Step 4: Evidence-Based Care During the Golden Hour

Becoming Baby-Friendly in Oklahoma Webinar

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Becky Mannel, MPH, IBCLC, FILCA

OKLAHOMA BREASTFEEDING RESOURCE CENTER

Becoming Baby-Friendly in Oklahoma

Welcome to Sara Bellatti
OBRC Staff Assistant

OKLAHOMA BREASTFEEDING RESOURCE CENTER

- Comes from the OU Office of Medical Education
- MS from Oklahoma City University
- Enjoys her 2 Welsh Corgis

Objectives

- Review concept of the “golden hour”
- Review current Baby-Friendly USA Criteria for Step 4
- Review current evidence for golden hour practices
- Describe a sample golden hour protocol

Michael Odent – French OB in 1977, described newborns seeking the breast in the first hour of life

Key Golden Hour Elements

- Skin-to-skin contact
- Delayed cord clamping
- Breastfeeding
- Delay of non-urgent tasks

Baby-Friendly USA Guidelines and Evaluation Criteria – Step 4

- STEP 4: Help mothers initiate breastfeeding within one hour of birth.

Place infants in skin-to-skin contact with their mothers ***immediately following birth for at least an hour*** and encourage mothers to recognize when their infants are ready to breastfeed, offering help if needed.

Baby-Friendly USA, 2016

Baby-Friendly USA Guidelines and Evaluation Criteria – Step 4

- All mothers should be given their infants to hold with ***uninterrupted and continuous skin-to-skin contact immediately after birth*** and until the completion of the first feeding,
  - unless there are documented medically justifiable reasons for delayed contact or interruption.
- **Routine procedures** (e.g. assessments, Apgar scores, etc.) should be done **with the infant skin-to-skin** with the mother.
- **Procedures requiring separation** of the mother and infant (bathing, for example) should be **delayed until after this initial period** of skin-to-skin contact and should be conducted, whenever feasible, at the mother's bedside.
- Additionally, skin-to-skin contact **should be encouraged throughout the hospital stay**.

Baby-Friendly USA Guidelines and Evaluation Criteria – Step 4

- **After cesarean birth**, mothers and their infants should be placed in continuous, uninterrupted skin-to-skin contact
  - as soon as the **mother is responsive and alert**,
  - with the same staff support identified above regarding feeding cues,
  - **unless separation is medically indicated**.

- In the event that a mother and/or infant are separated for documented medical reasons, **skin-to-skin contact will be initiated as soon as the mother and infant are reunited.**

Baby-Friendly USA Guidelines and Evaluation Criteria – Skin-to-Skin Contact

Skin-to-skin contact (STS) – Skin-to-skin contact or skin-to-skin care refers to contact between the newborn infant and its mother.

- In the case of incapacitation of the mother, another adult, such as the infant's father or grandparent, may hold the infant skin-to-skin.
- After birth, the **infant is completely dried and placed naked** against the mother's naked ventral surface.

Baby-Friendly USA Guidelines and Evaluation Criteria – Skin-to-Skin Contact

- The infant **may wear a diaper and/or a hat**, but no other clothing should be between the mother's and infant's bodies.
- The **infant and mother are then covered with a warm blanket**, keeping the infant's head uncovered.
- STS should be encouraged **beyond the first hours** and into the first days after birth and beyond.

What does the evidence say about golden hour practices?

Neczypor and Holley

Impact of the Golden Hour - INFANT

- DECREASED RISK OF:
  - Hypothermia
  - hypoglycemia
- Stabilizes respiratory rate and blood pressure
- Decreases newborn stress hormones
- Supports optimal brain development
- Increased oxytocin protects newborn from effects of sudden separation from the mother (similar to drug withdrawal)
- Increased breastfeeding exclusivity and duration

Biro 2015, Moore 2016, Redshaw 2014

Skin-to-Skin (STS) Contact Impact

- Increased time in quiet alert state
- Decreased infant crying
- Improved interactions between mother and infant
- **Dose-dependent relationship between STS and breastfeeding**
  - STS 31-60 minutes or more = increased percentage breastfeeding at 3 months

