WORK SUPPORTS FOR REDUCING MATERNAL MORTALITY: 
THE ROLE OF PAID FAMILY & MEDICAL LEAVE

MARCH 29, 2019
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PRESIDENT, IWPR
SCHOLAR IN RESIDENCE, AMERICAN UNIVERSITY
EDITOR, JOURNAL OF WOMEN, POLITICS & POLICY
TRENDS IN PREGNANCY-RELATED MORTALITY IN THE UNITED STATES: 1987-2014

*Note: Number of pregnancy-related deaths per 100,000 live births per year.*
Of the 7,208 deaths within a year of the end of pregnancy that occurred during 2011–2014 and were reported to CDC, 2,726 were found to be pregnancy-related.

Considerable racial disparities in pregnancy-related mortality exist. During 2011-2014, the pregnancy-related mortality ratios were:

- 12.4 deaths per 100,000 live births for white women.
- 40.0 deaths per 100,000 live births for black women.
- 17.8 deaths per 100,000 live births for women of other races.
## TRENDS IN ESTIMATES OF MATERNAL MORTALITY (MATERNAL DEATHS PER 100,000 LIVE BIRTHS), 1990-2015

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Julia M. Goodman, PhD, MPH

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Portland, Oregon

Email: julia.goodman@pdx.edu
Adequate prenatal and postpartum care → maternal mortality

• Women receiving no prenatal care 3-4x more likely to have pregnancy-related death than women who do\textsuperscript{1}

• 1/3 of African American women do not receive recommended number of prenatal visits\textsuperscript{2}

• Half of pregnancy-related deaths occur after birth\textsuperscript{3,4}

• Standard postpartum visit poorly attended, especially among women with limited resources\textsuperscript{5}

• Importance of managing chronic health conditions\textsuperscript{5}
Paid leave $\rightarrow$ adequate prenatal and postpartum care

- Limited access to paid leave in the US$^6$
As a mom: How much paid leave can you take with your infant?

worldpolicycenter.org

WORLD Policy Analysis Center
Paid leave $\rightarrow$ adequate prenatal and postpartum care

- Limited access to paid leave in the US$^6$
- Growing recognition of health effects of paid leave$^{7-14}$
  - Ability to attend medical appointments
  - Increased breastfeeding
  - Decreased infant mortality
  - Improved maternal mental health
  - Decreased stress
Inequities in access to paid leave

• Access to paid leave is not equal\textsuperscript{6}
• Policies increase access, though not always evenly\textsuperscript{15-16}
• Need to also consider policy implementation\textsuperscript{17}
Gaps in the literature

- Relatively little research on how paid leave affects *maternal* health
- Need more research on access to paid leave among African American women, including experiences trying to *use* benefits
Thank you!

Contact: julia.goodman@pdx.edu
Maternity Leave and Postpartum Depression: Implications for Maternal Mortality

Rada K Dagher*, Ph.D., MPH

March 29, 2019

E-mail: rada.dagher@nih.gov

* Scientific Program Director, Division of Clinical and Health Services Research, National Institute on Minority Health and Health Disparities (NIMHD), NIH
Disclaimer

- This presentation was prepared by Dr. Rada Dagher in her personal capacity. The opinions expressed in this presentation are the author's own and do not reflect the views of the National Institutes of Health, the Department of Health and Human Services, or the United States government.
Why Postpartum Depression (PPD)?

- Significant Prevalence: 10-15% of all pregnancies

- Debilitating mental disorder: begins in 1st 4 weeks after childbirth but may start as late as 3 or 6 months

- Negative effect on:
  - Maternal quality of life & relationships
  - Maternal-infant interaction
  - Children’s emotional and cognitive development

- In extreme cases, potential exists for suicide and/or infant homicide
Symptoms of PPD

- Fatigue
- Insomnia
- Fear and guilt
- Inability to concentrate
- Insecurity
- Anxiety attacks

- Obsessive thoughts
- Self hatred
- Loss of all hope
- Loss of interest in life
- Suicidal ideation

- Severe, persistent, may last for months
My Previous Research on Work and PPD

- Higher psychological job demands, lower schedule autonomy, and lower perceived control over work and family were associated with worse PPD scores (Dagher et al. 2009)

