

# Comparison of Breastfeeding among White and African American Patients Delivering at TJUH

Rachel Horowitz, Theresa Burcher MD, Abigail Wolf MD, Rebecca Mercier MD

Jefferson Department of Ob/Gyn

## BACKGROUND

- Maternal breastfeeding has been widely accepted as the gold standard for infant nutrition during the first six months of life.<sup>1</sup>
- Healthy People 2020 goals:
  - 89.1% initiation of breastfeeding
  - 60.6% breastfeeding for 6 months
  - 32.4% breastfeeding for 1 year<sup>1</sup>
- Global promotion of breastfeeding through Baby-Friendly Hospital Initiative
  - Started by WHO and UNICEF in 1991 to assist hospitals in facilitating and promoting breastfeeding
  - Provides education and skill building for all levels of staff
  - Recognizes hospitals providing optimal care for infant nutrition<sup>2</sup>
- While the rates of breastfeeding have increased nationally since 1990, the rates among African American women lag behind those of White and Hispanic women.<sup>3</sup>
- To determine if patterns at Thomas Jefferson University Hospital (TJUH) mirror national trends, we performed a retrospective chart review to analyze how breastfeeding rates differed between African American and White patients.
- This will provide a standard against which to measure future breastfeeding rates and trends in this patient population.

## METHODS

- Retrospective cohort study using EMR to review charts of patients who delivered at TJUH between July and December 2013.
- Exclusion criteria:
  - Infant death before first postpartum visit
  - Patient had unregistered insurance and no prenatal or postpartum care at Jefferson
- 656 charts meeting inclusion criteria were reviewed
- 523 were White or African American (total cohort)
- Of these 337 had feeding method recorded (study population analyzed)
- Secondary characteristics recorded:
  - Marital status
  - Education
  - Age
  - Insurance type (Private or Medicaid)
  - BMI upon hospital admission and at PP visit
  - Gravidity/Parity

