Breastfeeding Support for Families Facing High Risk Situations

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- Region 1 Breastfeeding Coordinator since 2005 and currently serve in that capacity at Mountain Area Health Education Center (MAHEC)
- Faculty and Course Director of the North Carolina Lactation Educator Training Program since 1996
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Georganna Cogburn, MSHE, RDN, LDN, IBCLC, RLC Disclosures

- I have no potential conflicts of interest to declare.
- Any products or brand names appearing in this presentation are for illustrative purposes only and do not constitute an endorsement.

Objectives

- Explore the reasons for and the best practices for breastfeeding support in high risk situations: diabetes, obesity, late preterm infants, postpartum depression and medication assisted therapy.

Why Support Breastfeeding?

- Breastfeeding is the preferred and normative method for infant feeding and is the standard by which everything else is measured.
- All Professional Organizations recommend exclusive breastfeeding for the first 6 months of life with continued breastfeeding to 12 months or beyond with the addition of complementary foods at 6 months of age.

Reasons to Breastfeed

Decreased Risk Of	Diabetes	Obesity	Late Preterm	PPD	MAT
URI	X	X	X	X	X
Ear Infections	X	X	X	X	X
GI Infections	X	X	X	X	X
SIDS	X	X	X	X	X
Asthma	X	X	X	X	X
NEC	X	X	X	X	X
Obesity	X	X	X	X	X
Type 2 DM	X	X	X	X	X
Eczema	X	X	X	X	X
Breast CA	X	X	X	X	X
Ovarian CA	X	X	X	X	X

Breastfeeding Challenges

	Diabetes	Obesity	Late Preterm	PPD	MAT
Separation	X	X	X	X	X
Delayed BF Initiation	X	X	X	X	X
Delayed Lactogenesis	X	X	X	X	X
Increased Risk of Supplementation	X	X	X	X	X
C-section Delivery	X	X			
Milk Supply Concerns	X	X	X	X	X
Mother's Expectations	X	X	X	X	X
Maternal Guilt/Stress	X	X	X	X	X

Best Practice Breastfeeding Support for ALL Families

- Basic Breastfeeding Support/Management
  - Encourage skin-to-skin contact starting immediately post-delivery
  - Room-in 24 hours per day
  - Assure optimal positioning and latch-on to prevent sore nipples and allow for maximum milk transfer
  - 8 to 12 feedings/pumping sessions per 24 hours
  - Observe infant for feeding cues/Teach parents about infant feeding cues
  - Monitor output – wet and bowel movements
  - Monitor infant weight gain
- For high risk families, more in depth support and assistance will be needed for breastfeeding success

DIABETES

Diabetes

- Breastfeeding is compatible with Type 1, Type 2 and Gestational Diabetes and reduces the risk of the infant developing diabetes
- The better the blood glucose control, the better the outcomes for the mother and infant
- Goal: near normoglycemia

Challenges with Diabetes

- Maternal
  - Existing diabetic complications
  - Demanding self-care regimen
  - Erratic blood glucose patterns early post delivery with possible severe hypoglycemia
  - Hyperglycemia as a result of illness or infection
  - Increased calorie needs
  - Increased susceptibility for mastitis
  - Increased risk for candidiasis
- Infant
  - Hypoglycemia
  - Prematurity
  - Macrosomia
  - Large for Gestational Age
  - C-Section Delivery
  - Birth Injury
  - Hyperbilirubinemia
  - Congenital Anomalies

Reasons to Support Breastfeeding with Diabetes

- Allows the mother to feel normal
- Decreased stress and more rest for the mother
- Better blood glucose control in the mother due to increased insulin sensitivity
- Reduced risk of the infant developing Type 1 diabetes
- May help with postpartum weight loss and the prevention of overweight and obesity
- If gestational diabetes, decreased risk of Type 2 diabetes in the mother as a result of increased insulin sensitivity
- More gradual change in hormonal levels post delivery may decrease the risk of postpartum depression

