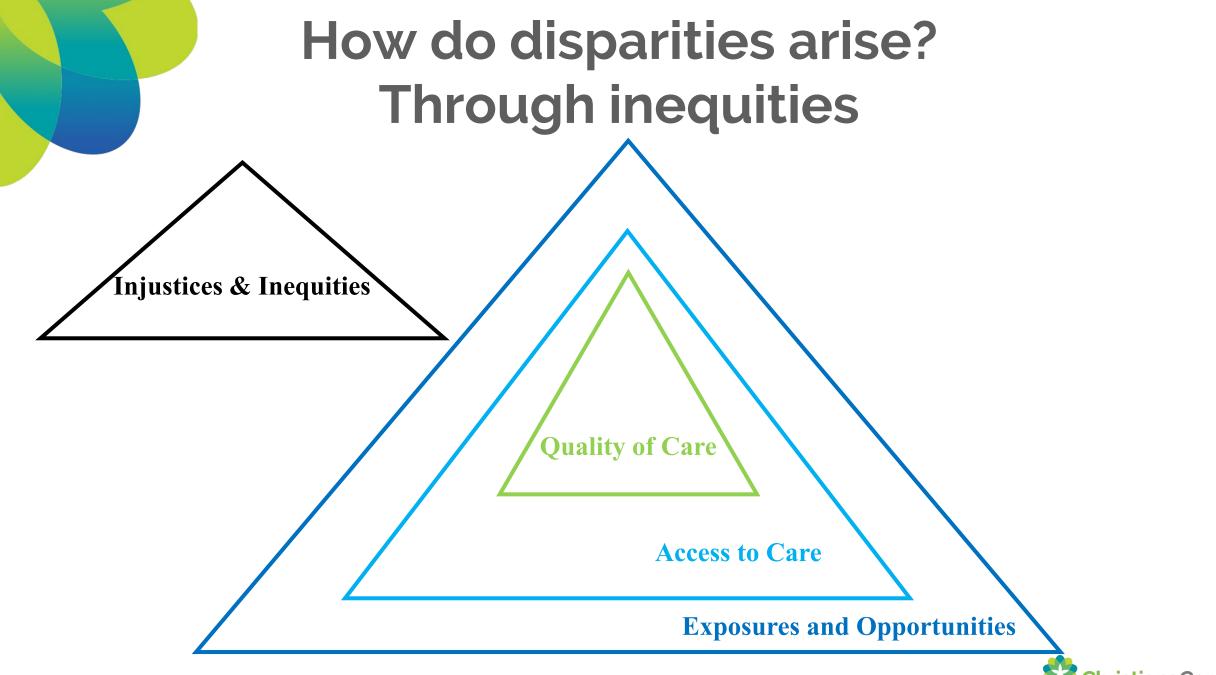
- Race/ethnicity
- Socioeconomic status
- Sexual orientation
- Gender
- Disability status
- Geographic location





