Respectful Maternity Care: Dissemination and Implementation of Perinatal Safety Culture to Improve Equitable Maternal Healthcare Delivery and Outcomes

Overview

Despite sizeable resources invested in US maternity care, severe maternal illness and death is worse in the US than in all comparable countries, with the greatest impact on Black women. Emerging research suggests that one key part of this problem relates to disrespectful care during childbirth. The goal of this review is to address the decisional dilemma facing policy makers and practice leaders around the uncertainty in measuring and identifying respectful maternity care (RMC), disrespect or abuse during childbirth, and effective strategies for implementing RMC in order to improve outcomes, particularly for disadvantaged populations.

Background

Growing disparities in maternal health require careful attention to the quality of maternity care to improve health and safety outcomes, particularly for populations at risk for health disparities. Although the cost of pregnancy care in the US far exceeds that of most other developed countries, maternal morbidity, mortality, pregnancy-related and pregnancy-associated mortality,[1-4] and near misses[2] are unacceptably high and significant health disparities exist.[5, 6] Women who identify as Black, low-income, or live in rural areas are more likely to die during pregnancy[7, 8] or within the first postpartum year,[6, 9] with Black women having nearly 4 times the mortality risk of non-Hispanic White women. From 2018 to 2019, just ahead of the COVID-19 pandemic, maternal mortality rates in the US increased from 17.4 to 20.1 per 100,000 live births. In 2020, rates increased to 23.8 per 100,000 live births,[10, 11] and statistically significant differences in maternal mortality continued for non-Hispanic Black women (55.3/100,000 live births) compared to non-Hispanic White women (19.1 per 100,000 live births).[11] Disparities in maternal mortality rates persist for non-Hispanic Black women even when controlling for education, income, or socioeconomic characteristics.[6, 10, 12]

Access to high-quality maternal health care is associated with reduced maternal and/or perinatal morbidity and mortality because it can help identify conditions that increase the risk for poor outcomes and facilitate appropriate and timely interventions for prevention or treatment.[13] Maternity care, including prenatal screening, is currently covered without cost sharing under the Affordable Care Act,[14, 15] yet inequities persist in the receipt and delivery of care. Emerging models such as remote monitoring and alternative prenatal care schedules[16, 17] to deliver care may present opportunities to improve access, efficacy, promote collaborative care,[18] optimize patient safety,[19, 20] and improve patient satisfaction to help close the health disparities gap.[20] Integrated care delivery models that promote the use of multidisciplinary teams (eg, midwives, doulas, physicians) and care approaches[21-23] such as telehealth and remote monitoring, support a

paradigm shift towards reorganizing care to successfully reach populations facing barriers and could address the diversity of contributors to maternal death.[1]

The coronavirus pandemic (COVID-19) disrupted traditional medical care and led to the rapid adoption of telehealth as an alternative to in-person care to reduce the risk of virus exposure. Although the Coronavirus Aid, Relief, and Economic Security "CARES" Act[24] federal funding increased access and infrastructure for services such as virtual doula care, home blood pressure monitoring, and remote pregnancy monitoring, including fetal Doppler monitors, data suggest that COVID-19 has magnified underlying health disparities, underscoring the urgent need for action.[25]

While many factors contribute to these maternal health disparities between the US and other high-resource countries and within the US, particularly between White vs. Non-Hispanic Black women, there is increasing attention to the role that respectful maternity care (RMC) may play in shaping these outcomes. Lack of RMC has been identified as part of systems failures leading to worse outcomes among those who are the most vulnerable during childbearing.[26, 27] There has also been a large uptick in community births within many US communities, potentially because patients do not feel safe or respected in hospitals, or because their support networks were not permitted in hospitals during the pandemic.[28, 29] Shared decision making[30] and patient preferences[31] are central considerations for updated maternity care approaches that are appealing to pregnant individuals and create safe birthing environments. These factors signal the need for careful consideration of standard RMC practices and opportunities for innovation in the care of all childbearing individuals, with particular attention to racial inequity.

Defining RMC and its components, understanding fundamental aspects of RMC, and identifying validated tools to measure and implement safe and respectful care, is paramount to informing future program goals and addressing these dilemmas.[32] Careful attention to these issues is important during labor and delivery, when women may experience pain or insecurity and are particularly vulnerable to experiences of disrespect or abuse.[33] Implementing evidence-based practices[34] may help reduce variations in care and promote effective and respectful delivery of care, while discouraging ineffective, inequitable, or potentially harmful interventions. Since there is no single tool to identify or measure RMC, recognizing the themes,[35] domains,[36] and key principles of RMC may facilitate a clearer understanding of target metrics for evaluation. Key measurements include impacts on maternal outcomes and identifying care disparities that consider patient experiences.

