In the Pink with mPINC: Improving Your Breastfeeding Practices Score
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Improving breastfeeding practices

• Improved maternity care practices are fundamental and act as a prerequisite to raising exclusive breastfeeding rates and duration
• Institutional changes in hospital practices are effective in both initiation & duration of breastfeeding

Researchers at Boston Medical Center, the nation’s 22nd Baby-Friendly hospital, have reported that during the implementation of the BFHI, breastfeeding rates rose from 58 percent to 87 percent, including an increase among US-born African-American mothers from 34 percent to 74 percent in 1999.

A large RCT (PROBIT) was conducted in the Republic of Belarus.

- It examined the outcome of implementation of the Ten Steps to Successful Breastfeeding in 31 Belarussian maternity units and clinics. Infant health outcomes were tracked for one year. Infants born in the intervention sites were significantly more likely than control infants
  - to be breastfed to any degree at 12 months
  - to be exclusively breastfed at 3 & 6 mo
  - had a significant reduction in the risk of 1 or more gastrointestinal tract infections and of atopic eczema.

The difference in exclusive breastfeeding rates at 3 mo between BFHI and controls was ~7 fold


Background

- Hospital practices are associated with breastfeeding continuation (Murray, 2007)
  - BF within 1h of birth
  - Breastmilk only
  - Rooming-in
  - No pacifiers
  - Phone number referral

- Only 18.7% received all 5
- 68% who experienced all 5 were bf at 16 weeks
- 53% who did not experience all 5 were bf at 16 weeks

Hospital practices are associated with breastfeeding continuation at 8 weeks

Source: Murray et al., 2007
Does improving maternity practices affect breastfeeding

DiGirolamo et al, 2001

- Study assessed the impact of the absence of 5 of the 10 steps on breastfeeding termination prior to 6 weeks (Infant Feeding Practices Survey I)
  - Late initiation of breastfeeding, no rooming-in, use of supplements, not feeding on demand, use of pacifiers
- 7% of 1085 women experienced all 5 of the steps studied
- Strongest risk factors for early termination were late breastfeeding initiation and supplementing the baby
- Compared with mothers experiencing all 5 steps, mothers experiencing none were 8 times more likely to stop breastfeeding early

Infant Feeding Practices Survey II

- Sample of 1907 women
- Practices that showed protective effect against early weaning (<6 weeks)
  - Bf within 1h of birth
  - Only breastmilk
  - No pacifiers
- 8.1% experienced all practices studied
- Also showed that mothers given no pain medication during labor were more likely to bf >6 weeks
- More likely to bf >6 weeks if baby brought to mother at night when not rooming in
The effect is cumulative

- Dose response relationship between number of evidence-based practices and early breastfeeding termination
- The fewer practices experienced by mothers the sooner the abandonment of breastfeeding

(DiGirolamo et al, 2008)

Importance of Breastfeeding Intensity

- Breastfeeding intensity (degree of exclusivity) is predictive of duration of breastfeeding up to 1 year of age
- Breastfeeding rate at 20 weeks is greater for mothers exclusively breastfeeding at 2 weeks
- Exclusive breastfeeding during first month associated with duration longer than 6mo
- Strongest association with breastfeeding duration of 1 year is a higher breastfeeding intensity during months 4-6 (validates ~6 mo of exclusive BF)
  - Piper et al. J Hum Lact 2001; 17:227-232

Changing hospital practices

(Wright et al, 1996)

- Infants given formula in the hospital
  - Less likely to be breastfed at 1 & 4 mo
  - Started on regular use of formula earlier
- Mother receiving formula discharge packs started formula earlier & stopped bf sooner
- Rooming-in <60% of time less likely to be bf at 1 & 4mo
- Infants given pacifiers stopped bf sooner
CDC’s Maternity Practices in Infant Nutrition and Care Survey (mPINC)

- What actually happens in maternity care settings?
- How common are positive practices?
- How common are negative practices?
- Geographic variations
- Predictors of variations
- Are practices changing over time?

