# Epidemiology and Health Disparities Working Group

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# What is the motivation for this working group?

- Standardization of data collection for PTB and other studies of reproductive health remains an issue
  - We cannot compare results across studies because of lack of standardization in approach and variable measurement
- Importance of social and physical environment that drive disparities
  - Largely ignored unless the primary focus of an investigation
    - Social context
    - Violence
  - Attempts and approaches to measure meaningful interaction are rare

# Do we need to re-address standardizing PTB research to include measures of social inequality?

Guidance for design and analysis of observational studies of fetal and newborn outcomes following COVID-19 vaccination during pregnancy

Deshayne B. Fell <sup>a,b,\*,1</sup>, Michelle C. Dimitris <sup>b,2</sup>, Jennifer A. Hutcheon <sup>c,3</sup>, Justin R. Ortiz <sup>d,4</sup>, Robert W. Platt <sup>e,f,g,5</sup>, Annette K. Regan <sup>h,i,6</sup>, David A. Savitz <sup>j,7</sup>

Vaccine 39 (2021) 1882-1886

A Standardized Template for Clinical Studies in Preterm Birth

Stephen J. Lye, PhD<sup>3</sup>, Sam Mesiano, PhD<sup>4</sup>, Amy P. Murtha, MD<sup>5</sup>, Scott M. Williams, PhD<sup>6</sup>, and Craig E. Pennell, MB. BS, PhD<sup>7</sup>; International Preterm Birth Collaborative (PREBIC) Pathways and

Leslie Myatt, PhD<sup>1</sup>, David A. Eschenbach, MD<sup>2</sup>,

Systems Biology Working Groups

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#### Designing Drug Trials: Considerations for Pregnant Women

Jeanne S. Sheffield,<sup>1</sup> David Siegel,<sup>2</sup> Mark Mirochnick,<sup>3</sup> R. Phillips Heine,<sup>4</sup> Christine Nguyen,<sup>5</sup> Kimberly L. Bergman,<sup>6</sup> Rada M. Savic,<sup>7</sup> Jil Long,<sup>8</sup> Kelly E. Dooley,<sup>9</sup> and Mirjana Nesin<sup>8</sup>

Clinical Infectious Diseases® 2014;59(\$7):\$437-44

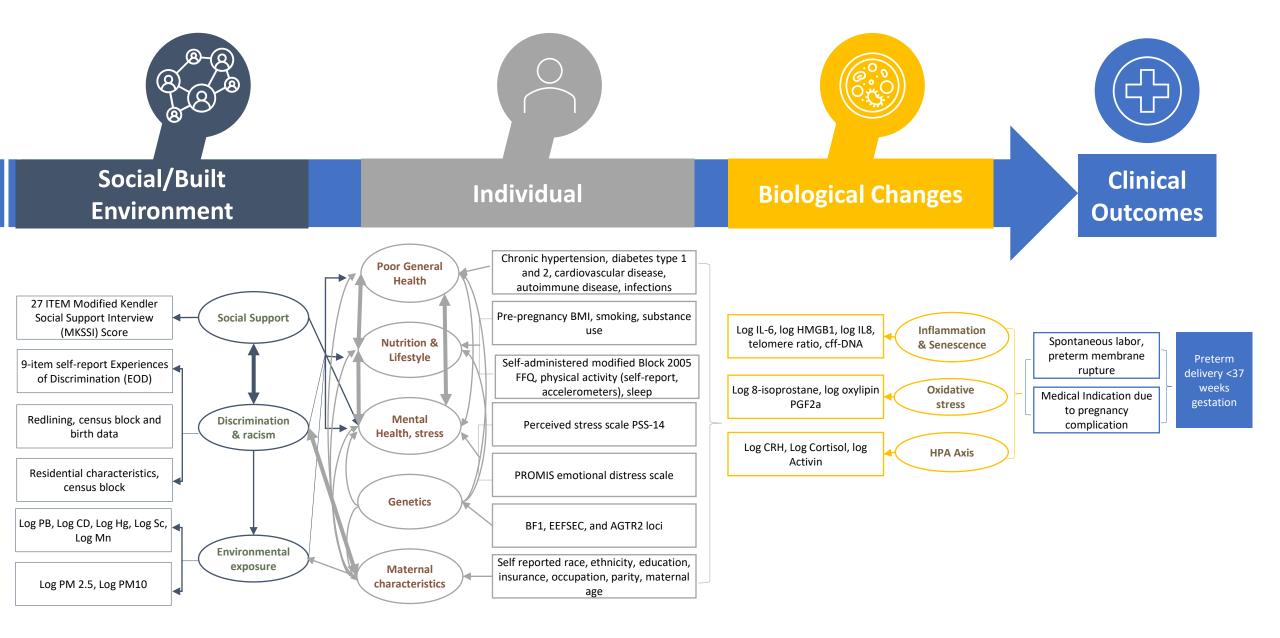
#### Methodologic issues in the design and analysis of epidemiologic studies of pregnancy outcome

