

Breastfeeding in Black Women: Reviewing Racial and Socioeconomic Differences in Breastfeeding and the Impact on Bonding, Breastfeeding Rates, and COVID-19 Pandemic Worries



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Background

- There are many advantages that mothers and infants could acquire from breastfeeding including the release of oxytocin¹, accessing the antibodies stored within breast milk¹, and breastfeeding can lead to a significant decrease in diseases such as breast cancer, diabetes, and certain cancers².
- Historically, Black women have some of the lowest rates of breastfeeding and the shortest duration at 6 months³. There have been many disparities for Black mothers breastfeeding including being used as wet nurses⁴, the push for formula feeding in the 1950s⁵, Nestle formula scandal in impoverished communities in Asia and Africa⁶, and high rates of labor participation⁷.

Aims

- Aim 1:** Investigate the relationship between racial disparities in maternal health and the rates of breastfeeding among Black and white mothers.
- Aim 2:** Investigate the association between socioeconomic status and breastfeeding rates in Black and white mothers.
- Aim 3:** Examine the relationship between breastfeeding and how mothers bond with their children on an emotional and physical level in Black and white mothers.
- Aim 4:** Strengthen research on COVID-19 and its association to maternal practices.
- Aim 5:** Examine the relationship between breastfeeding and postpartum depression and postpartum depression and bonding.

Methods

This cohort of 197 mothers (94 Black and 103 white) came from a larger longitudinal study, examining syndemic impact on mothers and children during the COVID-19 pandemic. We observed mothers at the 8–35-week postpartum timepoint. Mothers were asked 400 survey questions to capture their experiences from childbirth to postpartum.

Mean response time: 12.59 weeks after postpartum

Demographic Data:

- Obtained from the University of Pennsylvania's Electronic Health Records (EHR).

Measures:

- **COVID-19 General Worries:** The COVID-19 General Worries Scale (6 questions) asked mother questions such as "Are you worried of unknowingly affecting others with COVID-19?"
- **Mother and Infant Bonding:** The Postpartum Bonding Questionnaire (12 questions) asked mothers how much they resonate with statements such as "I feel close to my baby" or "My baby irritates me"
- **Breastfeeding at Postpartum:** Breastfeeding portion of the postpartum survey which asked if they were currently breastfeeding.
- **Breastfeeding at 12 Months:** Direct responses to why mothers did not partake in breastfeeding were obtained from the breastfeeding portion of the 12-month survey. The optional free response section asked if they were breastfeeding, did they breastfed for as long as they wanted to, and why they stopped breastfeeding.
- **Postpartum Depression:** Depression was measured with the Edinburg Postnatal Scale (9 questions) and asked mothers if they resonated with statements like "I have felt sad or miserable"

