Enhancing Breastfeeding Success: The Obstetrician’s Role

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Florida’s Quest for Quality Maternity Care
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Objectives

- Identify practices in the Preconception, Antenatal, Intrapartum and Postpartum Period that can enhance success for Breastfeeding Women

- List maternal contraindications to breastfeeding

- Understand how to assess if a medication is compatible with breastfeeding and identify resources to help with this.

- Understand which contraceptive methods may impact breastfeeding and why.

- List several resources to help women get assistance when they encounter breastfeeding difficulties.
Preconception Care:

- Women’s health providers screen for history of breast disease during primary care visits
  - Surgical procedures
  - Infections
  - Family history of cancer
  - Lactation history
- This is great opportunity to discuss lactation in general and work on societal perceptions “plant the seed”
- Especially important for adolescents
When should we discuss breastfeeding during prenatal care?

- As soon as possible!
- Unless there is a question of miscarriage
- During the breast exam
- Open ended questions
- Decisions are often made prior to pregnancy or in first trimester
- Cultural norms, do you know anyone that has breastfed?
Open ended questions that may facilitate a discussion about feeding

- Have you ever thought about how you will feed your baby?
- Are you interested in learning about why breastfeeding is the healthiest option for you and your baby?
- Do you have any family members or friends that breastfed their baby?
- What are your plans regarding work outside of the home after the birth?
History/Anticipatory Guidance

- Breastfeeding History
  - Did she breastfeed in the past?
  - How long?
  - Why did she wean?

- Other relevant medical/surgical history

- Involving partner/other family/social supports

- Review resources
  - Classes, Hospital Support (Lactation, nursing, OB/CNM/pedi)
  - Community Support

- Review hospital practices that will support breastfeeding
Maternal Benefits of Breastfeeding (It’s not just for babies anymore)

- Decreased Breast Cancer
- Decreased Ovarian Cancer
- Decreased Type 2 DM
- Decreased HTN, Hyperlipidemia and Cardiovascular Disease
- Less time away from work due to a sick child
- Decreased PP Hemorrhage and faster uterine involution
- Enhanced bonding and Stress Reduction
- Amenorrhea and Birth Spacing
Cardiovascular Disease and Breastfeeding

- Study in *Obstetrics and Gynecology, 5/09* by Schwarz, et al.
- Looks at 139,681 postmenopausal women from Women’s Health Initiative data
- Conclusion: women with increased duration of lactation had decreased prevalence of
  - Hypertension
  - Diabetes
  - Hyperlipidemia
  - Cardiovascular Disease
  - Minimum duration 6 months, longer duration, better outcomes.
Cost Analysis of Maternal Disease Associated with Suboptimal Breastfeeding

- Also published pediatric cost analysis in 2010
- Looks at 5 maternal outcomes which are improved by breastfeeding
  - Breast CA, Premen. Ovarian CA, Type 2 DM, HTN and MI
- Modeling /simulations which conclude a financial burden of $17.4 billion based on the high value of life lost before the age of 70.
Suboptimal Breastfeeding/Maternal Disease (cont.)

- Modeling in the study found 4396 additional deaths/year
- 5000 excess cases of Breast Ca
- 53,000 cases of HTN
- 14,000 cases of MI
- This exceeds the annual premature deaths of cervical cancer (3909), asthma (3361), and influenza (3055)
- This study may underestimate because it only used 5 outcomes and there are other health outcomes that breastfeeding impacts
Key Barriers to Breastfeeding
From SG Call to Action, 2011

- Lack of knowledge
- Lactation Problems
- Poor Family and Social Support
- Social Norms
- Embarrassment
- Employment and Child Care
- Barriers related to Health Services
An employer shall provide:

- Reasonable break time for an employee to express breast milk for her nursing child for 1 year after the child’s birth; and

- A place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk.
Exemptions:

- Breaks are unpaid unless a state law notes otherwise.
- If <50 employees, may be exempt if this imposes "undue hardship" due to size of business, resources and structure.
- Professional/salaried employees and teachers are not included in this law.
New legislation introduced in 2013: Supporting Working Moms Act

- Senator Merkley, OR
- Congresswoman Maloney, NY
- Expands the current federal law to include about 12 million salaried employees
- This law includes elementary and secondary school teachers, not previously covered
- Also includes non-hourly paid employees
Patients listen to what their doctors say…

Send a clear message to patients:
‘I recommend breastfeeding.’

