Revising the Game Plan:
Beyond Baby Friendly, Thinking Outside the Box

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OUTLINE

A. Practice changes
   – First hour ABC's

B. System changes:
   – Prevention
   – Availability
   – Sustainability

• I have no financial relationships to disclose.

• I will not discuss "off label" and/or investigational use in my presentation.
**What 1st Hour Practice Changes are Needed?**

- Given that even first hour hospital practices influence the prevalence of *insufficient production* and *suboptimal intake* …

- Given that no amount of skin-to-skin and unrestricted breastfeeding reduces these two problems when infants fail to access sufficient colostrum or stimulate an adequate supply.

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**What More Is Needed?**

- Given these time-sensitive problems may worsen by the hour.

- Given that attention to A, B and C in the first hour is not the norm after a cesarean birth.

- Given that worldwide, only 43% infants feed in 1st hr.

- Given that disparity (race, maternal education, socioeconomic status) and lack of 1st hour attention to A, B and C are related. Acharya 2015; Esteves TM, 2014

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**Maximize 1st hour benefits for every dyad**

- A = Attachment:
  The longer the interval between birth and first feeding, the more likely dysfunctional sucking.

- B = Breastmilk production, the cornerstone:
  The more colostrum removed in the 1st hour, the sooner supply increases, the greater production.

- C = Calories: Most accessible; Multiple protective benefits with 1st hr colostrum feeds ↓ hypoglycemia, ↓ wt. loss, ↑ protection.
First Hour Benefit for Mothers
50% reduction in postpartum hemorrhage with both breastfeeding and skin-to-skin within 30 minutes

Saxton A. Midwifery. 2015 Does skin-to-skin contact and breast feeding at birth affect the rate of primary postpartum haemorrhage: Results of a cohort study.

<table>
<thead>
<tr>
<th>CARE within 30 min.</th>
<th>n</th>
<th>% PPH (&gt;500ml)</th>
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<tbody>
<tr>
<td>Breastfeeding + skin-to-skin</td>
<td>2338</td>
<td>8.6%</td>
</tr>
<tr>
<td>Skin-to-skin alone</td>
<td>2590</td>
<td>15.6%</td>
</tr>
<tr>
<td>Neither</td>
<td>302</td>
<td>27.5%</td>
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There is a reason behind everything in nature. Aristotle

Expect the Unexpected….

How would you handle these 3 new mothers?
Early on, before the complications of a shallow or no latch develop, provide each mother with the information and support she needs to use her hands "I'm going to TRY."

1. Friends and relatives may have had problems.
2. Unfamiliar with what it should look like, feel like, sound like.
3. Self-blame, not systemic problem, if breastfeeding fails.
4. Birth is a time of vulnerability, when it takes little to undermine confidence

ALEX

Stay tuned for the rest of the story
Safeguard A:
Mother/partner helping hands from the 1\textsuperscript{st} hour

- Science supports:
  - 1\textsuperscript{st} hr skin-to-skin
  - 1\textsuperscript{st} hr feed
  - 1\textsuperscript{st} hr milk expression

- No science behind avoidance of gentle, cue-based assistance with 1\textsuperscript{st} latch.

- Attachment improves with contact and ↑ production

B=Breastmilk production

Stay tuned… for the rest of the story
Safeguard B: breastmilk production:
Incorporate hand expression into breastfeeding

Safeguard B: breastmilk production:
First hour hand expression for ANY mother with risk factors

Collecting every drop???
• Production, priority concern:
  – Avoid insufficient production
• Not a “fixed amount” of colostrum.
• Make it easy and convenient.
  – Lying flat on your back, in the shower, without first washing hands
  – Having only one hand available (I.V., nursing baby, on phone, drinking/eating, etc.)
C=Calories

National cesarean delivery rate of approximately 19 per 100 live births is associated with lower maternal/neonatal mortality among WHO member states. Molina G, 2015 JAMA

<table>
<thead>
<tr>
<th>Country</th>
<th>Cesarean rate</th>
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<tbody>
<tr>
<td>USA</td>
<td>32%</td>
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<tr>
<td>Canada</td>
<td>27.3%</td>
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<tr>
<td>Australia</td>
<td>32.3%</td>
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<tr>
<td>Cyprus</td>
<td>52.2%</td>
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<tr>
<td>South America</td>
<td>50%</td>
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<tr>
<td>Brazil (pr. practice)</td>
<td>90%</td>
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Safeguard C: caloric intake: Prioritize CBA vs. ABC for at-risk dyads
Safeguard C: caloric intake:
First hour hand expression to entice the less aggressive cesarean baby

Safeguard C: caloric intake:
First hour hand expression to entice the sleepy, less aggressive LPT infants

Safeguard C caloric intake:
Hand expression during early labor for the IDM, the LPT infant, …and even just to learn.
So what might paying attention to ABC in the 1st hour sound like?