- Lower job flexibility and higher total workload over the first 6 months after childbirth were associated with worse PPD scores (Dagher et al. 2011)

- Among employed mothers, those who were depressed incurred 90% higher health services expenditures than non-depressed mothers (Dagher et al. 2012)
Specific Aim of this Study
(Dagher, McGovern, & Dowd, 2014)

- To investigate the impact of duration of leave taken from work after childbirth on employed women’s postpartum depressive symptoms over the first year after childbirth
Theoretical Framework

- Hybrid model of health and workforce participation adapted from:
  - Becker’s (1965) household production theory
  - Grossman’s (1972) health production function

- Assumption: Women’s postpartum depression is a function of predetermined factors (e.g., demographics) in addition to personal choices (e.g. duration of leave).

- These choices are subject to constraints such as income and employer leave policies.
Who Cares?

✓ Employed Women and their families
  • Care about their health and what affects their wellbeing
  • Role of women as family care-givers

✓ Employers
  – Are charged with implementing the federal Family & Medical Leave Act and any state leave policies
  – Must address dramatic changes in LFP rates among mothers of infants:
    ▪ 54% in 2005 vs. 38% in 1980

✓ Policymakers
  ▪ 1993 Family & Medical Leave Act enacted
    – Provision of 12 work weeks of unpaid job-protected leave
    – Continued coverage for health care premiums
Who Cares? (Cont’d)

✓ Policymakers

- Six states and DC have passed paid leave laws
  - California, Massachusetts, New Jersey, New York, Rhode Island, and Washington


- Federal Employee Paid Leave Act — Introduced in March 2019 by Rep. Maloney and House Majority Speaker


- President Trump’s 2019 Budget Proposal includes a plan for Paid Family Leave for new parents
Methodology

- **Design:** Longitudinal panel data

- **Study Population**
  - 7 county metropolitan area of Minneapolis and St. Paul, Minnesota
  - Live birth in 2001
  - Age: 18 years and older

- **Study enrollment**
  - Three selected hospitals (St. John’s, North Memorial Medical center, and St. Joseph’s)
Participation Rate and Eligibility

2,736 Births

N=1,579 (58% of births) Not Eligible

N=340 (29% of eligible) Refused

N=1157 (42% of births) Eligible

N=817 (71% of eligible) ENROLLED
Follow Up

Enrolled (N = 817)

6 weeks  12 weeks  6 months  12 months

88%  81%  77%  71%
Characteristics of the sample

**Mother’s demographics**
- 30 years (SD=5.3, Range =18-45)
- 73% Married, 16% Partnered
- 86% Caucasian
- 46% College degree or higher
- 46.5% First time mothers

**Mother’s work characteristics**
- 14% Blue collar, 39% Clerical, 46% Professional
- 37 work hrs/wk (SD=8, Range = 20-70)
- Four years of employment

**Mother’s return to work rates**
- 7% at 6 weeks, 46% at 12 weeks, 87% at 6 months, 92% at 12 months
Edinburgh Postnatal Depression Scale (EPDS)

- Able to laugh and see the funny side of things
- Looked forward with enjoyment to things
- Blamed myself unnecessarily when things went wrong
- Been anxious/worried for no good reason
- Felt scared/panicky for no very good reason
- Things have been getting on top of me
- Been so unhappy that I had difficulty sleeping
- I have felt sad or miserable
- Been so unhappy that I have been crying
- Thoughts of harming myself occurred to me
Estimation problem: Omitted Variables

Error (v) → Leave Duration

Support with Childcare

→ Postpartum Depression

Error (u)
Estimation problem: Reverse Causality

Leave Duration \( \rightarrow \) Postpartum Depression

\( \epsilon_i \) \( \rightarrow \) \( v_i \)
Analysis Plan

- PPD as a function of Leave Duration
  - Two Stage Least Squares Regression

- Control Variables
  - Prenatal Moods of Depression and Anxiety
  - Demographics (Age, Education, Race, Income, Occupation, Marital Status, Parity)
  - Time Period
Testing Two Instruments for Leave Duration

