

Maternal Mortality and New Risks to Women's Reproductive Health

Ndidiamaka Amutah-Onukagha PhD, MPH, CHES

Julia A. Okoro Professor of Black Maternal Health

National Institute of Health Care Management

September 20, 2022



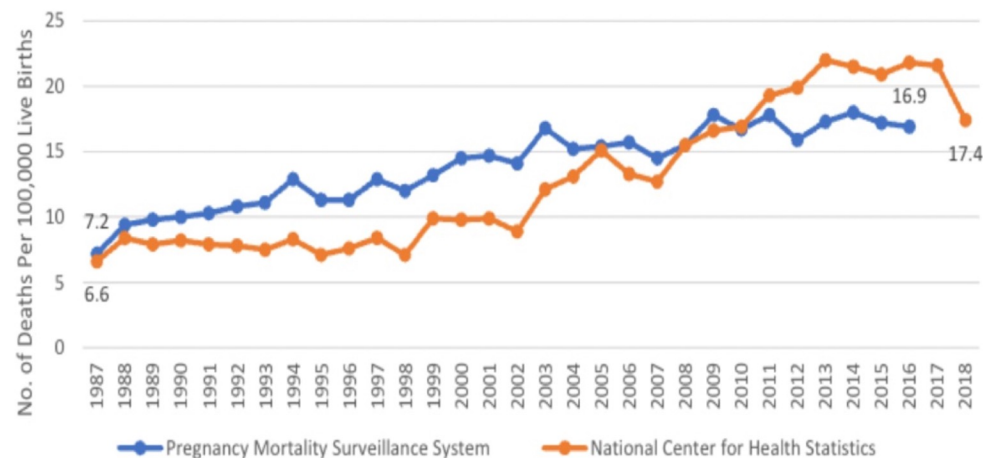
- 1 **Maternal Health Disparities Overview**
- 2 **Present Issues:** Understanding Disparities
in Maternal Morbidity & Mortality
- 3 **Implications for the Future:**
Addressing Racial Disparities in Maternal Health
- 4 **Take Action:** Advancing Maternal Health Care
- 5 **Q & A**

Maternal Health Disparities:

Maternal Mortality Data (U.S)

- The maternal mortality rates in the United States have *worsened* over the past three decades.
- According to the CDC Pregnancy Mortality Surveillance System, the maternal mortality rate was reported to be **17.4 deaths per 100,000 deaths** in 2018.
- 60% of leading causes for maternal deaths (and morbidity) are preventable.

Maternal Mortality Rates, United States, 1987-2018



Racial Disparities in Maternal Mortality

Multiple factors contribute to these disparities, such as variation in quality healthcare, underlying chronic conditions, structural racism, and implicit bias.

Maternal Health Disparities:

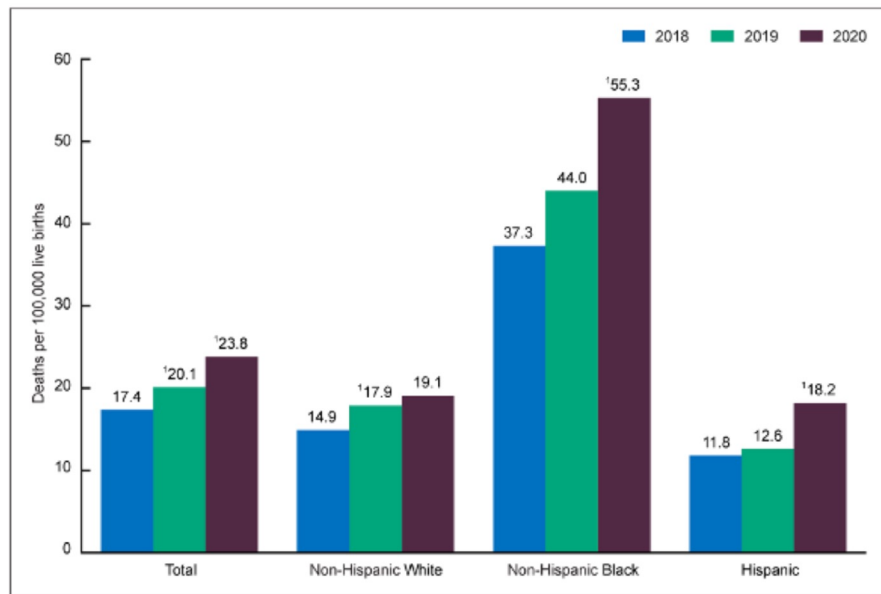
Maternal Mortality by Race and Ethnicity

A study from the Centers for Disease Control and Prevention (CDC) found that in 2020:

- **861 women** were identified as having died of maternal causes in the United States, compared with **754 women** in 2019.
- The maternal mortality rate for 2020 was **23.8 deaths per 100,000 live births** compared with a rate of **20.1** in 2019

The maternal mortality rate for **non-Hispanic Black women** was **55.3 deaths per 100,000 live births**, 2.9 times the rate for Non-Hispanic White women.