DiGirolamo et al. Birth 2003;30:94-100
Maternal Contraindications to Breastfeeding (Joint Commission/US)

- HIV infection
- Human t-lymphotrophic virus type I/II
- Substance abuse and/or alcohol abuse
- Active, untreated tuberculosis
- Active untreated varicella
- Mother undergoing radiation
- Active herpes simplex with breast lesions
- Maternal meds for which Bfing contraindicated
- Maternal ICU admission (relative, but do not count in JC measure)
- Adoption/Foster care of Infant (also for JC measure)
- Previous breast surgery which prevents mother from making milk
History of Breast Injury or Surgery

- Reduction Mammoplasty
- Augmentation Mammoplasty
- Lumpectomy or Biopsy
  - Especially if significant ducts or nerves are severed/removed
  - Greatest concern are periareolar incisions
- Previous Treatment for Breast CA
- Hx of Trauma, Burns, or Chest Tube (childhood)
- Nipple Piercings with Infection or Scarring
Reduction Mammoplasty

- Repositioning of areolae and nipples likely to have difficulty with production
- Periareolar incisions may interrupt ducts and/or block milk flow into ducts
- Exclusive Breastfeeding is rare
- Can usually produce some milk
- If nipple/areola are left on pedicle and not moved, chances of success are higher
Augmentation Mammooplasty

- Usually compatible with successful feeding
- Depends upon where the implant is placed
  - Behind or in front of pectoral muscles?
- Excessively large implants may:
  - Impact filling capacity and limit storage volume
  - Restrict blood flow to mammary tissue and decrease production
- Was there an underlying abnormal shape, i.e., tubular breasts, that may impact success
Previous Breast Cancer Treatment

- Has not been shown to increase recurrence
- May improve survival
- Usually recommended that women wait 5 years post treatment to conceive
- If pregnant sooner, can usually nurse from the unaffected breast
- Sometimes can nurse from both if surgery or XRT did not interfere
- Radiation may decrease production
Cancer Therapy

- Should not delay treatment in order to breastfeed
- Some women getting antimetabolite chemo can pump/discard until meds clear system and then feed later in the cycle
- Radiation generally compatible with breastfeeding but may impact production long term
Summary of Antenatal Education

- Discuss breastfeeding early and often
- Review benefits for mother and child
- Review practices in the hospital that will enhance success
  - Rooming In, Feeding on Demand, Skin to Skin
  - Unnecessary supplementation, Avoid pacifiers
  - Support groups and Community Resources
- Review how to combine working and breastfeeding/pumping and how to work with employers.
Breastfeeding Friendly Office

- Posters/Art depicting breastfeeding throughout the office, multicultural women and children
- Discourage formula marketing
- Sign to remind patients that breastfeeding is encouraged in the waiting room
- Mother’s room for patients and staff
- Patient and Staff Education
- Community Based Resources/Printed materials
- Prenatal Classes
Intrapartum/Early Postpartum Practices to Enhance Success

- Will be reviewed in detail during other webinars this summer
- Involve the Ten Steps to Successful Breastfeeding and the Baby Friendly Designation
- Reinforce the importance of these steps during antenatal visits and when doing births and helping women in the delivery room
- OB/CNM discussions can have significant impact: take advantage of teachable moments
- Help facilitate skin to skin as much as possible
Medications and Breastfeeding

Pearls for making the best choices
Golden Rules:

- Try to enable a scenario where mother is appropriately treated and no interruption of feeding occurs
- Only rare circumstances where breastfeeding needs to temporarily or permanently cease
- Consult your resources adequately
- Reaffirm mother’s goals
US Dept. of HHS and FDA standard warning on OTC drugs:

“As with any drug, if you are pregnant or nursing a baby, seek professional advice before using this product.”
Drugs may transfer into milk if they:

- Attain high concentrations in maternal plasma
  - Route of administration
  - Absorption Rate
  - Half Life
- Are low in molecular weight
- Are low in protein binding
- Pass easily into the brain (lipophillic)

