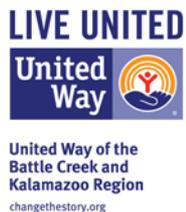# cradle
KALAMAZOO

ANNUAL MEETING

Thursday, November 16

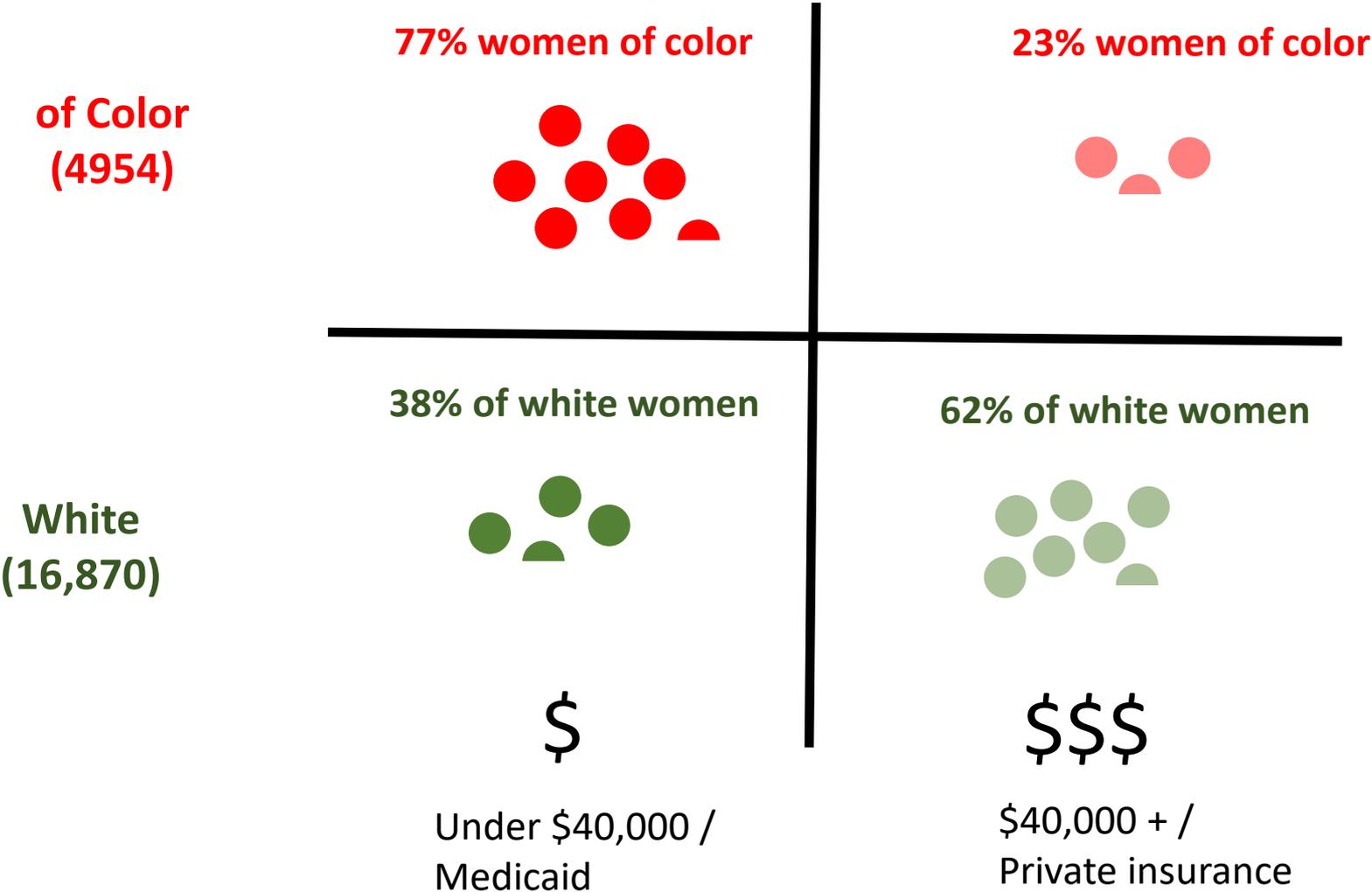**Dr. Cathy Kothari,** *Assistant Professor, WMed*

DAY-TO-DAY STRESSORS, INCLUDING DISCRIMINATION, IMPACTS HEALTH

Catherine L. Kothari PhD
Assistant Professor
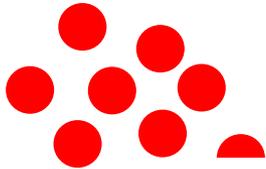WMU School of Medicine
catherine.kothari@med.wmich.edu
(269) 501-4149