Strategies to Support Breastfeeding with Diabetes

- Assess support system
- Education:
  - Benefits of exlcusive breastfeeding
  - Frequent monitoring of blood glucose levels and adjusting insulin dosage as needed
  - Effect of breastfeeding on caloric needs
    - Adjust caloric intake
    - Eat a snack with protein and carbohydrate before or during nursing
  - Early skin-to-skin, starting in the delivery room
  - Rooming-in throughout the hospital stay
  - Assistance with positioning and latch-on

Strategies to Support Breastfeeding with Diabetes

- Education:
  - Milk expression with a multi-user electric breast pump if infant is not going to breast or nursing effectively
    - Teach hand expression
    - Supplement the infant with colostrum rather than formula
  - Recognition of early signs of mastitis or candida infection
  - Weaning – gradual, not abrupt
  - Monitor infant for hyperbilirubinemia
  - Use of galactgogues

Treatment of Infant with Hypoglycemia

- At risk infants should be screened
- Monitoring of blood glucose levels should start no later than 2 hours after birth
- Monitoring should continue before feeding until the infant has 2 consecutive pre-feed measures 40 mg/dl – 50 mg/dl
- IV 10% glucose solution should be given if glucose level remains low (20 mg/dl – 25 mg/dl) despite feedings
- Continue to breastfeed with IV glucose therapy
- Continue monitoring
- Encourage mother to hand express and pump and feed the infant expressed breast milk
- Must pump or move milk 8 or more times in 24 hours

ABM Clinical Protocol #1, 2014

OVERWEIGHT AND OBESITY

Challenges with Overweight and Obesity

Overweight/Obese Women have increased health risk for:

- Type 2 Diabetes
- Gestational Diabetes
- Metabolic Syndrome
- Miscarriage/Stillbirth
- C-section Delivery
- Sore Nipples
- Fatigue
- Thromboembolism
- Osteoarthritis
- Cardiovascular Disease
- Pregnancy Induced Hypertension and Pre-eclampsia
- Delayed Lactogenesis – low milk supply

Challenges with Overweight and Obesity

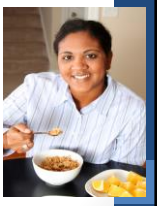
- **Infants born to overweight or obese women are at increased risk of:**
  - Macrosomia
  - Congenital anomalies
  - Neural tube defects
  - Birth injuries
  - Low Apgar scores
  - Admission to NICU
  - Greater body fat mass in the neonatal period
  - Stillbirth

Reasons to Support Breastfeeding in Overweight and Obesity

- Breastfeeding is associated with decreased risk of:
  - childhood obesity
  - diabetes
  - decreased postpartum weight retention.

Preparation for Pregnancy and Breastfeeding

- Prior to Pregnancy:
  - Develop a healthy lifestyle
    - Encourage to reach a healthy weight.
    - Encourage to adopt healthy eating habits.
    - Encourage physical activity



Preparation for Breastfeeding

- During Pregnancy:
  - Avoid excessive weight gain
  - Avoid non-nutritious foods
  - Encourage daily exercise, i.e. a walk
  - Discourage weight loss during the pregnancy.
  - Breastfeeding education: Benefits, Getting Breastfeeding Started
- During Intrapartum:
  - Encourage to be as active as possible to avoid a C-section delivery
  - Avoid sedation, if possible

Strategies for Supporting Breastfeeding in Overweight and Obese Women

- Postpartum:
  - Keep mother and infant together, even during C-section recovery
  - Skin-to-skin – as much as possible
  - Assess the need for pumping prior to feeding to make the nipple more accessible
  - Support the breast to reduce traction on the Cooper's Suspensory Ligaments
  - Early and frequent breastfeeding or pumping 8 to 12 times per day
  - Observe latch-on to assure adequate breast stimulation

Strategies for Supporting Breastfeeding in Overweight and Obese Women

- Postpartum:
  - Teach Reverse Pressure Softening to reduce engorgement in the areola
  - Teach Hand Expression
  - Instruct about the use of Alternate Breast Massage, especially for an infant who does not have an effective suck
  - Review signs of milk transfer – wet and bowel movements
  - Pump every 2 to 3 hours using appropriate size breast shields, if mother and infant are separated or have problems with latch