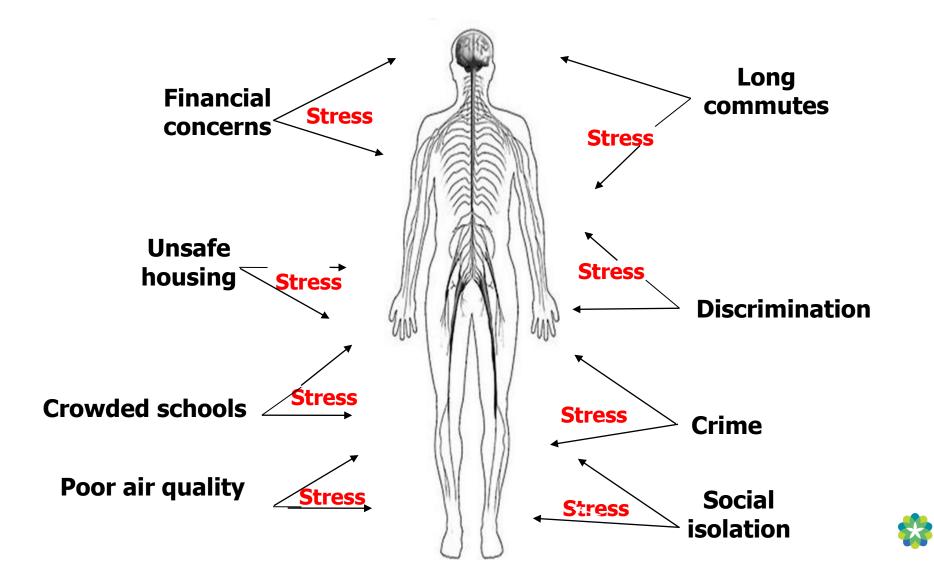
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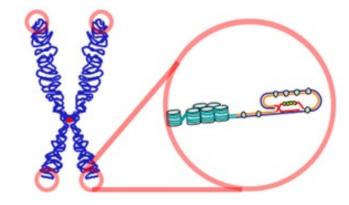
### When the External Becomes Internal

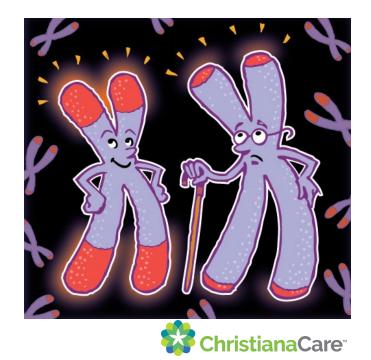


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### **Racial Differences in Telomere Length**

- Telomeres are sequences of DNA at end of chromosome. Telomere length is viewed as an overall marker of biological aging
- Study found that Black women had shorter telomeres than White women
- At same chronological age, black women had accelerated biological



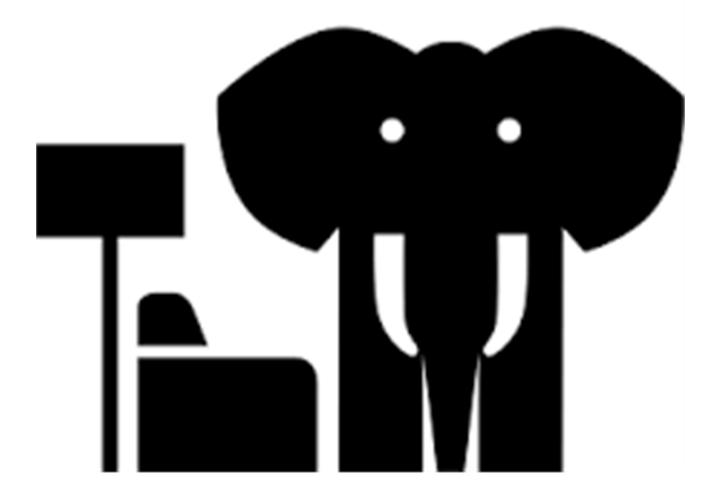




## Health & Racism



## Racism & Not Race As A SDOH





# **Defining Our Terms**

- **Race:** a socially constructed concept; an ethnological human stratification that was used to reinforce the rationale for the enslavement of persons of African descent
- **Racism:** prejudice, discrimination, or antagonism directed against a person or people on the basis of their membership of a particular racial or ethnic group, typically one that is a minority or marginalized and the power to exert said prejudice, discrimination, or antagonism



# **Defining Our Terms**

- 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 and beliefs toward racial out-groups (prejudice and stereotypes), and differential treatment of these groups by individuals and social institutions (discrimination)
- The trauma of racism: the cumulative adverse emotional, psychological, health, economic and social effects of racism on the lives of people of color



