

Barriers to the Breast for Babies: A Flint Public Health Crisis

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Introduction

- ❖ The AAP supports breastfeeding as the optimal nutrition in infants up to 6 months of age, subsequently continued for up to 1 year as mutually inclined by mother and infant.
 - Research surrounding the benefits and protective effects of breastfeeding are well known:
 - Decreased maternal postpartum blood loss, rapid involution of the uterus, decreased pediatric hospitalizations for respiratory or GI infections, reduced incidence of SIDS and allergic diseases.
 - Public health benefits include reduction in chronic diseases:
 - Hypertension, cardiovascular disease, leukemia, asthma, lymphoma and obesity.
- ❖ Despite these benefits, many families are still partial to formula feeding over breastfeeding.
- ❖ In 2020 Healthy People, the national target goal of breastfeeding rates were 81.9%. As of 2019, Flint community's breastfeeding rates at Hurley Medical Center (HMC) were 69.1%.

Our Research Learning Objectives:

1. Assess the barriers preventing successful breastfeeding in the Flint community
2. Identify socio economic disadvantages that deter Flint mothers from choosing breastfeeding
3. Design a framework in which mothers of Flint communities will be better supported based upon identified barriers

While it is known that the Flint community has faced ongoing adversity since the Flint water crisis of 2014, the goal of this study is to understand the unique barriers this resilient community faces. The goal being better public education, resources, support and ultimately improving breastfeeding rates within the community of Flint, Michigan, thereby to optimize the nutritional health in the children of this population.

Results

For those who are pregnant:

- 29.9% breastfeeding
- 29.9% formula feeding
- 27.1% both
- 13.0% unsure

*Prior to giving birth, pregnant women are roughly split in their decision to formula feed. ½ plan to breastfeed, ½ plan to formula feed and ½ are planning on using both.

However, after birth it appears that there is a change in choice where a significant amount of mothers now choose to formula feed or both, breastfeeding being the lowest percentage.

What is influencing this outcome?

For those who have already given birth:

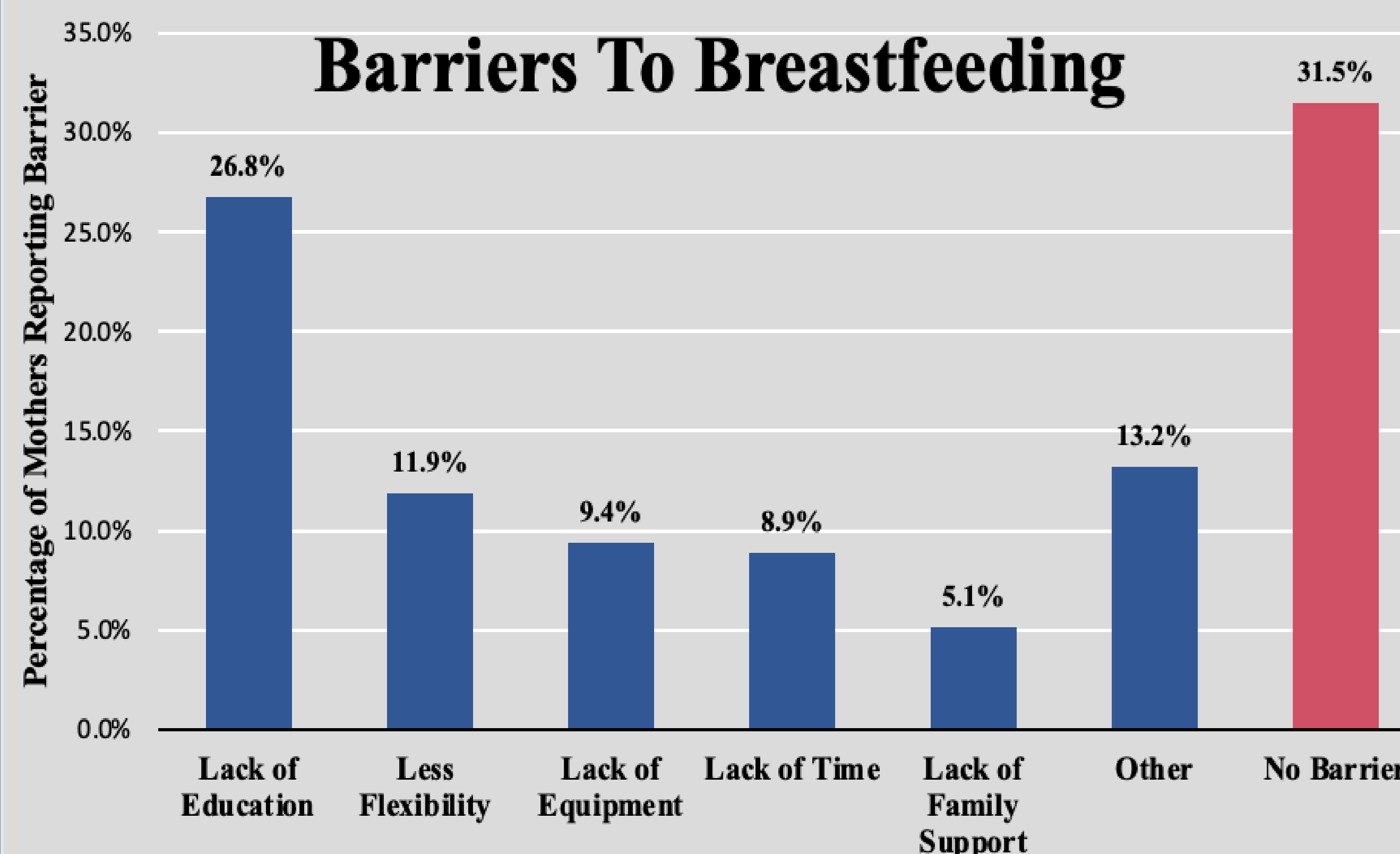
- 11.7% breastfeeding
- 41.7% formula feeding
- 46.7% both

