Race, Racism and Health
West Los Angeles VA Medical Center
June 9, 2021

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“Few people are capable of expressing with equanimity opinions which differ from the prejudices of their social environment.”
- Albert Einstein
Speakers and Conflicts of Interest*

• Presenters

  • Christina Harris, MD
    • Associate Vice Chair, Dept of Medicine for Equity, Diversity, & Inclusion
    • Associate Professor of Medicine, Division of General Internal Medicine
    • Associate Program Director of Internal Medicine Residency

  • Teresa Seeman Ph.D.
    • Associate Vice Chair, Dept of Medicine for Equity, Diversity, & Inclusion
    • Professor of Medicine & Epidemiology, UCLA

  • Keith Norris MD, Ph.D.
    • Executive Vice Chair, Dept of Medicine for Equity, Diversity, & Inclusion
    • Professor of Medicine, Division of Nephrology

*Our Biases: We believe in a society grounded in Equity & Justice
Overview

• COVID-19 Pandemic and the Unmasking of Racial/Ethnic Disparities

• Race and Racism

• The Biology of Racism

• The Endemic

• A Way Forward

Every system is perfectly designed to achieve the results it gets - Don Berwick

From UCLA Health Care Workers rally for Black Lives Matter – June 2020
Realities of a Pandemic

U.S. CORRECTIONAL FACILITIES REPORT STEEP RISE IN CORONAVIRUS INFECTION RATE

‘They’re Death Pits’: Virus Claims at Least 7,000 Lives in U.S. Nursing Homes

More than six weeks after the first coronavirus deaths in a nursing home, outbreaks unfold across the country. About a fifth of U.S. virus deaths are linked to nursing facilities.

COVID-19: a potential public health problem for homeless populations

Native American Deaths Rising at Alarming Rate from COVID-19

Covid-19’s devastating toll on black and Latino Americans, in one chart

The US health system has failed black and Latino populations for decades. Now they’re paying the price.

By Dylan Scott | @dylaniscott | dylan.scott@vox.com | Apr 17, 2020, 4:10pm EDT

Black, Indigenous and People of Color (BIPOC) 2-4 x more likely to die of COVID
The Makings of a Disparity

Structural Racism*
(e.g. residential segregation, underfunded school systems, poverty, chronic discrimination)

Increase Risk of Exposure
- Service Jobs
- Poor housing conditions
- Public Transportation

High Chronic Disease Burden
- DM/CKD
- HTN/CVD
- Asthma/COPD

Lack of Access to Quality Care
- Early testing shortage
- Poor preventative care
- Low quality hospitals
The Making of Race

The “Scientific” Foundation for Racism

1735 - Carl Linnaeus, father of modern taxonomy: Socially-constructed, hierarchal groupings with specific personal attributes establishing the foundation for racism ("Systema Naturae").

Americanus (American Indian): obstinate, merry, free, regulated by customs
Asiaticus (Asian): melancholy, avaricious, ruled by opinions
Africanus (Black): relaxed, crafty, negligent, governed by caprice
European (White): muscular, gentle, inventive, governed by laws

Leading Universities taught this through the 1970s

Caucasian - “to describe the variety of mankind in south of Mount Caucasus”; He claimed it was the “original” race and therefore the most “beautiful".
The Making of Race

- Race is a modern idea.
- Race is not based on biologic or scientific fact.
- Race and American freedom were born together.
- Race is a political construction which shifted over time.

Race was created via pseudoscience as a classification to give power to whites, to legitimize dominance, and to justify slavery.

“No one was white before he/she came to America. It took generations and a vast amount of coercion, before this became a white country.” -James Baldwin
The Making of Race

1845
“Manifest Destiny”
To justify colonization and dominance

1899
“The White Man’s Burden”
The moral imperative to govern inferior people

WHITE SUPREMAKY:
A historically based, institutionally perpetuated system of exploitation and oppression of continents, nations and peoples of color by white peoples; for the purpose of maintaining and defending a system of wealth, power and privilege.

We must all learn about, understand and accept United States’ racist roots
Individual Racism -
Bigotry or discrimination by an individual based on race.