## Levels of Racism









#### Internalized

#### Interpersonal

#### Institutional

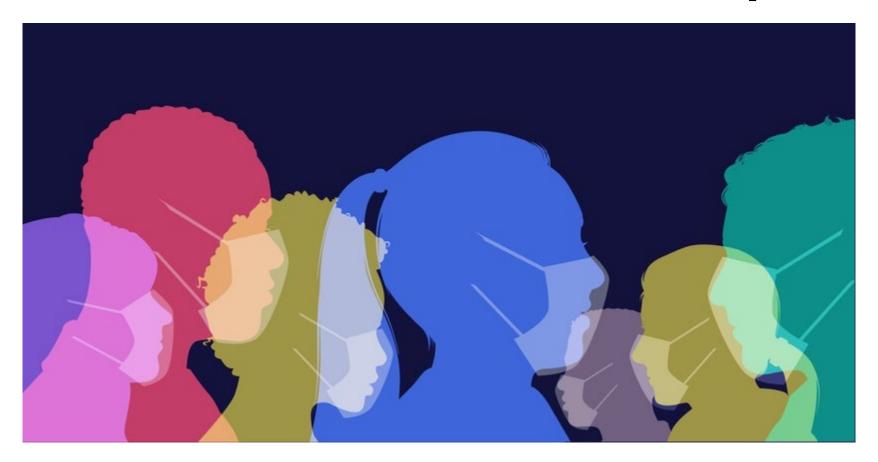
#### **Structural**

**Micro Levels of Racism** 

**Macro Levels of Racism** 



## **COVID-19** Perfect Storm for Structural Disparities

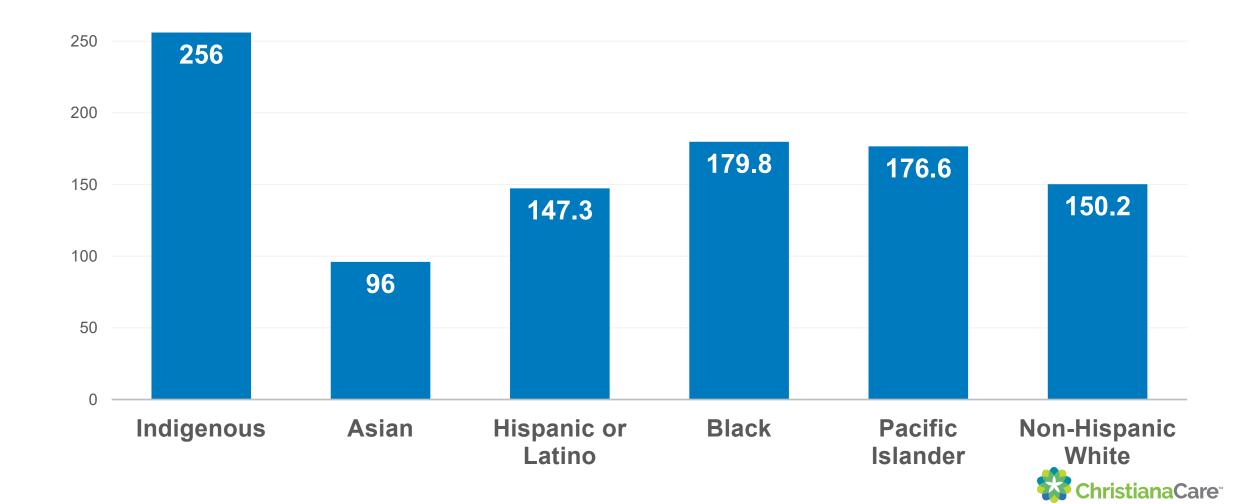




### COVID-19 Deaths in the United States Age-Adjusted per 100,000

300

(as of March 02, 2021)



# **COVID-19 Disparities**

Structural Racism

#### **Increased Exposure**

- Frontline Occupations
- Residential Crowding
- Public Transportation
  - Poverty