Maternal Mortality Rates, by Race and Hispanic origin: United States, 2018-2020



¹Statistically significant increase in rate from previous year ($p < 0.05$).

NOTE: Race groups are single race.

SOURCE: National Center for Health Statistics. National Vital Statistics System. Mortality.

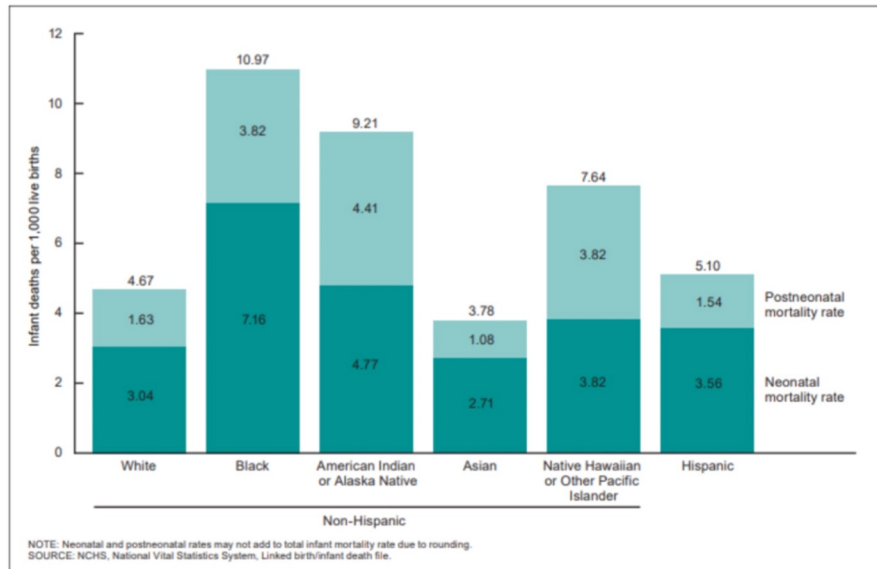
Quality of Hospital Care: Workforce Diversity

The lack of diversity within the healthcare workforce directly influences patient outcomes, as research suggests that physician-patient racial concordance can improve health outcomes for Black newborns.

- Black newborns are **more than twice as likely** to die during their first year as White newborns, at **1,090 deaths per 100,000 live births** compared to **490 deaths per 100,000 live births**.
- When cared for by Black physicians, the mortality rate for **Black infants as compared to White infants is halved**.

A study on the impact of Physician-patient racial concordance and disparities in birthing mortality for newborns suggests that newborn-physician racial concordance **lowers the mortality risk for Black infants by 39%**.

Infant, neonatal, post-neonatal mortality rates, by race and Hispanic origin: United States, 2017



The Reality of Racism Throughout the Lifespan:

Maternal Health Disparities amongst Black Women

- Black women are at **2.1 times greater** risk of experiencing severe maternal morbidity (SMM) event than women of other racial groups.
- According to the **American Journal of Managed Care**, For every maternal death, there are roughly 70 SMM incidents that the AJMC said “are considered ‘near misses.’”
- Black women are at the **intersection** of race and gender, evoking tremendous chronic stress.

This type of stress **cannot** be avoided with higher education or higher socioeconomic status.



Modern Day Challenges

How is racism and inequity expressed in today's health care delivery system?

- Systematic segregation and discrimination of patients based on race and ethnicity.
- Hospitals and clinics, which were once designated for racial and ethnic minorities, continue to experience significant financial constraints and are often ***under-resourced and improperly staffed.***
- These issues result in ***inequities*** in access and quality of health care, which are major contributors to racial and ethnic health disparities.
- While segregation and discrimination based on race and ethnicity is no longer legal today, some organizations continue to discriminate ***based on insurance status, which also disproportionately impacts non-white populations.***

Factors Impacting Maternal Health Disparities

To better understand and address these disparities, researchers suggest a deeper review of the social determinants of health. Limited access to prenatal care, discriminatory hospital protocols, mistreatment by health care professionals, and lack of diversity in the healthcare workforce are all factors that may contribute to maternal health disparities and warrant further investigation into approaches to dismantling them.