Characterize maternity practices related to breastfeeding

- Biannual national census of facilities routinely providing maternity services
  - Private hospitals
  - Public hospitals
  - Free-standing birth centers
- Single key informant
- Assesses ‘usual practice’

Survey Indicators | mPINC Dimensions
---|---
- WHO/UNICEF Ten Steps to Successful Breastfeeding
- Labor and delivery care
- Labor and birthing practices
- Breastfeeding assistance
- Postpartum care
- Contact between mother and infant
- Feeding of breastfed infants
- Postpartum care practices
- Discharge care
- Staff training
- Structural and organizational aspects of care delivery
- Contact between mother and infant
- Feeding of breastfed infants
Results from 2,687 hospitals

**TABLE 2.** Mean total maternity practice scores *by* annual number of births and facility type — Maternity Practices in Infant Health and Care Survey, United States, 2007

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Facility type</th>
<th>Mean total score</th>
<th>Mean</th>
<th>Sd</th>
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<tbody>
<tr>
<td>Annual number of births</td>
<td>Hospital</td>
<td>626</td>
<td>60</td>
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<td>204-299</td>
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<tr>
<td>500-999</td>
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<tr>
<td>1,000-1,499</td>
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<tr>
<td>1,500-1,999</td>
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<td>0.6</td>
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<tr>
<td>≥2,500</td>
<td>71</td>
<td>60</td>
<td>1.6</td>
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</tr>
</tbody>
</table>

*Mean total score may not be calculated for facility type and annual number of births categories with less than 10 births.*

**Note:** Mean total score may not be calculated for facility type and annual number of births categories with less than 10 births.
Results

• Comparison of the findings with state breastfeeding rates also suggests a correlation between maternity practice scores and prevalence of breastfeeding.
• In the 2006 National Immunization Survey, seven states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, and West Virginia) had the lowest percentages (<30%) of children breastfed for 6 months.
• The same seven states were among those with the lowest mean total maternity practice scores (48–58) in mPINC.

Results

• The findings indicate substantial prevalences of maternity practices that are not evidence-based and are known to interfere with breastfeeding.
• 24% of birth facilities reported supplementing more than half of healthy, full-term, breastfed newborns with something other than breast milk during the postpartum stay, a practice shown to be unnecessary and detrimental to breastfeeding.
• 70% of facilities reported giving breastfeeding mothers gift bags containing infant formula samples.

Results

• When asked whether healthy, full-term breastfed infants who receive supplements are given glucose water or water, 30% of facilities reported giving feedings of glucose water and 15% reported giving water.
• 17% of facilities reported they gave something other than breast milk as a first feeding to more than half the healthy, full-term, breastfeeding newborns born in uncomplicated cesarean births.
• 65% of facilities advised women to limit the duration of suckling at each breastfeeding.
• 45% reported giving pacifiers to more than half of all healthy, full-term breastfed infants.
National Mean Composite Quality Scores and Dimension Subscores

Lowest score: Breastfeeding support after discharge

- Mean US score: 40 out of 100
- Questions:
  - Does facility provide gift bags containing infant formula to breastfeeding mothers upon discharge?
  - Types of BF support provided to mothers upon discharge

Benchmark Report Target Audiences

Birth Center
- Birth Center Owner
- Medical Director
- Head Midwife
- Key Informant

Hospital
- CEO
- Director of Quality Assurance or Improvement
- Director of Obstetrics
- Director of Pediatrics
- Mother Baby Nurse Manager
- Key Informant
Results

- mPINC benchmark reports were provided to each facility that completed a survey, comparing the facility's subscale and total scores with the scores of all other participating facilities, other facilities in the state, and facilities of a similar size nationally.
- Provides the facility score for each item comprising the subscales, which can help facilities identify specific maternity practices that might be changed to better support breastfeeding.
- http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5723a1.htm
I Labor and Delivery Care

Initial skin-to-skin contact

Looking at the Evidence
- Infant stress reduction; improved homeostasis (Ferber & Makhoul, 2004)
- Improved temperature regulation (Chiu et al, 2005; Walters et al, 2007)
- Improved maternal affection (Moore et al, 2007)
- Cries less (Christensson et al, 1992)

When do mammals not like contact

- Improved blood glucose levels (Waters et al, 2007; Christensson et al, 1992)
- Improves ability to establish breastfeeding (Righard & Alade, 1990)
- Longer breastfeeding duration (Anderson et al, 2004)
- Correlation between skin-to-skin contact at delivery and exclusive breastfeeding during hospital stay (Bramson, 2010)