Chronic Disease Disparities

Institutional Racism

**Testing & Treatment** 

- Unequal Access

- Affordability & Health Insurance Gaps

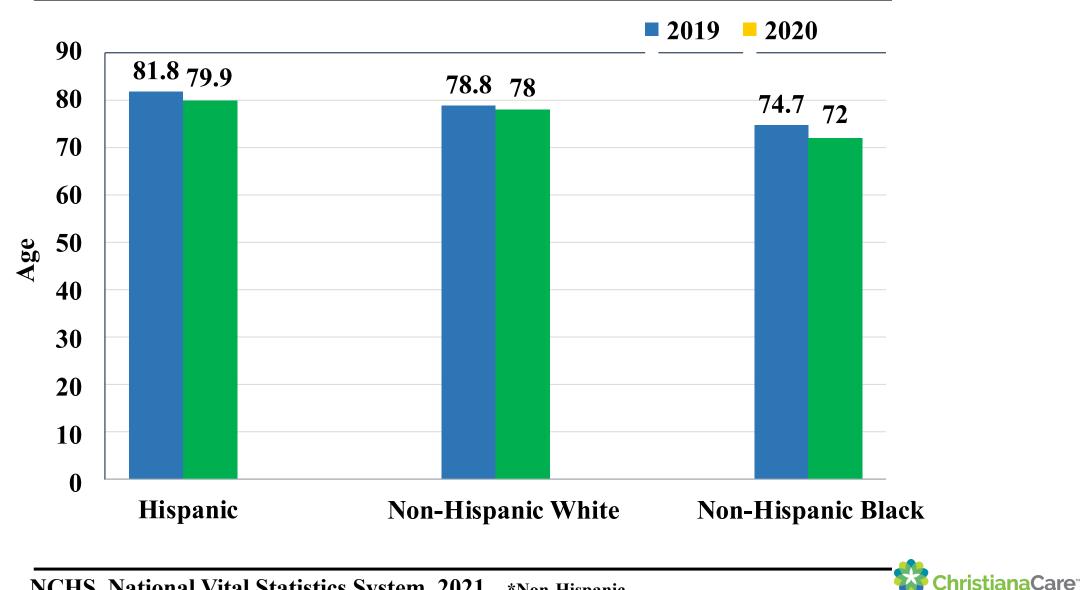
- Provider Bias & Racism
- Lack of Trust & Stigma

- Miscommunication



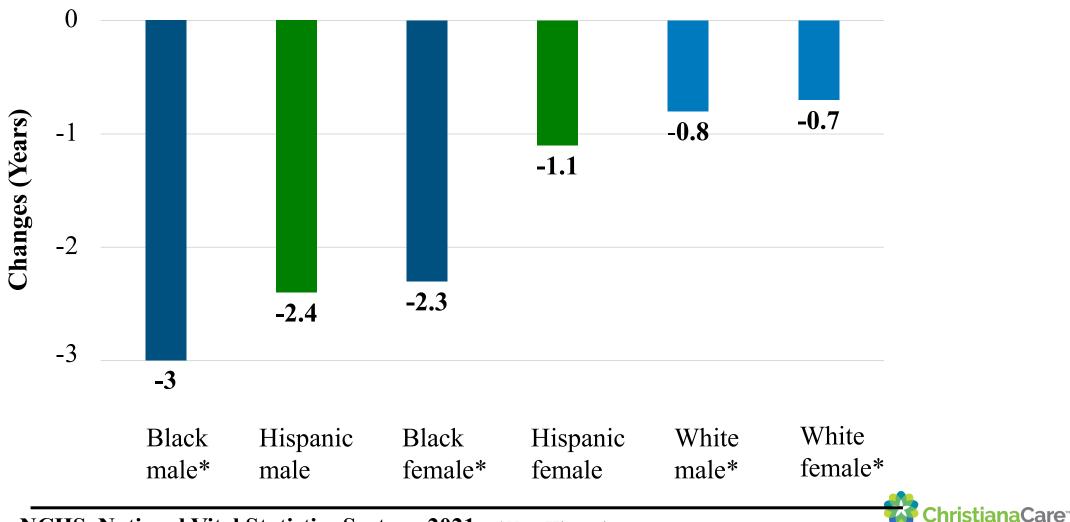
Higher COVID-19 Incidence & Mortality Among Minorities

