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### Starting off on the Right Food: The Role of Lactation Support in Breastfeeding Initiation and Continuation

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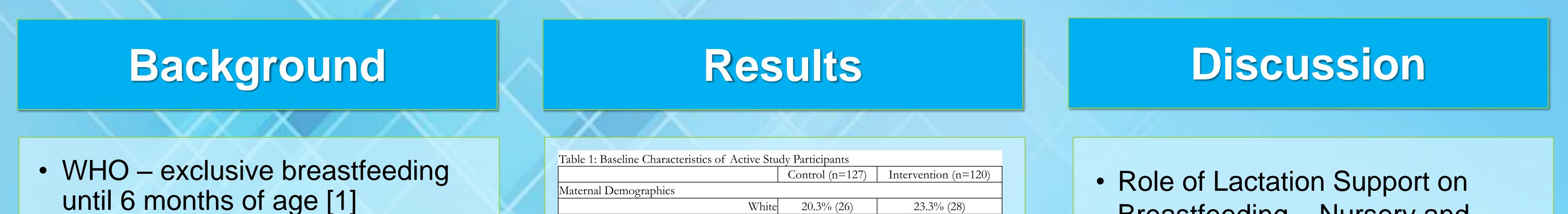
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# Starting off on the Right Food: The Role of Lactation Support in Breastfeeding Initiation and Continuation Rajan, P., Lenhart, C., PhD, Brown, K., M.D. Lehigh Valley Health Network, Allentown, Pennsylvania



- **Breastfeeding Benefits** [2]
  - Decreased morbidity and mortality of infectious diseases in childhood
  - Moderating early infant weight gain  $\rightarrow$ future obesity
- Early Termination of Breastfeeding – lactation and nutritional concerns [3], In-hospital formula feeding[4]
- LVHN- Baby-Friendly Hospital [5]
- Role of Lactation Consultant in Prenatal and Postnatal Setting [6,

## **Problem Statement**

This study investigated the relationship between duration of breastfeeding and encounters with the lactation consultant in both the nursery and the clinic.

| White                                    | 20.3% (26)         | 23.3% (28)         |
|--|--------------------|--------------------|
| Black/African American*                  | 7.1% (9)           | 15.8% (19)         |
| Hispanic                                 | 74.0% (94)         | 63.3% (76)         |
| Age                                      | 25.6 yrs (5.0 yrs) | 25.9 yrs (5.4 yrs) |
| Completed high school or less            | 55.9% (71)         | 50.0%(60)          |
| Employed Full time Pre-baby              | 45.7% (58)         | 43.8% (53)         |
| Employed Full Time Post-Baby             | 3% (4)             | 1.7% (2)           |
| Overall health is excellent/very good    | 57.4% (73)         | 58.3% (70)         |
| First Time Breastfeeding                 | 41.4%(53)          | 44.2% (53)         |
| Household Demographics                   |                    |                    |
| Parents co-parenting in single household | 78.7% (100)        | 75.6% (90)         |
| Child's parents married to each other    | 28.3% (36)         | 26.9% (32)         |
| WIC participants                         | 81.0% (102)        | 75.0% (90)         |
| Household income $\leq$ \$20,000         | 44.1% (52)         | 39.5% (45)         |
| Experienced food insecurity              | 40.9% (40)         | 33.6% (40)         |
| Infant Birth Statistics                  |                    |                    |
| Weeks of gestation at birth              | 39.4 (1.1w)        | 39.5 (1.1w)        |
| Vaginal delivery                         | 74.0% (94)         | 75.0% (75)         |
| *P<0.05                                  |                    |                    |
|  |                    |                    |

The control and intervention groups were wellbalanced, with the exception of the demographic characteristic of African-American race.

| Table 2: Participation in Breastfe                         | eeding (from surve             | ey responses)          |         |         |
|--|--------------------------------|------------------------|---------|---------|
| Proportion of Moms<br>breastfeeding at each time<br>point: | Among<br>Intervention<br>Group | Among Control<br>Group | Chi^2/t | Р       |
| <b>r</b>   | % (N)                          | % (N)                  |         |         |
| Ever breastfed this baby                                   | 79.2% (95)                     | 89.0% (113)            | 4.47    | < 0.05* |

Breastfeeding – Nursery and Clinic

- Limitations Loss to Follow Up, Sample Size, Standard but not **Routine Care**
- Further Work Prenatal Counseling, Measurement of **Baby-Friendly Initiatives, Larger** Sample Size with Routine Counseling
- SELECT Principles Primary Care Intervention

Methods

| 400 Women and Infants Enrolled in the Primary Care            |
|---|
| <b>Obesity Intervention Study Between July 2016-July 2017</b> |

| 280 Women and Infants Active at 6 Month  | าร |
|--|----|
| 30% of Original Cohort Lost to Follow Up |    |

