

Perceived Discrimination and Stress among Pregnant Women of Color During the COVID-19 Pandemic

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INTRODUCTION

The COVID-19 pandemic has disproportionately affected marginalized racial/ethnic communities across the U.S. with higher rates of adversity, health disparities, and mortality (Andrasfay & Goldman, 2021; Blitz et al., 2020). The impact of racial/ethnic health disparities and pregnancy-specific stress during the pandemic on maternal and infant health among pregnant women of color is poorly understood. Integrating an intersectional lens to understand systemic structures of racism and oppression and their reflection in pregnant women of color's experiences of discrimination and gendered racism could inform ways to improve their health and well-being.

Study Aim: We examined perceived discrimination, pandemic-related prenatal stress, and pregnancy-specific stress unrelated to the pandemic among women in the U.S. who identified as Black or African American, Hispanic or Latinx, White/Non-Hispanic, or Multiracial/Other (too few self-identified Asian American women participated in order to include them as a separate group). *We hypothesized that:*

1. Black/African American, Hispanic/Latinx, and Multiracial/Other women would report experiencing greater levels of pandemic-related prenatal stress and pandemic unrelated pregnancy-specific stress than White/Non-Hispanic women
2. Black/African American, Hispanic/Latinx, and Multiracial/Other women would report experiencing more discrimination during their pregnancy than White/Non-Hispanic women
3. Race and ethnicity would be associated with greater pandemic-related prenatal stress and pandemic unrelated pregnancy-specific stress via increased discrimination.

METHOD

Participants: The Stony Brook COVID-19 Pregnancy Experiences (SB-COPE) Study included 2,995 pregnant women with a mean age of 30.64 ($SD = 4.65$) from across the U.S.

Procedure: Data were collected between December 1 and December 21, 2020, during the second U.S. COVID-19 surge from pregnant women 18 years or older who were recruited online through social media platforms.

Measures:

- Pandemic-Related Pregnancy Stress Scale (PREPS) (Preis, Mahaffey, & Lobel, 2020) Preparedness Stress 7-items, $\alpha = 0.83$ (e.g., "I am worried I will not be able to have someone with me during the delivery"). Mean item score = 1-5. Perinatal Infection Stress 5-items, $\alpha = 0.85$ (e.g., "I am worried that my baby could get COVID-19 at the hospital after birth"). Mean item score = 1-5.
- Revised Prenatal Distress Questionnaire (NuPDQ; Ibrahim & Lobel, 2020; Lobel et al., 2008) 17-items, $\alpha = 0.83$ (e.g., to what extent "are you feeling bothered, upset, or worried about whether you might have an unhealthy baby"). Mean item score = 0-2.
- Perceived Discrimination During Pregnancy adapted from a measure of Pregnancy-Specific Gendered Racism (Rosenthal & Lobel, 2016) 6-items, $\alpha = 0.84$ (e.g., "How often do you feel that people make negative assumptions about you based on being a pregnant woman of your racial/ethnic background?" and "How much does this bother, upset, or worry you?"). For each experience, we created an interaction term for the frequency of the event x the related distress. Scores on the interaction term ranged from 0-12.