Institutional Racism -
Discriminatory treatment, unfair policies and inequitable opportunities and impacts, based on race, produced and perpetuated by institutions.
Structural Racism

The System which perpetuates Racial Inequities

- White Supremacy
- Education
- Exclusion
- Health Care
- Employment
- Culture
- Marginalization
- National Values
- Inequities
- Criminal Justice
- Exploitation
- Housing

It’s as ubiquitous as the air we breathe, for those allowed to breathe.
Structural Racism

The System which perpetuates Racial Inequities

White Supremacy

- Inequities

Exclusion

Marginalization

Exploitation

Culture

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Health Care

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Housing

It’s as ubiquitous as the air we breathe, for those allowed to breathe.
FDR New Deal created Homeowners’ Loan Act in 1933:
Billions of dollars in low-interest loans for home ownership

- Black Americans were systematically excluded because of redlining practices

FHA Underwriting Manual 1935:
“Important among adverse influences are the following: infiltration of inharmonious racial or nationality groups; the presence of smoke, odor, fog, etc.”
Structural Racism in Action - Redlining
Structural Racism in Action - Health Care
The Biology of Racism

Society ↔ Structural Racism
Inequity in resources and opportunities
Personal Experiences with discrimination and racism
Health inequities and subsequent impact

https://www.cdc.gov/nchs/hus/contents2017.htm#015
Weathering

“Blacks experience early health deterioration as a consequence of the cumulative impact of repeated experience with social and/or economic adversity and political marginalization. On a physiological level, persistent, high-effort coping with acute and chronic stressors has a profound impact on health”

Arlene Geronimus
Black vs White Differences in Childhood Adversity

- Family recv'd public assistance
- Parental ed<HS
- low status parental occupation
- Parental death
- Sibling death

[Bar chart with data comparison for Blacks (N=228) and Whites (N=942)]
Black vs White Differences in Adult Adversity

- **Major discrimination events**: Blacks (2.9%) vs Whites (0.2%)
- **Everyday discrimination**: Blacks (14.8%) vs Whites (2.7%)
- **Major Life events**: Blacks (3.2%) vs Whites (3.2%)
- **SES Adversity**: Blacks (4.1%) vs Whites (2.7%)

**Legend**:
- Red: Blacks (N=228)
- Green: Whites (N=942)
# Differential Weathering in the MIDUS Cohort

(ages 35-85)

<table>
<thead>
<tr>
<th></th>
<th>Blacks (n=228; avg age=53)</th>
<th>Whites (n=942; avg age=58)</th>
<th>Race Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting glucose (mg/dL)</td>
<td>111.1±42.3</td>
<td>99.9±23.4</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>HOMA-IR</td>
<td>1.5±0.64</td>
<td>1.3±0.55</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>CRP (ug/dL)</td>
<td>1.34±0.80</td>
<td>1.0±0.68</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>IL-6 (pg/mL)</td>
<td>1.5±0.54</td>
<td>1.2±0.51</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>E-selectin (ng/mL)</td>
<td>52.1±28.9</td>
<td>41.3±20.6</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Waist</td>
<td>101.4±18.1</td>
<td>96.5±15.7</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>BMI</td>
<td>32.8±8.6</td>
<td>29.0±5.9</td>
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What is Allostatic Load and how it is important to Structural Racism?

**Allostatic Load** = a cumulative index of dysregulation across multiple of the body’s regulatory systems
- Reflecting “wear and tear on the body” / biological aging
  – i.e. Weathering
- Cumulative effects on multiple biological regulatory systems of living in and adapting to one’s environment.

**Consequences** = shorter life spans, earlier onset of chronic disease

**Predictors** = lives characterized by greater stress in the face of fewer resources
Black vs. White differences in Allostatic Load Over the Life-Course

**Allostatic Load** = count of parameters with values in highest quartile of risk.

- Systolic BP (>127 mmHg)
- Diastolic BP (>80 mmHg)
- BMI (>30.9)
- Glycated hemoglobin (HgA1c > 5.4%)
- Albumin (<4.2 g/dL) *
- Creatinine clearance (<66 mg/dL) *

- Triglycerides (>168 mg/dL)
- C-Reactive Protein (>0.41 mg/dL)
- Total Cholesterol (>225 mg/dL)

*bottom 25% for albumin & creatinine clearance
Early Age Differences and Allosteric Load

FIGURE 1—Probability of having an allostastic load of 4 or higher, as predicted by race (a)

Poverty and Allostatic Load

Figure 3. Predicted diastolic blood pressure (DBP) by PERCEIVED DISCRIMINATION scores in older African Americans and whites.
Differential Weathering in the MIDUS Cohort  
(ages 35-85)

