Committee on the Assessment of NIH Research on Women's Health National Academies of Sciences, Engineering, and Medicine Meeting 4 April 11, 2024

# STRUCTURAL CHANGES TO SUPPORT STRUCTURAL DETERMINANTS RESEARCH IN WOMEN'S HEALTH

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## DISCLOSURES

 Funding Sources: K01MD015291 (PI); R01MD015107 (Co-I); U24NR02014 (Co-I)

Consultant: PCORI Grant AD-2020C3-20906; R01NR020670;

• Employment:

Drexel University Dornsife School of Public Health

Affiliate of the Social System Design Lab in the Brown School of Social Work at Washington University in St. Louis

## AGENDA

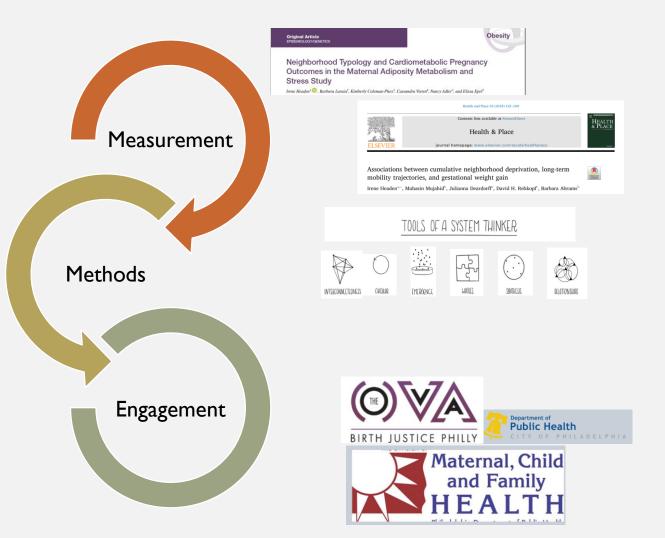
- Introduction
- Background
- Overview of existing challenges in funding and publication
- Challenges specific to structural determinants
- Reflections on moving forwards

## INTRODUCTION



## INTRODUCTION

 My research investigates how structural racism is embedded in neighborhood context and becomes embodied by Black birthing people to produce adverse pregnancy outcomes



## BACKGROUND



Bailey ZD et al. Structural racism and health inequities in the USA: evidence and interventions. *Lancet.* 2017; 389: 1453–63; Zhang et al. Big data science: Opportunities and challenges to address minority health and health disparities in the 21<sup>st</sup> century. *Ethn.Dis.*2017;27(2):95-106.

"...the totality of ways in which societies foster racial discrimination, through **mutually reinforcing** inequitable systems (in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, and so on) that **in turn reinforce** discriminatory beliefs, values, and distribution of resources..."

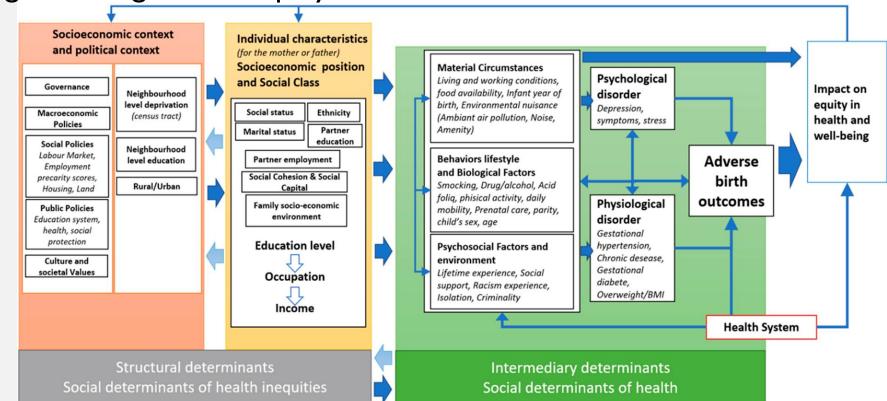
-Defined by interconnectedness -Reflected in culture -Rooted in history

## BACKGROUND

• Structural Determinants—the determinants that create the hierarchical power structures that create systemic patterns of marginalization and exclusion from opportunity, serving as an engine of inequity

Located within historical context and systems of oppression

For outcomes impacting women and those assigned female at birth, intersectionality also plays a role.



