

Perception and Practices of Breastfeeding in Dominican Mothers in the Dominican Republic

Kylie Mena, MD; Rafael Mena, MD; Laura Ward, MD, IBCLC; Chunyan Liu, MS; Shelley Ehrlich MD, ScD; Javier Gonzalez del Rey, MD, MEd; Amy Rule MD, MPH



Background

Breastfeeding has shown to provide the optimal nutrition, offering many benefits for both infants and their mothers.

Breast milk is associated with decreased risk of respiratory and gastrointestinal infections, otitis media, childhood leukemia, and obesity. Additionally, breastfeeding enhances cognitive and psychomotor development. Maternal benefits include a decreased risk of postpartum hemorrhage and postpartum depression, and reduced risk of some cancers and the development of type 2 diabetes. As a result, exclusive breastfeeding for at least the first 6 months is the recommendation of the American Academy of Pediatrics and the World Health Organization.

In the 2013 report from Encuesta Demográfica y de Salud, six-month exclusive breastfeeding rates within the Dominican Republic (DR) were only 7% despite report that 82% of babies less than two months had received breast milk. Multiple studies suggest early initiation of complementary foods in the DR could be contributing to the low exclusivity rates.

Objectives

- Explore current practices in infant feeding in the DR while assessing facilitators and barriers to exclusive breastfeeding.
- Evaluate breastfeeding perceptions and knowledge gaps in the DR. Stratify data based on demographics to determine whether there are significant differences in practices, facilitators, barriers, and knowledge about infant feeding.

Methods

- **Location:** Hospital Maternidad Nuestra Señora de la Altagracia in Santo Domingo, Dominican Republic
- **Study population:** Mothers in the NICU and post-partum unit who spoke Spanish or English.
- **Study Type:** Cross-sectional survey that explored infant feeding practices and perceptions surrounding infant feeding.

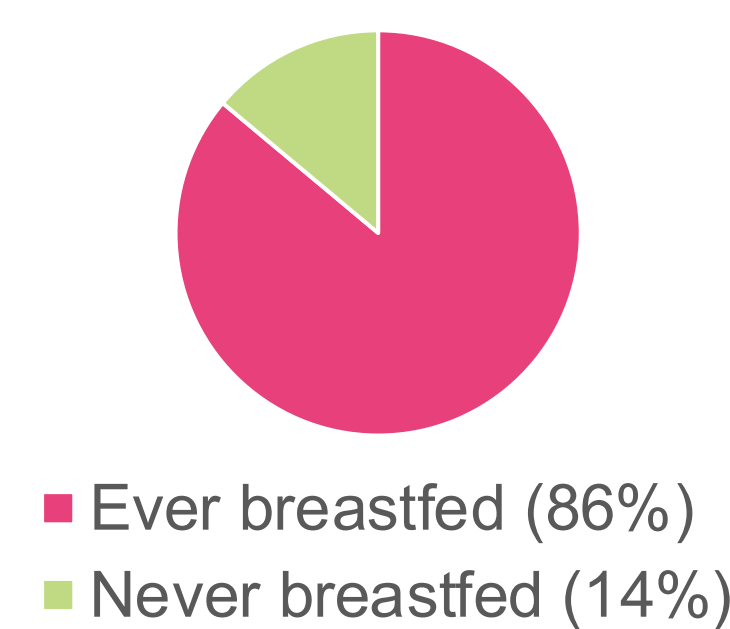
Demographics

Table 1 (n=79)	
Mean Age	27.4 years (range: 14-41)
Median gravidity	2 (range: 1-10)
Median parity	2 (range: 1-10)
Demographic Data	Percent
Country of Origin:	
Dominican Republic	87%
Haiti	11%
Peru	1% (1 participant)
Reported Financial Insecurity	79%
First time mothers	31.6%
Mothers with ≥1 premature infant	28%
History of C-Section	90%

