



Background

- Breastfeeding has known benefits to mothers and infants.¹
- Factors contributing to breastfeeding are multifaceted, however, mothers who are overweight or obese are less likely to breastfeed or breastfeed for shorter durations.^{2,3,4}
- Understanding why this difference exists is needed to better support mothers of all BMIs.

The purpose of this study was to identify potential factors contributing to breastfeeding in postpartum mothers of different body-mass-index (BMI) scores.

Methods

Data for these analyses came from the parent study, "Identification of Research Priorities During the 4th Trimester."

- Mothers, ages 18-40 years who had given birth to a single infant in the past 6 months were recruited from communities in North-Central Florida.
- Participants (N=97) completed a one-time survey via REDCap.
- Survey questions included:
 - Demographics
 - Pregnancy, birth, & postpartum experiences
 - Social support
 - Depression – Edinburgh Postnatal Depression Scale (EPDS)
 - Body image perception – Body Shape Questionnaire (BSQ)
 - Relationship – Revised Dyadic Adjustment Scale (RDAS)
 - Bonding – Mother-to-Infant Bonding Scale (MIBS)

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Data Analyses

- Breastfeeding was dichotomized into a yes/no variable at the time of data collection
- BMI was calculated from maternal, self-reported current height and weight
- Depression & body shape perception were calculated as appropriate to each scale
- Demographic variables tabulated as appropriate
- Logistic regression was performed



Results

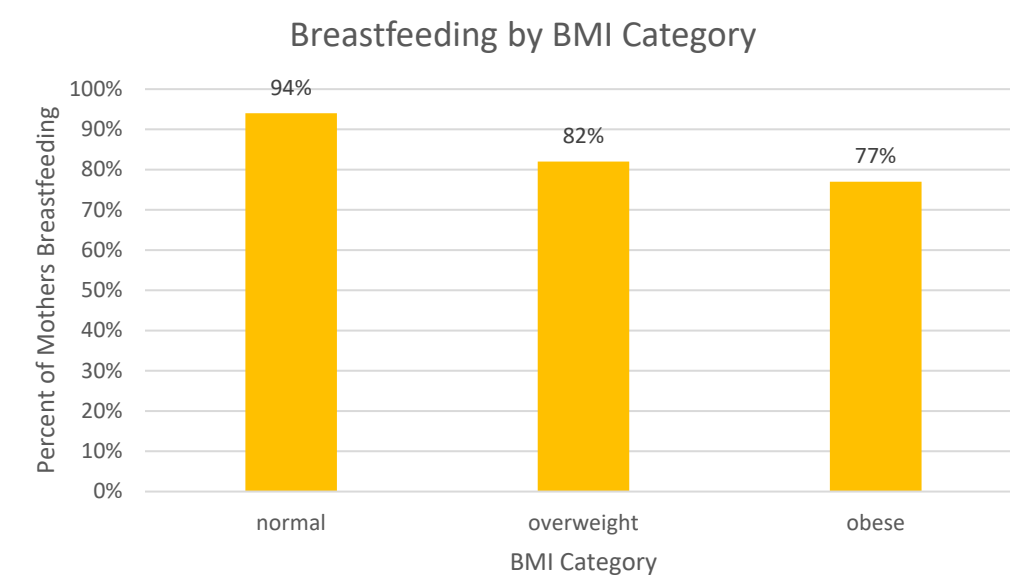


Fig 1. Controlling for baby age, depression score, body shape perception score, race, and marital status, for every 1 unit increase in BMI, odds of breastfeeding decreased by 23% ($p = 0.006$, OR 0.77, CI [0.63, 0.91]), Normal weight mothers were 9.78 times more likely to be breastfeeding compared to obese mothers ($p = 0.04$, CI [0.005, 0.81]).

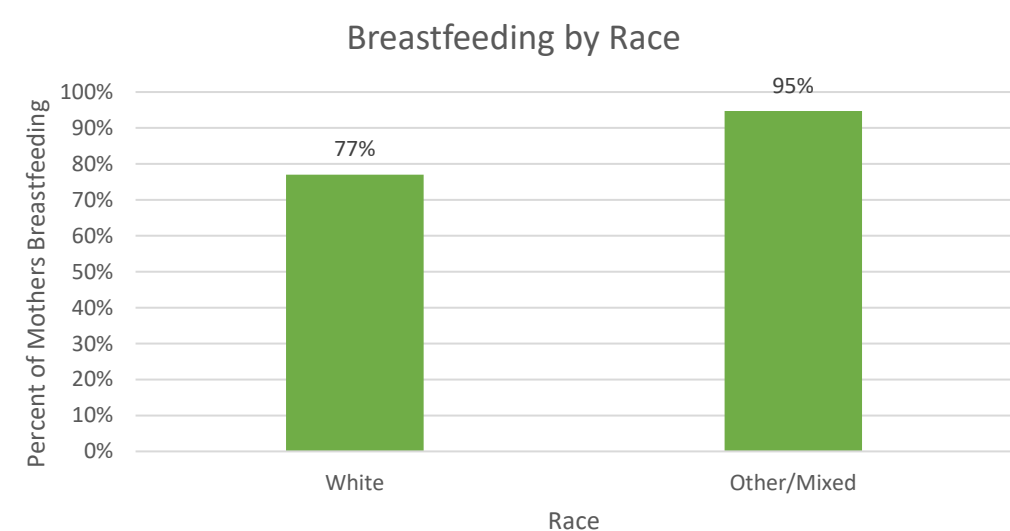


Fig 2. Controlling for baby age, depression score, body shape perception score, BMI, and marital status mothers of other/mixed race were more likely to be breastfeeding compared to white mothers ($p = 0.04$).