Results - Graphs & Tables

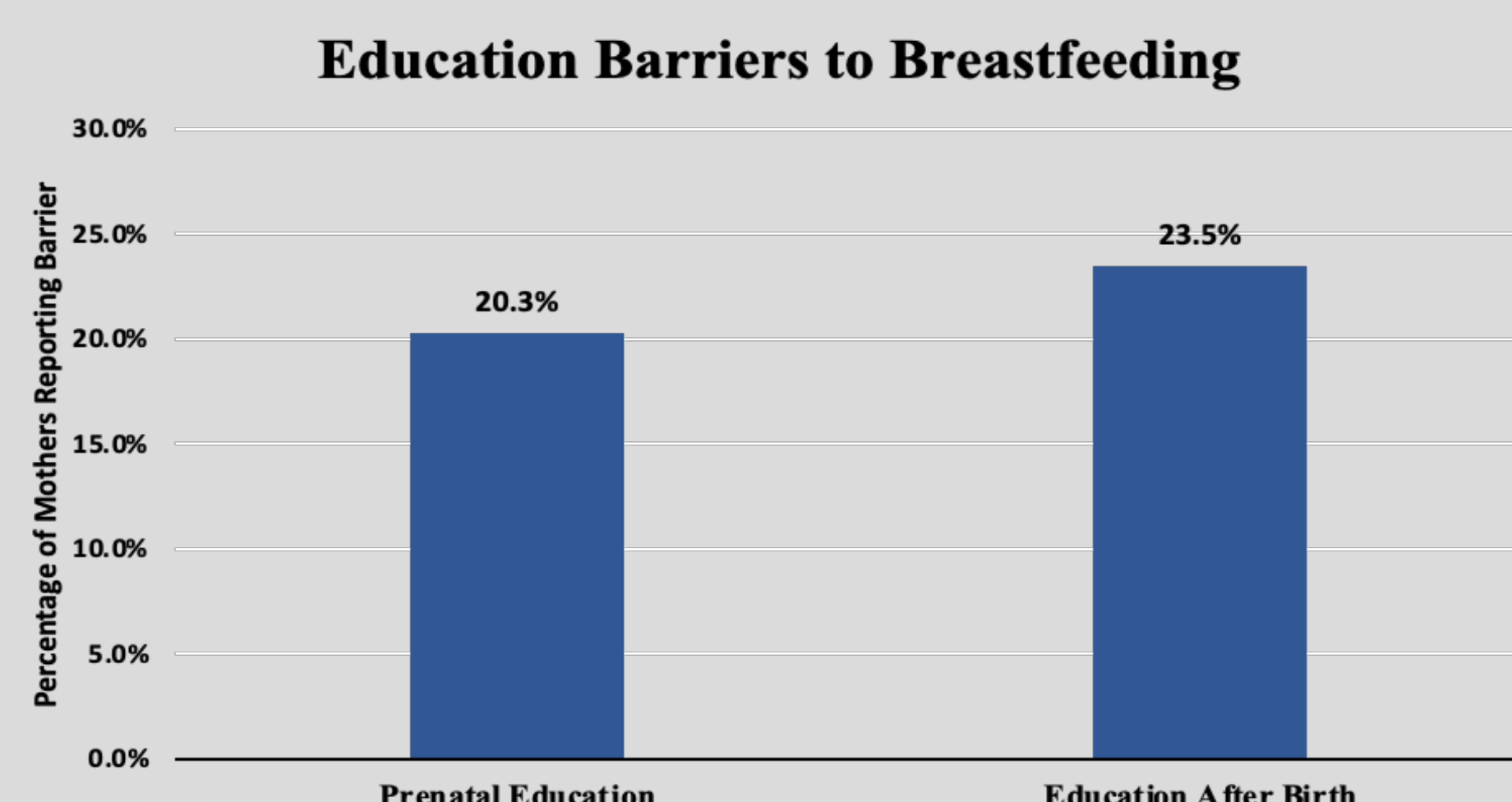
Table 1. Survey Respondents' Background Characteristics