Two instruments

- Maximum available duration of paid leave according to employer policy (predictor of leave duration):
  - F-Statistic = 39.7, P-value = 0.000

- Maximum available duration of job protected leave according to employer policy (predictor of leave duration):
  - F-Statistic = 82.4, P-value = 0.000
## Results: Leave Duration and PPD

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<td>-.0018 (.0054)</td>
<td>-.1075 (.0311)*</td>
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<td>Squared Leave</td>
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<td>.0003 (.0001)**</td>
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* p<0.05, ** p<0.01
Two Stage Least Squares Results

**Equation:** PPD = -0.1075 LD + 0.0003 LD-squared

Differentiate PPD with respect to LD:

\[-0.1075 + 0.0006 LD = 0\]

LD = 180 days

Postpartum depression is minimized at 180 days (6 months) of leave duration.
Leave status and postpartum depressive symptoms over four time periods

MEAN POSTPARTUM DEPRESSION SCORE

Time: 1=6weeks, 2=12weeks, 3=6months, 4=12months
Discussion

- This was the first longitudinal study to investigate the nonlinear relationship between leave duration and women’s postpartum depression over the first twelve months after childbirth using the EPDS.

- New mothers taking leaves from work less than six months after childbirth appear to have an increased risk of postpartum depressive symptoms.

- Duration of employer’s paid leave and job-protected leave predicted the duration of leave mothers took.

- Highlights the importance of leave as a protective factor for maternal mental health at a critical time in the life course of women and their families.
Subsequent Studies on Paid Leave and Postpartum Mental Health

- An Australian study of 2 cohorts pre- and post-implementation of a universal 18-week paid maternity leave policy found:
  - Women in the paid-leave group reported significant better mental health (Hewitt et al. 2017)

- California study:
  - Mothers experienced at least a 29% reduction in mean psychological distress symptoms after enactment of paid leave.
  - Effects were most pronounced for black, single, and low-income mothers (Doran et al. 2019)
How Do These Findings Relate to Maternal Mortality and Disparities?

- Suicide is the 7th leading cause of maternal death (1.27 per 100,000 deaths) within 6 months of delivery (Lewis et al., 2011)
- Suicidal thoughts and thoughts of harming the baby are symptoms that postpartum depressed women may experience
- Some studies point to higher rates of postpartum depression among Black and low SES mothers
- Black mothers in the U.S. die at three to four times the rate of white mothers (CDC stats)
Disparities in Access to Work Benefits/Policies

Latinos least likely to have access to paid sick days or paid parental leave
Percentage of workers age 18 and older with access to paid leave by race and ethnicity, 2011

Only about half of all workers have access to workplace flexibility
Percentage of workers age 18 and older with access to workplace flexibility by race and ethnicity, 2011

Future Research

- Examine the association between disparities in access to supportive work policies (e.g., paid leave, job flexibility) and maternal mortality
  - Potential mechanisms could be increased severity of PPD, preeclampsia, etc.

- Examine the Hispanic paradox of lower maternal mortality despite having the least access to supportive work policies

- Examine the contribution of untreated postpartum depression to maternal mortality and to racial disparities in mortality
Thank You!

Contact Information:

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Scientific Program Director,
NIMHD, NIH

E-mail: rada.dagher@nih.gov
Work Supports for Reducing Maternal Mortality: The Role of Paid Family and Medical Leave

Joia Crear-Perry, MD, FACOG
Article 2.

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

Article 3.

Everyone has the right to life, liberty and security of person

Article 25.

(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services

(2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same protection.
Reproductive Justice

The human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities.

- Loretta Ross

We must...

- Analyze power systems
- Address intersecting oppressions
- Center the most marginalized
- Join together across issues and identities
Everyone has a fair and just opportunity to be healthier.

Acknowledgements

• Intersectionality
• Centering marginalized communities
• Structural racism
• Culture and place
• Social determinants of health
birth equity *(noun)*:

1. The assurance of the conditions of optimal births for all people with a willingness to address racial and social inequalities in a sustained effort.