Biro 2015, Moore 2016, Redshaw 2014

Impact of the Golden Hour - MOTHER

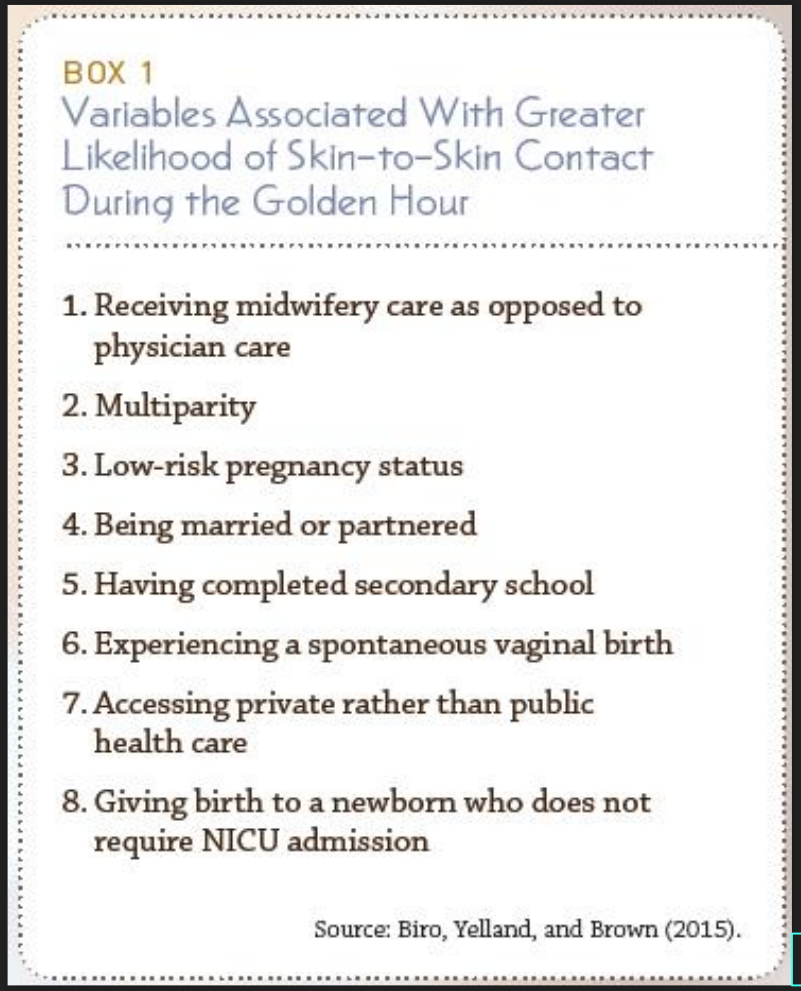
- Increased oxytocin
  - Decreased postpartum bleeding
  - Decreased risk for postpartum hemorrhage
  - More rapid delivery of placenta and uterine involution
- Decreased maternal anxiety
- Increased confidence in parenting skills
- Increased breastfeeding exclusivity and duration
- Increased maternal satisfaction

Crenshaw 2014, Lowson 2015, Moore 2016, WHO/UNICEF 2009

Who is at risk of not having STS contact?

Less Likely to Have STS Contact

- Primiparity
- Higher-risk pregnancy
- Surgical birth



BOX 1

Variables Associated With Greater Likelihood of Skin-to-Skin Contact During the Golden Hour

1. Receiving midwifery care as opposed to physician care
2. Multiparity
3. Low-risk pregnancy status
4. Being married or partnered
5. Having completed secondary school
6. Experiencing a spontaneous vaginal birth
7. Accessing private rather than public health care
8. Giving birth to a newborn who does not require NICU admission

Source: Biro, Yelland, and Brown (2015).

Neczypor and Holley

What is the impact of increased breastfeeding duration??

DID YOU KNOW??

Breastfeeding is a *women's health issue*

DISEASE	CASES PREVENTED
Breast cancer	5,023
Type 2 diabetes	12,320
Hypertension	35,982
Heart attacks	8,487

DID YOU KNOW??

... and a *children's health issue*

CASES PREVENTED	DISEASE
185	Leukemia
601,825	Ear infections
271	Crohn's disease & Ulcerative colitis
2,558,629	GI infections
20,900	Severe lower respiratory infections
45,298	Childhood obesity
1355	Necrotizing Enterocolitis

721 deaths

DID YOU KNOW??

