Assessing for Discrimination

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Background and definitions

Objectives

- To ***define*** discrimination
- To describe the ***levels and mechanisms*** through which discrimination can act to affect health outcomes
- To describe the ***key dimensions*** of discrimination to consider when assessing for it in health research
- To list ***important limitations*** to assessing for discrimination

Discrimination Defined

- Legal:
  - Differential treatment based on protected status is called **intentional discrimination** or **disparate treatment.**
  - Conduct that has the **effect of discriminating against people in a protected class**, even if the reason for the different treatment is not based on protected class.
- Protected statuses or classes for the US
  - Race, color, religion, national origin, older age, sex.
  - Familial status, disability, veteran status, genetic information, pregnancy, citizenship

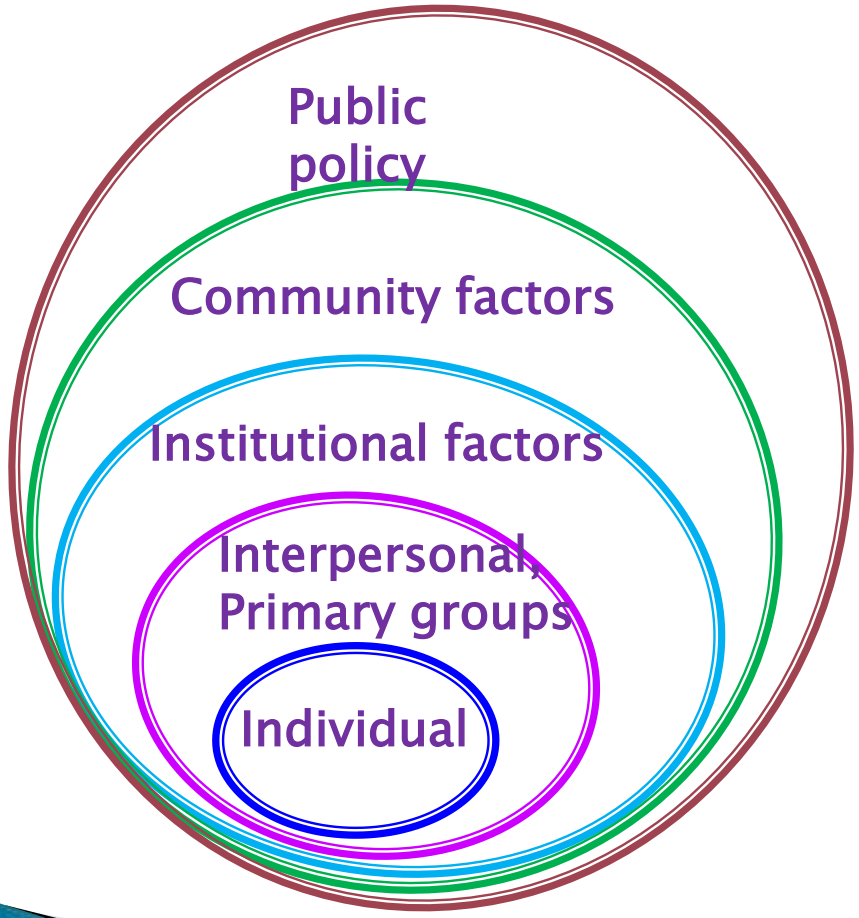
Additional statuses of interest for potential targets of discrimination

- Immigration status
- Sexual orientation
- Body size
- Disease status
- Socioeconomic status
- Language
- Intellectual ability
- Gender identity

Characteristics of Discrimination

- Results from ***commission*** or ***omission***
- May be ***legal or illegal***
- A response to "**isms**" (representing societal systems of inequality and belief)
- Leads to ***unearned***
  - Advantages
  - Disadvantages

