

COMMENTARY

M5 Power: On a Mission to Eradicate Maternal Mortality and Morbidity in Mississippi

Chawla LaToya Mason, MD¹

¹ Anesthesiology, University of Mississippi Medical Center

Keywords: maternal mortality, disparities, health equity, perinatal quality collaborative

<https://doi.org/10.67225/001c.117933>

Journal of the Mississippi State Medical Association

Vol. 65, Issue 5/6, 2024

This maternal health commentary offers insight into the integral relationship of maternal health to maternal mortality, as it is a key indicator for maternal health. Maternal mortality statistics for the state of Mississippi and the nation are shared. Reasons for racial and ethnic disparities in birth equity are explored. The networking process through which maternal mortality review committees and perinatal quality collaboratives may work to actuate sustainable change in these areas is also discussed. Based upon society statements, this commentary offers recommendations for roles that medical providers (obstetric and non-obstetric) may play in this “mission” to eradicate maternal mortality. Finally, this commentary speaks to some of the work ongoing in the state of Mississippi in this realm.

No publication dedicated to maternal health is complete without acknowledgement of its integral relationship to maternal mortality. When one examines maternal mortality rates in the state of Mississippi, it becomes apparent that our trends parallel those of our nation. Unfortunately, both at the (Mississippi) state level and on a national level, the news is *not* good. Rates of maternal mortality and severe maternal morbidity in the United States (U.S.) have increased over the past two-to-three decades with the U.S. having the highest rate when compared to other highly developed countries.¹⁻⁴ In 2021, Mississippi had the highest maternal mortality rate at 82.5 deaths per 100,000 births, followed by New Mexico at 79.5 deaths per 100,000 births.^{5,6} Closer examination reveals significant racial and ethnic disparities. Nationally and at the MS state level, inlaying race into mortality data indicates that non-Hispanic Black and American Indian pregnant women have three-to-four times higher risk of maternal death when compared to their White counterparts.^{6,7} With such sobering statistics, one must consider what role the medical provider (obstetric and non-obstetric) may fulfill in this mission to reverse such disturbing trends.

Being cognizant of the confluence of factors that play into birth inequity is a reasonable genesis. Race, ethnicity, social determinants of health, including socioeconomic status, and geography are drivers of health services disparities.⁸ In addition to diversifying our workforces, we must aim to ensure delivery of equitable care. This aim refers to the provision of resources according to the need. To address quality and safety in healthcare, considerations

to equity should be foundational to every step of planning and action. Simply put, delivering equitable care means meeting patients where they are and providing them with the information needed to increase their medical literacy. This meeting of need may be accomplished through provision of culturally competent care that takes into consideration the varying beliefs, attitudes, and values driving personal healthcare choices. Implementations to engage in this consideration may be executed on several levels including patient and provider education, institutional innovations, and community engagement.⁸⁻¹⁰

Implementation of regionalized maternal care systems is another way we may narrow the gap of disparate maternal care. Developed by the American College of Obstetricians and Gynecologists and Society of Maternal Fetal Medicine, these systems offer defined criteria regarding personnel, equipment, services, and capabilities that must exist for the levels of maternal care ranging from Levels 1-4. Such “leveling” or framework offers guidance on appropriate stratification of obstetric patients to risk-appropriate delivery locations in order to achieve optimal maternal-fetal outcomes.¹⁰

With a recent patient safety bundle, the Alliance for Innovation on Maternal Health (AIM) offers strategic recommendations that guide how providers may reduce peripartum racial and ethnic disparities. This collection of evidence-based, best practices spans the following five themes: 1) measurement of disparities; 2) recognition of disparities at personal and systems-levels; 3) awareness of the magnitude of disparities; 4) communication barriers; and 5) differences in the structure of care.⁸ In its Statement on Reducing Maternal Peripartum Racial and Ethnic Disparities in Anesthesia Care, the American Society of Anesthesiologists offers several recommendations that are based on AIM’s bundle.^{8,11} Although composed by ASA, they represent initiatives that may be utilized by other healthcare providers as well in their efforts to reduce disparities in maternal care. Table 1 lists these recommendations.

