

NATIONAL ADVISORY COUNCIL CONCEPT CLEARANCE

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Title of Initiative: Addressing Racial Disparities in Maternal Mortality and Morbidity

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Objectives: The purpose of this initiative is to support research that tests clinical, social behavioral and health care system interventions to address racial disparities in maternal mortality and morbidity (MMM) in the United States.

Background: In the United States, racial and ethnic minority women¹ face substantially higher rates of pregnancy-related complications (i.e., maternal morbidity) and pregnancy-related death (i.e., maternal mortality, defined by the CDC as death from a pregnancy-related cause within one year of termination of pregnancy) compared to White women. African American women are 3 to 4 times more likely to die from pregnancy-related causes compared to White women; disparities exist for American Indian women as well. During 2011-2016, the pregnancy-related mortality ratios were 42.4 deaths per 100,000 live births for African American women, 30.4 for American Indian women, 14 for Asian women, 13 for White women, and 11 for Hispanic women.

During 2011-2013, the leading number of pregnancy-related deaths, at 26%, were caused by cardiovascular conditions, including cardiomyopathy. The second-highest contributor to maternal mortality was pre-existing chronic conditions, which accounted for 15% of deaths. These conditions cause higher case fatality rates in African American and American Indian women when compared to White women, evidencing racial disparities in maternal mortality. Up to 50% of pregnancy-related deaths are preventable, which points to another factor underlying racial disparities in maternal mortality: access to quality care. Access of racial/ethnic minority women to quality care is often limited by factors like insurance coverage and site of care. Societal racism may also play a role in racial disparities in maternal outcomes. Research shows that community-level measures of racial prejudice are correlated with infant health outcomes, which are, in turn, highly correlated with maternal health outcomes.

Addressing maternal health means not only reducing mortality but also reducing morbidities and severe morbidities. Most women, however, do not die from pregnancy-related causes; pregnancy-related complications (e.g., hemorrhage, sepsis, eclampsia) are much more common than pregnancy-related deaths and thus are important points of intervention. During 2012-2015, there were 139 severe maternal morbidity incidents per 10,000 delivery hospitalizations among White women. By contrast, there were 162, 170, 206, and 231 incidents among Asian, Hispanic, American Indian and African American women, respectively. Racial disparities in maternal morbidity are in part due to the higher prevalence of chronic conditions (e.g., hypertension, diabetes) among African American and American Indian women. Moreover, African American women tend to start prenatal care later in their pregnancy compared to White women, restricting providers the ability to properly address pre-existing conditions.

¹ To the best of our knowledge, the statistics cited in this Concept are most likely based on data from individuals who self-identified as women.

Previous Studies & Gaps in Research: Since the 1980's, many studies have investigated the epidemiology of racial disparities in maternal mortality and morbidity. Thus, the primary contributing factors of these disparities, such as preconception health and site of care, are well-documented. However, insufficient progress has been made in developing, implementing and evaluating interventions to reduce MMM among racial and ethnic minority women. Several studies have proposed interventions, but few studies have implemented and subsequently evaluated an intervention. Some past data indicate that improvements in quality of obstetric care do not necessarily translate to reductions in racial disparities in maternal outcomes. Hence, there is strong need for maternal care interventions specifically targeting racial disparities.

Currently, NIMHD has 0 Funding Opportunity Announcements (FOA) that address maternal health. NICHD has 10 FOAs on maternal health, but none specifically address health disparities. However, since 2008, NIH has funded 33 investigator-initiated projects focused on racial disparities in maternal outcomes: 12 by NIMHD and 21 by other institutes. Of the grants funded by other institutes, 10 examined the relationship between MMM and factors such as psychosocial and built environment stressors, obesity, and obstetrical quality measures. Of the six testing interventions, five targeted gestational weight gain. Of the 12 grants funded by NIMHD, eight explored the relationship between obstetric outcomes, and factors such as hospital quality, stress and obesity. Of the five testing interventions, two examined tools to aid patient navigation of obstetric care and two targeted gestational weight gain. These projects are promising but merely describe correlates of MMM. The few projects that included interventions mostly focused on obesity.

Description of Initiative: This initiative will support multidisciplinary research examining the efficacy and/or effectiveness of multi-level interventions to reduce health/health care disparities in maternal morbidity and/or maternal mortality experienced by racial/ethnic minority women. Research projects could consist of health policy or health care system studies, social or behavioral studies, implementations studies, or clinical trials. Interventions can occur at any point across the continuum of care, from preconception care to postpartum care. Interventions must target factors at multiple levels of influence (i.e., individual, interpersonal, community, and societal).

Potential topics include, but are not limited to:

- Examine the role of quality improvement in preconception care in identifying women who are at-risk for potential adverse maternal outcomes.
- Examine how integration of community-based practices into health care systems (e.g., doula support from the beginning of pregnancy) influence identification of women at high-risk of complications during pregnancy.
- Evaluate the effect of implementation of Alliance for Innovation on Maternal Health (AIM) patient safety bundles on hospital-wide racial disparities in maternal morbidity.

- Examine best (multi-level) practices to prevent and treat common post-pregnancy complications within the first-year post-partum (e.g., patient and family education in post-birth warning signs, provider use of maternal care checklists at post-partum visits).
- Identify sociocultural areas of resiliency (e.g., community support) within specific racial/ethnic subpopulations and explore implications for other racial/ethnic groups.

References and Resources

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