**Disparities and Inequity in the Reproductive Health Continuum: A Focus on Breastfeeding**

Miriam H Labbok, MD, MPH
FACPM, IBCLC, FABM
Professor of the Practice of Public Health
Director, Carolina Global Breastfeeding Institute
Department of Maternal and Child Health
UNC Gillings School of Global Public Health
labbok@unc.edu
www.sph.unc.edu/breastfeeding

---

Or

Why is it that something that is so obviously good for health and survival continues to be controversial, under-supported, misrepresented, under-taught, and countered by so many forces, and what can we do about it?

---

**What could be achieved with increased breastfeeding NC?**

- Major causes of infant death, include Immaturity, SIDS, Pneumonia and Sepsis, would be significantly reduced
- The Death Rate from these diseases among minorities is 2-4 times higher than that of whites.
- Exclusive breastfeeding is practiced about half as often among African American moms, compared to others
- AND
- Increased Exclusive Breastfeeding would cut these death rates by about half.

---

**Marketing is a powerful player**

- Infant formula marketing, including TV ads, free samples, coupons, and even some government programs, have been implicated in undermining breastfeeding.
- The information available through magazines and media is often from industry.
- There is a reason industry puts big dollars into advertising!

---

**Which Baby is:**

- 15 times more likely to have diarrhea
- 3 times more likely to get pneumonia
- Any formula (even mixed breast and formula feeding) increases baby’s risk of pneumonia, diabetes, ear infections, lower IQ, asthma, obesity, as well as leukemia and SIDS death.

---

**Which mother is:**

- About twice as likely to get breast cancer
- Mother and child are more likely to be obese and get diabetes

---

**Most women would like to breastfeed. Why are these intentions not achieved?**

- Lack of knowledge
- Lack of peri-partum skilled support
- Lack of commitment - enhanced by marketing and media
- Lack of self-efficacy
- Lack of access to skilled support once home
- Lack of models and community examples
- Lack of paid maternity leave
- Lack of a place to turn for help in addressing the realities of daily life
NC Blueprint for Action:
Eight key recommendations for breastfeeding
V. Insurance coverage for breastfeeding care, services, and equipment.
VI. Media, social marketing and public education to promote breastfeeding.
VII. New laws, policies and regulations.
VIII. Research on breastfeeding outcomes, trends, quality of care, and best practices.

If NC communities increased culturally appropriately support to enable minority women to breastfeed, this would narrow the gap in infant deaths rates.

Take home messages
• African Americans suffer higher rates of infant death and illness.
• The specific causes of these excess deaths and illnesses ALL can be reduced with increases in exclusive breastfeeding.
• Many immigrants who breastfeed will mix-feed (non-exclusive) due to prior practices.
• Breastfeeding is about mom and baby and their lifetime health, and is not just a simple lifestyle ‘choice’ or substitute for formula feeding.
• Assumptions can be dangerous.
• Moms, both African-American and other, are not achieving their breastfeeding intentions today.
• We have identified some of the barriers and facilitators and have proven interventions.
• Resources are needed beyond the current predominantly voluntary efforts.

Outline
• Why should we be interested in breastfeeding, along with birth spacing and birthing support?
  • Disparities in breastfeeding and breastfeeding support result in unacceptable inequities in maternal and child health outcomes
  • The “Bottom Line” - For your consideration

Breastfeeding is the Heartbeat of Intergenerational Health, Development and Survival

Breastfeeding provides:
- Nutrition
- Immunization
- Oral Rehydration
- Growth and Development
- Maternal Health and Survival
- Reduced Cancer and Chronic Disease

Why should we be interested in breastfeeding, as part of reproductive health, along with birth spacing and birthing support?
• Breastfeeding saves infant and child lives
• Birth spacing reduces the risk of prematurity and LBW, and is supported by breastfeeding
• Technically, humanely and culturally appropriate birthing support contributes to positive birth outcomes.
• Breastfeeding is primarily a lifetime health intervention, not a nutrient intervention.

Lack of breastfeeding significantly associated with an increased risk of specific diseases
- acute otitis media
- non-specific gastroenteritis
- SEVERE LOWER RESPIRATORY TRACT INFECTIONS
- atopic dermatitis
- asthma (young children)
- obesity
- type 1 and 2 diabetes
- childhood leukemia
- NECROTIZING ENTEROCOLITIS
- hypertension
- high cholesterol
- SIDS
- Epigenetic deviation
- Intelligence
EBF reduces SIDS by >50%

- Controlling for:
  - SES
  - previous live births
  - birth weight of the infant
- And for the things we blame/shame parents for:
  - maternal smoking in pregnancy
  - additional heating during the last sleep
  - pillow in the infant’s bed
  - pacifier use during the last sleep
  - position placed to sleep
  - bedsharing in the last night
- Breastfeeding reduces SIDS by 50%, but it is not mentioned at all, or is the last considered in our SIDS campaigns

Breastfeeding impacts infant mortality, and we have a problem...