But is this a problem?
Inquire about the infant/child

- **Age**
  - Premature babies at highest risk
  - But quantity of milk they are ingesting is often quite small
  - Maturity of organs to clear, ie liver and kidneys

- **Stability of Child:** unstable infants with poor GI stability may increase the risk of meds

- **Is this medication used in pediatric population?** Compare pediatric doses with dose obtained through milk, usually much less
Imaging and Breastfeeding

- **Contrast Media for CT scan** are considered safe by the ACR. (2010)
  - <1% administered maternal dose is excreted into breastmilk.
  - <1% of contrast medium in breastmilk ingested by an infant is absorbed by the GI tract

- **Gadolinium Contrast for MRI**
  - 0.04% excreted into milk
  - Expected dose absorbed by infant is 0.0004% of maternal dose
  - No untoward effects noted
Older, more medically complex OB patients lead to more diagnostic imaging studies during lactation.

Overall, contrast enhanced media are safe and women should be advised NOT necessary to discard milk.

Plasma T½ 2 hours and 100% clearance in 24 hrs for both CT and MRI contrast media.

Certainly their option to discard for 2-24 hrs.
Radioactive Materials

- Radioactive Iodine ($^{125}$I and $^{131}$I): passes into milk at levels as high as 5% maternal dose (can be used for diagnosis or therapy)
- Breastfeeding should be discontinued until milk is clear (therapeutic use may be 1-3 months)
- Diagnostic studies usually 1-7 days discarding milk
- Milk can be tested for radioactivity
Other radioactive meds

- Gallium-67 discontinue for at least 72 hrs
- Technetium-99m discontinue for 24-48 hrs

- Think about if another study could be used for diagnosis without radioactive isotopes, collaborative care with team of providers.
Medications and Breastfeeding: Rules of Thumb

- Avoid using meds if not necessary
- If RID (Relative Infant Dose) is <10% most meds are safe to use. Usually <1%
- Choose drugs with published data
- Evaluate the infant for risks, ie premature or early neonatal period
- Meds used in first few days PP usually produce subclinical levels d/t low milk volume
Meds: Rules of Thumb: continued

- Mothers with depression symptoms should seek treatment. Most of these meds are safe or can choose one that is safe.
- Most drugs are safe in breastfeeding mothers.
- If drug is not safe, can TEMPORARILY discontinue until the drug is metabolized. Not always necessary to stop altogether.
- Choose drugs with short T1/2, high protein binding, low oral bioavailability or high molecular weight.
Contraindicated for breastfeeding: Antimetabolite Chemotherapies

- In general, this is one of the few situations where women are counseled to wean during chemotherapy.
- There are some newer agents with shorter half lives where temporary discontinuation during treatment until clearance is obtained may be possible.
- Team approach with Oncologist, Pediatrician and PCP/OB.
Resources for Medication compatibility with breastfeeding

- Lactmed
  - Website
  - App
- Medications and Mother’s Milk, Hale, 2012
  - Infantrisk.org
  - App
- AAP Committee on Drugs document (more dated)
- PDR (NO!!) Compiles all packages inserts standard recs are NOT to take—Poorest source of information
Drugs and Lactation Database (LactMed) - A peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed. Among the data included are maternal and infant levels of drugs, possible effects on breastfed infants and on lactation, and alternate drugs to consider.


Or Google “LactMed”
Lact Med FREE!
Medications and Mothers’ Milk
Tom Hale, PhD
Categories of Lactation Risk

- **L1 safest**: Drug has been taken by large number of breastfeeding mothers without observed adverse effect.
- **L2 safer**: limited number of BFing women without increase in adverse effects.
- **L3 Possibly safe**: No controlled studies in BFing women, risk is possible or controlled studies show minimal nonthreatening events.
Categories:

- **L4: Possibly Hazardous:** Positive evidence of risk to a breastfed infant or to breastmilk production, but benefits may be acceptable to mother despite the risk in infant.