Joia Crear-Perry, MD

*National Birth Equity Collaborative*
Root Causes

- Institutional Racism
- Class Oppression
- Gender Discrimination and Exploitation

Power and Wealth Imbalance

- Labor Markets
- Housing Policy
- Education Systems
- Globalization & Deregulation
- Social Safety Net
- Social Networks
- Tax Policy

Social Determinants of Health

- Safe Affordable Housing
- Job Security
- Living Wage
- Quality Education
- Transportation
- Availability of Food
- Social Connection & Safety

Psychosocial Stress / Unhealthy Behaviors

Disparity in the Distribution of Disease, Illness, and Wellbeing

Adapted by MPHI from R. Hofrichter, Tackling Health Inequities Through Public Health Practice.
• **Institutionalized racism** - the structures, policies, practices and norms resulting in differential access to the goods, services and opportunities of societies by race.

• **Personally mediated** - the biases and differential assumptions about the abilities, motives and intentions of others by race.

• **Internalized racism** - the acceptance and entitlement of negative messages by the stigmatized and non stigmatized groups.

-Camara Jones, MD, PhD, Past President APHA
Anthropology Demonstrates...

- Race is real, and it matters in society, but not how racists think it does.
- Race is not a genetic cluster nor a population.
- Race is not biology but racism has biological effects.
- Social constructs are real for those who hold them.
Black mothers who are college-educated fare worse than women of all other races who never finished high school.

Obese women of all races have better birth outcomes than black women who are of normal weight.

Black women in the wealthiest neighborhoods do worse than white, Hispanic and Asian mothers in the poorest ones.

African American women who initiated prenatal care in the first trimester still had higher rates of infant mortality than non-Hispanic white women with late or no prenatal care.
Racism affects health both directly (i.e., via chronic stress) and indirectly. Race-based discrimination across multiple systems creates differential access to high-quality schools, safe neighborhoods, good jobs, and quality healthcare, in other words, by shaping SDOH.
Research
• Mothers Voices Driving Birth Equity
• Birth Equity Index

Family Centered Collaboration
• Kindred Partnership with BMMA

Advocacy/Public Engagement
• Strategizing for passage of HR 1318 “Preventing Maternal Deaths Act”
The NBEC Campaign for Black Babies seeks to reduce African-American infant mortality rates (IMR) in ten US cities with the highest Black IMR in the nation. Our goals are to reduce rates by 25% in the next 5 years, and to reduce Black IMR at or below the national average in the target sites by 2025.

The Black infant mortality disparity is a, nationally, under recognized health issue. Health equity for the Black population in the US may be unattainable without parity at birth. Taking a double-pronged approach, elevating community voices and leveraging cross sector partnerships, we will bring attention to the drivers of Black IM and its methods for change.

- Atlanta
- Baltimore
- Boston
- Chicago
- Detroit
- Memphis
- Oklahoma
- New Orleans
- New York
- Philadelphia
- Kalamazoo
- St Louis
- Rural Mississippi
- Washington, DC
**BACKGROUND**

Women in the US are dying in pregnancy and childbirth at unprecedented rates.

The community closest to the pain and suffering through disparate deaths and complications are Black mothers and birthing people.

Disrupting birthing narratives and care required cultural shifting from mother/individual blame to provider/systems accountability.

Cultural transformation depends the capacity for providers and systems to listen to, understand, and respond to community voices in sharing stories of disrespectful and dismissive care and service gaps.

**PURPOSE**

To develop and apply a community informed theoretical model in the creation and testing of a participatory patient-reported experience metric (PREM) of mistreatment and discrimination in childbirth.

There is no metric for patient-reported experience of mistreatment and discrimination in childbirth and pregnancy developed by, for, and with impacted Black communities, mothers, and scholars.

**OBJECTIVES**

- Facilitate and sustain opportunities for Black mothers’ stories to be valued, seen, & heard in semi-structured focus group interviews.
- Develop a community informed theoretical model in collaboration with Black mothers/birthing people based on group interviews.
- Map existing theoretical constructs onto those identified from Black mothers and CBOs to inform the co-creation and co-testing of a PREM of respect, mistreatment, and discrimination.
- Utilize the PREM in systems accountability, quality improvement, patient advocacy, and interprofessional education.