- For every 597 women who optimally breastfeed, **one maternal OR child death is prevented.** - *Maternal Child Nutrition 2017*

Enabling **optimal breastfeeding** *would* ***prevent*** **2619 maternal deaths & 721 child deaths** *annually in the U.S.*

Describe a sample golden hour protocol

- Neczypor JL and Holley SL. *Providing Evidence-Based Care During the Golden Hour.* Nursing for Women's Health. 2018: Vol 21;6, p 462-472.

Key Golden Hour Elements

- Delayed cord clamping
- Skin-to-skin contact
- Breastfeeding
- Delay of non-urgent tasks

Delayed Cord Clamping

- WHO recommends clamping 1-3 minutes after birth
- American College of Nurse-Midwives (2014):
  - 5 minutes for term newborns
  - 2 minutes for term newborns placed at or below level of placenta
  - 30-60 seconds for preterm newborns

Delayed Cord Clamping

- Allows for placental transfusion of blood to newborn
- Increased birth weight
- Greater iron stores at 6 months of age
- Decreases need for neonatal blood transfusions
- Decreases risk of
  - necrotizing enterocolitis
  - Iron-deficiency anemia
  - Intraventricular hemorrhage

ACNM 2014, ACOG 2017, Mercer 2007

What about maternal HIV or Hepatitis B?

- Current WHO guidelines: proven benefits of cord clamping outweigh theoretical risk of HIV transmission
- Extra 1-3 minutes of placental blood flow have not been shown to increase risk of HIV transmission from mother to newborn
- Exception: newborns in need of immediate resuscitation
- AFTER delayed cord clamping with HIV or Hep B
  - Promptly bathe newborn with gentle soap and warm water
  - Return to mother for STS contact

WHO 2013, 2014; Nelson 2014

Immediate Skin-to-Skin Contact

- Place dried, unclothed newborn directly on mother's chest/abdomen just after birth
- No routine bulb suctioning
- Use dry towel to wipe away secretions from mouth/nose

Neczypor and Holley

Delay Non-Urgent Tasks

- Perform initial assessment of newborn on mother's abdomen
- Postpone weighing and bathing for at least 1 hour
- **Uninterrupted** bonding time

Neczypor and Holley

OU Medical Center

What's wrong with this picture??

Initiate Breastfeeding

- Help mother recognize early feeding cues
- Offer support as needed
- Complete first feeding before considering removing infant from STS contact

Neczypor and Holley

Exclusion Criteria (postpone, modify, waive)

- MATERNAL
  - Recent opioid administration leading to altered state of consciousness
  - Extensive repair of perineal lacerations
  - Extreme maternal exhaustion
  - Postpartum hemorrhage
  - Other maternal emergencies

Ferrarello 2014, Mercer 2007, Redshaw 2014

Exclusion Criteria (postpone, modify, waive)

- NEWBORN
  - Extreme preterm birth (<34 weeks)
  - Neonatal respiratory distress
  - Cyanosis
  - Elevated infection risk (maternal temp >=101F)
  - Congenital anomalies that may lead to cardiopulmonary issues
  - Perinatal depression signs (apnea, bradycardia, decreased muscle tone)
  - Birth of a nonvigorous neonate through meconium-stained fluid

AAP 2009, Mercer 2016

Exclusion Criteria (postpone, modify, waive)

- NEWBORN
  - **Stabilize the neonate before attempting to initiate the Golden Hour**