SOCIOECOLOGIC LEVELS



Policy
- Immigration policies
- Incarceration policies
- Resource allocation

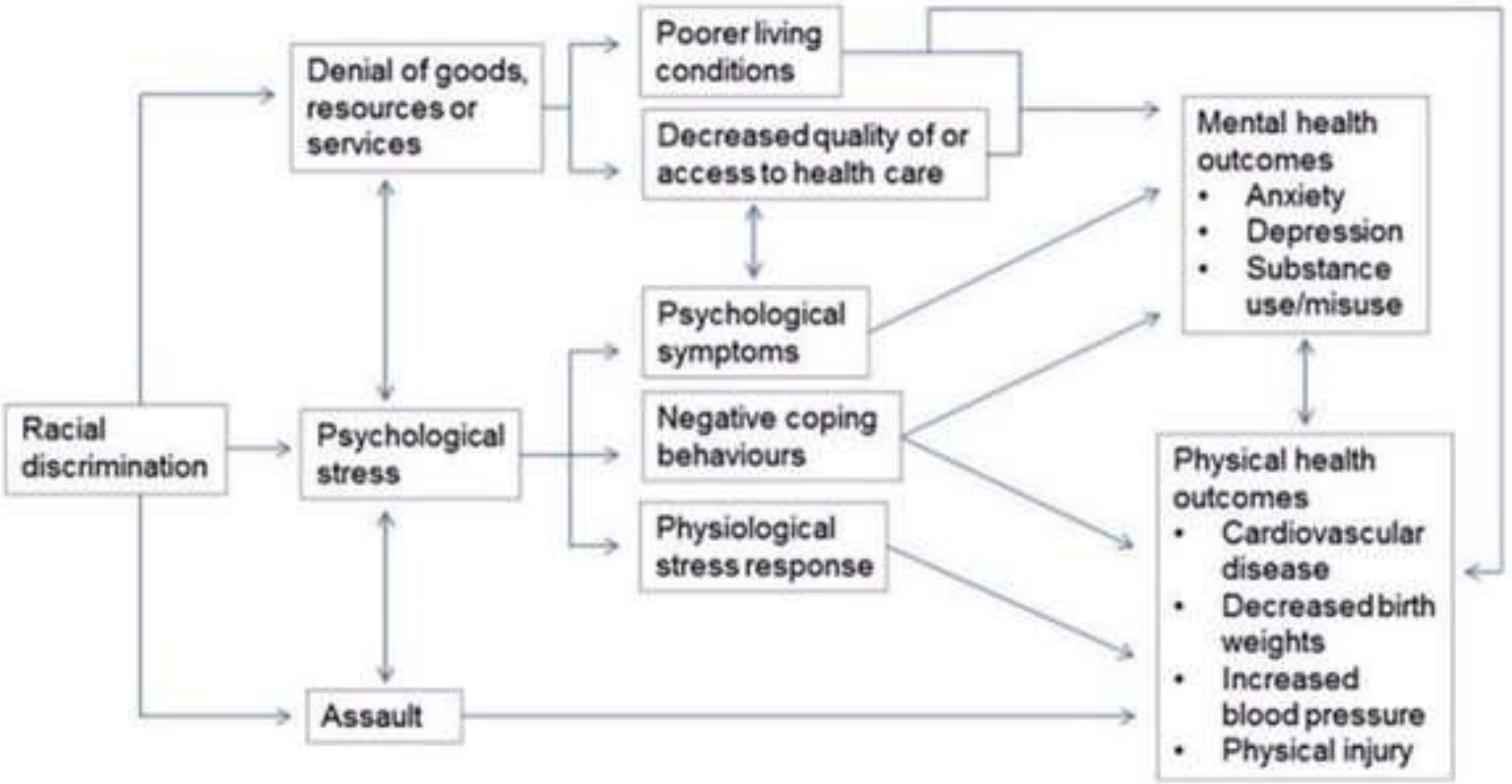
Community
- Differential resource allocation
- Residential and educational segregation

Institutional
- Hiring & promotion practices
- Resource allocation
- Under- or over-valuation of contributions

Interpersonal
- Overt discrimination, harassment
- Implicit bias

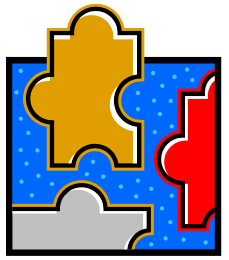
Individual/Intrapersonal
- Internalized 'ism (racism/homophobia, sexism, agism, etc.)
- Embodied inequities

A conceptual model of the relationship between racism and health



Source: Paradies et al; Systemic Reviews 2013 2:85

Discrimination as a public health issue



- Discrimination influences well-being.
  - Direct affects
  - Indirect affects
- Discrimination is **informed and affected by** public health research and policies.
- The populations disproportionately served by public health efforts are racial/ethnic minorities and other groups who experience disproportionate rates of discrimination.