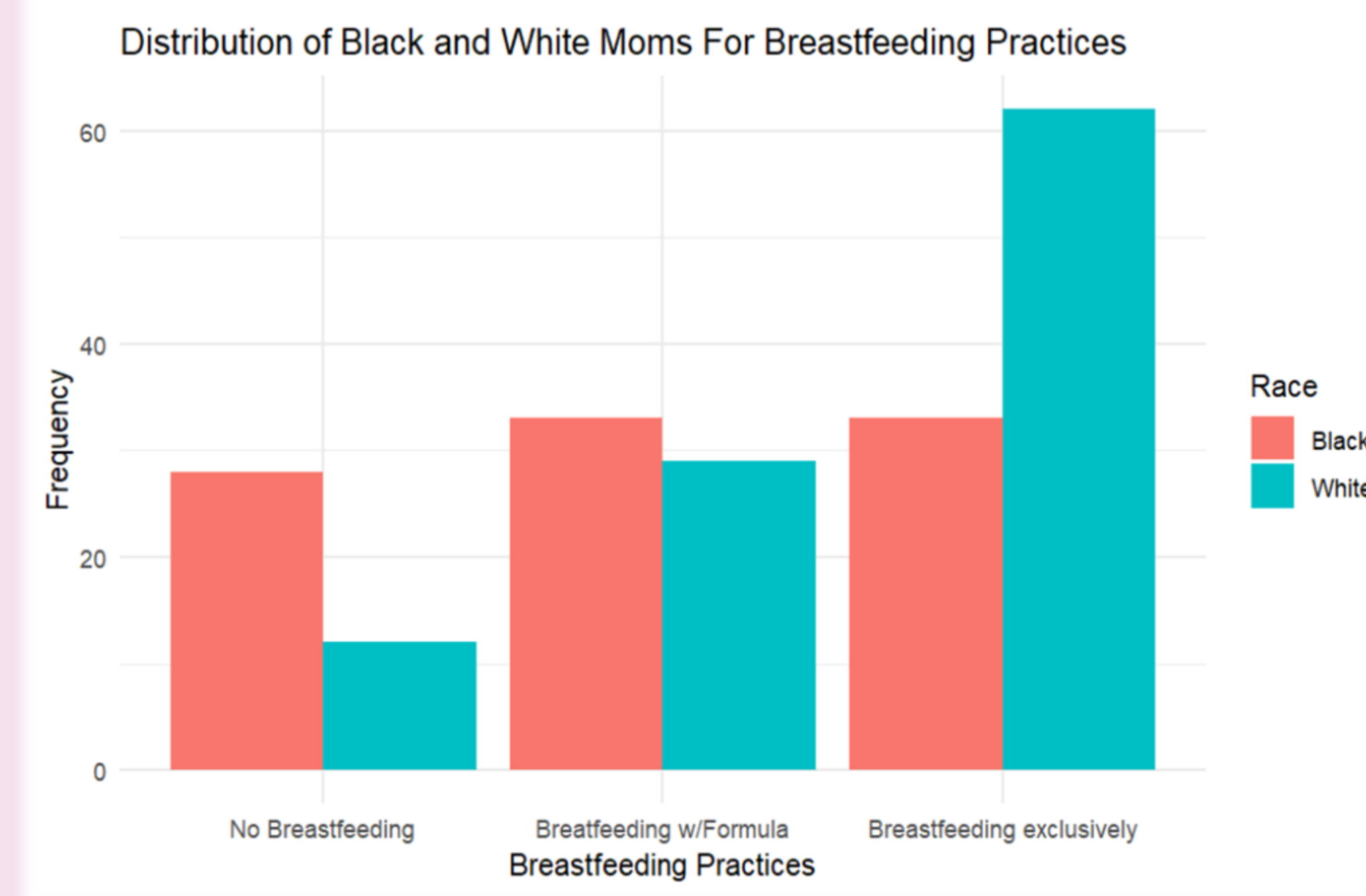
Figure 1: Demographics Table

In terms of education and income, Black women reported a lower education status and income level than white women on average at postpartum.

