

Explaining Breastfeeding Rates Across Races and Ethnicities Using National PRAMS Dataset

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Overview

Using the Pregnancy Risk Assessment Monitoring System (PRAMS) we examine differences in breastfeeding initiation and continuation across racial/ethnic groups and contributing factors.

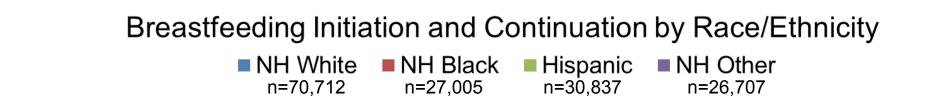
Background

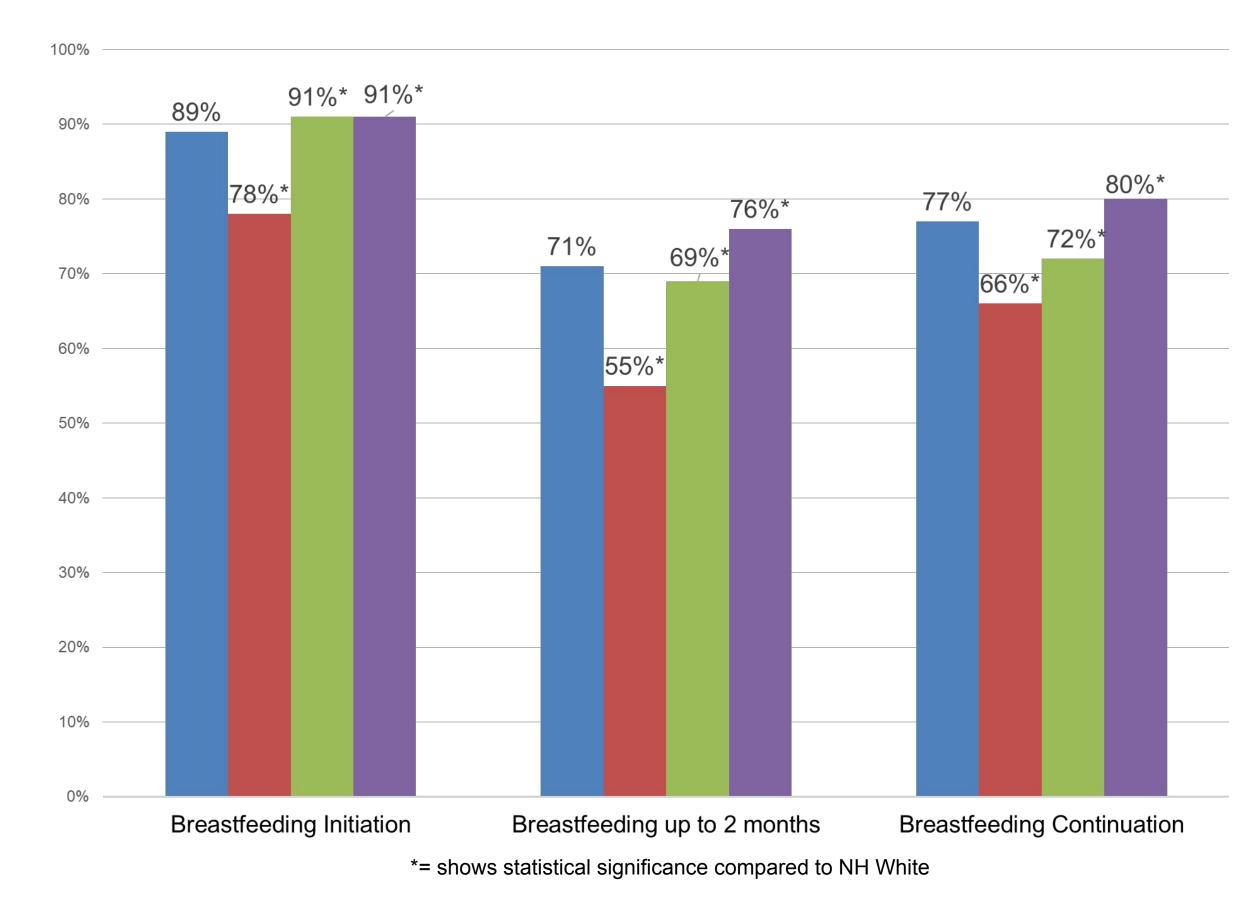
- Breastfeeding is beneficial for both mothers and infants
- Racial and ethnic minority mothers have lower breastfeeding rates than non-Hispanic White mothers
- Sociodemographic factors like income, education, insurance status, geographical region, etc. are associated with both breastfeeding and race/ethnicity.
- Other factors associated with race/ethnicity that may influence breastfeeding are WIC enrollment, prenatal care visits, and exposure to breastfeeding resources.
- This study uses a national dataset to examine whether sociodemographic and other factors explain racial/ethnic differences in breastfeeding initiation and continuation.