Public Health's Role in Discriminatory Discourse & Policy

- Numerous examples related to immigration.
- Public health concerns were used to differentially ***blame, quarantine, and stigmatize*** "undesired" immigrant groups.
- The ***social forces and economic policies*** that created unhealthy living conditions for these groups were frequently ignored.
- Instead, blame was often shifted to assumed ***moral character and cultural norms.***

Public Health's Role: Discrimination

- Late 19th Century: Chinese Exclusion Act restricted Chinese immigration to the United States
- Rationale:
  - to maintain the nation's imagined "racial purity"
  - to shield domestic workers from foreign competition
  - to address social fears -- Chinese immigrants and Chinese Americans were regularly accused of bringing to American shores "beastliness," "venereal disease," and even "leprosy."

Public Health's Role: Discrimination and Discourse

COVID-19

- Ramped up, but inconsistent restrictions on immigration and travel that do not line up with the epidemiology.

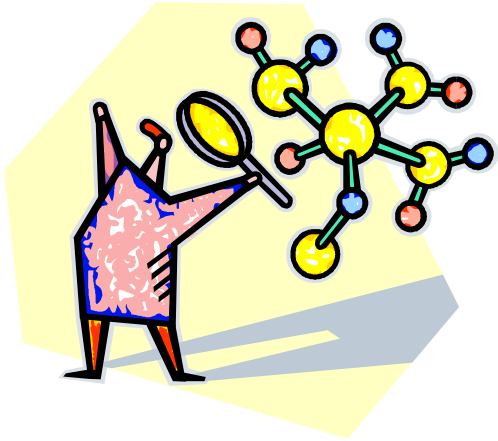
Words matter:

- "Spanish" flu
- "Chinese virus"
- "This week will be our Pearl Harbor."

Importance to disparities research and intervention

"Approaches to studying disparities, if not historically informed, have the potential to reinforce racial ideologies that assume racial inferiority or superiority of specific groups."

Harawa, Ford, *Ethnicity & Disease* 2008



Levels of Discrimination

INTRAPERSONAL & INTERPERSONAL DISCRIMINATION

Within an individual

Between individuals

&

IMPLICATIONS FOR HEALTH

Another: INTRA-PERSONAL MECHANISM

- Internalized racism/homophobia/agism, etc.
  - What is it?
  - Implications
    - for self
    - for other group members
  - Measurement
    - generally through self-report

Intrapersonal Example

- *Personal homonegativity (11 items)*

1) I feel ashamed of my homosexuality.

2) When I think of my homosexuality, I feel depressed.

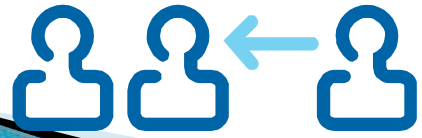
3) Sometimes I feel that I might be better off dead than gay.

4) I sometimes feel that my homosexuality is embarrassing.

5) I am disturbed when people can tell I'm gay.

INTERPERSONAL DISCRIMINATION

- Perceived discrimination
  - “Directly perceived discriminatory interactions between individuals, whether in their institutional roles or as public and private individuals." (Krieger, 1999, p. 301)
  - Can be difficult to distinguish between perceived prejudice and discriminatory treatment.
    - Perceptions about social environment, group experiences
    - Detection of racism/other ‘ism in personal exposure



Interpersonal Discrimination: Selected Outcomes

- Chronic stress
  - Anger, powerlessness, disturbed sleep quality
- Physiologic outcomes
  - Birth-related outcomes
    - Pre-term birth
    - Low birthweight births
  - Elevated resting, diastolic and systolic blood pressure
  - CVD and CHD
  - Physiologic stress responses
    - Cortisol
    - Allostatic load
    - Inflammatory disorders
    - Weathering
- Mental health outcomes
  - Depression
  - Anxiety
- Behavioral outcomes
  - Risk behaviors
  - Preventive behaviors
- Both the discrimination itself and the experience of discrimination as a source of (chronic) stress may be important.

ASSESSING PERCEIVED DISCRIMINATION – Interpersonal

Three main types of measures

a) Ratings of *attitudes or beliefs* about race, gender, disability, sexual orientation etc. (could be general or one's own beliefs or observations),
b) Assessments of *personal experiences* of bias, harassment, or discrimination, and
c) Vicarious assessments of observing *others' experiences*.

What type are each of these?

1. Native American men are more aggressive and brutal than other men. (modified Godfrey-Richman -ism Scale)
2. Rate how often you had the experience and how stressful the experience was it (RAALeS):
   - Witnessing discrimination or prejudice directed toward someone else.
3. When I walk into class, everyone turns his or her head to look at me. (Terrell and Terrell)

PERCEIVED DISCRIMINATION Self-Report Measures

- Selection should depend on the theoretical model linking discrimination to your outcome of interest.
- Limitations
  - Likely underestimates exposures
    - Does not account for macro-level exposures
    - Does not include exposures not perceived or reported (minimization bias)
  - Can also overestimate exposures (vigilance bias)
  - Rates of discrimination reported can differ widely by the measure used.