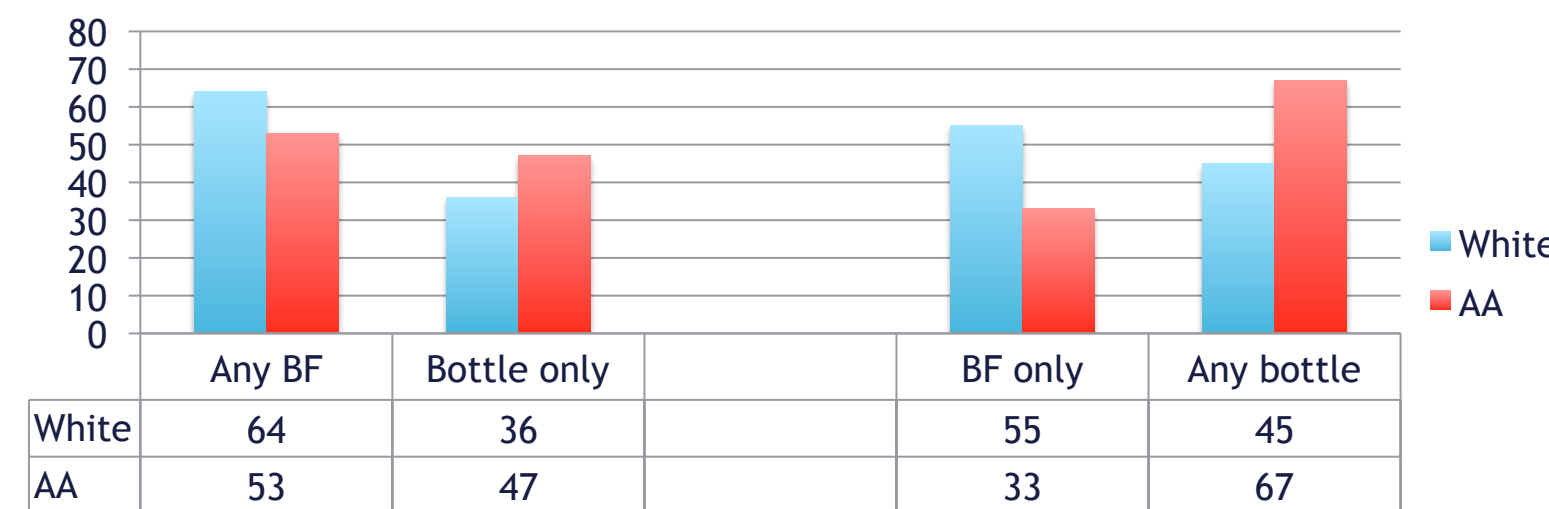
## RESULTS

**Table 1: Demographic Characteristics of Total Cohort by Race**

	Overall Sample	By Race		P value
		African American	White	
	N=523	N=342	N=181	
Age mean (sd)	27.9 (5.9)	26.6 (5.9)	30.4(5.3)	<0.01
Education: ≤ High School	156 (29.8%)	123 (35.9%)	33 (18.2%)	<0.01
Insurance: Private	230 (43.9%)	115 (33.6%)	115 (63.5%)	<0.01
Parity: First baby	136 (26%)	78 (22.8%)	58 (32%)	0.02
Marital status: Single	376 (71.9%)	290 (84.8)	86 (47.5%)	<0.01
Seen for PP visit	378 (72.3%)	247 (72.2%)	131 (72.4%)	0.97
Had BF data recorded*	337 (89.1%)	217 (87.8%)	120 (91.6%)	0.27

\* Of those with PP visit

**Figure 1: Rates of Feeding Method Compared by Race**



White patients have significantly higher rates of breastfeeding, both exclusively and in combination with bottle feeding, when looking at data unadjusted for potential demographic confounders.

**Table 2: Likelihood of AA Breastfeeding Compared to Whites**

	Unadjusted odds ratio	Adjusted odds ratio (for age, parity, insurance, marital status)
Any breastfeeding	0.62 (CI 0.39, 0.98)	0.91 (CI 0.52, 1.56)
Exclusive breastfeeding	0.41 (CI 0.25, 0.64)	0.61 (CI 0.36, 1.05)

When data is adjusted for confounders, the relationship between race and feeding method is no longer significant.

## DISCUSSION

### Conclusions

- Breastfeeding rates of Jefferson patients fall below the Healthy People 2020 goal (81.9% initiation of BF) for both White and African American patients.
- BF rates among Jefferson patients differed significantly between races:
  - Whites: 55% exclusive BF; 64% any BF
  - African Americans: 33% exclusive BF; 53% any BF
- However, this relationship is no longer significant when the data is adjusted for demographic confounders. Considering only race in looking at a patient's feeding method may overlook other important factors in this decision.

### Potential sources of error/bias

- Feeding method was self-reported by mother.
- Feeding method was determined at PP visit within 8 weeks, but exact time of visits in PP period varied between patients. Timing is not perfectly comparable to Healthy People goals.
- Due to problems with EMR, data was missing from birthlog in August 2013. It was not possible to gather data from the full 6 month period.

### Future research

- Increased discussion in the prenatal period will help clinicians understand patients' knowledge and attitudes regarding breastfeeding. This will also allow clinicians to address possible barriers to breastfeeding. Such discussion may increase patient intention to breastfeed.
- Intention to breastfeed has been shown as a stronger predictor of both breastfeeding initiation and duration than standard demographic factors.<sup>4</sup>
- A prospective randomized case control study is being planned to take place at Jefferson Dept. of Ob/Gyn and JFMA. The intervention group will have increased discussions with physicians about breastfeeding at prenatal visits. Breastfeeding intention, initiation and duration will be assessed for each group.

## REFERENCES

1. U.S. Department of Health and Human Services. Healthy people 2020. Washington, DC. Office of Disease Prevention and Health Promotion.
2. Baby Friendly USA. <https://www.babyfriendlyusa.org/>. Accessed 17 August 2014
3. Bentley ME, Dee DL, Jensen JL. Breastfeeding among low income, african- american women: Power, beliefs and decision making. *J Nutr.* 2003;133(1):305S-309S. Accessed 27 June 201
4. Donath SM, Amir LH. Relationship between prenatal infant feeding intention and initiation and duration of breastfeeding: A cohort study. *Acta Paediatrica, International Journal of Paediatrics.* 2003;92(3):352-356. Accessed 4 August 2014.