- **L5 Hazardous:** Studies in BFing mothers demonstrate significant and documented risk to infant based on human studies, risk clearly outweighs benefit, contraindicated with lactation (3 pages out of 1000 in textbook).
Fertility and Breastfeeding: Normal menstrual cycle

- Follicular development initiated by FSH (Pituitary)
- Cont follicular growth requires FSH/E2 in response to LH (pulsatile release from pituitary)
- Midcycle → estradiol increase triggers preovulatory surges of FSH/LH
- Follicle secretes progesterone (luteinization)
- Oocyte released about 36 hrs later
Postpartum period
Characterized by:

- Elevated levels of PRL
- Low levels of gonadotropins
- Anovulation and Amenorrhea
- Pulsatile GnRH is suppressed by suckling
- Suckling also results in high PRL but unclear how this suppresses fertility
- Time of lactational amenorrhea depends upon freq and intensity of suckling
- Nipple stimulation inhibits LH/FSH
Nonlactating Women:

- Return of menses at 25 days at earliest
- Most menstruate by month 3 PP
- 90% menstruate by 6 months
- Return of ovulation at 25-35d at earliest
- 40% return by 3 months
- Ovulate about 50% of the time with first menses
- 5% chance of regaining fertility by 6 wks PP
Lactating Women

- Ovulation generally occurs before menses returns and varies 14-75%
- Longer the first menses delayed, more likely it will be ovulatory
- Cont suckling and elev PRL produce inadequate luteal function in first cycles, less likely to conceive
- EBF: First bleed generally precedes ovulation, or if +ovulation generally poor quality
Contraceptive Options:

- **Nonhormonal methods**
  - LAM
  - NFP methods/periodic abstinence
  - Barrier methods
  - Copper IUD
  - Sterilization

- **Hormonal methods**
  - OCP (combined and progesterone only)
  - Implanon
  - Progesterone IUD
  - Injectables
  - Patch/Ring
LAM Lactational Amenorrhea

- Highly effective in a variety of cultural, health care and socioeconomic settings
- Most appropriate for women who plan to EBF for 6 months.
- Optimal effectiveness, feeding should not be spaced more than every 4 hrs during day and 6 hrs at night
- Pumping may decrease efficacy b/c decreases suckling “vigor”
Three key questions for LAM:

Ask the mother:

Is your baby less than 6 months old?
- NO
- YES

Are you amenorrheic? (no vaginal bleeding after 56 days post partum)
- NO
- YES

Are you fully or nearly fully breastfeeding your baby?
- NO
- YES

Her chance of pregnancy is increased. She should not rely on breastfeeding alone. She should use another family planning method, but continue to breastfeed for the child's health.

There is only about a 2% chance of pregnancy; she does not need a complementary family planning method at this time.

Tell the mother: when the answer to any one of these questions becomes No

Figure 20-7. Use of lactational amenorrhea method for child spacing during first 6 postpartum months.
Natural Family Planning Methods

- Signs, symptoms or timing of presumed ovulation used to identify when abstinence is necessary to avoid conception
- No risk to lactation
- May be challenging to assess changes in mucous during lactation
- Many women have difficulty interpreting the “rules” of this method
- Failure rates can be high: typical use about 25%
Figure 20-9. Temperature, mucus, and cervical assessments during lactation to identify ovulation. (Courtesy National Family Planning of Rochester, New York.)
Barrier Methods

- Condoms
- Spermicides
- Diaphragms
- Cervical Caps
- Sponge

- Physical and chemical Barriers
- Typical use Failure rate 10-20%
- No impact on lactation
Sterilization and Copper T IUD

- Highly effective
  - Vasectomy (1%)
  - Female sterilization (Postpartum, Interval Hysteroscopic or Laparoscopic) (0.5-2%)
  - IUD (duration 10 years) (1%)
- No impact on lactation
- Female sterilization may have a brief interruption during surgery, work with team to make sure pump available, nurse right before surgery if able. Should not have to discard milk
Hormonal Methods: General rule is to avoid estrogens if possible

- Combined OCP, Patch, Ring: all can decrease milk supply
- Progesterone methods have less impact on milk supply
  - Implanon
  - Progesterone IUD (5 year)
  - POP
  - Medroxyprogesterone Injection

- Sometimes they can alter milk supply as well
Progesterone Only Methods

- Theoretical risk of introducing too early may impact full supply being established
- Postdelivery decrease in progesterone part of the physiologic cascade to start lactogenesis II.
- Most experts recommend delay initiating these methods until full supply is established (4-6 weeks minimum)
- Rarely patients see a drop in supply even with Progesterone IUD.
Progesterone Methods Failure Rates

- Depot Medroxyprogesterone (IM q 3 months)
  Typical failure rate: 0.3%

- Progesterone Only Pill: 8-10% (Typical use)
  Perfect use: 1%

- Implant (Etonorgestrel Rod) Typical use <1%

- Also helpful for medically complicated patients that are not estrogen candidates
Postpartum Checkup: How can we help enhance breastfeeding duration and exclusivity?