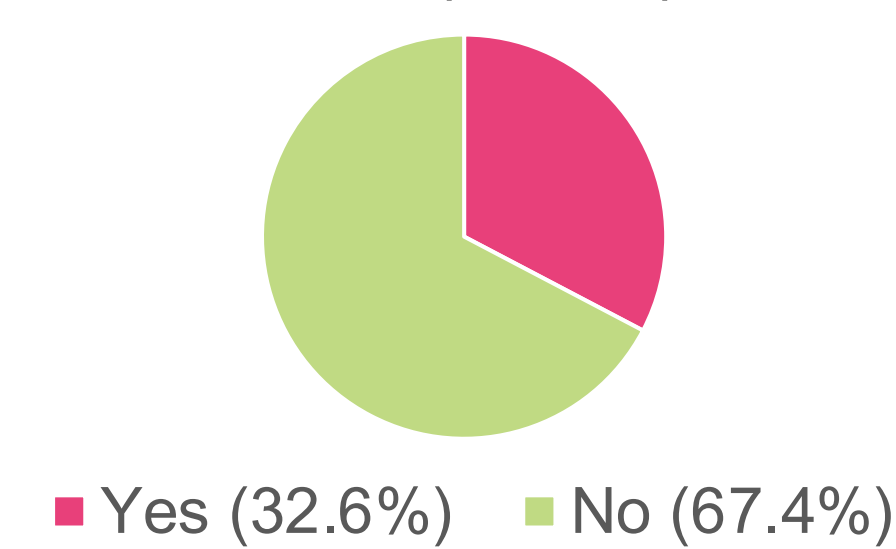
Results

PRACTICES

Breastfeeding Experience (n=79)



Ever Exclusive Breastfeeding Rate (n=52*)



*Includes mothers who breastfed with 1+ child >6mo and who answered questions regarding longest duration of breastfeeding and complementary food introduction

No significant differences in exclusive breastfeeding when comparing country of origin (p=0.39) or mothers of premature infants with term (p=0.74)



56% decided to breastfeed before baby was born and 39% decided while in the hospital.

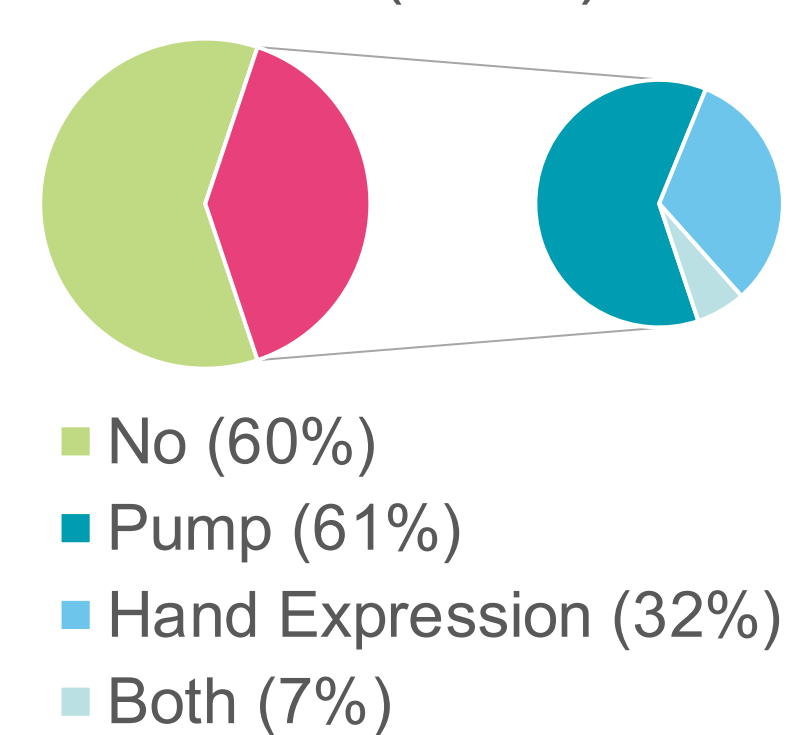


70% endorsed receiving education in prenatal visits, 87% of those moms felt it influenced their feeding decisions