#### Life Expectancy at Birth, by Race & Ethnicity 2019-2020

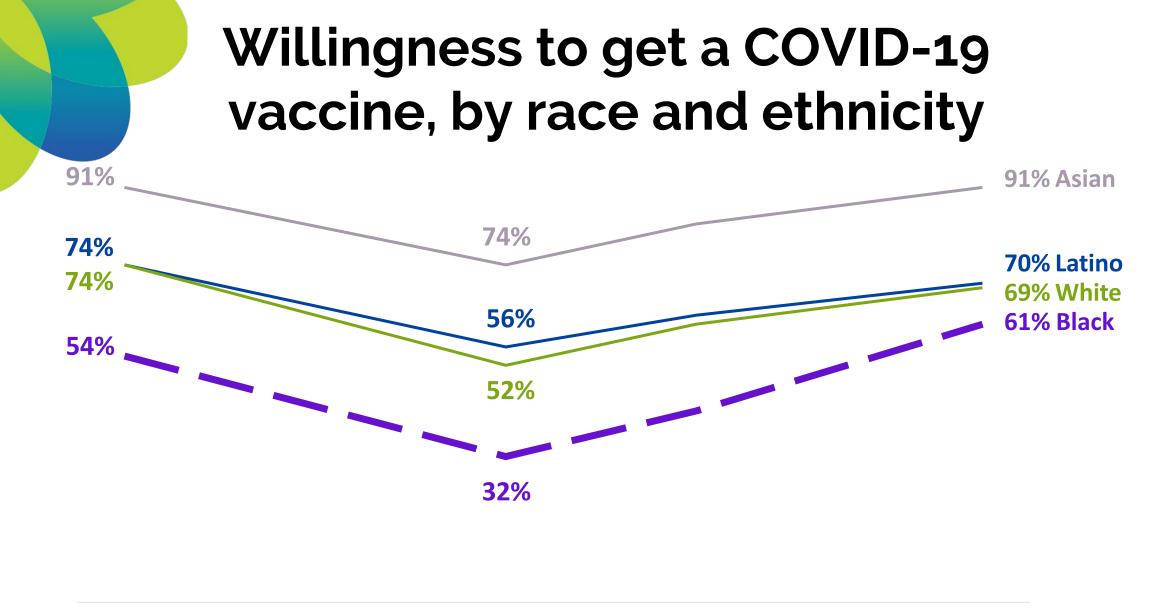


NCHS, National Vital Statistics System, 2021 \*Non-Hispanic

#### Change in Life Expectancy at Birth, 2019 and 2020



NCHS, National Vital Statistics System, 2021 \*Non-Hispanic



May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21

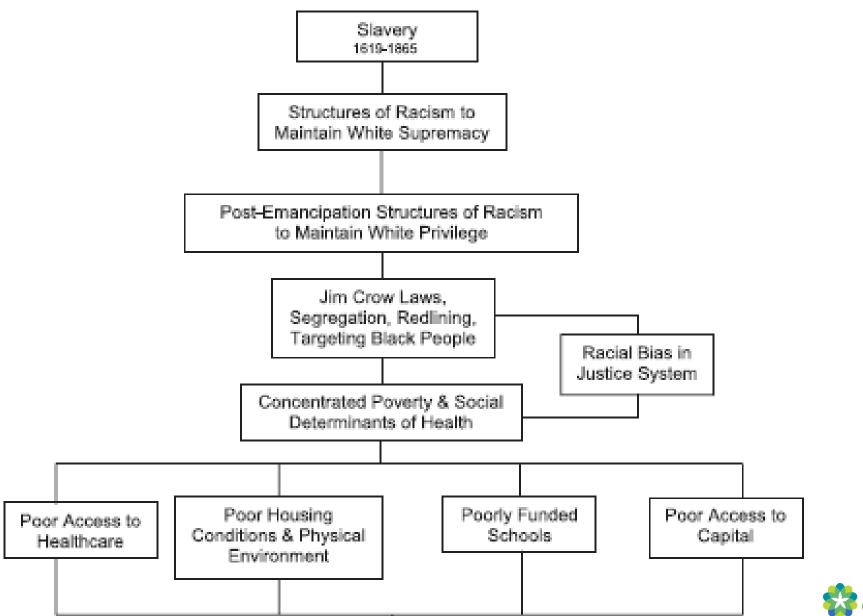




## **Historical Context**



## **Racism and SDOH**





# **Racism in Medicine**

Colonial period

- Owners would hire out or sell slaves to physicians for use as guinea pigs in medical experiments
- 19th century
  - Black cadavers were routinely exploited for profit by whites who shipped them to medical schools for dissection and to museums and traveling shows for casual public display.
  - Dr. Marion Sims, a 19th-century gynecological pioneer, was only able to achieve his breakthroughs by performing horrific surgeries without anesthesia on his female slaves.



The Legacy of Slavery Maternal Health Disparities

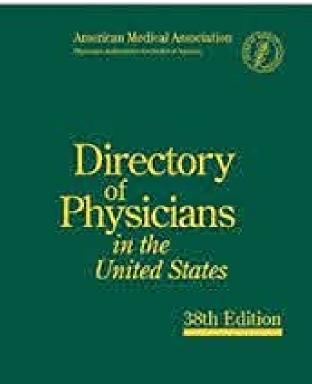


J. MARION SIMS: GYNECOLOGIC SURGEON



### AMA DIRECTORY OF PHYSICIANS

- 1906 AMA began publishing a Directory, which listed all US physicians.
- The Directory listed black physicians as "colored"
- Made it more difficult for black physicians to obtain malpractice insurance and credit.





# **Racism in Medicine**

- 1932 1972 Tuskegee Syphilis Study
  - 600 syphilitic black men were left untreated by the U.S. Public Health Service so it could study the progression of the disease
  - allowed to die untreated so that their cadavers could be used for research
- 1960s- early 1970s
  - Radical brain surgery and lobotomies performed by a University of Mississippi neurosurgeon on African-American boys as young as six who were deemed aggressive or hyperactive
  - a procedure he recommended for urban rioters after Watts
  - 1967 three neurosurgeons were awarded \$600,000 by the National Institutes of Medical Health and the Law Enforcement Assistance Administration for brain research of urban rioters



# Survivors of Tuskegee









### MEDICINE & THE CIVIL RIGHTS MOVEMENT



WAITING ROOM

FOR WHITE ONLY

BY ORDER

POLICHODEPT.



## **Implicit Biases**

(Internalized and Implicit Racism)