Access to Maternal Care

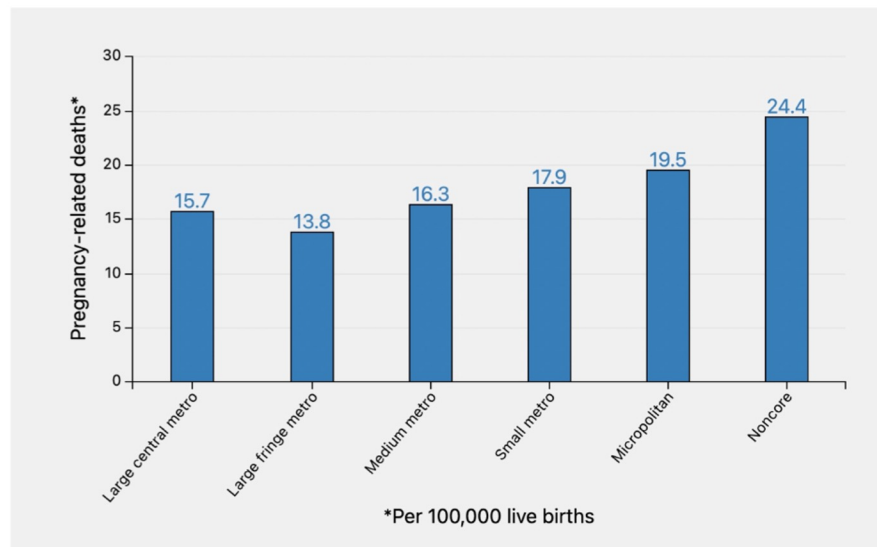
A CDC study found that mortality rates were higher in rural counties compared to metropolitan counties.

- More than 30% of rural communities of color are at least 30 miles away, compared with 19% of majority-white rural areas.
- BIPOC rural mothers are **60% more likely** to die of childbirth-related causes.

According to the **American Hospital Association**, half of rural hospitals have no obstetric care, leaving mothers in *maternity care 'deserts'* - which exacerbates existing disparities.

- Variability in geographic location groups reflect chronic health conditions and access to care (e.g., rural residents may face challenges such as distance from and lack of access to obstetric services and providers) including risk-appropriate care.

Pregnancy-related mortality ratio by Urban-Rural classification: 2016-2018



Future Implications

- Systemic racism exists within, and is reinforced and supported by multiple societal systems, including the housing market, the education system, the labor market, the criminal justice system, credit markets, the economy and the health care system.
- Systemic racism has created reduced access for stigmatized groups to the many opportunities that facilitate socioeconomic attainment, quality of life and health.
- To neutralize these negative effects and build healthier and **more equitable** communities (including the workforce), we call for investments to create “communities of opportunity” for underserved communities.
- To reduce the overwhelming gaps between Black women and their counterparts, we call for inclusive research that holds space for the voices of Black women, training that is intentionally inclusive of those that are culturally representatives of the communities they serve, and accountability for those currently practicing in the field.

Current Research & Projects

Research is critical in gaining a deeper understand of the maternal mortality crisis and collecting evidence on the impact of institutional policies on the racial and socioeconomic disparities observed in maternal mortality.

R01: Severe Maternal Morbidity

Project period: 5 years

Objective: Our study will lead to a more systematic understanding of pregnancy outcomes for Black women at highest risk of SMM, thus establishing a foundation for development and testing of future interventions to improve maternal outcomes.

Methods:

1. Use longitudinally linked hospital discharge data from PELL (2008-2018) to characterize preconception, prenatal and postpartum hospital encounters among women with SMM to identify key points where opportunities to intervene were missed.
2. Among hospitals that serve Black women, to assess the impact of implementing maternal safety bundles to ensure that Black women are receiving quality obstetric care.
3. Examine how systems integrating community-based doula support could decrease the inequities of SMM among Black and White mothers.

Title: Promoting Maternal Health Equity through Collaborative Community Partnerships: Teaming doulas, providers and families to create birth equity and empowerment

Project Period: 3 years

Research Question: How has the growing awareness of the maternal crisis influenced women of color's perceptions of their risk, maternity care choices, and patient empowerment?

Methods: We seek to understand this through a mixed methods approach consisting of both qualitative and quantitative methods including interviews, focus groups and hospital discharge data among Black women of reproductive age, their male partners/fathers, doulas and delivering clinicians.