Methods

- We analyzed Phase 8 (2016-2020) PRAMS data (n=155,261).
- Outcomes include 1) breastfeeding initiation, 2) breastfeeding at 8 weeks, and 3) continuation of breastfeeding to 8 weeks among those who initiated (n=141,997)
- We ran bivariate and multivariable logistic regression models resulting in the unadjusted and adjusted odds ratios with 95% confidence intervals.
- Model 1 adjusted for sociodemographic factors: age, educational attainment, income, insurance status, marital status, and region.
- Model 2 additionally adjusted for: WIC status, delivery type, number of prenatal care visits, and number of breastfeeding resources.
- All variables were significantly associated (p-value<0.05) with race/ethnicity.

Results





Crude and Adjusted Odds Ratios for Breastfeeding Outcomes

Breastfeeding Outcomes	Unadjusted OR	Model 1	Model 2
Breastfeeding Initiation NH White NH Black Hispanic NH Other	1.00 (ref) .44 (.41, .47)* 1.30 (1.20, 1.40)* 1.29 (1.18, 1.40)*	1.00 (ref) 85 (.80, .92)* 2.49 (2.27, 2.75)* 1.37 (1.24, 1.50)*	1.00 (ref) .76 (.71, .83)* 2.37 (2.13, 2.62)* 1.32 (1.18, 1.47)*
Breastfeeding at 8 weeks NH White NH Black Hispanic NH Other	1.00 (ref) .50 (.48, .53)* .91(.87, .95)* 1.31 (1.24, 1.38)*	1.00 (ref) .99 (.93, 1.05) 1.60 (1.51, 1.70)* 1.35 (1.26, 1.44)*	1.00 (ref) .97 (.91, 1.03) 1.56 (1.46, 1.66)* 1.32 (1.23, 1.42)*
Breastfeeding Continuation to 8 weeks NH White NH Black Hispanic NH Other	1.00 (ref) .61 (.58, .65)* .78 (.74, .83)* 1.28 (1.20, 1.37)*	1.00 (ref) 1.07 (1.00, 1.15) 1.27 (1.18, 1.35)* 1.34 (1.18, 1.38)*	1.00 (ref) 1.08 (.95, 1.10) 1.26 (1.18, 1.36)* 1.36 (1.16, 1.37)*

^{*=} shows significance

Results Continued

Compared to non-Hispanic White mothers...

- 57% of the sample were Non-Hispanic White mothers, 14% were non-Hispanic Black mothers, 19% were Hispanic mothers, and 9% where Non-Hispanic Other mothers.
- Black mothers had significantly lower odds of initiating breastfeeding, while Hispanic and Other mothers had higher odds.
- After adjusting for the sociodemographic and other factors, the decreased odds of breastfeeding initiation among Black mothers was attenuated but still significantly lower than White mothers.
- Both Black and Hispanic mothers had significantly lower odds of breastfeeding at 8 weeks and continuation of breastfeeding to 8 weeks after initiation, while Other mothers had higher odds.
- After adjusting for the sociodemographic and other factors, associations for Black mothers were completely attenuated, while for Hispanic mothers they were reversed.

Discussion

- Our findings show that Black mothers continue to have lower breastfeeding initiation and continuation rates than other racial and ethnic groups; Hispanic mothers, on the other hand, are initiating at a high rate, but have relatively low continuation rates.
- Sociodemographic factors may explain lower breastfeeding continuation rates among Black and Hispanic women.
- However, the variables we examined did not fully account for low initiation among Black month, suggesting additional factors are contributing to the disparity.
- Further studies are needed to investigate additional factors (e.g., stigma, social support, and implicit bias) to further understand why Black mothers are initiating at such low rates.
- Moreover, studies that aim to better understand how sociodemographic factors impact breastfeeding are needed to inform intervention efforts.