- Have referral/resources for community support readily available with staff for phone calls and during appointments.
- Remind patients to call the office with questions or problems relating to breast health at ANY time postpartum even after the PP exam.
- Review transition of return to workforce and plans to highlight the law and offer support and advice re: expressing at work.
Postpartum: How can we help

- Positive feedback goes a long way when you discuss what the baby is feeding
- Remind patients of benefits
- Review how contraceptives will impact breastfeeding, if at all and make sure she is making informed choices
- Handouts with information on refrigeration/freezer guidelines for expressed milk
Support of continuation through first year

- Offer to provide a letter for employer reviewing the medical and economic benefits for an employee to continue to breastfeeding
- Better employee retention
- Less absenteeism due to sick child
- Financially advantageous to retain breastfeeding employees rather than hire new employee
- Better work satisfaction
Screening Mammogram and Breastfeeding

- Older obstetric population coincides with more screening mammograms during lactation
- Should not delay screening if pt plans to breastfeed indefinitely
- Should be screened at a center that can interpret lactational changes seen on MMG
- Should empty the breast via nursing or pumping just prior to the imaging.
Resources/Links
Where providers lack confidence

- Peds/OB providers polled about where deficiencies lie:
  - Referral services
  - Returning to work/Pumping
  - Low Milk Supply
  - Breast Pain
  - Teaching Basic Skills/Evaluating Latch

Know when, and to whom, to refer – make use of lactation consultants.

Hypoglycemia
Discharge
Supplementation
Mastitis
Peripartum management
Cosleeping
Model Hospital Policy
Human milk storage
Galactogogues
Near-term infant
Ankyloglossia
NICU graduate
Contraception
The breastfeeding-friendly physician’s office
Anesthesia and analgesia
The hypotonic infant
MA Breastfeeding Coalition
www.massbreastfeeding.org

The Best Start:
A Guideline for Healthy Term Newborns, Birth to 48 Hours

Core Knowledge
Incorporate these bodies into RECENT Prenatal classes and/or visits

Inform Parents About:
- the effects of labor medications on breastfeeding
- drug-free alternatives for labor and delivery, including use of a birth doula, if available
- effects of breastfeeding on acute and chronic diseases of women and children, so that mother can make an informed feeding choice.

Teach Skills for Breastfeeding Success:
- Expect to feed within the first hour of life, with skin-to-skin contact.
- Offer frequent feeds, not formula. The more the baby nurses, the more milk the mother will make.
- Stay near the baby and nurse when needed.
- Sleep near the baby, not the clock.
- Warm the breast, not the clock.
- Recognize swallowing and milk transfer.
- Avoid supplementation without a medical indication.
- Breastfeed exclusively for 6 months.

Promote Time for Breastfeeding and Rest:
Suggest that parents don’t let visitors interrupt or delay feedings, and be prepared to ask visitors to leave. Suggest they turn ringer off the phone and not between feedings.

Encourage Pregnant Women to visit meetings of community breastfeeding support groups (e.g., La Leche League).

Core Practices
For Baby:
At birth:
- Place baby skin-to-skin immediately after birth.
- Dry baby and assess Apgar with baby on mother.
- Breastfeed within the first hour of life.
- Show mother correct latch and position wide open mouth.
- Inspect infant’s bottom for any pharynx until after first feed, up to 1 hour.
- Delay bath until after first feed.

First 48 hours:
- Check glucose only in high-risk babies.
- Perform baby’s weights, vital signs, & examination in mother’s room.
- Perform all painful procedures with baby at breast or skin-to-skin (includes heel sticks and Vitamin K).
- Increase breastfeeding frequency & assure swallowing & hypoglycemia. hyperbilirubinemia, or weight loss >7%.
- Avoid supplementation without a medical indication.
- Follow up 2 days after discharge & again at 2 weeks.

