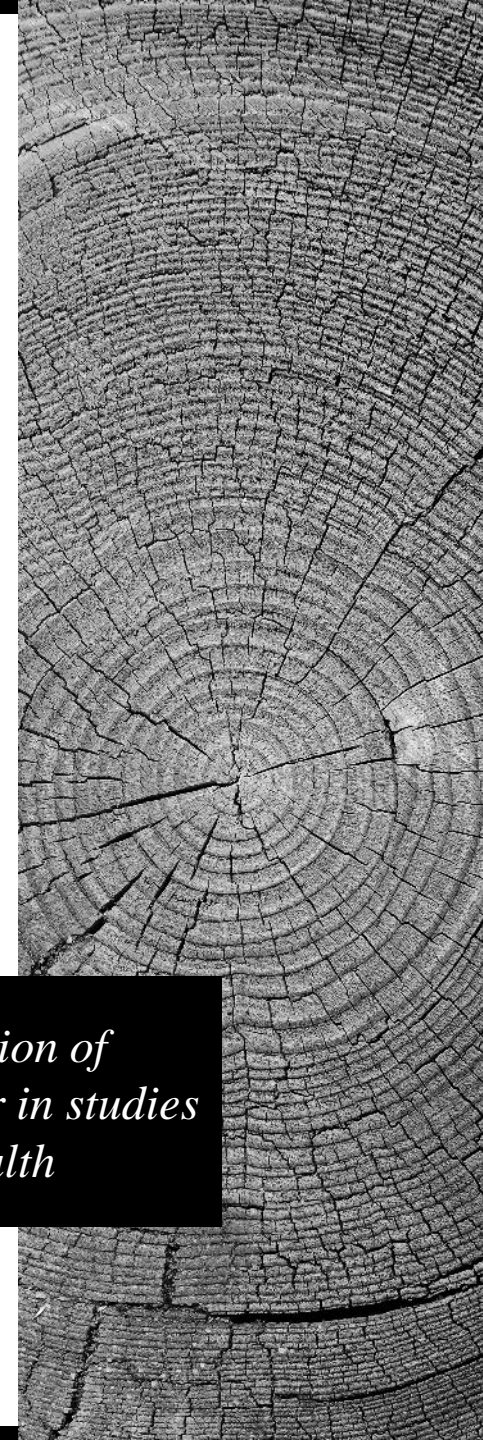


# WEATHERING AND HYPERTENSION

*Considering the intersection of  
race/ethnicity and gender in studies  
of racial inequities in health*



# THE WEATHERING HYPOTHESIS

How and **why** might infant mortality rates differ across mothers of different ages and races?

- Distinct, inverse patterns by race and age
- A consequence of cumulative social disadvantage

# THE WEATHERING HYPOTHESIS

“The weathering hypothesis encapsulates the ways in which **social inequality** may affect the health of population groups **differentially** and the ways in which these differences may be compounded by age”

(Geronimus, 1992, p. 210, emphasis added)

**WHAT MIGHT BE THE IMPLICATIONS OF INCORPORATING A  
FOCUS ON GENDER FOR RESEARCH ON RACIAL/ETHNIC  
INEQUITIES IN OTHER HEALTH OUTCOMES?**

# TWO STUDIES

**Hertz et al. (2005)**

A racial/ethnic disparities in health approach

**Richardson & Brown (2016)**

An intersectional approach



# INTERSECTIONALITY

What is intersectionality?

# INTERSECTIONALITY

## What is intersectionality?

- Analytic tool
- Race/ethnicity and gender, among many other aspects of identity, are
  - inextricably linked
  - unable to be reduced to single categories
  - aspects of identity and features of larger systems of oppression



# IMPLICATIONS OF GENDER-BASED ANALYSIS

*For research on racial/ethnic health inequities in hypertension*

- Research question/aim
- Conceptualization of variables
- Statistical analyses
- Results and interpretation



# RESEARCH AIM

## Hertz et al. (2005)

- “Characterize and explain differences in hypertension prevalence between black and white adults”

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## Hertz et al. (2005)

- “Characterize and explain differences in hypertension prevalence between black and white adults”

## Richardson & Brown (2016)

- “Determine whether race/ethnicity and gender combine to produce disparities in hypertension risk”
- Additive or multiplicative interaction?