Maternal Outcomes for Translational Health Equity Research Lab (M.O.T.H.E.R)



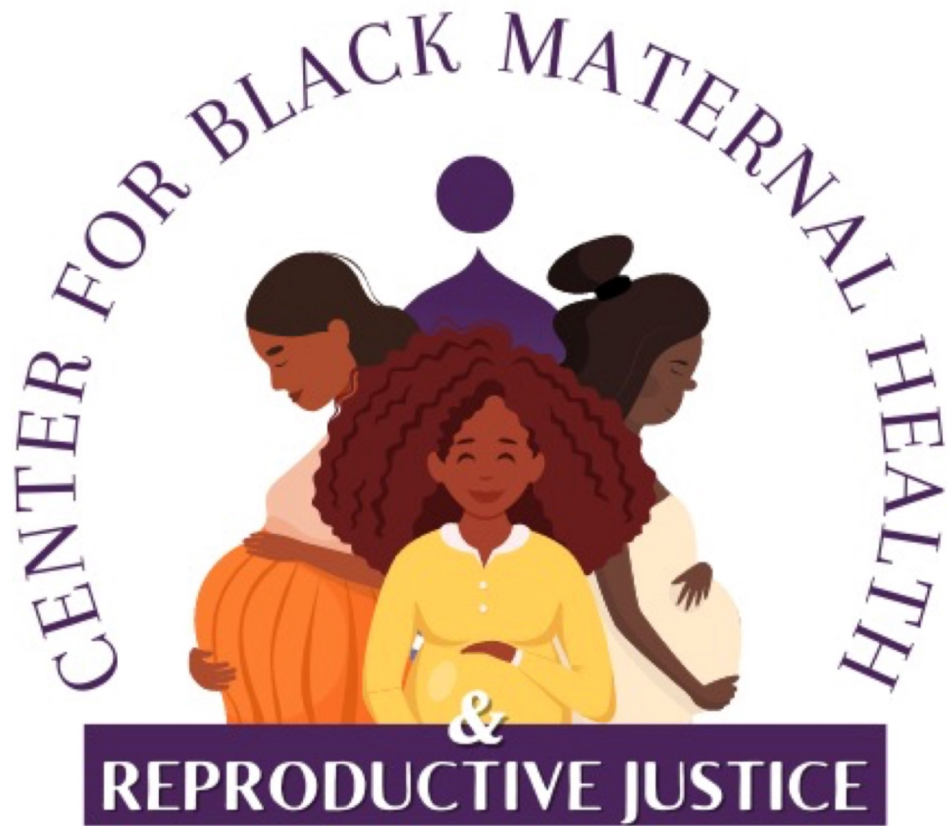
The **mission** of the MOTHER Lab is to address and eradicate inequities facing Black women, through research, advocacy, and mentorship by confronting and dismantling the system that enables and perpetuates racism for Black women who give birth.

MOTHER Lab Goals

Maternal Outcomes for Translational Health Equity Research Lab

1. Address maternal and child health inequities for Black women through solution-focused research and policy interventions.
2. Address and advocate for maternal health inequities at both the local and national level.
3. Acquire funding for research, stipends, and lab-related needs.
4. Educate our local and national community through by sharing information via webinars and social media engagements.
5. Create strong partnerships and leverage stakeholder relationships to expand MOTHER Lab to become one of the largest Maternal equity labs in the nation.
6. Create and foster a welcoming and inclusive research and professional development environment for people passionate maternal health inequities with a focus on representing minorities.





School of Medicine

Center for Black Maternal
Health & Reproductive Justice

Mission

The mission of the Center of Black Maternal Health and Reproductive Justice is to foster academic and community-engaged research in support of the center's goals to conduct maternal health research with a focus on Black Maternal Health and eliminating inequities.

1. Collective Action

Addressing these disparities is central to the mission of our center, and our collective action will shape federal, state, and local health legislation and impact policy at multiples levels.

2. Maternal Health Research

Foster maternal health research at Tufts University School of Medicine, with a particular focus on improving the health of Black birthing persons and their babies by reducing maternal health disparities.

3. Equitable Access

The center seeks to create a world where Black women can safely, efficiently, and comfortably receive equitable access to healthcare services without having to navigate through racism and/or discrimination in medical settings.

Center Units

MOTHER Lab

Research
Development &
Grants

Maternal Health
Epidemiology & Data
Synthesis

Maternal & Child Health
Policy

Community
Engagement

Education &
Training

Take Action: Engage Community Partners

- Ensure that communities are left better off than when the research began by engaging communities, patients, and stakeholders as partners in the process and products of health research.
- Consider framing research questions exploring maternal health care outcomes and reproductive justice within a community context.
- Ask “How, when designing, conducting, and communicating health research, do we promote justice for communities?”

These are especially important when considering that some communities may be considered vulnerable in the research process and potentially have the most to gain from advances in research for social, economic, and/or historical reasons.

Contact Information

Ndidiamaka N. Amutah-Onukagha, PhD, MPH, CHES

Julia A. Okoro Professor of Black Maternal Health

Department of Public Health and Community Medicine

Tufts University School of Medicine

Email: ndidiamaka.amutah_onukagha@tufts.edu

Twitter: @PhDiva0618



@CBMHRJ_Tufts @MOTHER_Lab @BMMTufts