David A Savitz Department of Community and Preventive Medicine, Mount Sinai School of Medicine, New York, USA, Nancy Dole Carolina Population Center, University of North Carolina, Chapel Hill, North Carolina, USA and Amy H Herring Department of Biostatistics, University of North Carolina School of Public Health, Chapel Hill, North Carolina, USA Statistical Methods in Medical Research 2006; 15: 93–102

Scand J Work Environ Health 1999;25 suppl 1:5-7

Design options and sources of bias in time-to-pregnancy studies by Jørn Olsen, MD'

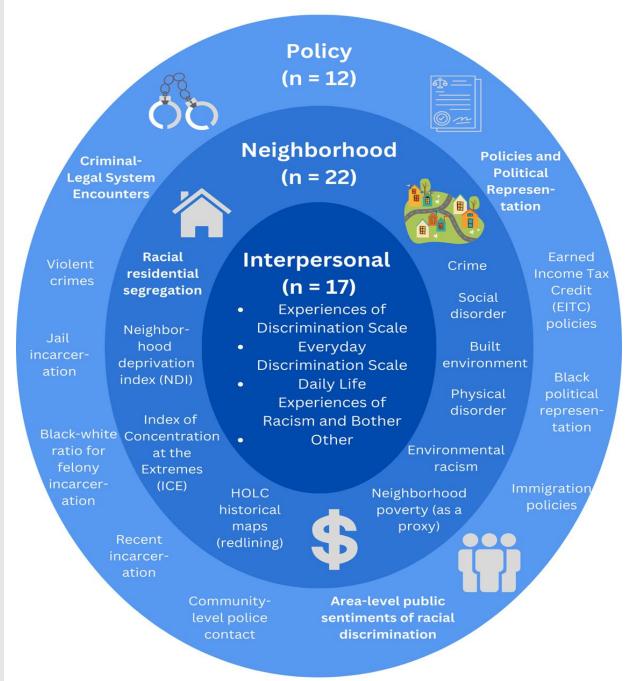
Olsen J. Design options and sources of bias in time-to-pregnancy studies. Scand J Work Environ Health 1999;25 suppl 1:5-7.



PREBIC Global Epidemiology and Health Disparities working group previously identified metrics of racism in preterm birth studies

Virtual working group meeting 2021 -Published a narrative review

PREBIC NA Branch 2022 meeting -Meta-analysis in progress -Identifying biomarkers to link racism to preterm birth



Measures of Racism and Discrimination in Preterm Birth Studies: A Systematic Narrative Review. Obstetrics and Gynecology 2023 Jan 1;141(1):69-83. PMID: 36701611

The Disparity in Preterm Birth Working Group, PREBIC Global 2023

- Extend this work beyond USA
- Disparities are defined by local context
- What is the architecture of disparities across the globe?



#### 2023 PREBIC Global Long-term Goal

- Develop a process to identify and define disparities within targeted countries.
- Leverage that information to create a framework to address disparities in reproductive health worldwide

# Step 1: Identify countries for proof of concept

- Focus on countries represented by PREBIC
  - BrazilSouth AfricaSweden
    - China
    - UK
    - India







## Project tasks

- Identify minoritized groups in Brazil, South Africa, Sweden
  - Literature review
  - Identify experts in social sciences (demographers, sociologist, etc.) to confirm findings and ensure relevance
  - Conduct a small focus group to survey persons in each country to better understand the landscape of disparities in their country
- Are marginalized groups defined by culture, ethnicity, religion, etc.?

# Project tasks

- Define disparities within the context of reproductive health outcomes
  - CS rates
  - Preterm birth
  - Preeclampsia
  - Adolescent pregnancy
- What data is available in each country to define reproductive health disparities?
- How are these variables measured?



# Project tasks

- Define other important structural variables
- What are social determinants in each country?
- What is the landscape of healthcare and how is it defined?

## Products/long-term goals



White paper to provide guidance on how to identify disparities in reproductive health on a global scale. 2

Apply for small funding to support the project using three "test" countries. 3

Extend to other countries on our list that are represented by PREBIC



Ultimate goal is to create a framework to address disparities in reproductive health worldwide

### Feedback

- Who are the experts in your country who can identify minoritized groups?
- What are the minoritized groups?
  - Are they culturally defined, ethnically defined, etc.
- What reproductive outcomes are important to focus on AND have adequate data?
  - E.g. adolescent pregnancy, CS rate, preeclampsia, preterm birth
  - How are these outcomes defined?
- What measures of social determinants of health are used in your country?