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<td>$12.7 \pm 12.2$</td>
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<tr>
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C-Reactive Protein & COVID Severity

Differences in Allostatic Load relative to highest Neighborhood SES quartile**

**Adjusted for age, age², gender, US nativity, education and income

- White (p trend 0.06)
- Black (p trend 0.002)
- Mex Am. (p trend 0.06)

Q1, Q2, Q3, Q4 (Reference)
Interquartile Ranges of Neighborhood SES Index by Race/Ethnic Group*

- **Total sample**: Range: -3.8 to 2.0
- **White**: Range: -7.7 to 1.7
- **Black**: Range: -6.0 to 1.6
- **Mexican**: Range: -3.6 to 2.0
- **Other**: Range: -3.6 to 2.0

*Red dashed lines indicate quartile cutpoints*
• Summary of health inequalities:
  • How long people live
  • How health differences during their life-times
    • Earlier deterioration in how body systems function
    • Earlier onset of chronic health problems – hypertension, diabetes
    • Worse outcomes from diseases – e.g. COVID-19

• How We Address Health Inequalities – Addressing Structural Racism
The Endemic: Bias, Racism and the Myths that are institutionalized in our society

Sample Myths/Narratives

I don’t see color
We live in a meritocracy
We will lose quality if we become more diverse
I have friends/family members from that group
You can infer about the individual from the group
Personal choice is independent of social structures
Supporting social justice/equity is reverse racism
They are lazy and don’t work/ Yet, they are taking all the jobs
Having a “woman/minority” to lead EDI issues solves the problem of racism/sexism
Towards Achieving Equity and Justice to Eliminate Disparities

1. Equality imagines a world that is fair.

America has a powerful narrative—that it is a true meritocracy.

We hold these Truths to be self-evident that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights that among these are Life, Liberty, and the Pursuit of Happiness.

2. But the world ISN'T EQUAL, and America is not a meritocracy.

BIPOC, LGBTQ+, women and others are kept in the hole, not because of content of character, but based on the ideology of people not being equal.

3. And it has BIAS AND SYSTEMIC RACISM.

4. DIVERSITY only places more people from marginalized groups into an unequal pathway.

5. True EQUITY redirects resources to the pathways with greatest need to fix barriers and intentionally provide support.

And JUSTICE closes the holes and starts adding some boxes.

This requires the elimination of structural racism, and REMEDIATION and REPARATIONS to move from creating and maintaining a hole to making all marginalized Americans whole.

Outlawing discrimination stops drilling the hole, but it does not fill the hole.
• Don’t be afraid of the names Structural Racism or White Supremacy Ideology (racial superiority/inferiority). No one on this zoom killed Native Americans or owned enslaved Black persons or created structural racism

• However, **everyone can and does** either
  1. Actively support structural racism and promote White Supremacy narratives
  2. Passively support structural racism and promote White Supremacy narratives by doing nothing, or
  3. Help to dismantle it (anti-racism)
What About Race and Ethnicity in Research?
How to use Race/Ethnicity in Research

- Race/Ethnicity - highly **complex** population-level socio-political variables
  - Nominal (vs. ordinal) variables with no inherent order. Cannot be used in clinical formulas as you cannot infer each individual from the group

**Race** is a risk factor for racism

**Exposure to racism** is risk factor for health conditions/outcomes and health disparities

- Race/Ethnicity are critical for population-level assessments that inform public health and community messaging, screening, monitoring progress in addressing disparities, modifying systems, creating policy recommendations, etc.

![Figure 3. Top 4 Leading Causes of Death, Age-Adjusted Rates by Race and Hispanic Origin: United States, 2017](chart.png)

**Color A vs B & Health (skin, hair or eye color, or favorite color)**

**Ordinal Variables (ordered; how we use it)**

- **Dichotomized BMI** is an ordinal variable. Every person with a BMI $> 25$ is greater than everyone with a BMI $< 25$

**Nominal Variables (unordered; reality)**

- **Nominal variables are unordered, thus we cannot assign an average group difference to each individual (Ecologic Fallacy)**

**Group A/B are assigned 0,1 in regression model**

- Avg incr health outcome/value

- We can assign the average group difference to individuals if we are willing to accept the aggregation bias