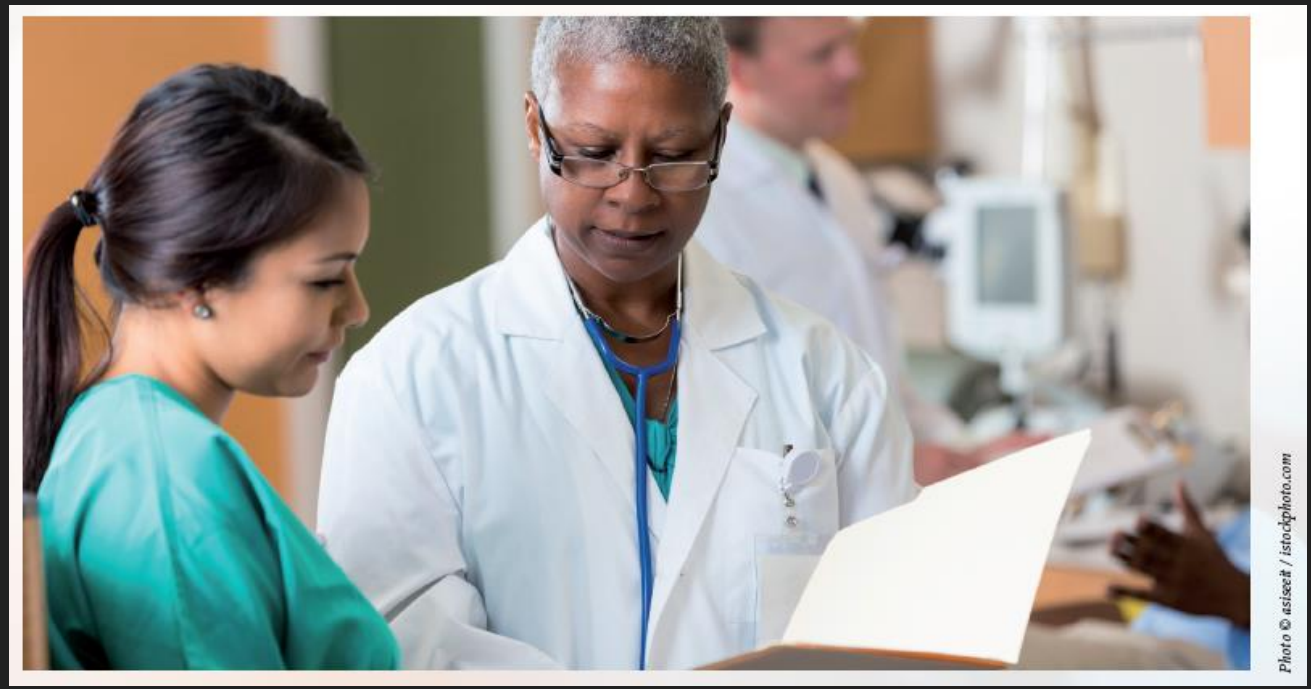
- **NOTE**: skin-to-skin contact for SGA neonates (<2,000g) significantly reduces mortality in low and middle income countries

?? Do we need a Golden Hour protocol for high-risk infants??

Moore 2016

Implementing a Golden Hour Protocol

- Evaluate existing policies
- Multidisciplinary stakeholders
  - Anesthesiology support
- Address additional staffing needs
- Reduce interruptions in first hour
- Training for staff and physicians
- Conduct a pilot test (PDSA!)



Common Barriers - Internal

- Will this new protocol change my workflow, my routine?
- How do we admit the newborn without a weight?
- Long-standing practices such as immediate cord clamping or early bathing
- Perception that the newborn is safer under the warmer
- Staffing ratios that limit practice changes
- Lack of knowledge of staff and/or families on importance of Golden Hour

Koopman 2016, Mercer 2007

Common Barriers - External

- Mother's privacy concerns
- Desire of other family members to hold the newborn
- Frequent interruptions by hospital staff
  - New mothers view this as ***exhausting, stressful and detrimental to bonding***

Ferrarello 2014, Koopman 2016

Financial and Quality Measures

- Implementation costs:
  - IT support
  - Creating new educational materials for staff and families
  - Staff training
- Value-based health care – Managed care bundles
  - Decreased NICU admissions
  - Decreased newborn complications (e.g. hyperbilirubinemia)
- Patient satisfaction
  - **Increased maternal satisfaction when mothers hold their newborns early and longer**

Biro 2015, Lowson 2015, Moriates 2015

Questions?
Comments?

BBFOK Training Updates

- New links for MD education on OBRC website:
  - http://www.ouhsc.edu/breastfeeding/Training.aspx

Physician Webinar Series

The Maryland Hospital Breastfeeding Policy Committee coordinated a six-lecture series of free webinars about breastfeeding-related topics that were broadcasted in September and October 2016. The webinars are available as recordings here. Each of these educational opportunities features a different topic and is provided by expert physicians in the field. Continuing medical education credit is available at no charge, and all medical practitioners are welcome. Note: training sessions will help fulfill the Baby Friendly USA and the Maryland Hospital Breastfeeding Policy Recommendations.

Presenters and webinar topics are listed below:

Safe Implementation of the Ten Steps
Lori Feldman-Winter, MD, MPH

Helping your breastfeeding patients succeed: Prenatal Breastfeeding Support, Delay in Lactation, and The Infant Who Won't Latch
Anne Eglash, MD, IBCLC, FABM