- Infant Mortality Rate in the US: 6.3 per 1000; Infant mortality rate in the US for African-Americans: about 13 per 1000
  - Black/White ratio: 1.9 overall
  - For educated moms >20 years old: 2.8
- Major causes of infant death in NC besides congenital anomalies: 1)
  - Prematurity/LBW, 2) SIDS, 3) respiratory infections/septicemia, all of which are significantly reduced by exclusive breastfeeding. Little difference between Whites and Minorties in other potential dangers, such as smoking and cesarean section.
- We estimate that, if breastfeeding among the African-American families could be brought to the same level as Whites, a minimum of 50-100 infant lives would be saved annually in NC.
- And hundreds of millions of dollars could be saved in health care costs in our state alone.
- AND WE ARE DOING LITTLE TO ADDRESS THESE REPRODUCTIVE HEALTH INEQUITIES.

Breastfeeding discontinuation in NC

Adapted from "Racial and Ethnic Disparities in Child Health: North Carolina 2008" Reported July 2009, CHAMP data

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy was unintended (wanted later or not at all)</td>
<td>61.2</td>
<td>36.7</td>
</tr>
<tr>
<td>Mother did not take folic acid every day before pregnancy</td>
<td>80.5</td>
<td>64.9</td>
</tr>
<tr>
<td>Unusual sleeping position for baby was not on back</td>
<td>53.1</td>
<td>31.0</td>
</tr>
<tr>
<td>Mother reported physical violence during pregnancy</td>
<td>7.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Mother did not breastfeed at all</td>
<td>41.6</td>
<td>25.3</td>
</tr>
<tr>
<td>Mother reported smoking after pregnancy</td>
<td>17.0</td>
<td>18.1</td>
</tr>
</tbody>
</table>

Multiple causes of disparities in outcomes

North Carolina Minority Health Fact Sheets 2010

<table>
<thead>
<tr>
<th>Percentages of North Carolina Women with a Recent Live Birth Who Had Selected Risk Factors, by Race/Ethnicity (Based on Weighted 2003–2007 PRAMS Survey Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Planned pregnancy?</td>
</tr>
<tr>
<td>% LBW</td>
</tr>
<tr>
<td>Infant deaths</td>
</tr>
<tr>
<td>% BF initiation (&lt;2500 g)</td>
</tr>
<tr>
<td>EBF at 3 months (at least)</td>
</tr>
<tr>
<td>EBF at 6 months (at least)</td>
</tr>
</tbody>
</table>

However, we have measurable differences by white vs minority in breastfeeding and breastfeeding preventative deaths

| 2009/2010 NC Data | Total | White | Minority | % of White
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Births (000s)</td>
<td>126.8</td>
<td>90.0</td>
<td>36.8</td>
<td>1/3 of births</td>
</tr>
<tr>
<td>Planned pregnancy?</td>
<td>54%</td>
<td>38%</td>
<td>30% less likely</td>
<td></td>
</tr>
<tr>
<td>% LBW</td>
<td>9.1%</td>
<td>7.2%</td>
<td>13.5%</td>
<td></td>
</tr>
<tr>
<td>Infant deaths</td>
<td>1006</td>
<td>487</td>
<td>519</td>
<td></td>
</tr>
<tr>
<td>% BF initiation (&lt;2500 g)</td>
<td>73%</td>
<td>79.0%</td>
<td>53.8%</td>
<td></td>
</tr>
<tr>
<td>EBF at 3 months (at least)</td>
<td>35.8</td>
<td>21.9%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>EBF at 6 months (at least)</td>
<td>14.8</td>
<td>8.0%</td>
<td>Half as likely</td>
<td></td>
</tr>
</tbody>
</table>

Outline

- Why should we be interested in breastfeeding, along with birth spacing and birthing support?
- Disparities in breastfeeding and breastfeeding support result in unacceptable inequities in maternal and child health outcomes
- The “Bottom Line” - For your consideration
WHAT WE KNOW
FOR ADVOCACY AND PROGRAM POLICY

In addition to the aforementioned risks of not breastfeeding and the potential to save at least 50-100 infant lives:

1. Calculating disability adjusted life years (DALYs) finds more than 250,000 unnecessary years of illness and reduced productivity are created annually in NC due to limited breastfeeding.

2. A review of the literature on barriers to Exclusive Breastfeeding (EBF) identified inequities in services, support, and contraceptive prescribing, and established the need for comprehensive, multi-level action, including social marketing.

3. Surveyed WIC breastfeeding support activities by county, this reflects maldistribution associated with racial profile and disclosed inequity in WIC services associated with the racial/ethnic composition of the population served.

4. Breastfeeding attitudes and values vary between white and African American church women: Black women tended not to be aware of breastfeeding advantages for women. All reported suboptimal feeding practices.