Strategies for Supporting Breastfeeding in Overweight and Obese Women

- Discharge Teaching Plan
  - Review infant feeding cues with the parents
  - Assure that the mother has achieved a comfortable position and an effective latch
  - Review frequency and duration of feedings
  - Teach parents to listen for audible swallows
  - Encourage to use a log to record number of feedings per day and output
  - Encourage to eat healthy foods
  - Take prescribed supplements

Strategies for Supporting Breastfeeding in Overweight and Obese Women

- Intertrigo
  - Inflammation of skinfolds caused by skin-to-skin contact or clothing friction
  - Educate regarding increased risk of infection and Candida
  - Wear a bra for support
  - Clean and dry thoroughly breast skin folds daily

Breastfeeding Concerns Post-Bariatric Surgery

- Bariatric Surgery
  - Fluids
  - Vitamin and mineral deficiencies – vitamin B12, Vitamin D, folate, and iron. Possible Protein-Calorie Malnutrition.
  - Breastfed infant at risk of vitamin B 12 deficiency and failure to thrive due to maternal lack of gastric intrinsic factor needed to absorb vitamin B 12
  - Mother needs a multivitamin and mineral supplement with regular nutrition
  - Positioning and Latch-on
  - Surveillance of infant growth, both may need parenteral vitamin B 12 supplementation

Breastfeeding Concerns Post-Bariatric Surgery

- Follow-up for Infants:
  - Pediatrician should know that mother has a history of weight loss surgery
  - Frequent checks for appropriate growth and development
  - Lab work for vitamin B12, vitamin D, folate, calcium and iron should be considered

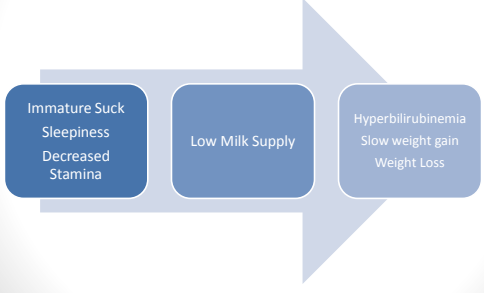
LATE PRETERM INFANTS

Feeding Challenges for the Late Preterm Infant

- Mother's biggest concerns with Late Preterm Infants
  - Mouth too small for feeding
  - Got tired easily
  - Sleepy
  - Low energy
  - Choking
  - Problems with effective latch
  - Coordination of suck/swallow/breathe

Dasani et al, International Breastfeeding Journal, 2017

Feeding Challenges for the Late Preterm Infant



Strategies for Supporting Breastfeeding in Late Preterm Infants

- Initiating Breastfeeding
  - Place skin-to-skin on the chest immediately after delivery.
  - Breastfeed within the first hour post-delivery
  - Room-in with close observation and frequent skin-to-skin care
  - If mother and infant are separated or infant is not sucking effectively, start pumping within 6 hours of delivery and at 3 hour intervals thereafter
  - Parent education:
    - signs of respiratory distress
    - infant feeding cues
    - waking the sleepy infant
    - amount per feeding based on the baby's stomach size
    - ways to reduce illness
    - tracking output – wet and bowel movements

ABM Protocol #10, 2016; National Perinatal Association Guidelines

Strategies for Supporting Breastfeeding in Late Preterm Infants

- Three Goals for Breastfeeding the Late Preterm Infant:
  1. Protect the milk supply
  2. Ensure adequate milk intake during breastfeeding
  3. Facilitate milk intake