**FRONT LOADING OUR MANAGEMENT**

**1st Hour Script, Low Risk Dyads (A, B, C)**

- If your baby is with you in the first hour, take your time to cuddle her. Once she begins to show interest in nursing, feel comfortable using your hands to help with:
  - A for attachment
  - B for breastmilk production
  - C for calories (or making sure your baby gets enough of your milk)

- No worries if she needs more time to perfect breastfeeding. You can make sure you make and she receives all she needs. Learn simple hand expression when it's easiest and your supply will increase sooner.

**1st Hour Script, High Risk Dyads (C, B, A)**

Some babies typically need a little hands-on help to "jump start" the first feed. Hold your recovering baby, skin-to-skin, near your nipple. Your partner can help you start the drips of milk. Soon, your baby will notice the familiar smell and begin moving her mouth. Guide her to the breast to lick the milk. If needed, help her latch on. In this way, you will protect her with your milk (C), promote your milk production (B) and help her learn (A).
Easy to remember two 10’s and two 5’s

- Two 10’s (approximations)
  - Weight loss is normal but not >10%
  - Regain birth weight by day 10

- Two 5’s (approximations)
  - Average size feed in first day is 5 mls (tsp)
  - Indicator of sufficient intake is bright yellow stools by day 5


Proposed Practice Changes to Reduce Risks

- Make every first hour count in every scenario
- Low threshold for hand-expressed spoon feeds
- Prioritize CBA vs. ABC for at-risk dyad.
- Normalize mother/partner helping hands in first hour
- Change the message: “You have all you need!”

OUTLINE

A. Practice changes
   - First hour ABC’s

B. System changes:
   - Prevention
   - Availability
   - Sustainability
What else can we do? What is lacking?

- What system changes are needed to keep both low and high risk infants safe, preserve the cornerstone of long-term, exclusive breastfeeding, milk production, while addressing the constraints of time, skills and resources?

How Do We Design A Shared, Sustainable, and Proactive Model?

Babies born in Baby-Friendly Hospitals have higher BF rates across all income and ethnicities -

Racial Disparity in NICU Use of Human Milk

CDC’s data: use of breastmilk in NICUs based on demographic makeup of the hospital's zip code area.

Per Cent of Hospitals in a Zip Code

>12.3% black residents  ≤12.3% black residents

48.9% used MOM  63.8% used MOM
38.0% not use DM  29.6% not use DM

Source: California Department of Public Health-Selected Disease Screening Program, Newborn Screening Data Form 3, 2015.
How can we provide EQUITY, not EQUALITY? What are the cornerstones of an optimal care?

There are already enough hurdles.

No Mothers, No Babies Left Behind

Lacoste, France
Systemic Changes
Cornerstones of an Optimal Care

- Prevention vs. Problem oriented
  - Prevent complications of suboptimal intake: excessive weight loss, hyperbilirubinemia, hypernatremia, delayed discharge, readmission

- Available vs. episodic, problem triggered
  - 24/7 for all dyads vs. a restricted few beneficiaries

- Sustainable vs. Unsupportable (cost/time)
  - Unsustainable cost of employing plentiful LCs or maintaining high level training of all staff

1. Prevention Vs. Problem Oriented
What must we prevent?
Two time-sensitive problems:
The first is sending mothers home who will not produce enough milk to feed their babies.
The second is sending babies home who risk complications related to not getting enough breastmilk

Sound Familiar?
- Third day, 37 wk AGA infant, NSVD, scheduled for discharge.
- Exclusively breastfed, primip mother says "going well"
- Weight down 10%, milk "not yet in", bilirubin 15.0,
- Recommendations:
  - LC consult prior to discharge
  - Mother rent a pump and use as much as possible
  - Supplementation after each breastfeed.
  - Follow up with pediatrician the next day
...is this not 3 strikes against her?

- Strike 1: Delay of 72 hours of prevention
- Strike 2: Pump suction alone may be a less **efficacious** method for colostrum removal
- Strike 3: On the threshold of leaving hospital supports, the message to mother: her best efforts to breastfeed put her baby in jeopardy with urgent measures needed

How Can We Avoid 3-Strikes?

Sound Familiar?

- Third day, 37 wk AGA infant, NSVD, scheduled for discharge.
- At 37 weeks (first week of term gestation) morbidity is twice that of 38 weeks
- Exclusively breastfed, primip mother says "going well"
- Consistent, skilled, bedside professional assessment?
- Weight down 10%, milk "not yet in", bilirubin 15.0,
- Complications of insufficient milk intake/production

Recommendations:
- LC consult prior to discharge
- mother rent a pump and use as much as possible
- supplementation after each breastfeed.
- Follow up with pediatrician the next day

Systemic Changes

Cornerstones of an Optimal Care

- Prevention vs. Problem oriented
  - Prevent complications of suboptimal intake: excessive weight loss, hyperbilirubinemia, hyponatremia, delayed discharge, readmission

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2. AVAILBILITY…

• New mothers, no matter what their circumstances become dependent on the hospital system to be there for them, at the bedside, 24/7.