For Mother:
- Breastfeed 24/7, a day, and has maximal contact with baby, preferably skin-to-skin.
- Start limited waketime when it’s time for feeding and teaching.
- Mothers feel stronger, having which is not necessarily painful.
- Parents are aware of feeding cues & swallowing.
- Parents are given written & verbal guidance about Skills for Breastfeeding Success.
- Mothers/baby demonstrate effective breastfeeding prior to discharge.
- Mother is given contact info for community support services.

Core Support
Provide extra support and/or consider referral to certified lactation consultant in the following circumstances, due to increased risk of breastfeeding problems:

For Baby:
- birth by vacuum extraction
- continued feeding after delivery
- weight loss >7% associated with poor feeding
- infant intubated, intubated, or sleepy & refusing to feed
- use of non-breastmilk fluids or pacifiers
- difficulty with latch
- noxious or intolerable swallowing
- no effective breastfeeding seen prior to discharge
- tongue-tie or other anatomical abnormalities
- hypothyroidism
- hypoglycemia (<65 by laboratory confirmation) in a-risk or symptomatic infants

For Mother:
- prior breast surgery
- type 1 diabetes
- obesity
- multiple birth
- smoking

Proper latch on
Making Milk is Easy!

10 Steps to Make Plenty of Milk

1. Prepare foods and drinks. Make sure your baby is fed. Breastfeeding is not just about the milk, but also about the bond you are building.

2. All you need is breastfeeding! The American Academy of Pediatrics recommends that your baby have a diet of breast milk for the first six months. After six months, you should add solid foods to your baby's diet.

3. Necessity and efficacy. Breastfeeding provides essential nutrients for your baby. It is recommended to continue breastfeeding beyond six months.

4. If the baby isn’t colicky, he or she isn’t feeding poorly. Learning to breastfeed will help you learn how to feed your baby properly.

5. Say, “I’m not泊湖, and neither is your baby!” Breastfeeding can be challenging, but it is possible. Remember, it’s normal to have some difficulties.

6. Don’t wait to call for help. Breastfeeding is not easy. It is a constant learning process. It is important to seek help when needed.

7. The baby needs to be fed. Your baby should be fed every two to three hours. This helps to maintain a good supply of milk.

8. Refine your baby’s suck. Your baby should be able to latch on and suck effectively. It is important to ensure your baby is getting enough milk.

9. Be patient. Breastfeeding takes time and practice. It is important to be patient and persistent.

10. Making your own baby needs to be fun. Breastfeeding is not just about the milk, it is also about the bond you are building.

Discharge Instructions

Before you leave the hospital...

1. Breastfeed your baby at least every three hours.
2. Rest as much as possible.
3. Practice in a comfortable position.
4. Remember to use a clean cloth to wipe the baby after each feeding.
5. Avoid using any medication that may affect your milk supply.
6. Keep the baby warm and dry.
7. Remember to ask for help if needed.

It’s my birthday, give me a hug!

Skin-to-Skin Contact for You and Your Baby

One-time...

What is "Skin-to-Skin Care"?

Skin-to-skin contact is a practice that involves placing your baby on your chest and skinning for at least 10 minutes. It is a proven way to improve bonding and attachment.

Benefits...

1. Skin-to-skin contact improves your baby’s ability to breastfeed.
2. It decreases stress and promotes a sense of calm.
3. It strengthens the bond between mother and baby.
4. It improves your baby’s development.
5. It can help reduce your risk of developing postpartum depression.

Skin-to-Skin Care Beyond the Delivery Room...

It’s important to continue skin-to-skin contact after your baby is discharged from the hospital. It can help you feel connected to your baby and provide a sense of security.

Tips...

1. Try to breastfeed your baby at least once a day.
2. Keep the baby close by.
3. Avoid using any medication that may affect your milk supply.
4. Remember to ask for help if needed.
5. Skin-to-skin contact is an important practice that can help you bond with your baby.

If you have questions, please ask a lactation consultant for help right away!
Dept. of HHS and Office on Women’s Heath, African American Breastfeeding Campaign:
http://www.womenshealth.gov/itsonlynatural/
Thank you!
FL Breastfeeding Coalition
Dr. Joan Meek

Questions?