Improving Breastfeeding Practices

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Overview

• Why exclusive breastfeeding matters
• Barriers
• One hospital’s successful efforts to improve breastfeeding practices
Exclusive Breastfeeding

- No water, formula, other liquids or solids
- Recommended for 6 months as best practice by
  - WHO, AAP, other organizations
  - Exception: “if a medical indication exists”
CDC’s Biannual mPINC Survey
Maternity Practices in Infant Nutrition & Care

Scores US birthing facilities by adherence to evidence-based best practices

Compared by size, state, nation
The Joint Commission
Perinatal Care Core Measure on Exclusive Breast Milk Feeding

1 of 5 national performance measures required in facilities with >1100 births/year

# of non-NICU babies without a breastfeeding contraindication who are exclusively breast milk fed
Baby Friendly

Implemented in >150 countries by WHO & UNICEF to improve hospital breastfeeding practices

Ten Steps to Successful Breastfeeding

361 US hospitals now Baby-Friendly certified (18% of US births annually)
Ten Steps to Successful Breastfeeding (BF)

1. Written BF policy routinely communicated to staff
2. Train all staff in skills needed to implement policy
3. Inform pregnant women of benefits & management of BF
4. Help mothers initiate BF ≤ 1 hour of birth
5. Show mothers how to BF & maintain lactation, even if separated
6. Give infants no food or drink other than breast-milk, unless medically indicated
7. Practice rooming in 24 hours a day
8. Encourage BF on demand
9. No pacifiers or artificial nipples
10. Foster BF support groups & refer mothers to them on discharge
Why Exclusive Breastfeeding Matters
Recent evidence confirms lifelong effects of breastfeeding on maternal & child health

If 90% of US women exclusively breastfed for 6 mo, annual healthcare savings estimated at $13 billion
## Table 2. Excess Risk Associated with Not Breastfeeding

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Excess Risk</th>
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<tbody>
<tr>
<td><strong>Among full-term, healthy babies</strong></td>
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<tr>
<td>Gastrointestinal infection</td>
<td>178%</td>
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<tr>
<td>Hospitalization for lower respiratory tract disease during first year</td>
<td>257%</td>
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<tr>
<td>Childhood obesity</td>
<td>32%</td>
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<tr>
<td>Sudden Infant Death Syndrome</td>
<td>56%</td>
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<tr>
<td><strong>Among preterm infants</strong></td>
<td></td>
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<tr>
<td>Necrotizing enterocolitis (NEC)</td>
<td>138%</td>
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<tr>
<td><strong>Among mothers</strong></td>
<td></td>
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<tr>
<td>Breast cancer</td>
<td>4%</td>
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<tr>
<td>Ovarian cancer</td>
<td>27%</td>
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Newborns’ gut junctions open at birth

• While open, proteins & pathogens can pass through
• ↑ risk of infection, NEC & allergy sensitization
• Take weeks to close

Colostrum
• Grows baby’s gut
• Helps it mature
• Protects from pathogens

One formula feed changes gut flora

• ↑ gut permeability & keeps junctions open weeks longer
• ↑ risk of allergy sensitization
• ↑ risk of inflammation & infection
• ↑ risk of insulin resistance & obesity

Barriers to Exclusive Breastfeeding
2/3 of US mothers who intend to breastfeed exclusively for ≥3 mo do not reach their goals.

Perrine, et al. *Pediatrics* 2012; 130(1):54-60
Surgeon General’s 2011 Call to Action to Support Breastfeeding

Identified 7 breastfeeding barriers

Personal Breastfeeding Barriers

Lack of knowledge

Social norms based on bottle-feeding

Poor family & social support

Embarrassment
Systemic Breastfeeding Barriers

Problems with health-care services
Lactation challenges
Employment & child care
One Hospital’s Successful Efforts to Improve Breastfeeding Practices
Increase Exclusive Breastfeeding at Hospital Discharge

- Chicago suburban hospital, 3500 births/year
- 8 board-certified lactation consultants on staff
Outpatient lactation clinic
The Nurturing Nook opened November 2014—a huge income generator

Allowed for further expansion of lactation staff
## Results So Far

<table>
<thead>
<tr>
<th></th>
<th>BF initiation</th>
<th>Exclusive BF @ d/c</th>
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<tbody>
<tr>
<td><strong>Before Initiative</strong></td>
<td>93%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>1 year later</strong></td>
<td>93%</td>
<td>67%</td>
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</table>
MDs, NPs, Midwives

