Racial Inequities in Maternal Mortality: Exploring Paths Forward

Alecia J. McGregor, Ph.D
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Overview

- The U.S. is facing a maternal health crisis
  - Rising mortality & morbidity
  - Staggering racial inequities, exacerbated by COVID-19

- Widespread loss of obstetric units across U.S.
  - Affecting vulnerable urban and rural populations
  - What are the implications on outcomes?

- Ways Forward – Promising Policy Developments
  - CDC, 2022: Over 80% of pregnancy related deaths are preventable
The United States continues to have the highest maternal death rate, with the rate for Black women by far the highest of any group.

Maternal deaths per 100,000 live births

<table>
<thead>
<tr>
<th>Country</th>
<th>Maternal Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZL</td>
<td>0.0</td>
</tr>
<tr>
<td>SWZ</td>
<td>1.2</td>
</tr>
<tr>
<td>SWE</td>
<td>2.8</td>
</tr>
<tr>
<td>NETH</td>
<td>2.8</td>
</tr>
<tr>
<td>JPN</td>
<td>3.4</td>
</tr>
<tr>
<td>AUS</td>
<td>3.5</td>
</tr>
<tr>
<td>GER</td>
<td>3.5</td>
</tr>
<tr>
<td>UK</td>
<td>5.5</td>
</tr>
<tr>
<td>FRA</td>
<td>7.6</td>
</tr>
<tr>
<td>CAN</td>
<td>8.4</td>
</tr>
<tr>
<td>KOR</td>
<td>8.8</td>
</tr>
<tr>
<td>US-Asian</td>
<td>13.2</td>
</tr>
<tr>
<td>NZ</td>
<td>13.6</td>
</tr>
<tr>
<td>CHL</td>
<td>14.3</td>
</tr>
<tr>
<td>US-Hispanic</td>
<td>16.9</td>
</tr>
<tr>
<td>US-White</td>
<td>19.0</td>
</tr>
<tr>
<td>US-Black</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Notes: The maternal mortality ratio is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. For more information on how maternal mortality is defined, see Organisation for Economic Co-operation and Development, “Maternal and Infant Mortality,” in Health at a Glance 2023: OECD Indicators (OECD, 2023). 2015 data for FRA; 2017 data for UK; 2016 data for NZ; 2020 data for CAN and SWZ; 2021 data for AUS, GER, JPN, KOR, NETH, and SWE; 2022 data for CHL (provisional), NOR, and US. Due to sample size limitations, data for US-AIAN cannot be displayed. AIAN = American Indian and Alaska Native. Asian Americans include a wide range of distinct communities. Such groupings are imperfect, as they mask significant differences in maternal mortality rates.


While the maternal mortality rate increased in several countries during the COVID-19 pandemic, the rate has begun to decline since then.
Pregnancy-related mortality ratios by race and ethnicity before and during COVID-19

Fig. 2. Pregnancy-related mortality ratios by race and ethnicity during vs before the coronavirus disease 2019 (COVID-19) pandemic, 2019–2021, United States. Race and ethnicity categories are single-race categories. All race categories are non-Hispanic origin. Hispanic origin includes all races.

Severe maternal morbidity

Figure 2. SMM in Massachusetts: 2011-2020

1. * Denotes statistical significance.
2. Annual Percent Change

Massachusetts Department of Health, July 2023
Figure 4. SMM in Massachusetts by Race and Hispanic Ethnicity: 2011-2020

Note: Rates for American Indian and Other non-Hispanic birthing people are not shown because these are based on a total of 39 events.
Leading explanations

For racial inequities in maternal mortality and morbidity:

**Environmental Stress/Weathering:** repeated exposure to stressors & discrimination throughout the life course leads to increased allostatic load (Geronimus et al 2006). Stressors include neighborhood factors such as living in segregated/redlined neighborhood.

**Disparate access to care/misaligned care:**
- Black and Hispanic women are more likely to receive a Cesarean that is not needed.
- Inadequate access to prenatal care and to postpartum care.

**Health Systems Challenges**
- Widespread closures of obstetric units in urban and rural communities
- Black and Latinx-serving hospitals have fewer capital assets, revenues ➔ greater likelihood of SMM and maternal death at these facilities.
Loss of Obstetric Units Nationwide

- Between 2002 and 2013, more than 10% of all hospital OB Units closed (Hung 2017)
- 2010 – 2022: PA and DC among the top 5 states with highest rate of closure (Kozhimannil et al, forthcoming)
- Via full closure of hospital, or closure of the OB department only.
- Urban and rural communities affected Regardless of state Medicaid expansion

Carroll et al, 2022
Racial Inequities & OB Closure

- Counties with a greater % of Black women of reproductive age have higher odds of losing OB care than their White counterparts (Hung et al 2017)

- Greater odds of SMM among NJ women giving birth after nearest OB closure & those delivering at Black-serving hospitals (McGregor et al 2021)

- Remaining OBs saw a spike in birth volumes and a shift in patient mix (Lorch 2014)
  - Perinatal and neonatal outcomes worsened in the immediate aftermath of closures in PA county (Lorch 2013)
Washington, DC

- 4 of 9 hospital obstetric units have closed since 2001.

- Leaving the only hospital obstetric units in NW—the most affluent section of the District.

- Washington, DC’s maternal mortality rate (36/100,000 births in 2018) is almost twice the national rate (20.7)

- Black people made up 90% of all pregnancy related deaths between 2014 and 2018 (DC Maternal Mortality Review Committee, 2022).
FIGURE 3.

Racial Demographics of Washington, DC, Neighborhoods

Percentage of Black residents by census tract in Washington, DC.

Source: American Community Survey 2019 (5-year estimates)

Ways Forward

- Transforming the **payment environment** to support the sustainability of obstetric units in vulnerable communities (ex: *Keep Obstetrics Local Act, Wyden (D-OR)*)

- Transforming the **composition of the maternal care workforce** to bolster midwifery and doula care, evidence-based solutions to narrowing disparities and reducing the Cesarean rate (ex: *Mama’s First Act*)

- Increasing Medicaid reimbursement for obstetric services
Q & A

Thank You!

amcgregor@hsph.harvard.edu