In 2020, the US Department of Health and Human Services (HHS) launched a department-wide effort to improve equity in maternal health and safety outcomes in response to the ongoing recognition of growing maternal health disparities, particularly among groups already at risk for health disparities. This included funding of maternal mortality review committees and efforts to address implicit bias and racial gaps in pregnancy and childbirth related deaths.[37] Through a partnership with HRSA's Maternal Child Health Bureau and the Alliance for Innovation on Maternal Health (AIM), AHRQ has worked to integrate the Safety Program in Perinatal Care (SPPC) with the existing AIM maternal safety bundle framework[38, 39] by emphasizing teamwork

and communication to improve patient safety and the culture of obstetric care. As part of this partnership and in recognition of a need for an increased focus on addressing persistent inequities, HRSA, AIM, and AHRQ have focused on updating the existing AIM Maternal Safety Bundle "4 R framework" (Readiness, Recognition, Response, Reporting) to include a 5th R: respectful maternity care (RMC). Adding RMC is intended to improve person-centered and equitable care. The addition of RMC as the "5th R" will incorporate pregnant and postpartum individuals and their identified support networks as part of the multidisciplinary care team.[40, 41]

The goal of this review is to address the decisional dilemma facing policy makers and practice leaders around the uncertainty in measuring and identifying RMC, disrespect or abuse[42-44] during pregnancy and childbirth, and effective strategies for implementing RMC in order to improve outcomes, particularly for disadvantaged populations.[45] Importantly, this review will help define, identify, and evaluate key components of RMC and synthesize current research to inform an update of the AIM Maternal safety bundle by incorporating appropriate metrics and tools to assess RMC. When data are available, we will also assess the differential impact of RMC on populations adversely affected by disparities due to geography, race/ethnicity, age, language, education, socioeconomic status, or other factors as defined by the PROGRESS-plus framework.[46] Our aim is to conduct a systematic review, informed by KI feedback during topic refinement, that will be useful to a diverse set of stakeholders, including patients, clinicians, and policy makers, and can be used to inform updated maternal safety bundles.

Draft Key Questions (KQs)

Key Question 1. Which components of RMC have been examined using validated measures? Are there validated tools to measure RMC?

Key Question 2. What is the effectiveness of strategies to implement respectful maternity care?

Key Question 3. What is the effectiveness of respectful maternity care on maternal health and utilization outcomes?

a. How does effectiveness vary among disadvantaged pregnant persons?
b. Which components of RMC are associated with effectiveness?
c. Which (non-patient) factors are associated with effectiveness?

Key Question 4. What is the effectiveness of respectful maternity care on infant health outcomes?

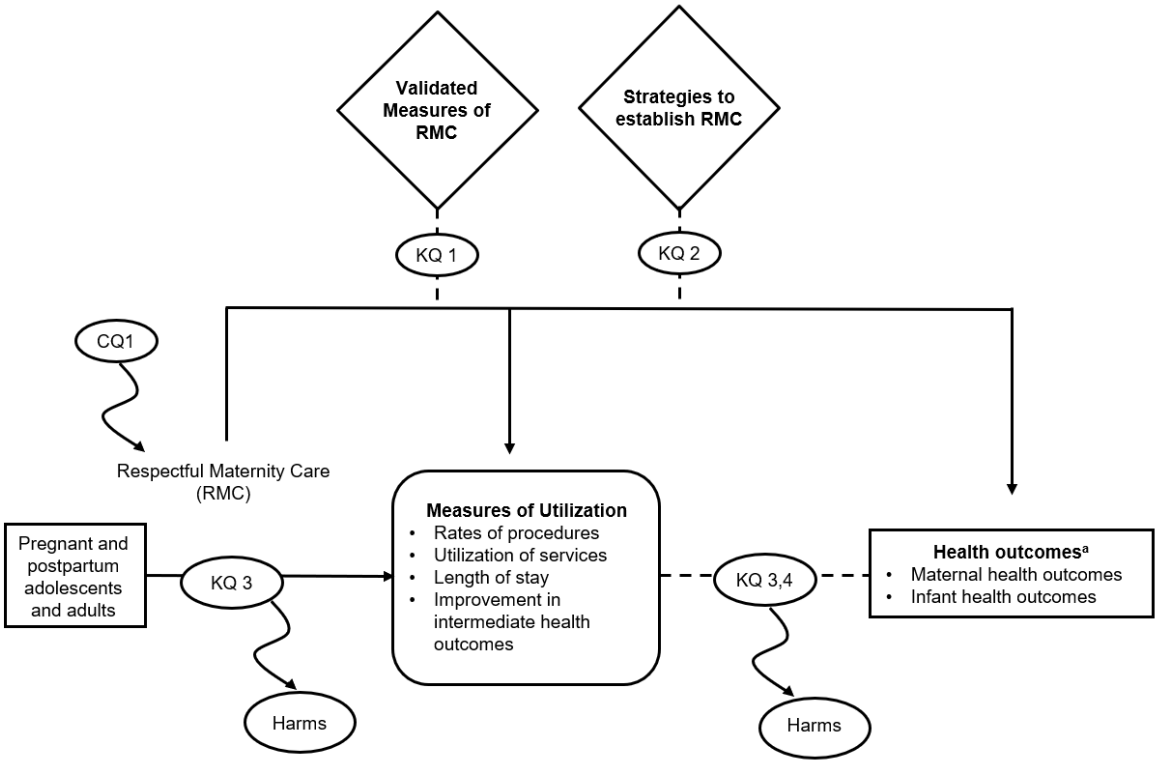
a. How does effectiveness vary among infants of disadvantaged pregnant persons?
b. Which components of RMC are associated with effectiveness?
c. Which (non-patient) factors are associated with effectiveness?