Kalamazoo County Birth Records, 2008-2014

of Color (4954)

77% women of color

23% women of color

White (16,870)

38% of white women

62% of white women

$

Under $40,000 / Medicaid

$$$

$40,000 + / Private insurance

Day-to-Day Income Stressors
(n=121 lower-income survey moms)

75% women of color

35% of white women

$

Under $40,000 /
Medicaid

We….
- Don't have enough to eat   (8%)
- Rent (66%) or live with other family (22%)
- Do not have good childcare (19%)

Neighborhood…
- Neighbors don't help each other (25%)
- Isn't welcoming (17%)
- Is't safe (12%)

Larger community…
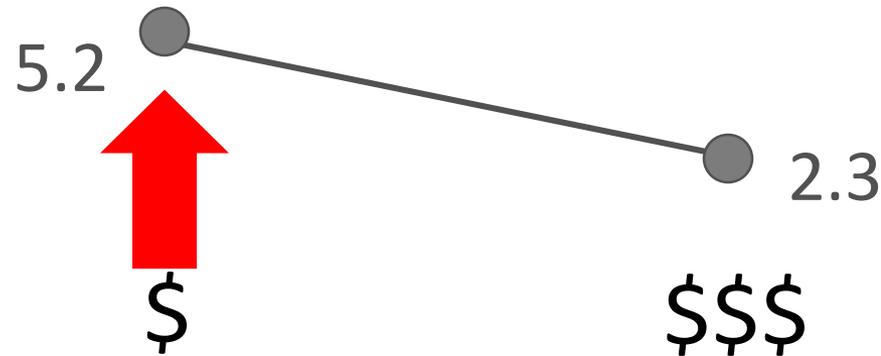- Does not take good care of my neighborhood (54%)

Stress Changes Biology (Ong et al, 2017)

- Increases cortisol levels

- Increases blood pressure

- Changes metabolism (lipid / glucose)

- Increases Inflammatory response

- Agitates the sympathetic nervous system

Ong, AD, Nwizu, U., Williams DR, Gruenewald, TL. (2017). Everyday Unfair Treatment & Multisystem Biological Dysregulation in African American Adults. *Cultural Diversity & Ethic Minority Psychology*. Vol 23., no 1, p27-35.

Poverty doubles chances of infant dying

Estimated Infant Mortality Rate:
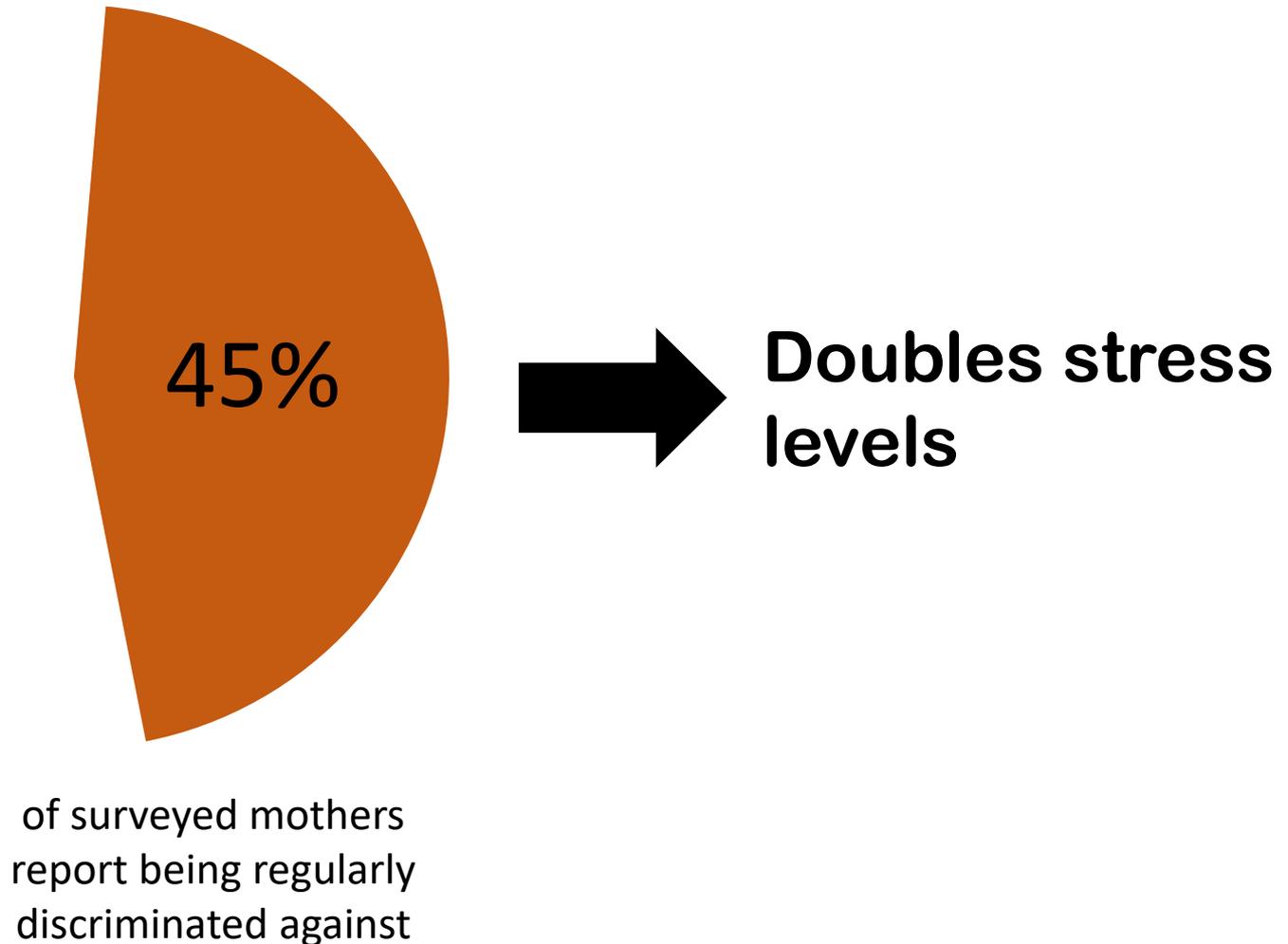## Kalamazoo County, 2010-2016*