Physiology of skin-to-skin

- Tactile, olfactory, & visual sensory stimuli activate neuroendocrine adaptation of mother and baby
  - Central oxytocin release reduces behavioral changes and social interactive behavior (Uvnas-Moberg, 1996)
  - Infant hand massage stimulates the breast to prepare for breastfeeding by increasing maternal oxytocin levels (Matthiesen et al, 2001)
- Close body contact immediately post birth regulates
  - Newborn temperature
  - Energy conservation
  - Acid-base balance
  - Breathing
  - Crying
  - Nursing behaviors
  - Increases maternal attention to infant needs
  - Vagus activation
  - GI hormones surge for optimum use of calories (Winberg, 2005)
Barriers to skin-to-skin

- Routine separation for examination, bathing, & stabilization, vitamin K
  - Run through the checklist, then leave mother and baby together
- Procedures (bathing, eye meds, warming, observation) taking priority over breastfeeding in the first hour of life
- Pressure to complete admission procedures
- Only for vaginally-born full term infants
- Busy unit that needs the room

So what do we know?

- 300 papers on skin to skin
- Mothers already want to exclusively breastfeed.
- The hospital experience is key to getting started with confidence.
- The evidence suggests that breastfeeding is “time sensitive”.
- If moms start out exclusively they are more likely to continue exclusive breastfeeding
- Only 39% of mothers in the Listening to Mothers Survey II reported that during the 1st hour postbirth the baby was in their arms
- Routine procedures can be safely conducted while skin-to-skin & reduces unnecessary separation (Bystrova et al 2007; Awi & Alikor, 2006)
- Skin to skin saves nurses work!
  - Sit down
  - Fill out paperwork
  - Engage in early teaching
  - Check vitals & fundus

What can we do?

- Inexpensive, low tech, effective way to improve infant health.
- One change in practice affects thousands of births/year.
- Early feeding patterns often set the stage for later feeding patterns.
- Stock newborn medications in LDR to avoid separation
- Consider implementing the SOFT program
SOFT Program

S = Skin to Skin

F = Finger Tip Touch

O = Open Eye To Eye

T = Time Together

Keep your baby close

In infants can easily get over- stimulated by sights, sounds and touch. Your newborn may show several signs when over-stimulated.

Skin to Skin
Open Eye to Eye
Fingertip Touch
Time Together

Capture these magical moments with your newborn. Remember to ask your visitors to delay their visit until you have shared the first hour together.

A gift only you can give your baby
II Postpartum Care
a. Feeding of Breastfed Infants

- Measures what % of bf infants receive breastmilk as first feeding
- Measures what % of breastfeeding infants receive non-breastmilk feedings
- Measures whether breastfeeding infants receive glucose water and/or water

- 17% gave non-breastmilk as 1st feeding to >50% of healthy fullterm bf babies
- 24% gave routine supplements to >50% of fullterm BF babies
- 30% gave glucose water; 15% gave water
- LTMS II – 38% bf babies received supplements
- IFPS II – supplementation as a predictor of shorter bf duration

Resources

- www.massbfc.org
- AAP policy statement on breastfeeding
- ACOG clinical review of breastfeeding
- AWHONN role of the nurse in promoting breastfeeding
- ABM clinical protocol #5 for peripartum breastfeeding management www.bfmed.org
- Videos- Delivery Self-Attachment (www.geddesproductions.com)
  
  Breastfeeding is Baby’s Choice (www.healthed.cc)
Newborn Feeding: 
Supplementation of breastfed newborns

Supplementation: A Growing Problem
Ryan et al. Pediatrics 2002; 110:1103-1109
Mothers Survey, Ross Products, Breastfeeding Trends 2003, 2006

- 1971
  - 21% exclusive breastfeeding in hospital
  - 3% additionally supplemented
- 1982
  - 55% exclusive breastfeeding in hospital
  - 6.9% additionally supplemented
- 2001
  - 46.3% exclusive breastfeeding in hospital
  - 23% additionally supplemented
- 2003
  - 44.0% exclusively breastfeeding in hospital
  - 22% additionally supplemented
- 2006
  - 38.4% exclusively breastfeeding in hospital
  - 25.2% additionally supplemented

CDC Exclusive Breastfeeding at 7 Days

- 2003 62.5%
- 2004 59.4%
- 2005 59.4%
- HP 2010 goals are for 60% exclusive breastfeeding at 3 months and 25% at 6 months
Consequences of Inappropriate Supplementation