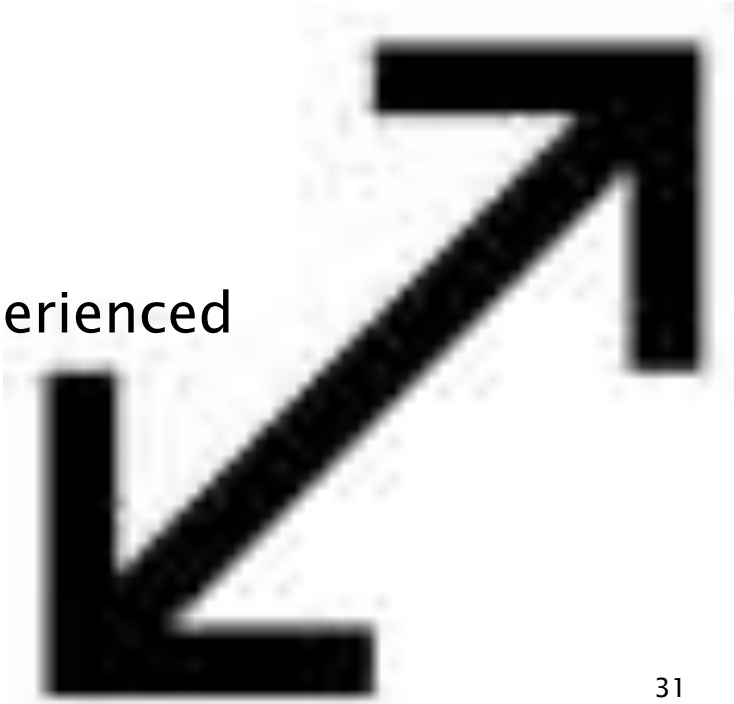
Minimization Bias

Reasons for **underestimation** in self-reports of discrimination

- Denial by perpetrators
- Costs associated with reporting discrimination
- Subtle/ambiguous discrimination
- Experience of other groups may be unobserved

Vigilance Bias

- Reasons for **overestimation** in self-reports of discrimination
  - Prior individual or group experiences lead to attributing ambiguous experiences to discrimination.
  - Likelihood affected by
    - Worldview
    - Knowledge-base
    - Self-protection
    - Degree of prior discrimination experienced



- Institutional level

ASSESSING DISCRIMINATION – Institutional

Main approaches

a) Ratings for perceptions of *climate or general practices* within an organization/group/setting.
b) Examination of secondary data on complaints, pay scales, admissions/hiring/promotion/sentencing patterns, pay scales.
c) Examination of policies and their impacts.

Context – Clinical Settings

Clinical settings are important contexts for intrapersonal, interpersonal, and institutional discrimination.

- Intrapersonal – healthcare stereotype threat
- Interpersonal – patient/ provider encounters
- Institutional – policies, wait times, security enforcement, staff training, staff hiring and compensation.

CLINICAL ENCOUNTER ISSUES: Selected Mechanisms

Implicit bias

- Provider assumptions (e.g., re: medication adherence)
- Undetected differential treatment
- Differential communication (e.g., body language)

Cultural barriers

Linguistic barriers

Quality of interaction

- Communication
- Implicit bias → differential communication via body language, etc.
- Rapport

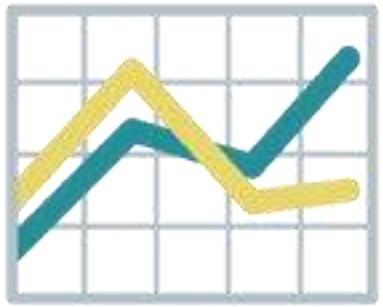
Patient preference

- Does not explain observed disparities

Selected Methodological Issues

- Controlling for clinician personal style (e.g., communication style)
  - Training and process evaluations
- Controlling for co-morbidities and patient characteristics
  - Audit studies
  - Actors

- Sampling
  - Random selection – may not be feasible
  - Patients vs. providers
  - Providers from sampling frame (e.g., practice, region)



- Audit Studies

"Patients" experiencing symptoms of heart disease, from Schulman et al. (1999)

Selected Logistical Issues

- Primary data collection
  - Medical records
  - Staff, space and time constraints
  - $ to access data or use space
- Recruitment
  - Address potential ethical issues
    - Coercion – given disease severity
    - Data sharing with clinicians
- HIPAA
- Who is the main stakeholder?

