

Racial/Ethnic Bias and Its Role in Severe Maternal Morbidity

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Received date: November 10, 2022, **Accepted date:** January 04, 2023

Citation: Levine EM, Delfinado L, Fernandez CM. Racial/Ethnic Bias and Its Role in Severe Maternal Morbidity. Arch Obstet Gynecol. 2023;4(1):4-6.

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Abstract

Racial and ethnic health disparities have been identified by many information sources in recent years, and a specific example of this is severe maternal morbidity and mortality, which includes mortality from postpartum hemorrhage. It is this racial/ethnic health disparity that has been highlighted in news reports that should be of concern to all physicians and healthcare providers, recognizing that women of color have more than three times the risk of dying in childbirth than white women. The details about this are worthy of further examination.

Keywords: Race ethnicity, Maternal mortality, Prejudice discrimination, Postpartum hemorrhage

The American College of Obstetrics and Gynecology (ACOG) issued a Committee Opinion (#495) in 2015 [1], related to racial and ethnic disparities in Obstetrics and Gynecology (e.g., incidence of preterm birth [2], maternal morbidity [3] and mortality [4], fetal demise, fetal growth restriction, access to prenatal care [5] and contraception), recognizing the prevalence of this disturbing trend, though its exact etiology is still undetermined [6]. Some references refer to racial prejudices existing among people in general, possibly even including some medical providers [7], as potentially being responsible for the identified disparities. Naturally, the use of related medical terminology needs to be precise, in order to help with its identification and health disparity measurement. Unfortunately, appropriate and revealing language is not consistently used in the medical literature for it to be closely studied. Obviously, the extent of such racial and ethnic disparities can relate to a variety of specific morbidities in women's healthcare (obstetrics & gynecology), as has been noted by many authors [8-10].

Severe maternal morbidity and mortality (SMM) has been a specific example of the commonly described disparities which have been previously mentioned [11-16]. The most common cause of SMM is hemorrhage originating at childbirth, termed postpartum hemorrhage (PPH), which is potentially remediable with prompt treatment with multiple uterotonic

and thrombotic medications, and other measures as well, though it may inevitably require operative therapies for its resolution, including hysterectomy [17]. Failure to initially recognize hemorrhage when occurring at childbirth, and the lack of its immediate treatment consistently by all providers to all populations likely contributes to the incidence of this SMM disparity, the degree to which it exists may be specifically measurable and scored [18].

Regarding the rising rates of perinatal hemorrhage being reported, and the lack of its consistent predictability from risk factors [19], the previously mentioned possible personal bias among some providers may need to be considered as an etiology of this, given its reported evidence [7,9]. Moreover, additional evidence may be necessary to acquire with aggregate data analysis, to identify any provider biases that may exist, to eventually improve perinatal care quality [20]. While many different sources have reported the existence of structural racism in society, its possible inclusion in healthcare practice (i.e., among providers) may need to be identified and possibly measured, to understand how corrections can successfully be initiated.

While much of the medical literature cited previously and those which follow, emphasizes the "promptness" of therapeutic efforts for treating PPH, there has been little

documentation of the value of such promptness for treatment. There was one investigation, however, detailing the value of prompt administration of tranexamic acid (TXA), an anti-inflammatory plasmolytic agent proven useful for treating bleeding disorders [21]. Data within an electronic medical record (EMR) system may be useful, if aggregated from multiple hospital systems. If data analyses are to be pragmatically conducted to investigate the racial/ethnic disparities that may exist regarding SMM, the promptness of treatment after identification of PPH may need to be measured. To measure the promptness of PPH treatment, the time between the date/time of birth (which is always recorded in any perinatal dataset) and the time of initial administration of the first medication given in the usual cascade of medical treatment when hemorrhage is clinically identified (which is part of any EMR) may be ideal. A comparison of this time difference across different racial/ethnic cohorts within multiple institutions can be potentially revealing, and be an objective way of explaining a previously documented specific ethnic and racial healthcare disparity, and its potential preventability [22]. Of course, there may not be a great incentive for any institution to engage in such data analysis, given the potential of revealing the embarrassing cause of racial/ethnic health disparity in an individual healthcare organization. However, there may be value to an institution's recognition of possible monetary savings, measuring the associated costs of these disparities [23], and the possible savings which can accompany their potential identification and correction.

This may also be seen as an inequity when providing quality obstetric healthcare to some populations [24]. It is inescapable that personal implicit bias of some providers may be ultimately responsible for these demonstrated racial/ethnic health disparities, accompanied by the various societal racial/ethnic disparities known to ubiquitously exist [25], and a call for its systematic change has been made [26]. Nonetheless, any explanation of these known health disparities should be welcomed by the entire medical community.

Conflict of Interest

The authors deny any conflict of interest.

Funding

There was no funding for this manuscript.

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