Table 1. Participant Characteristics (n = 88)

Variable	N	%
Maternal Race*		
White	63	75
Black	16	19
Other/Mixed	5	6
Hispanic*	18	20.7
Married [®]	73	84.9
College Graduate [#]	57	67.1
Baby sex, male	43	48.9
Vaginal birth ⁺	57	65.5
Current breastfeeding, yes [#]	70	82.4
Variable	M ± SD	Range
Mom Age, years*	30.3 ± 5.1	20 – 43
Baby Age, days	75.6 ± 54.5	6 – 202
Depression Score [^]	8.3 ± 5.2	0 – 21
Body Shape Perception [^]	21.3 ± 8.9	8 – 48

*n = 84; [#]n = 85; ⁺n = 87; [®]n = 86; [^]n = 78

BMI and Race

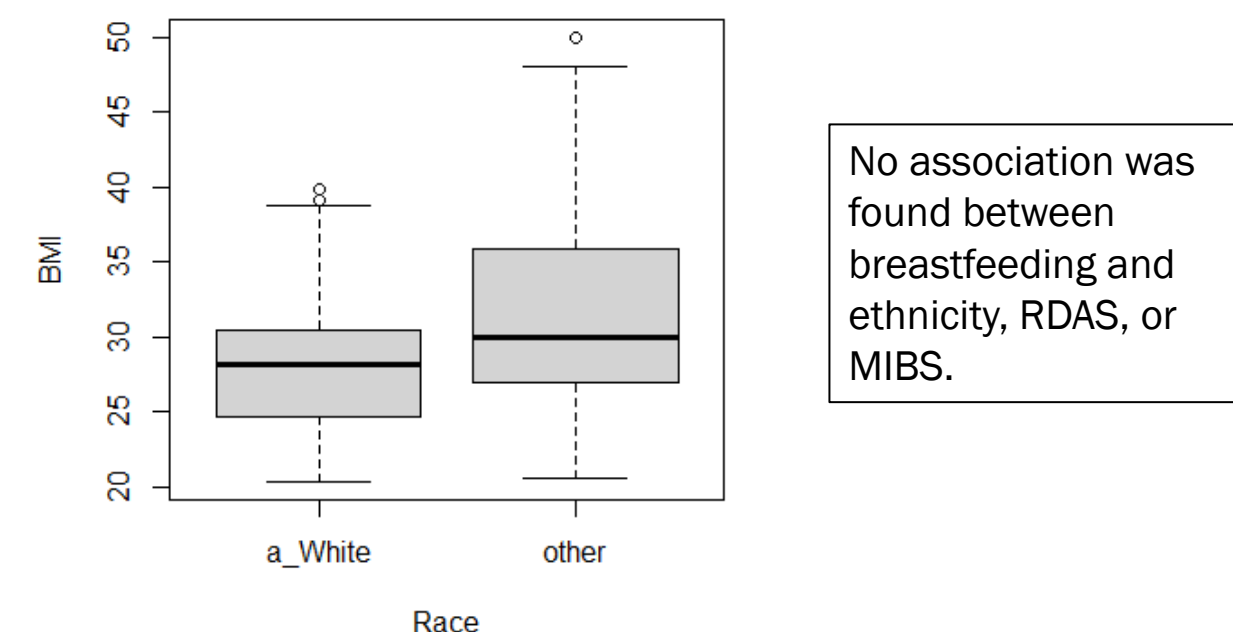


Fig 3. Mothers of other/mixed race had a higher BMI compared to white mothers ($p = 0.11$, $d = 0.56$, $M = 28.8$ vs $M = 32.4$).

Discussion

- Consistent with prior literature, there were lower odds of breastfeeding in mothers with a higher BMI.
- Clinicians need to be aware that mothers with obesity may need additional support & resources for breastfeeding.
- Mothers who identified as a race other than white had an increased odds of breastfeeding compared to white mothers, this is not consistent with literature.⁵
- The mean BMI in mothers of other/mixed race was higher than white mothers suggesting that the relationship between BMI and breastfeeding may vary among different racial groups.

Limitations

- We did not account for quantity of breastmilk provided to the infant at the time of data collection (i.e., exclusive or mixed feedings).
- Duration of breastfeeding was not analyzed.
- Maternal height and weight was self reported.

Future Directions

- More research is needed and should prioritize reasons for these differences.
- Mixed-methods analyses from informative interviews may elucidate challenges for obese mothers.

References & Contact

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