• Our current practice relies heavily on episodic, specialized care (lactation specialists) for only a restricted number of beneficiaries.

• This may result in too few doing too little too late, while little problems become bigger, and less remedial and more time consuming.

Barriers and shortcomings of conventional care for RNs, MDs and Mothers (anonymous survey of 360 staff)

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<thead>
<tr>
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<th>RNs and MDs</th>
<th>Mothers</th>
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<tbody>
<tr>
<td>Time</td>
<td>Unavailability</td>
<td></td>
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<tr>
<td>Skills/Knowledge</td>
<td>Inconsistent, unhelpful advice</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>Who to turn to?</td>
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Add more LCs in the NICU works!

Quality improvement targeting early expression ↑ rates
Murphy L., Hum Lact 2014.

• Q.I. initiative to ↑ early milk expression (<6 hours) in mothers of VLBW infants
• Addition of more LCs offered mothers more frequent and earlier expression (median 6 vs. 9 hr.) using pumps and manual expression.
• At 28 days, 64% vs. 74% (P = .40) infants received breastmilk and at discharge 37% vs. 59% (P = .046).

Cost prohibitive (unsustainable) for some centers?
So many at risk!
Early, predictive concerns re attachment/production

- Of 532 primiparas, well-educated mothers, motivated to exclusively breastfeed, receiving good lactation support:
- 92% express at least 1 concern about attachment or milk production by day 3
- Of these 50% end up feeding formula between 30-60 days (vs. 15% mother with no concerns)
- By 2 months, 23% stopped breastfeeding (vs. 3%)

Should 92% receive a lactation consult?

Systemic Changes
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3. SUSTAINABLE
...too costly, time-consuming, difficult?

- A simple, proactive approach to care for all dyads might reduce the number of less remedial, time consuming breastfeeding complications.
- A simple, proactive approach might inspire more healthcare providers, who otherwise shy away from really “being there”, to feel like an integral part of a bedside team to support breastfeeding.
3. SUSTAINABLE

- Breastfeeding support, especially early on before problems get too far downstream, can be simplified, focused, and easy to teach and learn.

- Would simple training and reorganization improve prevention, availability and sustainability?

What is needed to optimize care?
A paradigm shift?

- STEEEP – safe, timely, effective, efficient, equitable and patient-centered. (Institute of Medicine)

- While we have created many great social enterprises that generate innovative approaches, we have not spent enough time and resources on doing what it takes to turn innovative ideas into lasting, system-level change. …by identifying the organizations and individuals already working on a problem, and helping them join forces to achieve their common goals.

Think out of the box!
Disclosure: A New Proposal

1. AWHONN's Nursing for Women's Health 2013;17;478-488.
3. J Hum Lact 2013. 29: 635
5. Breastfeeding Medicine, 2014: Vol. 9 (7);327-328
4 - Step Plan

1. Baby-friendly breastfeeding hospital policy
   AAP Sample Hospital Breastfeeding Policy

2. Adopt a focused, streamlined curriculum with core competencies critical during first 3 days
   - Low risk: ABC
   - At-risk: CBA

3. Train bedside staff:
   - Attachment
   - Breastmilk production (hand expression)
   - Calories (nomograms wt. loss and bili, spoon feed)

   Learning opportunities
   ✓ daily bedside responsibilities
   ✓ shadowing L.C.
   ✓ help in group (multi-cultural) maternity unit breastfeeding classes
   ✓ mandatory written and practical demonstrations of core competencies (“See one, do one, teach one”)

   UNLIMITED BREASTFEEDING
   hand expression
   spoon feeding to satiety
   “See one, do one, teach one”
4 - Step Plan

4. Conduct daily, brief *bedside* rounds with three participants: the *mother*, her *nurse* and the *lactation consultant* with a focused agenda (with M.D. support)

(prioritize *ABC* for low risk; *CBA* for at-risk)

Bedside Rounds

Focused Agenda:

– What skills require additional tutoring?
– How, where and who provides services?
– Frequent one-on-one bedside help, group classes, visual aids
– Same approach/language in all settings, beginning in the delivery room

Could such a program....

• Offer quality, consistency, and available bedside care for each dyad?
• Reduce the need for pumping, bottle feeding, phototherapy, discharge delays, and re-admissions?
• Increase the impact of lactation consultants, breastfeeding rates, and staff and patient satisfaction?

What's the harm in trying?
What's the harm in not trying?
The rest of the stories…

By day 5, at least!

Yellow stools by day 4 or 5!
Thank you!

“Son, your mother is a remarkable woman.”