RESULTS

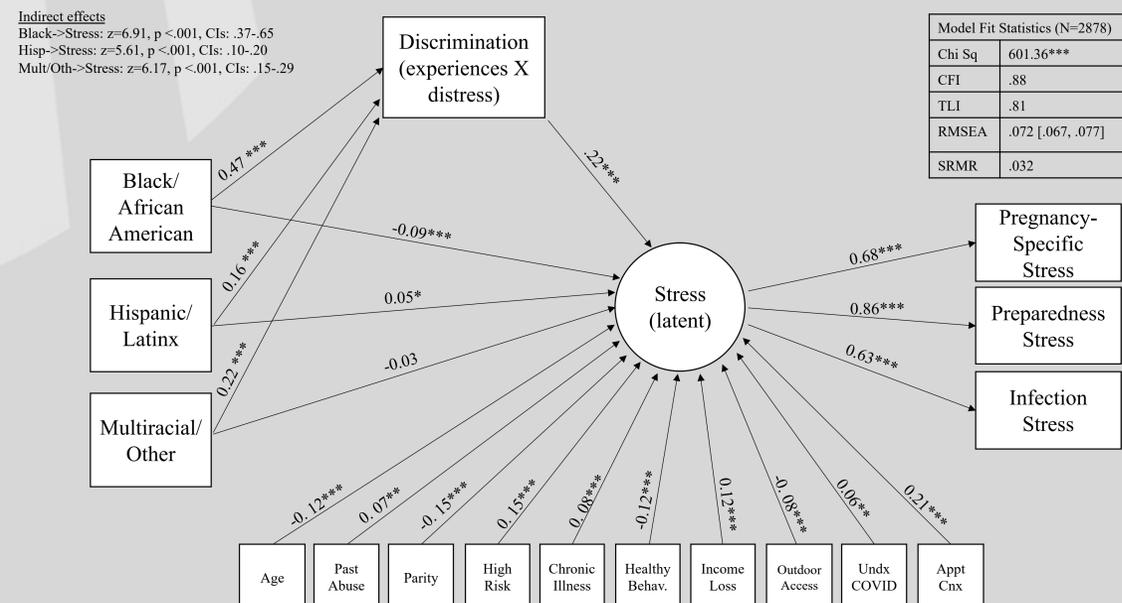
Significant racial/ethnic differences in stress and discrimination were found (see Table 1; all p 's < .05). Women of color reported greater pandemic-related preparedness and infection stress, pregnancy-specific stress, and discrimination than did White/Non-Hispanic women. Post-hoc comparisons indicate differences among all four groups. For example, Hispanic/Latinx women experienced highest pandemic-related preparedness and infection stress; White/Non-Hispanic women experienced the lowest levels of these types of stress. Pregnancy-specific stress was equally high in all three groups of women of color, and higher than for White/Non-Hispanic women. Levels of discrimination differed across all four groups, listed in descending order of magnitude: Black/African American, Multiracial/Other, Hispanic/Latinx, White/Non-Hispanic. Bivariate analyses indicated that sociodemographic, obstetric, and pandemic-related factors were associated with stress (e.g., age, parity, access to the outdoors). Multivariate analyses showed that while controlling for sociodemographic, obstetric, and pandemic-related factors, discrimination uniquely predicted pandemic-related stress and pregnancy-specific stress. A structural equation model illustrates the significant role of discrimination in associations of race/ethnicity with prenatal maternal stress (see Figure 1).

Table 1. Differences in discrimination and stress across racial/ethnic groups.

	White/Non-Hispanic <i>n</i> = 2360 <i>M</i> (<i>SD</i>)	Black/African American <i>n</i> = 182 <i>M</i> (<i>SD</i>)	Hispanic/Latinx <i>n</i> = 233 <i>M</i> (<i>SD</i>)	Multiracial/Other <i>n</i> = 201 <i>M</i> (<i>SD</i>)	<i>F</i>	η^2
Preparedness Stress	3.08 (.93) ^a	3.22 (1.04) ^{ab}	3.34 (.93) ^b	3.19 (.94) ^{ab}	6.98***	.007
Infection Stress	3.09 (.97) ^a	3.13 (1.09) ^{ab}	3.30 (.99) ^b	3.24 (.98) ^{ab}	4.50**	.004
Pregnancy-Specific Stress	.88 (.37) ^a	.99 (.39) ^b	1.00 (.36) ^b	1.00 (.38) ^b	15.21***	.015
Discrimination	.28 (.91) ^a	3.54 (3.45) ^b	1.27 (2.10) ^c	1.74 (2.31) ^d	347.53***	.260

Means that are significantly different within each row do not share a superscript. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1. Model of discrimination and stress in three racial/ethnic groups.



* $p < .05$, ** $p < .01$, *** $p < .001$

DISCUSSION

Summary of Findings: Analyses confirmed that pregnant women of color experienced more discrimination and greater stress than White/non-Hispanic women. Findings corroborate the impact of discrimination and help to explain racial/ethnic differences in maternal stress during the COVID-19 pandemic.

Strengths: The sample of 2,995 participants was large and geographically diverse. All measures had high internal consistency and were previously validated or adapted from a validated measure (Discrimination).

Limitations: The study was conducted in the U.S. so findings may not be applicable to pregnant women from other countries during the COVID-19 pandemic. Also, the number of pregnant women in each marginalized racial/ethnic group was relatively small. The measure of discrimination did not provide a detailed representation of discriminatory experiences.

Practical Implications: Prenatal maternal stress is a potent risk factor for adverse outcomes such as low birthweight and preterm birth but its magnitude, contributors, and impact during a global health crisis are unknown. Findings suggest that community collaborations and culturally-relevant interventions with an intersectional framework are a promising way to reduce stress among pregnant women of color. At the same time, we must not overlook the importance of reducing discrimination experienced by all marginalized groups of people in our society, especially during times of communal crisis.

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