Herrick, C., & Bell, K. (2022). Concepts, disciplines and politics: On 'structural violence'and the 'social determinants of health'. *Critical Public Health*, 32(3), 295-308; Simoncic, V., Deguen, S., Enaux, C., Vandentorren, S., & Kihal-Talantikite, W. (2022). A comprehensive review on social inequalities and pregnancy outcome—identification of relevant pathways and mechanisms. *International Journal of Environmental Research and Public Health*, 19(24), 16592.

## CHALLENGES IN FUNDING AND PUBLISHING HEALTH EQUITY RESEARCH

- Longstanding inequities in funding persist
  - Black investigators have historically submitted fewer applications (1.4% in FY2000-2006)
    - They are also 70% less likely to be funded, although improvements in this inequity have been achieved over time
- Recent work has still found that Black Investigators are less likely to submit R01 (1.8% of FY2020 submissions)
  - Also less likely to be "super Pls" (i.e. 3 or more R01s)
  - Black women are least likely to be categorized in this group

- Factors contributing to gap
  - Topics of investigation selected
  - Institute/Center of application
  - Impact score
  - Whether application was discussed in study section
  - Disparities in funding by percentile for poorer performing applications
- BUT a large proportion of the gap remains unexplained

Nguyen, M., Chaudhry, S. I., Desai, M. M., Dzirasa, K., Cavazos, J. E., & Boatright, D. (2023). Gender, racial, and ethnic and inequities in receipt of multiple National Institutes of Health research project grants. JAMA network open, 6(2), e230855-e230855; Taffe, M. A., & Gilpin, N. W. (2021). Racial inequity in grant funding from the US National Institutes of Health. *Elife*, 10, e65697; Erosheva EA, Grant S, Chen MC, Lindner MD, Nakamura RK, Lee CJ. NIH peer review: Criterion scores completely account for racial disparities in overall impact scores. Sci Adv. 2020 Jun 3;6(23):eaaz4868. doi: 10.1126/sciadv.aaz4868. PMID: 32537494; PMCID: PMC7269672.

## CHALLENGES IN FUNDING AND PUBLISHING EQUITY RESEARCH

- Inequities in publications between Black and white scholars persist
  - Diversity of submissions to journals
  - Journals considerations around "rigor"
  - Allowable "zones of expertise" (eg health equity tourism)
  - Impact factors of journals accepting equity (and women's health) work
- Furthermore, a 2020 article by Boyd et al. (2020) found that only 86 articles were returned with the term "race" and "structural racism"\*
  - Due to practices within publishing that erase racism as an operating mechanisms (allowing "race" to be an accepted proxy)
  - Also trends in lack of accountability when authors do not cite specific bodies of evidence on the role of racism and health developed over the last few decades

\*this trend has changed in the last four years with the disciplinary reckonings with the ongoing legacy of racism, but delays in dissemination and diffusion of ideas potentially creates a lag on it's impact on publication record (through citations) and funding

Loui M, Fiala SC. Inequities in Academic Publishing: Where Is the Evidence and What Can Be Done? Am J Public Health. 2024 Apr;114(4):377-381. doi: 10.2105/AJPH.2024.307587. PMID: 38478868; PMCID: PMC10937608; Boyd, R. W., Lindo, E. G., Weeks, L. D., & McLemore, M. R. (2020). On racism: a new standard for publishing on racial health inequities. *Health Affairs Forefront*.

- Operationalizing structural racism is challenging
  - Conceptually (reorient our methodological foundations; reproductive justice)
  - Empirically (develop new approaches to measurement and metric development)

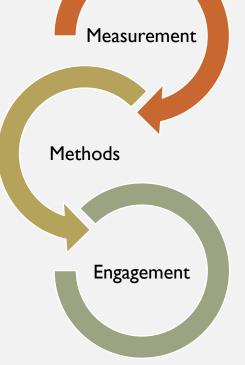
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Jaquelyn L. Jahn

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Measuring Structural Racism: A Guide for Epidemiologists and Other Health