#### 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



Jones et al., Dual Pathways to a Better America, APA, 2012

#### Faster than the Twinkling of an Eye!

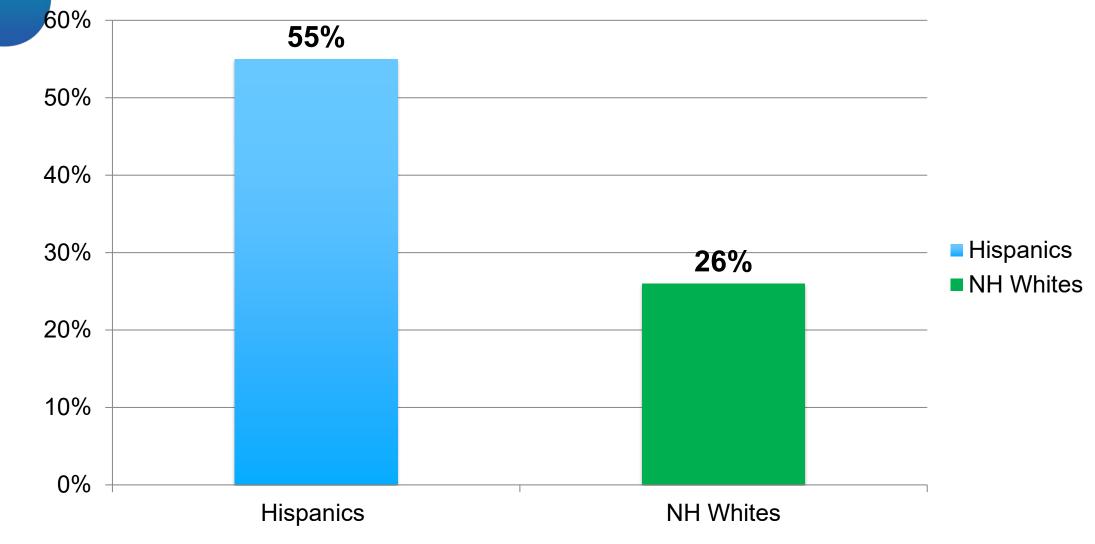
- Studies find that most Americans have rapid and unconscious emotional and neural reactions to blacks
- A millisecond is 1/1000 of a second
- 100 milliseconds how quickly an individual's race is noticed and whether or not that person is trustworthy
- 300 400 milliseconds: time for human eye to blink
- 800 milliseconds: human resting heart cycle time





### **Ethnicity and Pain Medicine**

Percent of Patients with broken bone receiving no analgesia



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Todd et al., JAMA, 1993

## **Empathy Gap**

- Studies of empathic responses in brain activity when viewing suffering of persons of one's own race vs. members of another race.
- Stronger empathic neural response to the pain of same race versus other race individuals, using a variety of stimuli. Han, S. Trends Cogn. Sci. 2018



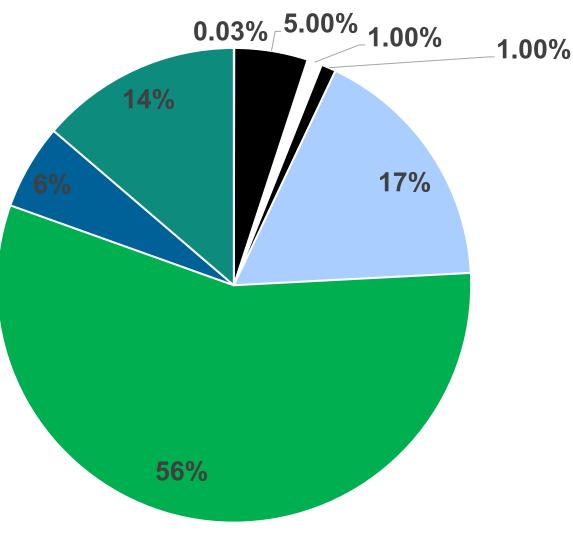
### Race of MD & Newborn Survival

- Study of 1.8 million hospital births in 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