5.2

2.3

$

$$$

*Unofficial Rates: # deaths per 1,000 births (N=128).
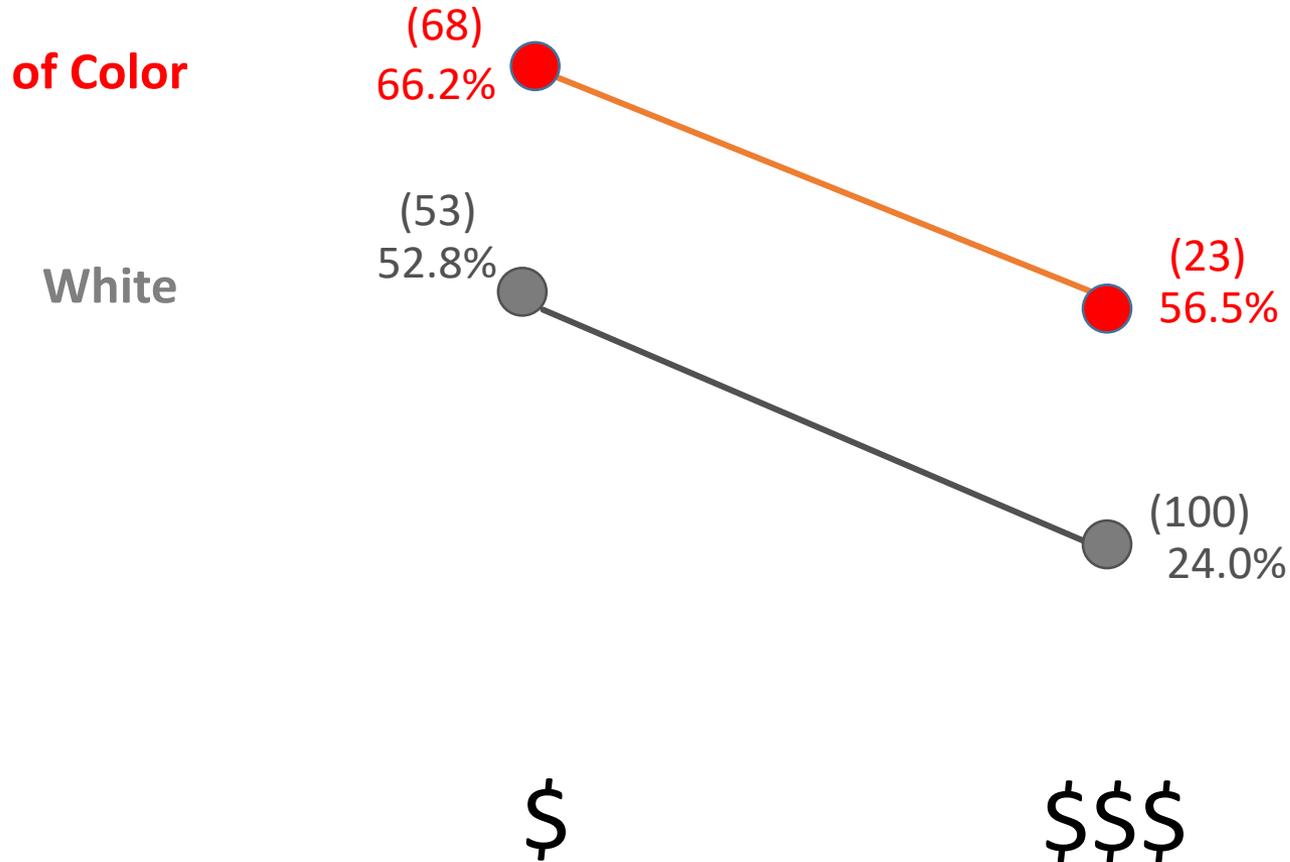NOTE: Income was defined by whether delivery was paid by Medicaid ($) or private insurance ($$$).
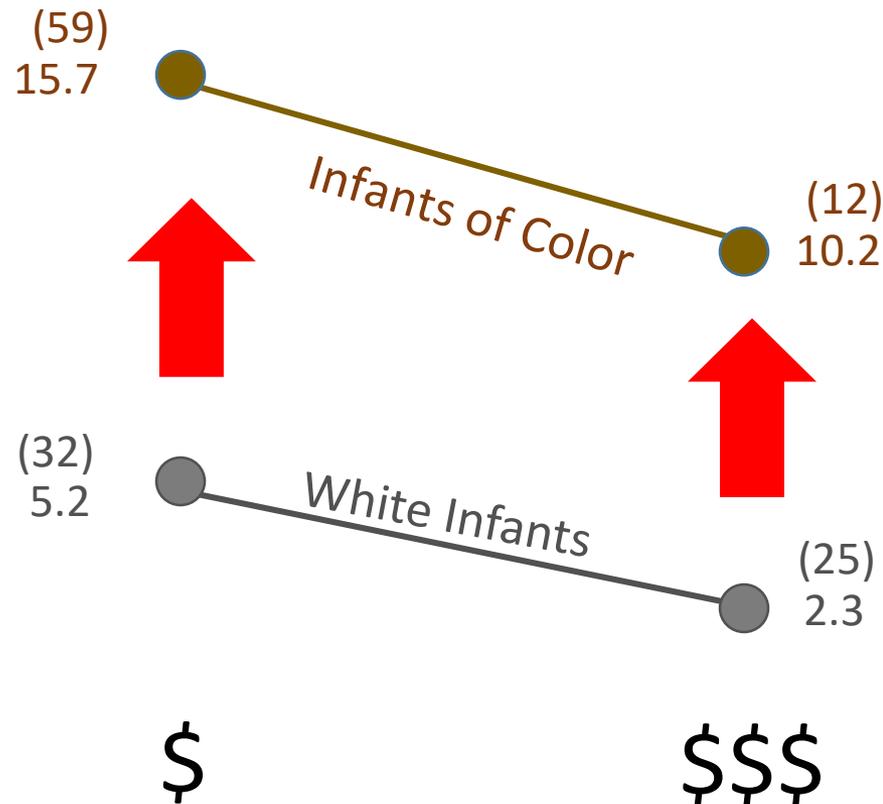
Unfair treatment is a stressor
(n=254 survey moms)

45%

→ **Doubles stress levels**

of surveyed mothers
report being regularly
discriminated against

Survey Moms Reporting Unfair Treatment
-% with monthly or more frequent-

of Color (68) 66.2% — (23) 56.5%

White (53) 52.8% — (100) 24.0%

$ $$$

Living in Kalamazoo as a person of color triples chances of infant dying

(59)
15.7

Infants of Color

(12)
10.2

(32)
5.2

White Infants

(25)
2.3

$

$$$

*Unofficial Rates: # deaths per 1,000 births (N=128).
NOTE: Income was defined by whether delivery was paid by Medicaid ($) or private insurance ($$$).

Every baby lost is a future lost...

...they are also a marker for child health & community well-being