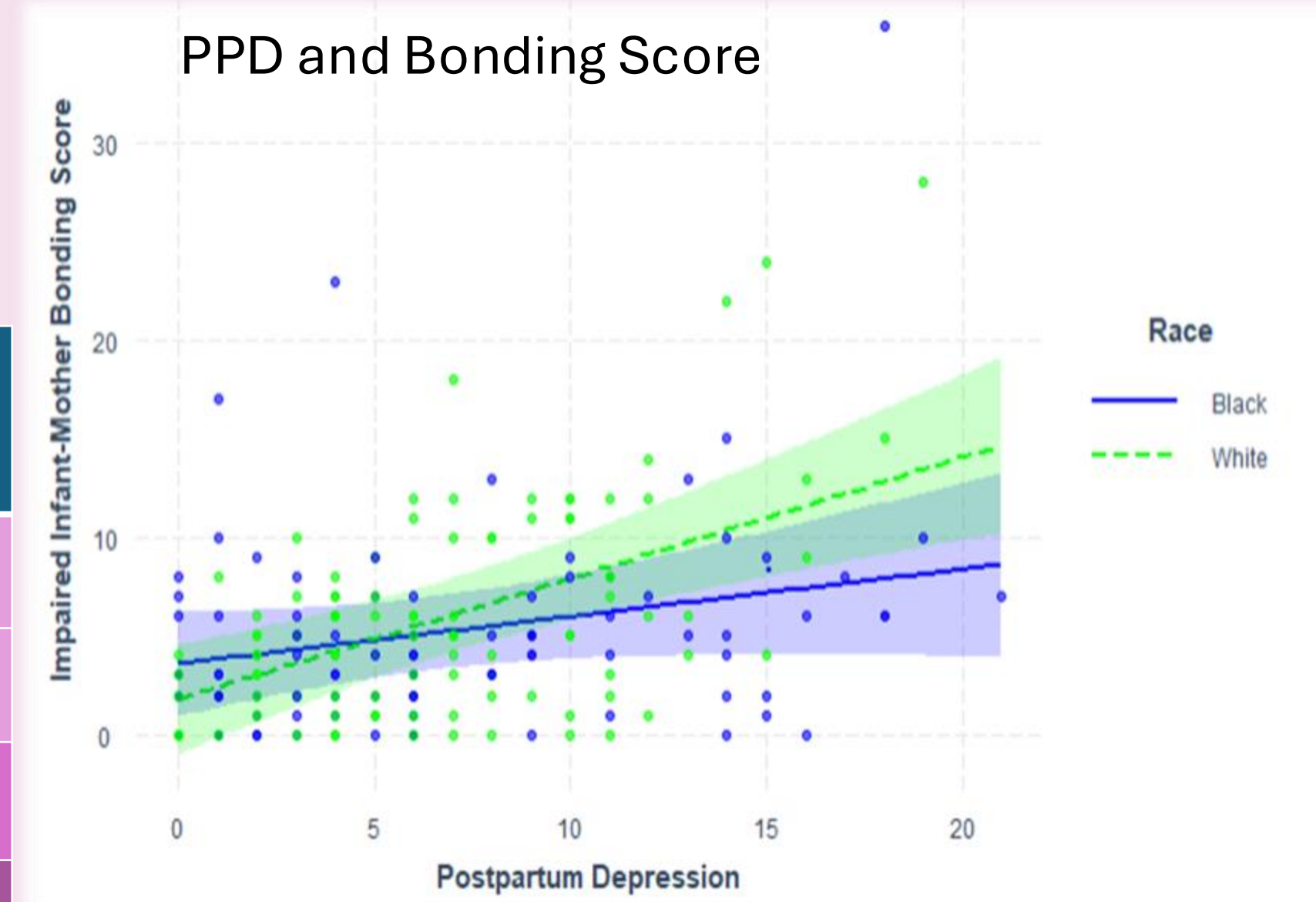
Income	Total (n=197)	Black (n=94)	White (n=103)
<20k	28 (14.2%)	26 (27.7%)	2 (1.9%)
20-60k	46 (23.4%)	40 (42.6)	6 (5.8%)
60-100k	24 (12.2%)	13 (13.8%)	11 (10.7%)
>100K	99 (50.3%)	15 (16.0%)	84 (81.6%)
Education			
> BA	58 (29.4%)	52 (55.3%)	6 (5.8%)
BA Degree	59 (29.9%)	22 (23.4)	37(35.9%)
GA Degree	80 (40.6%)	20 (21.3%)	60 (58.3%)

Figure 2: Breastfeeding Practices Bar Graph

Significant difference in No Breastfeeding ($p<0.01$) and in Breastfeeding exclusively ($p<0.001$) at postpartum.



Results



$B=0.62, SE=0.15, p<0.001$

Figure 3: PPD and Bonding Scatter Plot

Postpartum depression was significantly associated with impaired bonding status and the effect was larger for white women in postpartum.

Discussion

There was no significant difference found between breastfeeding or COVID-19 general worries on bonding score.

Reasons mothers said they did not breastfeed:

Answers were provided in the 12-month survey. 52 Mothers gave an answer, and some provided more than one.

- Insufficient supply of milk: 29.6%
- Baby not latching: 25%
- Medical reasons: 19.2%
- Work: 15.3%
- Child disinterested: 0.09%
- Covid worries: 0.04%
- Lack of support: 0.02%

Study limitations:

- Small sample size.
- Since we did not specifically ask for reasons why, we cannot make any assumptions on the reasons why mother breastfed or not.
- Postpartum is a range, so not all mothers completed the survey at the same exact timeframe.

Future directions:

- Analyze income and education levels and examine if mothers of lower socioeconomic status have lower rates of breastfeeding.
- Health care professionals and research can work together to create informational programs that educate mothers on the importance of breastfeeding.
- Ensuring that workplaces create a workplace environment that encourages mothers to breastfeed (e.g. having lactation rooms, breaks to pump, and separate storage places).

Acknowledgements and References

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References

