Baby-Friendly:
Policy and System Changes to Support the Breastfeeding Dyad

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Knox County Health Department

Vision
Every Person, A Healthy Person

Mission
To encourage, promote and assure the development of an active, healthy community through innovative public health practices

Initiative Funding
Project Diabetes grant funded by the Tennessee Department of Health
“Baby-Friendly”

• Baby-Friendly Hospital Initiative (BFHI)
  • US accrediting body: Baby-Friendly USA, Inc. (BFUSA)
  • www.babyfriendlyusa.org

• Baby-Friendly designation
  • Ten Steps to Successful Breastfeeding
  • International Code of Marketing of Breast-milk Substitutes
  • Healthy Full-term Infants
Summary

• Formula Culture
• Breastfeeding
• Baby-Friendly
  • International Code of Marketing of Breast-milk Substitutes
  • Ten Steps to Successful Breastfeeding
  • Myths & Misunderstandings
  • Designation Process
• Knox County Health Department Initiative
Formula History

1860’s
- Introduced in USA

Early 1900’s – 1980
- Medical professionals main advertising method
- Almost no direct-to-consumer interactions

1985
- 2 wk PP: 93% using formula knew hospital brand, 88% using it

1989
- First infant formula commercial aired

1990-Present
- Manufacturers supply educational materials, supplies, coupons and samples to obstetrician’s & hospitals

Quotes & Slogans

• “Look Out For That First Little Tooth” (1915)
• “No Doctor Can Recommend Any Better Evaporated Milk for Infant Feeding” (1940’s)
• “Ask Your Doctor Why [Our Brand] Milk is so good for babies”
• “The Food of Royal Babies”
• “Nurse your baby if you can; but if you cannot, remember that in the last 40 years, millions of babies have come to their teeth easily and naturally with the help of [our brand]”
Medical Facilities & Formula

• Free formula and supplies
• Mother baskets, samples
• Patient handouts
• Training events, conferences, speakers
• Advertisements in academic journals

Breastfeeding

“Optimal breastfeeding and complementary feeding practices can save the lives of 1.5 million children under five every year.”
World Health Organization, 2010
Breastmilk: A Living Tissue

- **Direct Immunity**
  - Maternal immune factors
    - Antibodies, white cells, lactoferrin

- **Indirect Immunity: Gut Microbiome**
  - Breastmilk lactose & oligosaccharides
    - Bifidobacterium (~75%) & Lactobaccilus
  - Human milk glycans as “decoys”

Benefits of Breastfeeding - Baby

- GI Infections¹
- Respiratory Infections¹
- Otitis Media¹
- Type 1 & 2 Diabetes¹
- Obesity¹
- Asthma¹
- Childhood Inflammatory Disease¹
- Celiac Disease¹
- SIDS¹
- Atopic Dermatitis¹
- Eczema¹
- Dental Carries¹
- Leukemia¹
- NEC & NEC Mortality¹
- Nosocomial Infections²
- Sepsis²

Benefits of Breastfeeding – Mother

- Financial Savings
- ↓ Breast Cancer¹
- ↓ Ovarian Cancer¹
- ↓ Postpartum Hemorrhage¹
- ↓ Postpartum Weight Retention¹
- ↓ Type 2 Diabetes²

The “Gold Standard”

- American Academy of Pediatrics
- American College of Obstetricians and Gynecologists
- American Academy of Family Physicians
- American Hospital Association
- Association of Women’s Health
- Obstetric and Neonatal Nurses
- Academy of Nutrition and Dietetics
- American Public Health Association
Breastfeeding Rates

<table>
<thead>
<tr>
<th>2011 Data¹</th>
<th>Ever BF</th>
<th>BF at 6 mo.</th>
<th>BF at 12 mo.</th>
<th>Exclusive BF 3 mo.</th>
<th>Exclusive BF 6 mo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP2020</td>
<td>81.9%</td>
<td>60.6%</td>
<td>34.1%</td>
<td>46.2%</td>
<td>25.5%</td>
</tr>
<tr>
<td>USA</td>
<td>79.2%</td>
<td>49.2%</td>
<td>26.7%</td>
<td>40.7%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>74.9%</td>
<td>40.7%</td>
<td>20.9%</td>
<td>39.1%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