# CONCEPTUALIZATION OF VARIABLES

*Race/ethnicity and gender*

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- Provides no conceptualization of variables “race” or “sex”
- Gender not discussed

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## **Hertz et al. (2005)**

- Provides no conceptualization of variables “race” or “sex”
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## **Richardson & Brown (2016)**

- Race/ethnicity and gender as “dimensions of social inequality” that “are interconnected and interlocked, and are mutually reinforcing and constitutive”

# STATISTICAL ANALYSES

## Hertz et al. (2005)

- Calculate age-sex adjusted prevalence of hypertension by race and sex
- Test for statistical significance of difference between races (not sexes)
- No modeling, no covariate control beyond age, sex

# STATISTICAL ANALYSES

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## Richardson & Brown (2016)

- Complex models for risk of hypertension
- Additive and multiplicative interactions between race/ethnicity, gender, and age
- Rich covariate control

# RESULTS + INTERPRETATION

## Hertz et al. (2005)

- No discussion of gender/sex inequity
- No suggestion of future research re: inequities
- Propose interventions on lifestyle

Hypertension prevalence among non-Hispanic Black and White adults in the United States by sex and age, NHANES III (1988-1994)

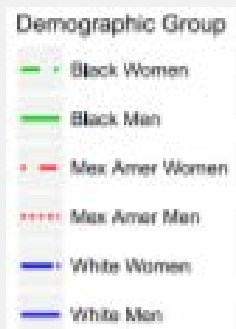
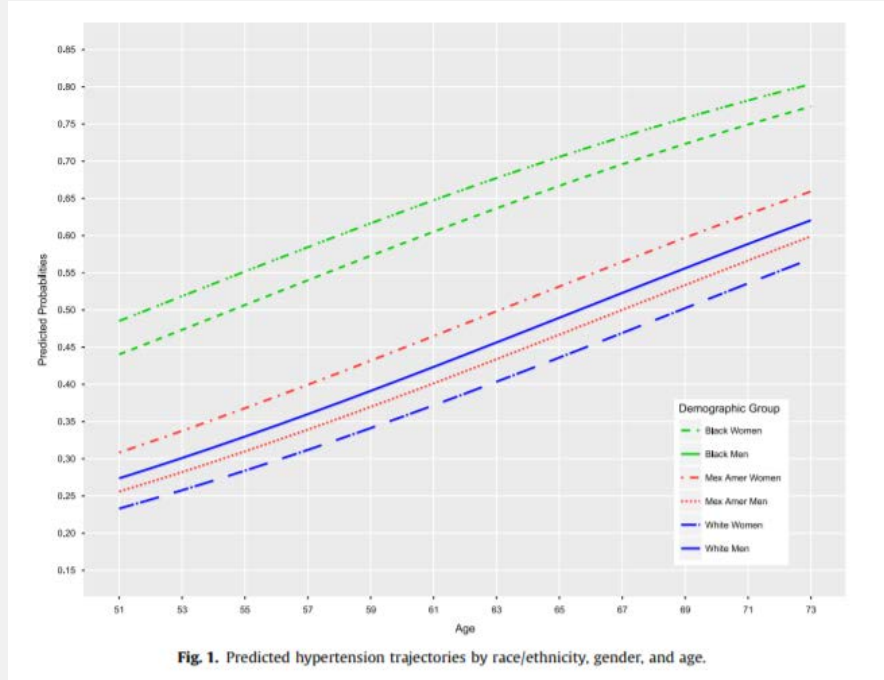
Sex	NHANES III (n = 11830)
Both sexes	
Black	35.8 (0.7)*
White	24.3 (0.6)
Men	
Black	33.9 (1.0)*
White	24.4 (1.0)
Women	
Black	37.6 (0.8)*
White	24.2 (0.7)

\*p<0.001 black vs white

# RESULTS + INTERPRETATION

## Richardson & Brown (2016)

- Race/ethnicity and gender effects multiplicative rather than additive
- Suggest intersectional interventions and policies to address these disparities







# IMPLICATIONS OF INCORPORATING GENDER

*For research on racial/ethnic health inequities*

- Research question/aim
- Conceptualization of variables
- Statistical analyses
- Results and interpretations

# REFERENCES

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