Bennett, CF et al. Journal of Nutrition Education and Behavior, 2017

Strategies for Supporting Breastfeeding in Late Preterm Infants

- On-Going In-Hospital Care
  - Breastfeeding evaluation within first 24 hours after delivery by IBCLC or trained nurse
  - Observe, assess and document breastfeeding 2 times per 24 hours
  - Should breastfeed 10 to 12 times per day with assistance if needed
  - Continue skin-to-skin care
  - Monitor vital signs, weight gain and output
  - Supplement, if needed
  - Express breast milk using a multi-user electric breast pump and hand expression
  - Provide the parents with education on:
    - Recognition of infant cues
    - Breastfeeding frequency and technique
    - Breast pumping, hand expression, milk storage
    - Supplemental feeds
    - Output - wet diapers and bowel movements
    - Protection from overstimulation
    - Continued skin-to-skin contact

ABM Protocol #10, 2016; National Perinatal Association Guidelines

Strategies for Supporting Breastfeeding in Late Preterm Infants

- Discharge Planning
  - Assess readiness for discharge
  - Develop a discharge feeding plan
  - Follow-up appointment or home visit scheduled 1 to 2 days post hospital discharge

ABM Protocol #10, 2016; National Perinatal Association Guidelines

Strategies for Supporting Breastfeeding in Late Preterm Infants

- On-going Post-Discharge Care:
  - First visit post-discharge:
    - Assess infant alertness, hydration, weight without clothing, output, feeding frequency and duration, supplementation
    - Assess mother's breast and emotional state
    - Observe infant feeding at breast
    - Review mother's goals and expectations
    - Review safe sleeping practices

ABM Protocol #10, 2016; National Perinatal Association Guidelines

Strategies for Supporting Breastfeeding in Late Preterm Infants

- On-going Post-Discharge Care:
  - Weekly weight checks until 40 weeks post-conceptual age or thriving. Weight gain of 20 – 30 gm/day
  - Iron supplementation
  - Continue pumping and supplementing, if infant is not moving milk effectively
  - As infant matures, continue to offer the breast

ABM Protocol #10, 2016; National Perinatal Association Guidelines

Strategies for Supporting Breastfeeding in Late Preterm Infants

- Problem-solving
  - Slow/poor weight gain
    - Signs of adequate intake:
      - 6 wet diapers and 3 to 4 sizable yellow-seedy stools by Day 4
      - Satisfied after 20 to 40 minutes of breastfeeding
      - Appropriate weight loss/gain
  - Latch Problems
  - Jaundice/Hyperbilirubinemia

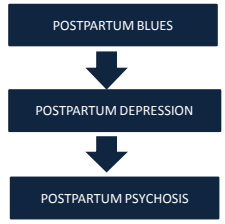
ABM Protocol #10, 2016; National Perinatal Association Guidelines

POSTPARTUM DEPRESSION

Factors That Increase The Risk For Postpartum Depression

- Prior history of depression (25 - 30% risk of recurrence)
- Recent stressful life events
- Lack of social support
- Unintended pregnancy
- Women who are economically stressed, disadvantaged, low income or black

Disease Spectrum of Postpartum Depression



Screening for Depression

- Screening is recommended for all women
  - ACOG recommends screening at least once in the perinatal period for depression and anxiety symptoms using a standardized, validated tool
  - AAP and US Surgeon General's Office recommend the early identification and treatment of mental health disorders, including postpartum depression.
- Screening Tool
  - Edinburgh Postnatal Depression Scale (EPDS) - free, in public domain, available in many languages

ACOG Committee Opionion 630, 2015

When Making Feeding Decisions, Consider

Breastfeeding Challenges with Depression

- Mother's expectations
- Nighttime feedings
- Breastfeeding problems
- Feelings of guilt
- Lack of access to professional lactation care

Reasons to Support Breastfeeding with Depression

- More rest for the mother
- Skin-to-skin contact with infant will reduce mother's cortisol level and calm an infant who is irritable

Non-Pharmacological Treatment of Depression

- Long-chain fatty acids – DHA & EPA
- Exercise
- Psychological Therapy - Interpersonal Psychotherapy, Cognitive Behavioral Therapy or Psychodynamic Therapy (Non-directive Therapy)
- Social support/groups
- St John's wort