- IBCLC’s per 1000 live births¹
  - National: 3.48; Tennessee: 2.21
- % Breastfed infants receiving formula before 2 days of life¹
  - National 19.4%; Tennessee: 22.3%
- International Comparisons²
  - Rwanda 88.4% exclusive BF at 6 mo
  - Denmark, Sweden, Norway ~100% ever breastfed

“Such empowerment [of mothers] involves the removal of constraints & influences that manipulate perceptions & behavior towards breastfeeding, often by subtle & indirect means.”

Innocenti Declaration, WHO/UNICEF 1990
Baby-Friendly: Brief History

• Started in 1991 – Response to Innocenti Declaration
• Global effort by WHO and UNICEF to “protect, promote and support breastfeeding”

Based on:

• The Ten Steps to Successful Breastfeeding (WHO/UNICEF, 1989)
Today

Worldwide
• 152 Countries\(^1\)
• 20,000 hospitals\(^2\)

United States\(^2\)
• 243 Hospitals representing 46 states and DC
• Delivery rates improving
  • 2.9% of deliveries were in Baby-Friendly hospitals in 2007
  • 11.36% today (Healthy People 2020 goal 8.1%)

Tennessee\(^2\)
• Erlanger Baroness Campus – Hospital (2014)
• Lisa Ross Birth & Women’s Center – Birthing Center (1998)

International Code of Marketing of Breast-milk Substitutes
Marketing Breast-milk Substitutes

• Legitimate market for formula
• Traditional marketing unsuitable
• No direct marketing, samples, gifts, misleading information

• Adopted by vote of 118:1
  • United States has taken no action
  • Law in: Afghanistan, Brazil, India, Nepal, Pakistan, Tanzania, Uganda & others
  • Many provisions: Australia, China, Denmark, Finland, France, Germany, Italy, Mexico, Sweden, United Kingdom & others

(2) UNICEF. *National implementation of the international code of marketing of breastmilk substitutes*. New York, April 2011.
Ten Steps to Successful Breastfeeding

Knox County Health Department

Every Person, A Healthy Person
1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

2. Train all health care staff in the skills necessary to implement this policy.

3. Inform all pregnant women about the benefits and management of breastfeeding.

4. Help mothers initiate breastfeeding within one hour of birth.

5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast-milk, unless medically indicated.

7. Practice rooming in - allow mothers and infants to remain together 24 hours a day.

8. Encourage breastfeeding on demand.

9. Give no pacifiers or artificial nipples to breastfeeding infants.

10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.
1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.

- 20 hours of training
  - 15 sessions & 5 hr clinical skills

- Training Resources
  - IBCLCs
  - Facility designed modules
  - Online providers

3. Inform all pregnant women about the benefits and management of breastfeeding.

- Having “meaningful discussion” is key
- Antenatal education most effective when informal, one-on-one, trained professional or peer support
- Hands-Off Technique
- ACA and JC standards

Early Termination

• Concerns that milk production is insufficient (45%)
• Belief that breastmilk did not satisfy baby (42%)
• Difficulty nursing (24%)
• Sore, cracked or bleeding nipples (17%)
• Mother returning to work or school (16%)

(NYC PRAMS, 2004-2005)

4. Help mothers initiate breastfeeding within one hour of birth.

Benefits of Skin-to-skin\(^1\)

- ↓ crying & dyad stress
- ↑ cardio-respiratory stability
- ↑ temperature control
- ↑ blood glucose maintenance
- ↑ maternal attachment

Skin-to-Skin

Milk Supply & Confidence

↑ Cortisol (Stress)

Kneading Breast & Kicking Uterus

↑ Oxytocin & Prolactin (Breastmilk)

5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.