ASSESSING PERCEIVED DISCRIMINATION

- Relevant dimensions to consider
  - Severity
    - Major incidents (individual & societal)
    - Frequency (e.g., daily microaggressions)
  - Setting
    - Home/Community/Education/Medical/Workplace
  - Timing
    - Analysis period
    - Critical periods
  - Attribution
  - Intersectionality
    - Multiple group identities that shape the experience of discrimination

Microaggression Defined

- Coined by American psychiatrist, Chester M. Pierce
- Brief & commonplace daily verbal, behavioral, or environmental indignities, whether intentional or not, that communicate hostile, derogatory, or negative racial slights and insults toward people of other races.

Type	Definition
Microassault	An explicit racial derogation characterized primarily by verbal or nonverbal attack meant to hurt the intended victim through name calling, avoidant behavior, or purposeful discriminatory actions.
Microinsult	Characterized by communications that convey rudeness and insensitivity and demean a person's racial heritage or identity.
Microinvalidation	Characterized by communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person.

Assessing Perceived Discrimination – *Additional Dimensions*

- Group-level/family exposures may also be salient
- Perception & responses to discriminatory incidents/climates
- Vigilance & anticipatory stress
- Social support & coping strategies
  - **Example:** John Henryism is a strategy for coping with prolonged exposure to social discrimination by expending high levels of effort to counteract negative expectations that results in accumulating physiological costs.

Dimensions example: Homophobia (Diaz/Ayala):

1. verbally harassed in childhood for being gay/effeminate
2. felt that homosexuality hurt/embarrassed family
3. had to pretend to be straight in order to be accepted
4. heard as a child that gays would grow old alone
5. had to move away from family because of homosexuality

LIFE COURSE/ INTERGENERATIONAL

- Life-Course approach
  - Social factors and exposures interact throughout the life span to affect risk of disease and mortality, as well as to produce social inequality in health.
  - Within-person mechanisms or consequences.
  - Early exposures have lasting effects.
- Embodiment of inequities over time
- May be trans-generational
  - Precede birth
  - Precede conception
  - Birth-related outcomes and implications for child development

One life course approach

1. General life course trajectory

2. Life course trajectory potentially shaped by racism

Gee et al., 2012.

Assessing attribution:

One-step measures

inquire specifically, in one question about racial or another form of discrimination

- may lead to higher reports of that type of discrimination
- *Have you ever been treated unfairly or badly by the police because of your race.*

Two-step measures

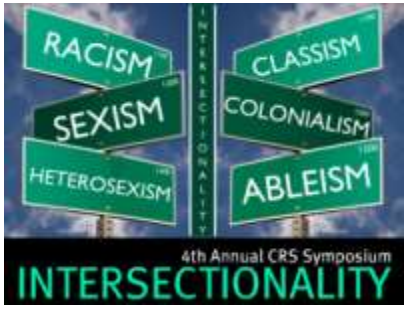
inquire about unfair treatment broadly and then ask about attribution

- may minimize interviewer effects and demand bias
- capture multiple forms of discrimination
- may measure something different than ___discrimination

INTERSECTIONAL CONSIDERATIONS

- Intersectionality: interlocking categories tied to interlocking forms of oppression

- Exposures may target intersecting categories only, not the lower-order categories.
  - E.g., gender & race or gender & sexual orientation



- Behavioral or attitudinal responses to discrimination may vary by other sociodemographic factors.