• ↓ in exclusive breastfeeding
• Consistent association between non-medical supplements and early weaning (Bloomquist et al., 1994)
• Provoke allergies (Host, 1991; Saarinen et al., 1999)
• Trigger diabetes (Rosenbauer, 2008; Sadauskaite-Kuehne et al., 2004)
• Reduce maternal confidence
• Reduce milk production
• Disturb breastfeeding behaviors (nipple preference)
• Interference with immune system development (Hanson, 2004)

Undesired Outcomes

• Infants given non-medically indicated supplements in the first 48 hours of life or offered pacifiers are 2-3 times more likely to have suboptimal breastfeeding behaviors on days 3 and 7 – Dewey et al. Pediatrics 2003; 112:607-619
• Babies given 2 or more bottles within the first 24 hours are at significant risk for breastfeeding cessation at 7-10 days – Hall et al. J Pediatrics 2002; 141:659-664

More Consequences

• Partial feeding of formula or an intake of <150g of human milk /day 24-48 hours after lactogenesis II is linked to weaning within 4 weeks (Sievers et al. 2003)
• Interferes with lactogenesis III (calibration and maintenance of sufficient milk supply) (Daly et al. Exp Physiol 1993; 78:209-220)
Still More Consequences

- Interference with the body’s ability to accomplish and sustain the production of copious amounts of milk results in ↓ amounts of milk transfer to the infant and a repeating cycle of more formula supplementation until the body receives the signal for breast involution
- Breastfeeding frequency and duration declines quickly after the start of regular formula supplementation; the younger the infant at the start of formula supplementation, the younger they are when they stop breastfeeding
  - Hornell et al. Pediatrics 2001; 107(3)
  www.pediatrics.org/cgi/content/full/107/3/e38

“Just One Bottle Won’t Hurt”… or will it?

- Alters gut flora in breastfed infants, delaying the production of an acidic environment
- Can cause sensitivity or allergy to cow’s milk protein in susceptible families
- Can damage infant’s immune system leaving him more vulnerable to asthma and atopy
- Can increase the risk of developing IDDM in susceptible families
Barriers to Exclusive Breastfeeding

- Non-evidence based policies for hypoglycemia, hyperbilirubinemia, weight loss, length between feedings, dehydration, infants of diabetic mothers
- Convenience
- Staff perceive formula to be free and use and distribute it liberally
- Formula seen as a solution for all breastfeeding problems

In-hospital formula supplementation of healthy breastfeeding newborns. Gagnon et al. JHL 2005; 21:397-405 (con’t)

- Nurse’s rationale for supplementing
  - Sleepy baby
  - Difficult latch or breast refusal
  - Sore nipples
  - Infant behavior
    - Fussy, unsettled, crying
  - Maternal fatigue
  - Insufficient colostrum to satisfy the infant

Number 1 Reason is Maternal Request

- Formula is benign
- Feeding frequency and volumes
- Baby not getting enough
- Baby fussy
- Cluster feedings by 24 hours of age
- Baby always at the breast and not sleeping
- Visitors and interruptions

- Needs sleep
- Want to do both so babies have bottles in bassinet
- Non-evidence based protocols of supplementing babies of diabetic mothers with formula upon admission to nursery
- No leche/no milk
What can we do?

• Develop evidence-based policies that are communicated to all staff and disciplines
• Hospitals that have a written breastfeeding policy have better breastfeeding outcomes at 2 weeks (Rosenberg et al, 2008)
• Develop a specific policy for supplementing breastfed infants
• Restrict formula use to bottle-fed babies and only those breastfed infants with medical indications
• Formula use should be followed up with teaching of staff & patients as needed

Stemming the flow of formula

• Lock up formula and require that it be logged out, noting batch number, date & time, patient & staff names, & reasons for use
• Place formula in medication distribution system such as Pyxis