Health professionals in our state are collaborating in the mission to improve maternal health by seeking measures to eradicate maternal mortality. The MS Maternal Mortality Committee (MMRC) is actively engaged in organized processes to examine reasons why mothers are dying and identifying opportunities for actionable change. As one of 39 states that has partnered with the Center for Disease Control’s Eliminate Maternal Mortality Program, our MMRC uses a standardized approach to “ERASE maternal mortality” by “enhancing reviews and surveillance to eliminate maternal mortality”.¹² Mississippi’s MMRC recently published an inaugural report that may be viewed in its entirety using this link: <https://msdh.ms.gov/page/resources/19612.pdf>. Our state likewise has an active perinatal quality collaborative (PQC). This term refers to the network of perinatal professionals who work collaboratively to broadly share recommendations statewide and beyond with

the goal of improving the quality of care for mothers and infants. State-based and national networking is paramount in driving positive, sustainable change in this realm.^{9,12}

Regardless of our clinical areas of expertise, we can all endeavor on this mission to adopt sustainable, actionable practices that aim to reduce maternal health disparities and eradicate maternal mortality in Mississippi and beyond.

Submitted: March 25, 2024 CDT. Accepted: April 12, 2024 CDT. Published: May 15, 2024 CDT.

REFERENCES

1. Fleszar LG, Bryant AS, Johnson CO, et al. Trends in state-level maternal mortality by racial and ethnic groups in the United States. *JAMA*. 2023;330(1):52-61. doi:[10.1001/jama.2023.9043](https://doi.org/10.1001/jama.2023.9043). PMID:37395772
2. Berg CJ, Callaghan WM, Syverson C, Henderson Z. Pregnancy-related mortality in the United States, 1998 to 2005. *Obstet Gynecol*. 2010;116:1302-1309. doi:[10.1097/AOG.0b013e3181fdfb11](https://doi.org/10.1097/AOG.0b013e3181fdfb11)
3. Chang J, Elam-Evans LD, Berg CJ, et al. Pregnancy-related mortality surveillance-United States, 1991-1999. *MMWR Surveill Summ*. 2003;52:1-8.
4. Hoyert DL. Maternal mortality rates in the United States, 2021. *NCHS Health E-Stats*. Published online 2023. doi:[10.15620/cdc:124678](https://doi.org/10.15620/cdc:124678)
5. Osterman MJK, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. Births: final data for 2021. *National Vital Statistics Reports*. 2023;72(1):1-53.
6. Mississippi State Department of Health. Mississippi Maternal Mortality Report 2017-2019. January 2023. Accessed March 24, 2024. <https://msdh.ms.gov/page/resources/19612.pdf>
7. Creanga AA, Syverson C, Seed K, Callaghan WM. Pregnancy-related mortality in the United States, 2011-2013. *Obstet Gynecol*. 2017;130(2):366-373. doi:[10.1097/AOG.0000000000002114](https://doi.org/10.1097/AOG.0000000000002114). PMID:28697109
8. Howell EA, Brown H, Brumley J, et al. Reduction of peripartum racial and ethnic disparities: A conceptual framework and maternal safety consensus bundle. *Obstet Gynecol*. 2018;131:770-782. doi:[10.1097/AOG.0000000000002475](https://doi.org/10.1097/AOG.0000000000002475)
9. Mason CL, Collier CH, Penny SC. Perinatal quality collaboratives and birth equity. *Curr Opin Anaesthesiol*. 2022;35(3):299-305. doi:[10.1097/ACO.0000000000001143](https://doi.org/10.1097/ACO.0000000000001143)
10. American College of Obstetricians & Gynecologists, Society of Maternal Fetal Medicine. Obstetric care consensus: levels of maternal care. *Obstet Gynecol*. 2019;134(2):883. doi:[10.1097/AOG.0000000000003495](https://doi.org/10.1097/AOG.0000000000003495)
11. American Society of Anesthesiologists. Statement on reducing maternal peripartum racial and ethnic disparities in anesthesia care. Accessed March 25, 2024. <https://www.asahq.org/standards-and-practice-parameters/statement-on-reducing-maternal-peripartum-racial-and-ethnic-disparities-in-anesthesia-care>
12. Centers for Disease Control and Prevention. Enhancing reviews and surveillance to eliminate maternal mortality (ERASE MM). Accessed March 25, 2024. <https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/index.html>