Nurses (Mother-Baby, L&D, NICU)

Lactation Staff
Step 1: Get LCs on the Same Page

- Shadowed everyone
- Reviewed research on conflicting information as a team
- Developed handouts for patients and staff
Step 2: Get RNs on the Same Page

Five 30-minute live breastfeeding in-services

- Each offered 20-30 times around the clock near unit
- Offered nurses contact hours
- Mandatory—if missed, must watch recording, turn in assignment
Learner Objective

• Describe optimal pumping strategies after birth among exclusively pumping mothers and how they vary over time.
Milk Volumes (mL) Day 1 to 6 Weeks

- 1st expression ≤1 hour
- 1st expression 1-6 hours after birth

Parker, et al. *J Perinatol* 2012; 32:205-09; N=20 VLBW
Parker, et al. *Breastfeed Med* 2015; (10)2: 84-91; N=40 VLBW
IN JULY, 82% OF PUMPING WAS INITIATED IN L&D

Average hours to initiate breast pumping for NICU babies

Baseline Feb/Mar n=32
April n= 20
May n= 17
June n= 10
July n=22
2. Early Breastfeeding Positioning

Learner Objective

• Explain how feeding positions affect newborns’ innate feeding behaviors and the amount of effort mothers must expend during breastfeeding
Breast Crawl: 9 Instinctive Stages after Birth

1. Birth cry: *Lungs expand*
2. Relaxation: *Relaxed hands, no mouthing*
3. Awakening: *Small head & shoulder movements*
4. Activity: *More head & shoulder movements*
5. Rest: *May occur between any stages*
6. Crawling: *Movement to the breast*
7. Familiarization: *Licks nipple, touches breast*
8. Suckling: *Latches & suckles*
9. Sleep: *Falls into restful sleep*

• Videotaped feedings of 40 mother-baby pairs
• Identified 20 primitive neonatal reflexes (PNRs)
• PNRs work for or against breastfeeding, depending on position

20 Primitive Neonatal Reflexes

Include:
- Rooting
- Suck
- Swallow
- Hand to mouth
- Mouth gaping
- Tongue licking
- Jaw jerk
- Arm & leg cycling
- Head lifting
- Head bobbing
- Stepping, crawling

More PNRs led to breastfeeding when mothers lean back with baby on top (p<0.0005)

Sitting up, PNRs made latching more difficult. Pull of gravity caused gaps, head-butting, arching away.
Yet What Positions Are Often Taught?
Learning to Breastfeed
38-min. video: www.NaturalBreastfeeding.com
Short clips: www.YouTube.com/NancyMohrbacher
3. Early Breastfeeding Adequacy

Learner Objective
• Discuss the key information parents of breastfeeding newborns need about feeding intervals, length, and number of feeds per day
Focus: 8-12 feeds/day

• Common patterns
  – Clustering feeds
  – More feeds at night

• Can feed in light sleep

No need to focus on:
• Intervals between feeds
• Feeding length, except if at latch baby appears asleep
• Diaper output (any OK)
• Weight loss ≤10%
4. Supplementing the Breastfed Baby

Learner Objectives

• List recommended supplements for breastfeeding newborns in order of priority

• Define biologically appropriate newborn feeding volumes by age

Photo: The Breastfeeding Atlas
Supplement

What

In order of priority
1. Expressed mother’s own milk
2. Infant formula
Protocol to supplement healthy, term babies

Volume per feed
1st 24 hr: 2-10 mL
24-48 hr: 5-15 mL
48-72 hr: 15-30 mL
72-96 hr: 30-60 mL

5. Nipples and Nipple Shields

Learner Objective

• Describe 3 types of nipples and what to tell mothers about their impact on breastfeeding
Messages to Mothers

“Your nipples are great for nursing.”
(NEVER blame a slow start on mother’s anatomy!)

“Often breastfeeding takes time and practice to learn.”
Planned Future Topics for RNs

• Safe Sleep, Skin-to-Skin Contact & Breastfeeding
• Breastfeeding the Late Preterm Baby
• Counseling Skills
• Cultural Literacy
Step 3: Get MDs on the Same Page

Invite Dr. Jen to talk to the peds about

• Why a breastfeeding friendly practice is more successful
• Best breastfeeding practices
More Plans

- Expansion of outpatient clinic
- Adding lactation support
  - Night shift
  - Labor and delivery
Overview

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- Barriers
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