Resources

• ABM supplementation protocol and model hospital policies
• Model Hospital Policy Recommendations
  – http://www.cdph.ca.gov/healthinfo/healthyliving/childfamily/Pages/MainPageofBreastfeedingToolkit.aspx
• AAP Sample hospital breastfeeding policy for newborns
II Postpartum Care  

b. Breastfeeding assistance

- Feeding decision documentation (Lee, 2005)
- Provision of breastfeeding instruction (US Preventive Services Taskforce, 2008; Chung et al., 2008; Kronborg et al., 2007)
- Cue-based feeding vs scheduled feeds (Hornell et al., 1999; Kent et al., 2006)
- Limitation of suckling times (Yamauchi & Yamanouchi, 1990; Cadwell, 2007)
- Direct breastfeeding assessment by staff (Gill, 2001)
  - The infant has completed at least 2 successful feedings, with documentation that the infant is able to coordinate sucking, swallowing, and breathing while feeding (AAP, 2004)
- Use of breastfeeding assessment tool (Kumar et al., 2006; Benson, 2001)
- Use of pacifiers (Howard et al., 2003; Di Girolamo et al., 2008)

Barriers

- Inconsistent/incorrect advice
- Not enough time spent with mothers
- Inability of staff to solve breastfeeding problems
- Poor or little breastfeeding help
- Imprecise documentation
- Inadequate or inappropriate assessment
- Minimal staffing/too many patients
- Lack of access to lactation consultant
- Staff unwillingness to support breastfeeding
- Too many visitors and interruptions
What can we do?

- Staff training with practical skills-oriented focus
- Mandatory competency requirements
- Training to help change attitudes
- Staff resistance may reside in lack of confidence or competence
- Annual review to include breastfeeding evaluation
- Breastfeeding team to mentor other staff members
  - 5 (or more) nurses thoroughly trained to mentor 5 more nurses each
- Use or adapt breastfeeding assessment tool (Walker, 2006)

What can we do?

- Group teaching
  - Nurses teach and observe several mother/baby couplets simultaneously to avoid time intensive individual teaching & observation
- More effective use of lactation consultants
  - Optimal staffing of 1 full-time equivalent (FTE) per 783 breastfeeding couplets (Mannel & Mannel, 2006)
- Cross train paraprofessionals such as nursing assistants in basic breastfeeding assessment and management
- Use volunteers/peer counselors
  - WIC
  - Those accruing hours to sit for IBCLC exam
  - Local breastfeeding support groups

What Mothers Need to Know Prior to Discharge

- I can position my baby correctly at both breasts
- It does not hurt once the baby starts sucking
- The baby can latch to each breast
- I can tell when the baby is swallowing milk
- I know how many times in 24 hours to feed the baby
- I know how long to feed the baby on each side
- I know when it is time to feed my baby
- I know the five feeding cues to use if my baby is sleepy
- I know how many diapers baby should have each day
- I know how to tell if my baby is jaundiced
What Mothers Need to Know Prior to Discharge

- I know how to tell if a disposable diaper is wet
- I know how much weight baby should gain weekly
- I know that artificial nipples and pacifiers can confuse my baby and have been shown other ways to feed him
- Someone will visit me a day or two after I get home, or....
- I will see my pediatrician or family doctor in two days
- I know when and who to call for help with nursing

Visitors

- Reduce the number of feedings
- Results in an overhungry baby and difficult latch
- Cause mothers to miss feeding cues
- Can cause an infant to shut down
- Fatigue the mother
- Interfere with staff teaching
- Consider reducing visiting hours

Interruptions

Morrison et al. JOGNN 2006; 35:709-716

- Averaged 54 interruptions over a 12 hour period
- Interruptions were frequent, erratic
- Mothers reported feeling rushed when breastfeeding because they were unsure when the next person would enter the room
- Interruptions took precedence over breastfeeding
- Mothers would cease breastfeeding immediately when interruptions occurred
- Mothers had little time to rest, take care of themselves, or feed the infant
Managing Interruptions

- Inform friends and family of how to help other than visiting the hospital
- Set aside time to nap each afternoon, using a do not disturb sign
- Have phone calls held and visitors and hospital staff check with nurse before entering
- Rest during the day improves ability to breastfeed babies at night

Dear Visitors

- Our new family needs time alone together getting to know each other and learning the many skills of baby care.
- Please limit your visits to 15 minutes.
- Please, no loud noises or loud talking as our new baby has sensitive ears.
- Please wash your hands before holding the baby.
- Please do not visit if you are sick.
- If we have a sign on our door we are sleeping or feeding the baby.

Please limit your visits to 15 minutes. We appreciate your visit and your support of our new family!