- Breastfeeding skills education (per 100 educated)
  - 20 more women BF, compared to standard care\(^1\)
  - 4 more women EBF through 6 months, compared to standard care\(^1\)

- Hand expression
  - Collection of colostrum\(^2\)
  - Provides more fatty hind milk\(^3\)

- Pump use

6. Give infants no food or drink other than breast-milk, unless medically indicated.

- Prelacteal & supplemental feeds associated with earlier termination\(^1\)
  - Formula, glucose or plain water
- Suggestion of “insufficiency” vs. medical grounds\(^2\)

Source: (1) WHO. Evidence for the ten steps to successful breastfeeding. Geneva. 1998.
7. Practice rooming in - allow mothers and infants to remain together 24 hours a day.

- Treating the dyad
- Mothers get more sleep\(^1\)
- Parental education provided during procedures\(^2\)

8. Encourage breastfeeding on demand.

- Linked with steps 4, 5 & 7
- Responsive feeding
- Crying is life or death\(^1\)
  - ↑ Cortisol Levels
  - ↓ Breastfeeding Comfort
- ↓ in immediate postpartum period\(^2\)
- Prevents breast engorgement\(^2\)

(2) WHO. Evidence for the ten steps to successful breastfeeding. Geneva. 1998.
9. Give no pacifiers or artificial nipples to breastfeeding infants.

- Bottle feeding\(^1\)
  - Prolongs expiration
  - ↓ breathing frequency
  - ↓ oxygen saturation

- Nipple/Flow Confusion

10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.
Synergy of the Steps

• Mothers exposed to 6 BF steps 13 times more likely to meet mother’s breastfeeding goal\(^1\)

• Quality Improvement
  • mPINC Scores
  • Joint Commission Scores
    • Exclusive breastfeeding (PC-05 & PC-05a)

Baby-Friendly Myths & Misunderstandings

Knox County Health Department
Every Person, A Healthy Person
Myths

• Baby-Friendly only helps breastfeeding mothers
  • All mothers benefit from skilled staff, skin-to-skin and rooming in

• Physician authority is impaired
  • Physicians are empowered to make medically necessary decisions in light of breastfeeding training
  • Breastfeeding can prevent a spiral of medical interventions

• Baby-Friendly forces breastfeeding on everyone
  • Mothers are encouraged to make an “informed choice”
Myth: NICU must be Baby-Friendly

• Not required – healthy, full-term only
• Breastfeeding guided by infant stability\(^1\)
  • Providing breastmilk ↓ helplessness & isolation\(^2\)
  • Skin-to-skin ↑ thermal control\(^1\)
  • Rooming-in ↓ anxiety, feeling like outsider\(^1\)
  • On demand ↑ weight gain, earlier discharge\(^1\)

Achieving Baby-Friendly
4-D Pathway & Hospital Fees

D1 Discovery
- Register
- CEO Letter
- Self Appraisal Tool

D2 Development
- Workgroup & Plan
- Breastfeeding Policy
- Staff Training Plan
- Prenatal & Postpartum Plans
- Data Collection Plan

D3 Dissemination
- Train Staff
- Collect Data

D4 Designation
- Implementation
- Readiness Interview
- On-Site Assessment

Understanding Costs

• After initial costs
  • Statistically insignificant cost difference\(^1\)
  • Labor & formula costs ↓ over time\(^2\)

• Formula cost estimates may be inflated\(^3\)
  • Due to significant over reporting by supplying company
  • Liberal distribution for non-medical reasons
  • Donation of promotional supplies

Sources:
KCHD’s Role

• Assist area hospitals interested in implementing some or all of the Baby-Friendly Ten Steps to Successful Breastfeeding either
  • With the purpose of becoming Baby-Friendly OR
  • For quality improvement related to perinatal care

• By providing resources
  • Facilitate planning and readiness work
  • Support and provide training
Support Hospitals in:

- Identifying needs for change
- Setting clear objectives
- Establishing a multidisciplinary team
- Making policies consistent with goals
- Providing training or training tools
- Developing mechanisms for internal accountability
Thank You
Program Planning Committee for the Healthy Weight Colloquium 2.0
UTK Department of Nutrition
Area Hospitals & Medical Professionals
Erlanger Baroness Campus | Lisa Ross Birth & Women’s Center
Tennessee Department of Health