- Operationalizing structural racism is challenging
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- Mixed-methods
- Systems Science
- Intersectional analyses

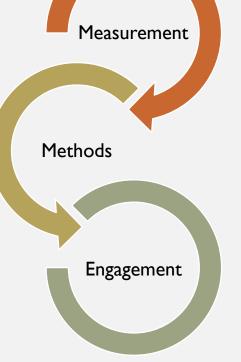
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Researchers

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Engagement

Methods

- Systems Science
- Intersectional analyses
- Communities most impacted must be centered
  - Community Capacity Building
  - Centering systems of resilience

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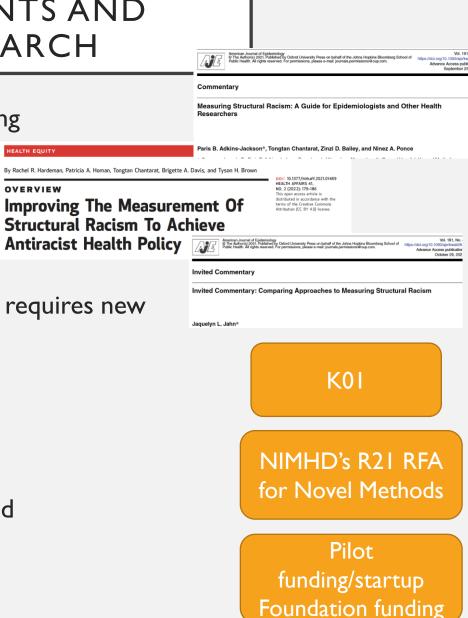
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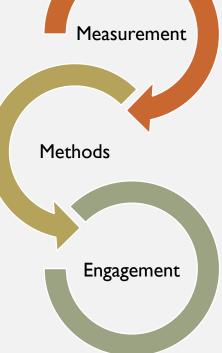
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OVERVIEW

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- Building a robust evidence base from which to act requires overcoming publication challenges
  - Journal impact factor
  - Manuscripts on women or individuals assigned female at birth populations often considered "specialized"
  - Lack of reviewer expertise in understanding constructs of race and racism and equity-based work
  - Prioritization of particular publishing mediums that are misaligned with community needs

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#### Special Report

#### Racism and perinatal health inequities research: where we have been and where we should go

Irene E. Headen, PhD; Michal A. Elovitz, MD; Ashley N. Battarbee, MD, MSCR; Jamie O. Lo, MD, MCR; Michelle P. Debbink, MD, PhD

#### Box

#### Recommendations for the Roadmap to Perinatal Health Equity Research<sup>a</sup>

#### Infrastructure:

- 1. Ensure that institutional practices and policies supporting investigators do not recreate existing barriers to multidisciplinary inquiry or true community partnership
- 2. Improve the alignment of strategic priorities of federal agencies and professional organizations with funding objectives
- 3. Adopt guidelines in academic publishing to guide race and racism reporting in perinatal health research as well as equitable manuscript review and knowledge access

<sup>a</sup>Critical readings to guide change. Although a wealth of references supporting deeper understanding of these recommendations can be found in the bibliography, we specifically guide readers' attention to these foundational readings:

- Black Women Scholars and the Research Working Group of the Black Mamas Matter Alliance.<sup>14</sup>
- Ford et al.<sup>15</sup>
- Ford and Airhihenbuwa.<sup>16</sup>
- Jones.<sup>12</sup>
- Bailey et al.<sup>17</sup>
- Roberts.<sup>18</sup>
- Roberts.<sup>19</sup>

Headen. Racism and perinatal health inequities research. Am J Obstet Gynecol 2022.

## **REFLECTIONS FOR MOVING FORWARD**

#### **Short(er)-term considerations**

- Role of flexible funding types (e.g. pilot funding)
  - Address community engaged and community led research/capacity building
  - Target high-risk, innovative approaches
  - Time horizons align with scope of change
- The role of protected time (e.g. K01s)
- Importance of sponsorship as well as mentorship

### Long-term considerations

- Ongoing issues with lack of reviewing infrastructure that supports equitable review
  - Both funding and publishing
- Need for reflexivity throughout the research process
  - Tools and metrics?
- Tools for transparency and accountability in changing infrastructure