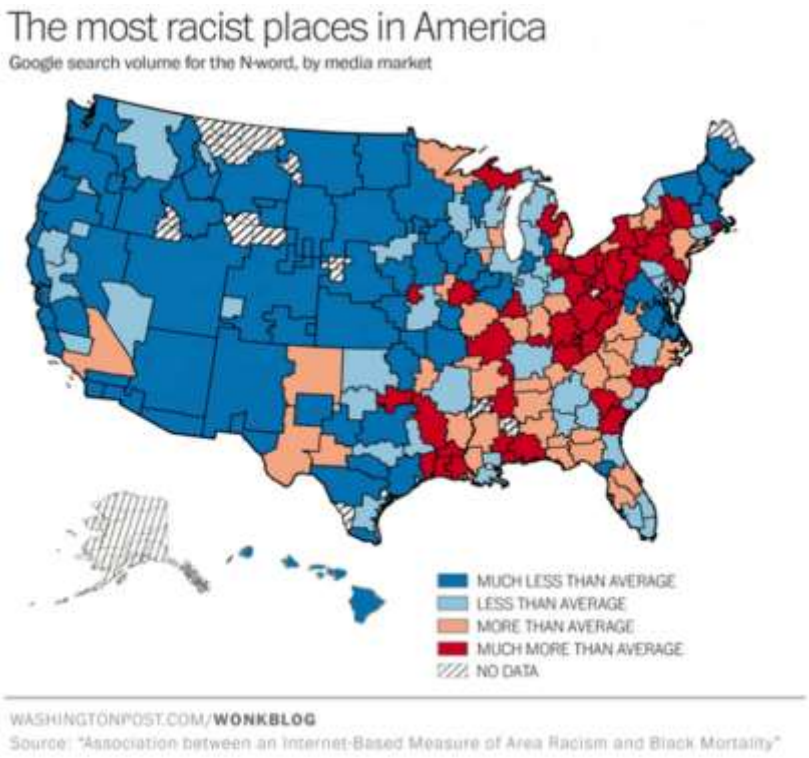
- Community-level discrimination

Measuring Community/Policy-Level Discrimination

- Inferring discrimination from data on social exposures
  - Examples
    - Employment discrimination
    - Housing
    - Policing data
  - Subject to unmeasured confounding
  - Limited by data available sources
  - Denominators
    - Who is target population?
      - All minorities?
      - All people stopped by police?
      - All minorities in certain neighborhoods?
    - Enumerating target population

Examining Discrimination using "Big Data"

- More and more studies are using search engines and other tools to develop area-based measures of prejudice/climate then measure associations with health outcomes.



Area Racism and Birth Outcomes Among Blacks in the United States

Prevalence ratios associated with low birthweight among Black mothers in 196 designated market areas, National Center for Health Statistics, 2005–2008

	Model 1 PR (95% CI)	Model 2 PR (95% CI)	Model 3 PR (95% CI)
Area Racism	1.09 (1.06, 1.12)***	1.08 (1.04, 1.11)***	1.05 (1.02, 1.07)***

Chae et al. found that each standard deviation increase in area racism was associated with relative increases of 5% in the prevalence of preterm birth and 5% in the prevalence of low birthweight among Blacks.

Measuring Discrimination: Emerging Research Approaches

- Improving measures
  - Targeted measures
    - settings, context, person factors
- Biomarkers as outcomes
  - Which biomarkers? For which specific outcomes?
  - Improving the measurement of biomarkers
- Improved measures of "real world" exposures
  - Partnering with communities to develop new tools
  - Use of electronic momentary assessments.
  - Use of search engine data and mapping
- Using virtual reality
  - Allows for real-time examination of responses to discrimination .

Recommended

- A Systematic Review of the Extent and Measurement of Healthcare Provider Racism. Yin Paradies, Mandy Truong, Naomi Priest J Gen Intern Med. 2014 February; 29(2): 364–387. Published online 2013 September 4. doi: 10.1007/s11606-013-2583-1 PMCID: PMC3912280
- Worth watching: Dr. Camara Jones (APHA President elect) https://www.youtube.com/watch?v=E-exB7xcPnQ
- Perceptions of Race/Ethnicity-Based Discrimination: A Review of Measures and Evaluation of their Usefulness for the Health Care Setting Nancy R. Kressin, Kristal L. Raymond, Meredith Manze. J Health Care Poor Underserved. 2008 August; 19(3): 697–730. doi: 10.1353/hpu.0.0041 PMCID: PMC2914305

Recommended

- Lewis TT, Cogburn CD, Williams DR. Self-reported experiences of discrimination and health: scientific advances, ongoing controversies, and emerging issues. Annu Rev Clin Psychol. 2015;11:407-40. doi: 10.1146/annurev-clinpsy-032814-112728. Epub 2015 Jan 2. Review. PubMed PMID: 25581238
  - Expanding our Understanding of the Psychosocial Work Environment: *A Compendium of Discrimination, Harassment, and Work-Family Issues* http://www.cdc.gov/niosh/docs/2008-104/pdfs/2008-104d.pdf
  - Ford CL, Griffith DM, Bruce MA, Gilbert KL. Racism: Science & Tools for the Public Health Professional. APHA Press April 2019