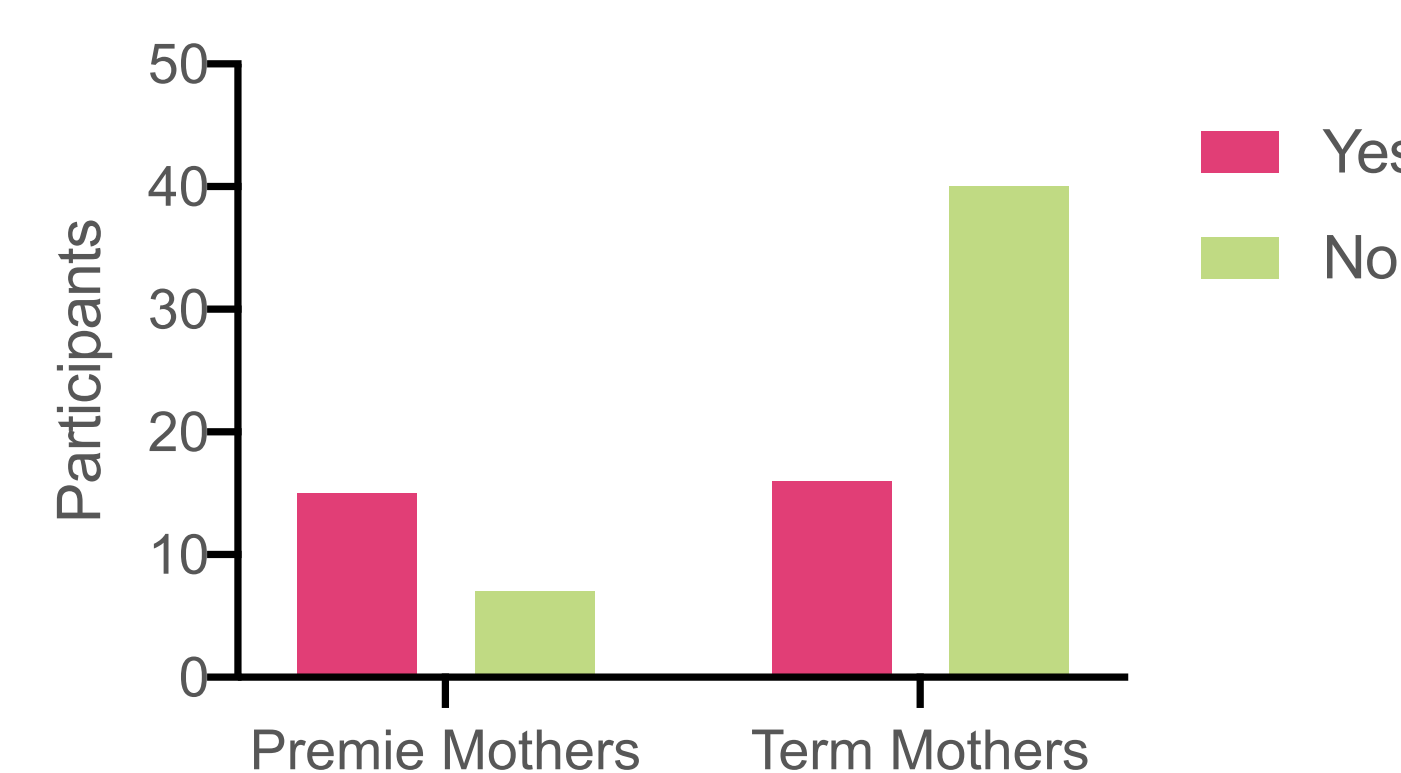


Most cited reason for breastfeeding discontinuation was that baby weaned themselves 44%.

History of Expressing Breast Milk (n=78)



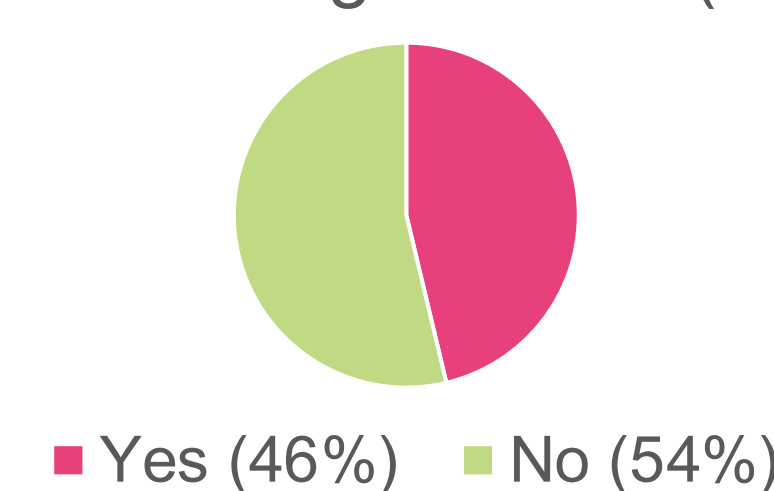
History of Expressing Breast Milk (n=78)



Mothers of premature infants are 5x **more likely** to have expressed breast milk (p=0.0019) and to have had difficulty pumping (p=0.037).