**Dichotomized BMI** is an ordinal variable. Every person with a BMI $> 25$ is greater than everyone with a BMI $< 25$

**Nominal variables are unordered, thus we cannot assign an average group difference to each individual (Ecologic Fallacy)**


What About Race and Ethnicity in Clinical Care?
Race Implicit Association Test (IAT) Doctors, Researchers and Lawyers

Cohen’s D: standardized effect size, comparing the mean to M=0 (no bias), D of 0.2 = small effect, D of 0.5 = medium effect, and D of 0.8 = large effect

Data from Project Implicit®, operated at Harvard University (https://implicit.harvard.edu/)

Patient-physician gender concordance and increased mortality among female heart attack patients

Gender concordance and patient survival: 90% confidence interval displayed. Estimates include controls and hospital quarter fixed effects.

Comparison group is male doctor, male patient.

$n = 581,797$ for full sample, $n = 134,420$ for matched sample

Psychosocial Stress (Poverty/Discrimination/More) & Cognitive Processing

Stress (to survive) leads to realignment of workspaces that limits cognitive processing

What might happen if/when an “under-resourced/marginalized” patient/study participant makes it to their visit & then goes home?

Suboptimal Health or Trial Outcome

- Inability to remember
- Cost of food, housing, more
- Small margin for unforeseen events
- Inability to implement
- Fear, anxiety apprehension
- Mistrust and Stress from social injustices (-isms)

Which ball(s) are your under-resourced/marginalized and disproportionately minority patients/study participants likely to drop
-Rent, food, electricity, childcare, elder care or
-Provider recommendations/trial protocol, f/u visit, meds/other?

UCLA
David Geffen School of Medicine
What happens if a Student/Staff/Faculty has the usual work/life stress & the additive stress of work/life discrimination/isolation/navigation?

Inability to remember

Self-segregation, Avoiding other groups

Fear, anxiety apprehension

Reduced spiritual connectedness

Impaired interpersonal relationships

Which ball(s) are your employees likely to drop if your organization is not a safe space?
For Countering Bias & Racism (all isms)

• Overcoming Unconscious or Implicit Bias
  • Recognize it could be you
  • Focus on treating patients/peers/staff as individuals and not as a category.
  • Practice Empathy, Caring, Respect

• Unraveling the Institutionalization of Racism
  • Revise health system policies
  • Recognize your role as a community resource and/or leader for health – Help change laws/policies that promote inequity and adverse social determinants of health

• Passivity is a choice – it is choosing to perpetuate structural racism and health disparities

Adapted from Masters C, et al. Addressing Biases in Patient Care with The 5Rs of Cultural Humility, a Clinician Coaching Tool. JGIM 2019;34(4):627-630
Capers Q. How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education. ATS Scholar. 2020;1(3):211-7
Caring for Marginalized Patients

What many “Marginalized” Patients have

• Discriminated Group
• Limited Income
• Under and Un-Insured
• Low Educational Attainment
• Limited Access to Care
• Impaired Cognitive Processing
• Adverse Biologic Profile
• Multimorbidity

What many “Marginalized” Patients need

• High Quality Care
• Treated with Respect
• Our Empathy
• Our Compassion
• Our Support
• To Be Given Hope
• Judgement
• Ire
• Lecture

Tell your patients that you treat them like family
And then do it!

And remember: It’s not what’s wrong with them
it’s what did we do to them
The Way Forward: VA Medical Center Leadership

• Use your platform to highlight the importance to address EDI issues

• Review policies and practices to eliminate identity-based advantages/disadvantages.
  • Make sure you are being inclusive and equity-minded in your communications to your group.

Equity, diversity and inclusion should be the values that guide how leaders set the goals.
The truth is that there is nothing noble in being superior to somebody else. The only real nobility is in being superior to your former self. – Whitney Young, Jr. adapted from Hemingway
Race & Biology

- Not based on biologic or scientific fact
- Human Genome Projects, completed June 2020:
  - ‘racial subgroups’ not a scientifically valid construct - Craig Venter, Head Celera Genomics
- Race does have biologic associations
- Racism can affect health/illness & biology
- Race is indirectly (not directly) related to biology/ancestry
  - Guess of continental ancestry which is an estimate of varying prevalence of known/unknown polymorphisms, gene-gene and gene-environment interactions on health
  - Estimated that 85% of all possible human genetic variation occurs between two persons from the same ethnic group, 8% occurs between tribes or nations, and 7% occurs between the so-called major races