	Characteristic	Percentage	Number
Status	Pediatric Clinic	34%	n=80
	OB/GYN Clinic	66%	n=155
Race	African-American	42.3%	n=94
	White	45.9%	n=102
	Other race	11.7%	n=26
Number of Previous Children	None	32.3%	n=74
	1-2	46.3%	n=106
	3-4	13.1%	n=30
	4+	8.3%	n=19
Receives WIC Services	Yes	85.6%	n=184
	No	14.4%	n=31

Graph 1. Barriers that Influence Feeding Choice



Graph 2. A Closer Look into the Education Barriers



Discussion/Conclusion

Discussion:

- ❖ In our survey, it appears that prior to giving birth, most pregnant women are fairly evenly split in terms of their choice of feeding methods.
 - Majority of population sample were either White or African American, majority have appeared to have previous children (67.7%) and majority, 85.6%, are recipients of the special supplemental Nutrition Program for Women, Infants and Children (WIC).
- ❖ After birth, nearly half, choose formula feeding in lieu of breastfeeding which was only 11.7%, lowest out of all the choices significantly.
 - Of note, In 2020 Healthy People, the national target goal of breastfeeding rates was 81.9%
 - Why such a significant change during this transition?
- ❖ When looking at the barriers, aside from the majority who selected “no barriers”, **lack of education** was chosen as the highest addressable barrier that influenced feeding choice marked at 26.8%.
- ❖ With lack of education as the highest addressable barrier, this survey examined where education occurred:
 - Slightly higher education occurred in the post-natal setting in the pediatricians office - 23.5%
 - In comparison in the pre-natal setting in the OB/GYN office - 20.3%

Conclusions:

1. There is a significant shift towards formula feeding in lieu of breastfeeding after giving birth.
2. With the highest addressable barrier identified as lack of education in both the obstetrician's and pediatrician's offices, there is an opportunity for growth for physicians and ancillary staff to support mothers in their breastfeeding journey. Education could include:
 - a. Self-study on ways to teach and support mothers
 - b. Visible reminders to address breastfeeding education during prenatal care
 - c. Traditional lactation consultant classes/certifications
 - d. Awareness and access to local community resources to address specific concerns (e.g. specialized breastfeeding clinics)

References

1. American Academy of Pediatrics. Section on Breastfeeding. [Breastfeeding and the Use of Human Milk external icon](#) . *Pediatrics*. 2012;129(3):e827-841. DOI 2011-3552. Accessed April 2021
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3. Healthy people 2020: Breastfeeding objectives. (n.d.). Retrieved April 26, 2021, from <http://www.usbreastfeeding.org/p/cm/ld/fid=221>