Contextual Questions:

Contextual Question 1. How is respectful maternity care during labor and delivery, and the immediate postpartum period defined in the literature? Does the literature define the essential/critical components of RMC? For example, is teamwork and communication (amongst providers, staff, patients and families) an essential element of RMC?

In KQ 3a and 4a, 'disadvantaged pregnant persons' may be defined by geography, race/ethnicity, age, language, education, SES, etc., as described in Cochrane's PROGRESS-Plus framework.[46] In KQ 3c and 4c, 'non-patient factors' could be related to setting (type of hospital, rural/urban, staffing ratios) or intervention characteristics.

Draft Analytic Framework



The analytic framework illustrates how the populations, interventions, and outcomes relate to the Key Questions (KQ) in the review.

[a] Outcomes vary by KQ and are specified in Table 2.

PICOTS (Population, Interventions, Comparisons, Outcomes, Timing, and Settings)

Table 1. PICOTS for KQs

	Include	Exclude
Population	KQ 1-4: Pregnant adolescents and adults admitted for labor through discharge after delivery Subgroups of interest: • KQ 3a and 4a: Disadvantaged individuals[a]	• Non-pregnant populations
Interventions	KQ 1: Validated measures of respectful care KQ 2: Implementation strategies for RMC (eg, patient/provider education, policies, payment, doula/patient advocate, practice facilitation) KQ 3-4: Respectful maternity care (any definition) KQ 3b and 4b: Specific component of RMC	• Non-validated RMC measures
Comparators	KQ 1: Other tool(s), reference/gold standard or no tool to measure respectful care KQ 2: Other implementation strategies for RMC KQ 3-4: Routine maternity care Absence of a specific RMC component	• No comparison

Outcomes	KQ 1:
	• Respectful care as measured by a validated tool
	KQ 2
	• RMC provider knowledge and/or practices
	• Rates of procedures and interventions
	KQ 3:
	• Health outcomes for pregnant persons
	  ○ Maternal morbidity
	  ○ Maternal mortality
	  ○ Mental health outcomes
	  ○ Function, quality of life using validated measures
	  ○ Mental health outcomes based on validated measures (eg, anxiety, depression)
	  ○ Harms
	• Utilization outcomes for pregnant persons
	  ○ Length of stay
	  ○ Healthcare utilization post-discharge
	  ○ Rates of procedures
	KQ 4:
	• Health outcomes for infants
	  ○ Infant morbidity
	  ○ Infant mortality
	  ○ Harms
	• Utilization outcomes for infants
	  ○ Length of stay
	  ○ Healthcare utilization post-discharge
		• KQ4: Infant health outcomes >1 year

	Include	Exclude
Timing	• Intervention: Admission for labor through discharge after delivery • Outcomes: from admission through one year postpartum	• Interventions: before labor, during prenatal care • Outcomes: More than one year postpartum
Settings	• KQ1, CQ: All countries in a hospital or birthing facility setting (eg, birth centers) • KQ 2-4: US and US relevant country hospital or birthing facility • KQ 3c and 4c: US and US relevant country hospital or birthing facility	• Home births
Study designs and publication types	• KQ1-4: Trials (randomized and comparative nonrandomized), comparative observational studies	• KQ 1: studies that do not describe psychometric properties/methods of determining validity of measures or components • KQ2-4, Case reports, case series (or similar single-arm designs) • Publication types: Conference abstracts or proceedings, editorials, letters, white papers, citations that have not been peer-reviewed, single site reports of multi-site studies

Abbreviations: CQ, contextual question; KQ, key question; RMC, respectful maternity care

[a] "Disadvantaged persons" as defined by PROGRESS-plus framework[46]

Definition of Terms

Term, acronym, or abbreviation	Definition
AWHONN	Association of women's health, obstetric, and neonatal nurses
CQ	Contextual Question
KI	Key Informant; persons with special insight, experience and expertise with a topic that helps the EPC identify key issues, areas of uncertainty, or decisional dilemmas to look for when reviewing the literature

KQ	Key Question
MADM index	Mothers Autonomy in Decision Making scale
MIST	Mistreatment index
MOR index	Mothers on Respect index
PROGRESS-Plus	Disadvantaged pregnant persons are defined according to the PROGRESS-Plus framework, which includes place of residence, race/ethnicity/culture/language, occupation, gender/sex, religion, education, socioeconomic status, and social capital. Including these factors, which may contribute to differential health outcomes and opportunities, is one step in ensuring the research design, implementation, and dissemination are rooted through an equity lens.
RMC	Respectful Maternity Care

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