Brad Greenwood, et al. PNAS, 2020



#### Percentage of Active Physicians by Race/Ethnicity AAMC Diversity in Medicine: Facts and Figures 2018



- American Indian or Alaska Native
- Black or African American

Multiple Race, Non-Hispanic

- Other
- Asian
- White
- Hispanic
- Unknown





# Moving Towards Health Equity



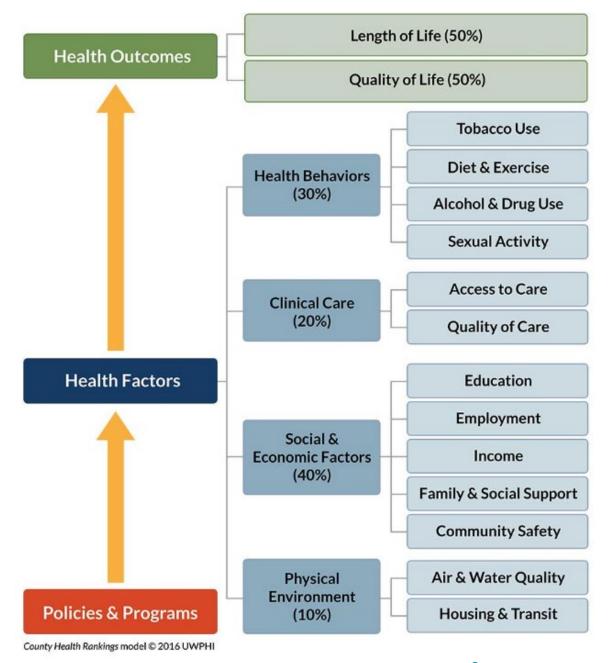
# Health Equity

- Attainment of the highest level of health possible for all people.
- Achieving health equity requires valuing everyone with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health disparities and health care disparities



### Clinical care is a necessary but not a sufficient condition for equity in health outcomes

http://www.countyhealthrankings.org/explore-healthrankings/measures-data-sources/county-health-rankingsmodel





We will work to overcome and eliminate systemic racism and create a healthier, more equitable ChristianaCare and community together."

- Dr. Janice Nevin, President and CEO



### Conclusion

- 1. Inequalities in health are created by larger inequalities in society, of which racism is one determinant.
- 2. Health inequities are "problem of racism", not a problem of race
- 3. To achieve health equity, we must first name and identify structural racism in places it exists, and then challenge and dismantle the structural racism that shapes upstream governance, social structures, and policies that perpetuate ideologies of superiority over historically marginalized populations and perpetuate persistent disparities.
- 4. Systemic change is needed to dismantle structural racism.
- 5. Future policies and interventions must be implemented at the individual, community, and population levels to achieve equitable access to social and economic resources that enhance health equity for all historically disenfranchised groups.

## **Call to Action**



"Do not get lost in a sea of despair. Be hopeful, be optimistic. Our struggle is not the struggle of a day, a week, a month, or a year, it is the struggle of a lifetime. Never, ever be afraid to make some noise and get in good trouble, necessary trouble."

Congressman John Lewis





## **Further Reading**



#### UNEQUAL TREATMENT

CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTH CARE

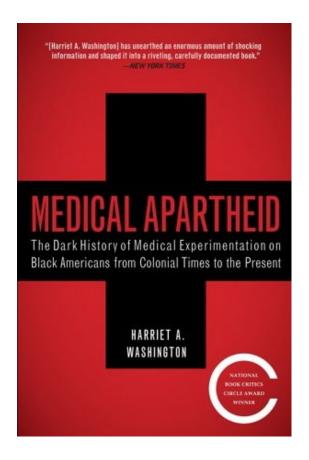
### Racial Bias in Medical Care

INSTITUTE OF MEDICINE

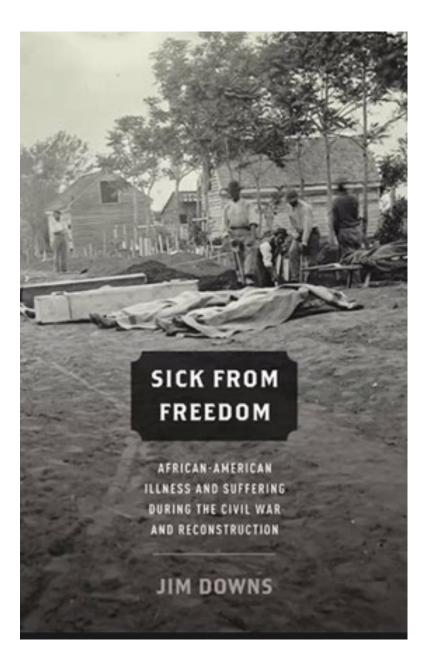


#### MEDICAL APARTHEID THE DARK HISTORY OF MEDICAL EXPERIMENTATION ON LACK AMERICANS FROM COLONIAL TIMES TO THE PRESENT

#### By Harriet A. Washington











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.



### Questions