Haitian-born mothers are 7x **less likely** to express breast milk compared to Dominican-born mothers (p=0.045)

Formula Supplementation in Breastfeeding Mothers (n=67)

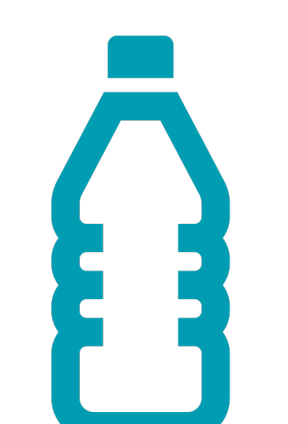
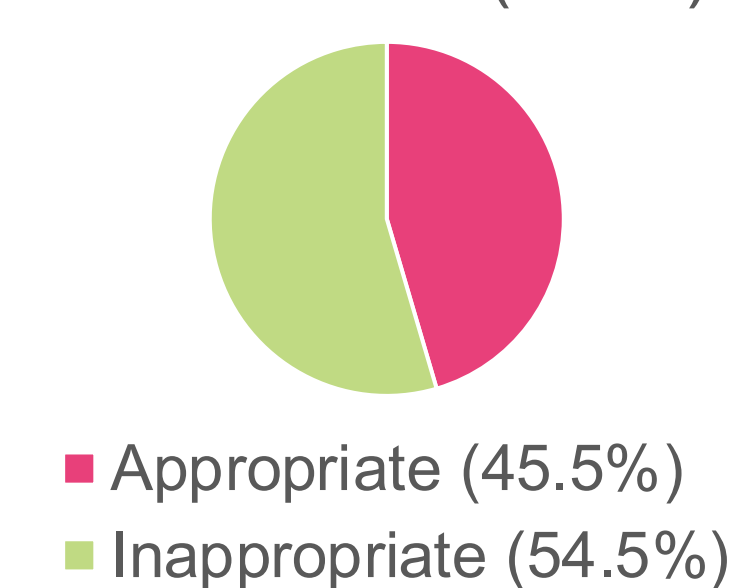


45% of mothers who supplemented reported introducing formula soon after infant was born with 18% starting after 6 months of age

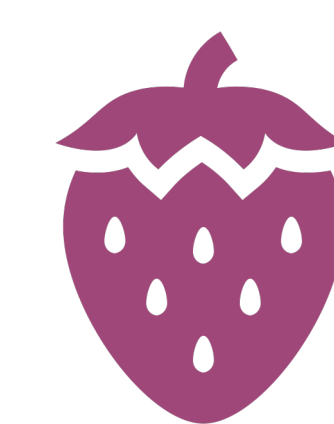
Majority (78%) endorsed using formula for >1 month

55% of mothers endorsed using formula because of perceived low milk supply

Complementary Food Introduction (n=55)



44% gave infants water between 0-3 months of age



15% of participants introduced baby foods 0-3 months of age

No significant differences in complementary food introduction when comparing country of origin (p=0.5) or mothers of premature infants with term (p=0.5)

Results (cont.)

PERCEPTIONS

- ✓ 93% of mothers appropriately agree breastfed infants are healthier than formula fed infants
- ✓ 99% agree breast milk is the ideal nutrition for infants
- ✓ 95% of mothers agreed breast milk is easier to digest
- ✗ 81% of mothers **incorrectly** believe mothers have all the milk they need on the day infant is born
- ✗ 69% of participants **incorrectly** thought that the nutritional benefits of breastfeeding only last until infant is weaned
- ✓ 97% of participants thought breastfeeding improves bond between mother and infant
- ✓ 52% believe formula is best if mother is to work outside the home with 59% feeling breastfeeding makes it hard to return to work. Mothers of multiple children, however, are more likely to disagree with these statements compared to mothers of one child (p=0.027, p=0.012 respectively).
- ✓ 53% think it is hard to tell when a breastfed infant is satisfied

Conclusions

- This population had similar breastfeeding initiation rates as prior studies, but a higher exclusive breastfeeding rate than expected.
- Most participants view breastfeeding in a positive light, though have high rates of formula use despite high levels of financial insecurity.
- Opportunities for improving breastfeeding exclusivity include prenatal education with emphasis on breastmilk expression, complementary food and water introduction, and expectations for milk supply.
- Future studies should focus on those opportunities and explore the impact of financial insecurity on breastfeeding

Acknowledgements

- Thank you to The Global Health Center and the GROW Award committee for funding my travel and supplies including incentives for participants.
- Thank you to the faculty and staff at Hospital Altagracia for supporting this endeavor.



Kylie Mena packaging diapers to provide to mothers participating in the study.