5. A community-based participatory research project to increase breastfeeding rates among African-American women in Durham, NC found the need for situations in which breastfeeding Black women might feel welcome, particularly concerned re: modesty, and that their employers were not accommodating lactation.

6. An intervention study with low-income, predominantly African American and Hispanic adolescent mothers found fear of physical discomfort, time constraints and lack of support by folks they know.

North Carolina Blueprint

We know what to do
EIGHT ACTION AREAS:
• Community activities
• Health systems
• BF Workplaces
• Child care
• Insurance coverage
• Media and Social Marketing
• Laws and regulation
• Research and evaluation

WITH ATTENTION TO SPECIFIC IDENTIFIED ISSUES TO SUPPORT AFRICAN AMERICAN MOMS AND OTHER MINORITIES

Ongoing interventions need support for sustainability

1) WIC’s efforts to address identified inequities
2) Statewide hospital-based Ten Steps assessment approach, instituted by the NC DPH endorsed by the State Hospital Association could be supported in areas of high minority populations
3) Statewide effort to increase exclusivity of breastfeeding and human milk feeding through the Perinatal Quality Collaborative, North Carolina with unpaid technical advisors
4) Addressing disparities in hospitals with targeted Ten Step support - highlighted due to joint commission
5) Addressing disparities at the childcare facilities – Breastfeeding Support in Wake County with a Focus on Childcare serving vulnerable populations
6) Addressing disparities through Community-Based Participatory work in organizations such as YWCA, churches, even clinics
7) Completing ‘intention’ studies to further elucidate barriers to achievement of breastfeeding goals
8) Target culturally appropriate social marketing on this issue to populations and providers alike

Outline

• Why should we be interested in breastfeeding, of all things?
• Current disparities in breastfeeding and breastfeeding support result in unacceptable inequities in maternal and child health outcomes
• The “Bottom Line” - For your consideration
First – People, including health care providers, moms and families, and legislators, need to be made aware of the problem, and the solutions.

Breastfeeding and birth spacing could be highlighted in health reports mentioned.

Laws could be actively implemented (P.L. 111-148 and NC legislation)
- Amends the Fair Labor Standards Act of 1938 (FLSA)
- Requires:
  - break time and place (not bathroom) for an employee to express milk as frequently as needed
- Excludes:
  - an employer with <50 employees
  - compensation for milk expression time
- Cannot preempt greater protection under state laws like ours
- BUT does not apply to everyone

Bottom Line: We know what to do.
Surgeon General’s Call to Action to Support Breastfeeding, 2011
- Call to Action to Support Breastfeeding 2011:
  Dr. Regina Benjamin
  - Continues message of need to increase attention to the support for African-American families.
  - 20 specific actions under 6 areas: Mothers/Families; Communities; Health care; Employment; Research and surveillance; Public Health Infrastructure
  - States that government has a role in actively protecting rights and equity

What is needed to save lives and reduce health care costs, to decrease disparities and increase equity in support and in health outcomes?
Just two things:
1. First and foremost — ensure that people know!!
2. Then, fund the proven interventions that will support African-American families to achieve their breastfeeding and related reproductive health intentions

How do we do this?
By providing support for proven programs across the socio-ecological framework: 1) educate/social marketing, with tested and culturally appropriate messaging, especially for African American moms and for health professionals, 2) implementing the ten steps, support in child care and workplace, and 3) ensure equity in birthing and birth spacing support

Take home messages
- African Americans suffer higher rates of infant death and illness.
- The specific causes of these excess deaths and illnesses ALL can be reduced with increases in exclusive breastfeeding.
- Many immigrants mix feed due to prior information given.
- Breastfeeding is about mom and baby and their lifetime health, and is not just a simple lifestyle ‘choice’ or substitute for formula feeding.
- Assumptions can be dangerous.
- Moms, both African-American and other, are not achieving their breastfeeding intentions today.
- We have identified some of the barriers and facilitators and have proven interventions.
- Resources are needed beyond the current predominantly voluntary efforts.

Conclusions
- Why should we be interested in breastfeeding, along with birth spacing and birthing support? Because we have a shared desire to reduce disparities in infant and child – and maternal -- health and survival
- Disparities in breastfeeding and breastfeeding support result in unacceptable inequities in maternal and child health outcomes We have the proven interventions – it is time to provide the needed support
- The “Bottom Line” - For your consideration
Change is never easy, but now is the time to address these inequities head on.
THANK YOU FOR YOUR INTEREST AND ACTION TO HELP MAKE NORTH CAROLINA THE BEST PLACE TO HAVE AND RAISE A FAMILY!

References

• NC State Health Statistics and Vital Statistics: PRAMS, CHAMPS, etc. and CDC NIS breastfeeding data
• McNeil M et al
• Please contact labbok@unc.edu for additional references