**247 Women and Infants Eligible For Inclusion** in Breastfeeding Study

Inclusion:

| At 6 months | 21.0% (25) | 18.9% (24) | 0.005 | 0.95 |
|-------------|------------|------------|-------|------|
|-------------|------------|------------|-------|------|

There was a statistically significant difference in rate of initiation of breastfeeding in the control group versus the intervention group. No difference existed at 6 months.

| Table 3: ANOVA                              | Compa | risons of | Duration of E | Breastfeed | ling        |              |
|---|-------|-----------|---------------|------------|-------------|--------------|
|   |       |           |               |            | Tukey's HSI | D            |
| Group                                       | п     | Mea       | an (weeks)    | SD         | Not Seen    | Nursery Only |
| Intervention<br>A) Not Seen<br>by Lactation |       | 12        | 11.29         | 9.05       |             |              |
| B) Seen in<br>Nursery Only                  |       | 69        | 11.01         | 9.18       |             |              |
| C) Seen in<br>Nursery and<br>Clinic         |       | 11        | 11.09         | 7.76       |             |              |
| Control<br>A) Not Seen<br>by Lactation      |       | 11        | 9.27          | 8.82       |             |              |
| B) Seen in<br>Nursery Only                  |       | 93        | 9.43          | 8          | 0.9         |              |
| C) Seen in<br>Nursery and<br>Clinic         |       | 11        | 15.96         | 8.27       | 0.13        | 0.03*        |
| Total                                       |       |           |               |            |             |              |
| A) Not Seen                                 |       | 23        | 10.33         |            | 9           |              |

### Conclusions

In alignment with the WHO guidelines regarding infant nutrition and the Baby-Friendly designation, lactation counseling should function as a routine part of postnatal care both in the clinic and nursery, as demonstrated by a small sample size of mother-infant dyads in this study.

Further work should be pursued to elucidate its role in a larger sample size and in the prenatal setting.

### REFERENCES

1. Infant and Young Child Feeding: Model Chapter for Medical Students and Allied Health Professionals. World Health Organization, 2003. http://www.who.int/maternal\_child\_adolescent/documents/9789241597494/en/

• Born at LVHN – for access to medical record regarding lactation consultation after delivery • Full-Term Infant (Born 37w of gestation) – for feeding and growing issues related to preterm delivery

#### Exclusion

• Born at Outside Hospital

• Born Between 34-37 weeks gestation

| by Lactation                        |     |       |      |
|-------------------------------------|-----|-------|------|
| B) Seen in<br>Nursery Only          | 162 | 10.1  | 8.56 |
| C) Seen in<br>Nursery and<br>Clinic | 22  | 13.63 | 8.56 |

There was a significant difference in the mean duration of breastfeeding within the control groups when analyzed for differences in exposure to lactation counseling (F(2, 114) =3.36, p=0.04). A significant difference in rates of breastfeeding was found between control mothers seen in the nursery when compared to those seen in the nursery and clinic (p=0.03).

- 2. Carling, Stacy J., et al. "Breastfeeding duration and weight gain trajectory in infancy." Pediatrics 135.1 (2015): 111-119. doi: 10.1542/peds.2014-1392. Epub 2014 Dec 1
- 3. Li, Ruowei, et al. "Why Mothers Stop Breastfeeding: Mothers' 9 Self-reported Reasons for Stopping During the First Year." Pediatrics122. Supplement 2 (2008): S69-S76. doi: 10.1542/peds.2008-1315i
- Chantry CJ, Dewey KG, Peerson JM, Wagner EA, Nommsen-Rivers LA. In-Hospital Formula Use Increases Early Breastfeeding Cessation Among First-Time Mothers Intending to Exclusively Breastfeed. The Journal of pediatrics. 2014;164(6):1339-45.e5. doi:10.1016/j.jpeds.2013.12.035.
- World Health Organization. "Guideline: protecting, promoting, and supporting breastfeeding in facilities providing maternity and newborn services. " (2017). Accessed January 29, 2019.
- Bonuck K, Stuebe A, Barnett J, Labbok MH, Fletcher J, Bernstein PS. Effect of Primary Care Intervention on Breastfeeding Duration and Intensity. American Journal of Public Health. 2014;104(Suppl 1):S119-S127. doi:10.2105/AJPH.2013.301360.
- Bonuck, K. A. (2005). Randomized, Controlled Trial of a Prenatal and Postnatal Lactation Consultant Intervention on Duration and Intensity of Breastfeeding up to 12 Months. *Pediatrics, 116*(6), 1413-1426. doi:10.1542/peds.2005-0435

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