Il Postpartum Care

c. Contact between mother & infant

- Separation during transition to receiving units (Byturova et al., 2007; Elander et al., 1984)
- Rooming-in
  - Negative staff attitudes to night rooming-in suggests that closeness of mother/baby is not important (Svensson et al., 2005)
  - Promotes successful breastfeeding (Buranasin, 1991; Murray et al., 2007)
- Removal of infant from mother’s room
- Bringing baby to mother at night when not rooming-in (DiGrolamo et al., 2008)
Separating Mothers and Babies

- Interaction between mother & baby
- Hinders learning of infant feeding cues
- Results in fewer breastfeeding
- ↑ supplementary feedings (Pechlivani et al, 2005)
- Delays lactogenesis II
- ↑ crying, ↓ blood glucose levels
- May ↑ risk for jaundice

Barriers

- Staff think they are practicing 24 rooming-in but really are not
- Interferes with mother’s sleep
- Mothers get more sleep when baby in nursery
- Will increase mothers’ complaints of maternal fatigue
- Cannot room in with cesarean
- Might co-sleep
- Routine separation necessary for bathing, pediatric exams, use of bili lights, weighing

More Barriers

- We don’t need to change, things are just fine
- Press Ganey surveys will be unfavorable
- Mothers want or need to…. (rest, have visitors, use pacifiers, receive gifts, use bottles)
Separating Mothers and Babies

- Does not result in more sleep for the mother: 5.5 hours with or without infant in room with mother (Keefe, 1988)
- Reduces length of breastfeeding:
  - Rooming-in for 60% or more of hospital stay is associated with continuation of full breastfeeding at 4 months (Wright et al, 1996)

What can we do?

- Perform a process audit
  - Maps the path of the baby and mother through the hospital stay
- Prepare scripts and engage in role playing for nurses to deal with not knowing what to say to mothers regarding:
  - Complaints of fatigue, use of pacifiers, etc
- Explore co-sleepers that attach to hospital bed
- Perform night weights in mother’s room
- Reduce visiting hours so visitors leave earlier than 10:00pm

What can we do?

- Perform routine care in mother’s room
- Avoid bottle-feeding baby at night:
  - Bring baby to mother’s room for breastfeeding
- Do not remove baby to nursery for:
  - Pediatric exams
  - Weighing
  - Bilirubin lights
  - Blood work
  - Baths
- Create cart with necessary equipment
III Facility Discharge Care

- Ambulatory breastfeeding support
  - Home visit
  - Out-patient visit
  - Telephone call
  - Referrals to community resources
- Distribution of commercial formula discharge packs

Post discharge care

- Mothers need continuing breastfeeding support post-discharge as many experience ongoing problems (Taveras et al, 2003)
- Mothers may be unaware of support resources in the community and should be given referrals especially if experiencing problems
- Can’t eliminate discharge bags because hospital would have to purchase formula
What can we do?

• Assure that all mothers have access to breastfeeding support post-discharge (Lewallen et al., 2006)
• Provide mothers with community resources
• Create breastfeeding plan for all mothers, especially those having difficulty in hospital
• Become familiar with your local resources
• Consider postpartum care center, follow-up phone calls, and out-patient visits
• Establish breastfeeding drop in center (malls, pediatric clinic) or Baby Cafe

What can we do?

• Invite LLLI or WIC to hold bf groups on maternity unit
• Provide postpartum phone calls during downtime on the unit
• Establish or join local or state breastfeeding coalition

Resources

• La Leche League
• ILCA (http://www.ilca.org/falc.html)
  – To locate a lactation consultant
• Nursing Mothers Council
• LCs in pediatric office, clinics, employers)
• WIC and public health system
• State breastfeeding coalitions (http://www.usbreastfeeding.org/StateCoalitions/coalitions-directory.html)
• Zip Milk (http://massbfc.org/zipmilk/
Discharge Packs

- Women who got packs more likely not to exclusively breastfeed at 10 weeks than women who didn't (Rosenberg et al, 2008)
- Meta-analysis: bags decreased exclusive breastfeeding at any point in time, from 0–6 months postpartum (Donnelly et al, 2000)
- Reduced number of women exclusively bf at 6 & 13 weeks (DiGirolamo et al, 2008)