Walker, Breastfeeding Management, 2017

Pharmacological Treatment of Depression

- Medications (SSRI - selective serotonin reuptake inhibitor) - safe for breastfeeding
  - Paroxetine (Paxil) and Sertraline (Zoloft) should be considered first
- Mothers treated with SSRI or tricyclic antidepressant or SNRI (serotonin-norepinephrine uptake inhibitor) during pregnancy with good results should continue on the same medication while breastfeeding
- Resources
  - https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm
  - Tom Hale https://www.infantrisk.com/

Strategies for Supporting Breastfeeding with Depression

- Skin-to-skin care
- Monitor infant weight gain
- Use an infant sling
- Provide opportunities for frequent suckling (Feed 8 to 12 times in 24 hours)
- Encourage planned rest periods
- Severely depressed mom might benefit from pumping

Support Resources for Depression

- Postpartum Support International www.postpartum.net
- Postpartum Depression Online Support Group www.ppdsupportpage.com

MEDICATION ASSISTED THERAPY

Opioid Abuse During Pregnancy Increases the Risk of

- Lack of prenatal care
- IUGR
- Placental insufficiency
- Preterm rupture of membranes
- Premature birth
- Postpartum hemorrhage
- Perinatal mortality

ACOG Committee Opinion 711, 2017

Why Medication Assisted Therapy?

- Increases the stability of the uterine environment
- Decreases risk of early pregnancy loss and preterm labor
- Decreases maternal drug seeking behavior
- Decreased maternal morbidity and mortality
- Improves pregnancy outcome – improved prenatal care, access to substance abuse counseling, less fetal loss
- Decreases severity of Neonatal Abstinence Syndrome (NAS)

Graves et al, 2016, Substance Use Research and Treatment

Support for Breastfeeding from Professional Organizations

- ACOG, AAP and ABM all support breastfeeding for opioid dependent women who are enrolled in a substance abuse treatment and when there are no contraindications to breastfeeding

Breastfeeding Challenges with MAT

- Inaccurate and inconsistent information from health care providers, family and friends
- Effect of medication on the infant
- Social stigma around Medication Assisted Therapy (MAT)
- History of sexual trauma
- Lack of support services to visit the infant at the hospital – transportation, distance to the hospital, care for other children

Breastfeeding Challenges with MAT

- Maternal mental health- guilt, anxiety, stress
- Lack of family support
- Polypharmacy/Polydrug Use
- Concerns regarding milk production
- If Hepatitis C positive, fear of transferring to infant

Breastfeeding Challenges with MAT Infant Experiencing NAS

- CNS hyperirritability
- GI dysfunction
- Respiratory distress
- Vague autonomic symptoms – yawning, sneezing, mottled color, fever
- Hypertonicity
- Irritability
- Disorganized suck

Reasons to Support Breastfeeding with MAT

- Amount of methadone and buprenorphine found in breast milk is minimal
- Reduction in NAS Symptoms leading to a decreased need for and/or shorter treatment for NAS
- Shorter hospital stay for infant
- Protection against SUID with exclusive breastfeeding
- Increased maternal confidence
- Lower risk of neglect
- Better family-social functioning
- Improved maternal-infant bonding

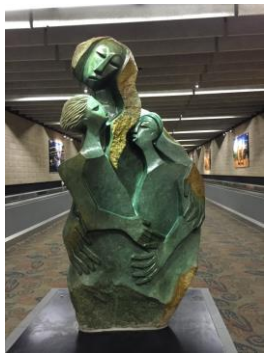
Strategies to Support Breastfeeding with MAT

- Education during the prenatal period about breastfeeding with MAT
- Skin-to-skin contact starting immediately after delivery
- Rooming-in
- Swaddling
- Minimize external stimulation
- Use of pumped breast milk

Hilton, 2012, AmJMCN and Pritham, 2013, JOGGN

Strategies to Support Breastfeeding Women on MAT

- Anticipatory Guidance and Education
- Multidisciplinary Teams: Health Care Provider, Behavioral Medicine, IBCLC, Peer Counselor
- Community Support Groups



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