

OBSTETRICS

Race matters: maternal morbidity in the Military Health System



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Background

In the United States, Black women are 3 to 4 times more likely to die from childbirth and have a 2-fold greater risk of maternal morbidity than their White counterparts (Figure). This disparity is theorized to be related to differences in access to healthcare or socioeconomic status. Military service members and their dependents are a diverse community and have equal access to healthcare and similar socioeconomic statuses.

Objective

This study hypothesized that universal access to healthcare, as seen in the military healthcare system, leads to similar rates of maternal morbidity regardless of race or ethnic background.

Study Design

A retrospective cohort study included data from the inaugural National Perinatal Information Center special report comparing indicators of severe maternal morbidity by race. National Perinatal Information Center data from participating military treatment facilities in the Department of Defense performing more than 1000 deliveries annually from April 1, 2018,

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to March 31, 2019, were included. Using this convenience data set, Chi-square analyses comparing the percentages of cesarean deliveries, adult intensive care unit admissions, and severe maternal morbidity between Black and White patients were performed.

Results

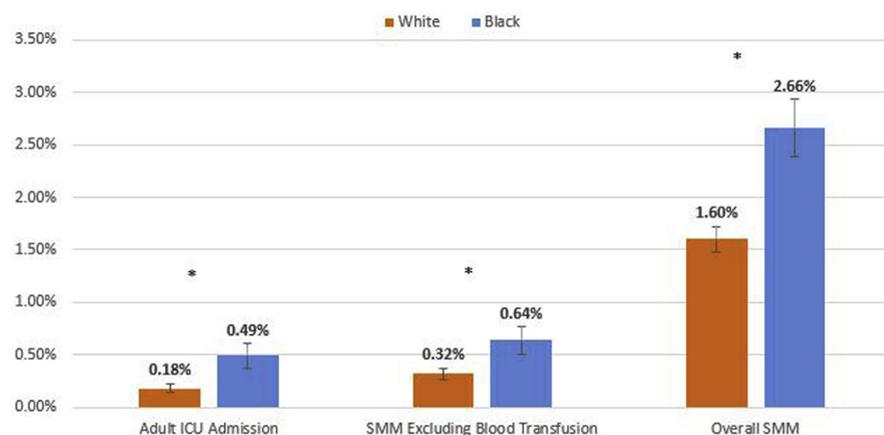
Black women were more likely to deliver via cesarean delivery (31.68% vs 23.58%; $P < .0001$; odds ratio, 1.5; 95% confidence interval, 1.38–1.63), be admitted to an adult intensive care unit (0.49% vs 0.18%; $P = .0026$; odds ratio, 2.78; 95% confidence interval, 1.46–5.27), and experience overall severe maternal morbidity (2.66% vs

1.66%; $P = .0001$; odds ratio, 1.67; 95% confidence interval, 1.3–2.15) even when excluding blood transfusion (0.64% vs 0.32%; $P = .0139$; odds ratio, 1.99; 95% confidence interval, 1.17–3.36) than their White counterparts. There were no substantial differences between races in overall severe maternal morbidity associated with postpartum hemorrhage even when excluding blood transfusion in this subset.

Conclusion

Equal access to healthcare and similar socioeconomic statuses in the military healthcare system do not explain the healthcare disparities seen regarding maternal morbidity encountered by Black women having children in the United States. This

FIGURE
SMM by race



Rates of SMM per 1000 deliveries seen in all 13 sites when comparing Black and White women for adult ICU admission, SMM when excluding blood transfusion, and overall SMM (the asterisk indicates $P < .05$).

ICU, intensive care unit; SMM, severe maternal morbidity.

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study identifies healthcare disparities in severe maternal morbidity among active duty service members and their families. Further studies to assess causes such as systemic racism (including implicit and explicit medical biases) and physiological factors are warranted. ■

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