Discharge Bags: Sampling at its Finest

- Used as an example in marketing textbooks
- Implies hospital endorsement of formula in general and of a certain brand in particular
- Defined by HIPPA as a form of marketing
The High Cost of “Free” Bags

- Mothers receiving bags start formula sooner and breastfeed for shorter durations even when the formula has been removed from the bag
- Exclusive breastfeeding is reduced at all points measured between 0-6 months
- Bags contain the most expensive brands
- Bags cost the company <$7 while a year of formula can cost a family up to $2000
- Mothers pay at least an extra $700 per year for brand name formula compared to store brands

Formula Company’s View of Nurses

- An old Ross employee manual states, “Never underestimate the role of nurses. If they are sold and serviced properly, they can be strong allies. A nurse who supports Ross is like another salesman.”

Hospital Based Actions

- Federal anti-kickback statute
- Federal antitrust laws
- HIPAA
  - Defines discharge bags as a form of marketing
- Check vendor policy
- Check hospital’s policy on marketing products to patients
- Look at mission statement
- Contact ethics committee, corporate compliance department
- Check provisions for conscientious objection to avoid handing out commercial discharge bags
Anticipating hospital protests

- The mothers want it
- Poor mothers need it
- Eliminates choice
- Forces people to breastfeed
- Doesn’t affect breastfeeding
- Might make bottle-feeding mothers feel guilty
- Would have to buy formula

What Can We Do?

- Visit the website at www.banthebags.org
- Use the toolkit and resources to approach the hospitals in your state
- Use the concept of the hospitals volunteering to market products to patients rather than the effect on breastfeeding
- Compare to pharmaceutical influence

Hospitals eliminating sample packs 2000-2006 (East of Mississippi)
Resources

• Make your own hospital gift bags
  – Market your services rather than peddling formula
• Funding can come from marketing department, hospital foundation, hospital auxiliary
• Easy Guide to Breastfeeding
  http://www.4women.gov/pub/bf.cfm
• WIC Loving Support materials
  http://www.nal.usda.gov/wicwork/LearningCenter/support_materials.html
• La Leche League

Resources

• Visit www.cafepress.com/banthebags for items with the Ban the Bags message
• All proceeds go towards administering the campaign
• National Alliance for Breastfeeding Advocacy (NABA) www.naba-breastfeeding.org
Heads Up
“For the nursing mom on her first visit”
• When discharge bags have been removed from hospitals formula companies place the in physician offices, clinics, & send coupons to mothers
• Ask your physicians to avoid distributing these products as it neutralizes your efforts in hospital

IV Staff Training
• Looks at the number of hours of staff education for new and current staff
• Looks to see if staff has had any education in breastfeeding
• Looks at how often staff is assessed for competency
• First days after birth are a critical time with need to provide extensive breastfeeding support (Ahluwalia et al, 2005)
Staff Education

- Assures a standard of care adhered to by all staff (Lu et al, 2001)
- Presents opportunity to learn new information and maintain skill level (Dykes, 2006; Freed et al, 1995)
- Standard 18 hour training improves patient breastfeeding hospital-wide (Cattaneo et al, 2001)
- Staff education has long lasting effects in improvement of breastfeeding care delivery over time (Shinwell et al, 2006)

Barriers

- Knowledge base and clinical skills regarding breastfeeding are not taught in medical and nursing school
- Many clinicians feel and are inadequately prepared to provide lactation care and services
- Continuing breastfeeding education in hospital is often only provided to nurses
- Staff training may be voluntary & sporadic
- Staff training may be conducted and/or funded by formula companies
- Staff training is expensive
- Staff training is too disruptive to the unit

What can we do?

- Develop minimal staff competencies and assure that all staff practice these
- Mentor new staff
- Train core of staff to train other staff
- Assure that staff training is mandatory as outcomes and practice may not change if training is voluntary (Iker & Morgan, 1992)
- Place training and mentoring into clinical ladder
- Provide training for physicians (Krogstrand & Parr, 2005)
  - Grand rounds
  - Web based training
  - CD modules
- Partner with community breastfeeding training
  - State coalitions
  - LLL, WIC
What can we do?