**Research & QI Methodologies**

- Systematic analysis and disruption of the hierarchy of knowledge construction and power in QI, clinical research, and public health.
- Prioritization and amplification of community voice and knowledge.
- Co-development of shared language, vision, and understanding of respectful and dignified maternity care.
- Co-creation and testing of best practices that lead to improved listening, shared decision-making, and trust between Black mothers, clinicians, and health systems.

**Background Image:**

- Maternal Mortality
  - Source: CDC Wonder
  - Maternal Morbidity: MEASURE NAME: BLACK, WHITE, HISPANIC, NON-HISPANIC
  - Years: 2001-2015

**NBECC**

- National Birth Equity Collaborative (NBECC) optimizes Black birth outcomes through training, research, community-centered collaboration, and advocacy. NBECC utilizes Black women-led organizations, guiding clinicians, and researchers to center women, their families, and their stories.

**ACOG-AIM**

- The American College of Obstetrics and Gynecology (ACOG) is the lead partner in the Alliance for Innovation on Maternal Health (AIM) program. AIM is a national alliance to promote consistent and safe maternity care to reduce maternal mortality and severe maternity morbidity.

**CMQCC**

- California Maternal Quality Care Collaborative (CMQCC) based at Stanford University, is a multi-stakeholder organization committed to ending preventable morbidity, mortality and racial disparities in California maternity care.
NatBirthEquityCollab

To reduce Black infant and maternal mortality through research, family centered collaboration, and advocacy.

New Orleans

If we had said 400 years ago that people with blonde hair and blue eyes were less valuable, trust me, they would have bad birth outcomes. They would be obese, they would have higher rates of poverty, we would create structures and systems that devalue them.

Closing the Race Gap in Prenatal Care
For black women in the U.S., having a baby comes with disproportionate health risks. Experts are calling for change.

thepapergown.zocdoc.com
Public Engagement

National Birth Equity Collaborative
Published by Shani Hunter Ⓒ - November 15, 2018

Our Fearless Leader, breaking it all down for you. #NBEC #birthequity

ESSENCE.COM
Racism Is The Root, Sustaining Cause Of Black Infant Mortality - Essence

2,605
People Reached
246
Engagements

Danica Cook Davis, Linda Bennett and 27 others
27 Shares

Like
Comment
Share
Global Context

- United Nations Office of the High Commissioner for Human Rights
- World Health Organization
- Harvard University Maternal Health Task Force, Maternal Health Visionary Award 2019 USA
- Women Deliver 2019
Setting the Standard for Holistic Care of and for Black Women
Thank you

Founder President
drjoia@birthequity.org
COMMONSENSE CHILDBIRTH INC.
The JJ Way®

www.perinataltaskforce.com
www.commonsensechildbirth.org
www.jenniejoseph.com

@jenniejoseph on Twitter

321 221 1084

Jennie Joseph LM, CPM
Executive Director
Commonsense Childbirth Inc.

- Free-standing Birthing Center
- Independent Women’s Health and Maternity Care Clinics
- “Midwifery Model of Care”
- Trauma-informed Care

501(C)3 Non Profit Org.

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## PRE-TERM, LBW BIRTHS 2006
### Orange County, Florida

### Preterm Birth Rate Comparisons - Health Council Study

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### Low Birth Weight Comparisons - Health Council Study

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NEW REPORT: Building a Movement to Birth a More Just and Loving World (March 2018)

Four primary areas of need are identified:

- Models that provide community-located and culturally-based healthcare resources
- Increased social and community support as a means to mitigate the impacts of racism, stress, and other determinants that affect an individual’s social conditions and, ultimately, health outcomes
- Models that promote self-determination and agency
- Movement-building efforts that shift cultural and social conditions
What’s Happening in the United States of America?

Healthy People 2010 Goals

Aim to increase the quality and years of life, and call for the elimination of Health Disparities

Healthy People 2020 Goals

The goal was expanded even further: to achieve health equity, eliminate disparities, and improve the health of all groups.
Maternal Mortality in the UK

1952-54
90 per 100,000 maternities

2010-12
10 per 100,000 maternities

2011-13
9 per 100,000 maternities
Determinants of Health
“Materno-toxic Zones”

Photo by Dexter Chatuluka on Unsplash

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How do we create safety for moms and babies?