Interpersonal Stress Linked to Racism: Racial Bias and its Health Consequences

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The opinions, findings and conclusions expressed by speakers during this event are strictly my own and do not necessarily represent the opinion, views or policies of the Office of the Assistant Secretary for Health (OASH), Office of Minority Health (OMH) and the Department of Health and Human Services (HHS); nor does mention of trade names, commercial practices, or organizations imply endorsement.
The House that Racism Built

Racism as a societal system

Social Forces
• Political
• Legal
• Economic
• Religious
• Cultural
• Historical Events

Cultural Racism
(e.g. Stereotypes, Stigma, Implicit & Explicit biases)

Institutional Racism
(e.g. Segregation)

Individual Discrimination

Williams, Lawrence, Davis, Vu, ‘Understanding how Discrimination Can Affect Health,’ HSR, 2019
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

Williams, J Health and Social Behavior, 2016

photo from pixels.com
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?

Williams, Yu, Jackson, Anderson, J Health Psychology, 1997
Almost every day or at least once a week

NH White  Black  Hispanic  Asian  AmI/AN

11  23  19  11  34

American Psychological Association, Stress in America, 2016
### Everyday Discrimination and Health

<table>
<thead>
<tr>
<th>Incident</th>
<th>Nicotine dependence</th>
<th>CAC (coronary artery calcification)</th>
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<tr>
<td>- Metabolic Syndrome</td>
<td>Binge eating</td>
<td>IMT (intima media thickness)</td>
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<td>- CVD outcomes</td>
<td>Smoking &amp; drug use</td>
<td>Visceral fat</td>
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<td>- Breast cancer</td>
<td>At-risk drinking</td>
<td>HRV</td>
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<td>- Type 2 diabetes</td>
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<td>Atrial fibrillation</td>
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<tr>
<th>Adult onset asthma</th>
<th>Sleep duration</th>
<th>Inflammation (CRP, IL-6, e-selectin)</th>
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<tr>
<td>Nocturnal amb. BP</td>
<td>Sleep quality</td>
<td>Cortisol</td>
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<tr>
<td>Cognitive function</td>
<td>Consulting with</td>
<td>Telomere length</td>
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<tr>
<td>Increases in SBP, DBP</td>
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<td>Allostatic load</td>
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<tr>
<th>Waist circumference</th>
<th>Breast cancer screening</th>
<th>DSM Disorders</th>
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<tr>
<td>Obesity</td>
<td>Cervical cancer screening</td>
<td>Emotional Distress</td>
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<td>Weight gain</td>
<td>Lower adherence</td>
<td>Well-being</td>
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<tr>
<td></td>
<td>Delays in seeking treatment</td>
<td>Changes in personality</td>
</tr>
</tbody>
</table>

| Williams, Lawrence, Davis & Vu, *Health Services Research*, 2019 |
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

Tynes, Giang, Williams & Thompson, 2008; J Adolescent Health
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

B. Tynes et al., J Adolescent Health, 2019
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

• 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.

Dylan Jackson & Kristin Turney, Journal of Urban Health, 2021
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

Bor, Venkataramani, Williams & Tsai, *The Lancet*, 2018
Consequences of the cumulative exposure to discrimination and other stressors

“Accelerated Aging”
“Premature Aging”
Biological “Weathering”
Earlier Onset of Chronic Disease
Earlier Onset of High Blood Pressure

- Age 18-34:
  - African American: 12%
  - White: 10%

- Age 35-49:
  - African American: 33%
  - White: 22%

- Age 50-64:
  - African American: 61.00%
  - White: 41%

Behavioral Risk Factor Surveillance System, 2015
Comorbidities of Covid-19 Patients

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

- Hypertension: 57%
- Obesity: 42%
- Diabetes: 34%
- Heart Disease (CAD; CHF): 18%
- Respiratory disease*: 17%
- Cancer: 6%

Safiya Richardson et al. JAMA, April 22, 2020 *(Asthma 9%, COPD 5%, sleep apnea 3%)*
Number of Comorbidities, Covid-19 Patients

- None: 6%
- One: 6%
- More than 1: 88%
Identifying Protective factors and Resilience Resources
Discrimination, Social Ties, Biomarkers

- 331 Black adolescents in 9 rural counties in Georgia
- **Discrimination assessed at age 16, 17, and 18**
- Stably high levels of discrimination as a teen linked to higher biomarkers (overnight cortisol, epinephrine, norepinephrine, SBP, DBP, CRP, BMI) at age 20
- Social support: 11 item caregiver emotional & instrumental support and 4 item measure of peer support
- High social support (caregiver and peer) erased the negative effect of high discrimination on biomarkers

Gene Brody et al., 2014., Child Development
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

Ellison, Musick & Henderson, 2008
"True compassion is more than flinging a coin to a beggar; it understands that an edifice which produces beggars needs restructuring.”
Further Reading