- Training should include changing attitudes, clinical skills, and problem solving
  - Provide training in small increments – have some fun!
  - During unit downtime
  - During low patient census
- Provide training for and on all shifts
- Utilize self study modules
  - Printed
  - CD
  - Computer
- Utilize web based training
- Construct learning modules from recent journal articles which address knowledge and skill deficits
- Secure funding from other hospital sources, outside sources

Resources

- Physician Lactation Education Collaborative of Washington – 2 CD set
  - http://www.breastfeedingwa.org/collaborative
- Breastfeeding Basics – Case Western Reserve U
  - http://www.breastfeedingbasics.org
- Free from the University of Virginia
  - http://www.breastfeedingtraining.org/
- 18 hour training course
  - http://www.tensteps.jbpub.com/
- University of Medicine & Dentistry of New Jersey
  - http://www.umdnj.edu/lactweb/index.htm
- Health e-Learning
  - http://www.health-e-learning.com/courses/bfi-education?showAll=1

- South Dakota State University
  - http://learn.sdstate.edu/Nursing/Breastfeeding.html
- Registered Nurses Association of Ontario
- Wellstart International
  - http://www.wellstart.org/
- American Academy of Pediatrics
  - http://www.aap.org/breastfeeding/
- March of Dimes
  - http://www.marchofdimes.com/nursing/index.htm?oid=00000003&qpid=s_s2_t-1&pdt-re order=1
- AWHONN
- Rising Star
  - http://www.risingstareducation.net/
Is BFHI Cost Effective?
The cost effectiveness of BFHI is comparable to the cost-effectiveness of immunizations and short term tuberculosis treatment.


V Structural & Organizational Aspects of Care Delivery

- Facility receives infant formula free of charge
- Does the facility have a designated person who oversees lactation care within the facility (just within the maternity unit or facility-wide?)
- How many breastfeeding supports are provided to lactating staff
Free formula
• ADA guidelines for Hazard Analysis Critical Control Points (HACCP) should apply to free formula (ADA, 2004)
• Presents inherent conflict of interest (AMA 2005, AMA 2006)
• Parents will continue to purchase hospital brand of formula, an effective marketing tool
• A $3 investment reaps $1000-$2000 for the formula company

Targets Health Care Providers
• Mothers trust what their health provider recommends
• Food, flattery, and friendship paves the way for providers to defend infant formula
• Neutralizes the opposition

Barriers
• Too expensive to buy formula
• Will lose all of the other “free” services, supplies, and equipment
• Unprofessional or inappropriate relationship with vendor
• Free formula may be tied into other free or low cost materials for the hospital through contracts or purchasing agreements
• Formula as a normal and “important” part of unit culture
What can we do?

- Use the system first
  - Contact Corporate Compliance Department, Ethics Committee, CEO, Director of Purchasing
  - Ask regarding hospital endorsement of commercial products for financial gain
- Find out how much formula the unit actually uses
  - Do not rely on what formula company says
- Calculate the cost to the hospital
  - $0.25/bottle x 6 bottles/day for formula fed infants
  - Add number of bottles used to supplement breastfed infants (should not be greater than 10% of babies)
- Cost of food is part of room and board charge
  - Does not come out of unit’s budget
  - In capitated system, re-negotiate insurance contracts for slightly more per birth to cover formula purchase and LC expenses, saves insurers $$
- Put out a bid to vendors, including large chain pharmacies or food wholesalers to determine fair market price

What can we do?

- There are other formulas besides Similac, Enfamil & Carnation
- Approach hospital leaders from the standpoint of ethical behavior not breastfeeding improvement

Quality Improvement
A Vehicle for Change

- Taken as a model from industry
- Also known as total quality improvement and continuous quality management
- Possible to create dramatic improvements in quality of care through systematic intervention (Lebov & Scott, 1992)
- Changes are data driven, eliminating emotional overtones
- Results in staff practices designed toward outcome of effectively nursing baby (Cadwell, 1997)
QI

• Form an interdisciplinary committee
• Assess your practices
  – Use BFHI assessment tool or mPINC survey
• Communicate what you are doing to inform & increase interest in the project
  – Newsletter
  – Email
• Engage administration
• Use evidence to determine practice

• Value teamwork
  – Knight in shining armor is ineffective
  – Find a champion

QI

• Create a poster to publically and visually track progress
• Celebrate small victories
  – Positive encouragement & recognition for hard work
• Measure performance

• Use medical librarian for evidence gathering
• Break projects into small components to engage more staff
• Don’t point fingers or distribute blame