Safe Evidence Based Infant Care Alignment and Skin to Skin Practices

What we know for sure...

Safe Evidence Based Infant Care Alignment practices are part of our everyday teaching to mothers and families.

They include safe infant sleep, safe holding, safe feeding and all the activities of daily living infants experience.

What we know for sure....

We know that breastfeeding and bottlefeeding mothers bedshare—chosen/accidental from fatigue.

We know that breastfeeding is functionally interrelated to mothers and infants being close.

We know that breastfeeding mothers are more likely to bed share.

We know the hormonal effect of breastfeeding facilitates relaxation and sleep.

Disclosures

- I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this educational activity.

What we know for sure....

- The more we review our SIDS/SUIDS cases the more we understand and refine what we need to do.
- We see that poor or improper alignment is actually a cause of some of these deaths.
- We also know that biologically mothers and babies need to be together—universal need.

What we know for sure

- Many bottlefeeding mothers fall asleep with their infants whether in bed or in a chair.
- It's not a matter of "if" but "when"
- Bed sharing is not always as easily modifiable
- It can be a deeply imbedded cultural parenting practice.
- We need to abide by the American Academy of Pediatrics recommendations on safe sleep.
- We are stuck in a paradigm.
What does Safe Sleep Look Like

- Place infant on his/her back to sleep
- Firm sleep surface
- No blankets covering infant's head
- No pillows
- Keep soft objects out of infant's crib
- Infant should not sleep in an adult bed, on a couch or chair
- We know that babies may not be comfortable with this sleeping arrangement...

What we know for sure

- Knowing mothers are likely to fall asleep planned or unplanned, just saying “no bedsharing” is not enough.
- With appropriate teaching on safe infant care practices, parents are more likely to take appropriate precautions to keep their baby safe and mitigate risks substantially.
- We need to acknowledge these truths...

What we know for sure

- There are a number of variables that need to be considered when safe infant care alignment practices are taught including:
  - individual mother/infant situation and abilities
  - maternal fatigue
  - maternal medications
  - cultural beliefs

  Health professionals need to be educated and become confident in:
  - safe sleep practices
  - safe birth and postpartum skin to skin care practices
  - safe infant posture/holding and infant feeding techniques
  - INFANT ALIGNMENT is critical

What we know for sure

- There have been:
  - apparent life threatening events (ALTE)
  - sudden unexpected postnatal collapse (SUPC)
  - during the birth process, during skin to skin, and feeding/holding of infants

  Infants are very vulnerable to suffocation and airway compromise.

Sudden Unexpected Postnatal Collapse

- 1/3—first 2 hours of life
- 1/3—2-24 hours of life
- 1/3—1-7 days of life

  2/3 occur in the first 2-24 hours of life.
  This is a very vulnerable time for the infant.


What we know for sure

- The way we frame our messages is critical.
- We need to be culturally sensitive.
- Our messages need to be individualized, respectful and non judgmental.
- We need to enhance confidence in the mother in every possible encounter (praise)
- By building confidence with praise we increase her trust in us and this increases the likelihood of her hearing our message.
What we know for sure

Connection Before Content

○ Always start with something positive
○ “People don’t care what you know until they know you care”

Harry Truman

What we need to do

○ We need to strategize on how we can better prepare parents and how we can collaborate and work as a health care team.

○ We need frequent, consistent sound bites on infant safety and care from all medical personnel, families and communities during the prenatal period and beyond.

What we need to do

○ We need to integrate safe sleep teaching with safe positioning, safe skin to skin, safe holding and feeding of infants in our everyday encounters with all families.

○ Remember messages are most effective when carefully targeted information is specific to her.

○ We need to standardize and systematize our practice without losing our ability to individualize with parents.

○ We need to acknowledge maternal fatigue.

What we need to do

○ We need all professionals to understand the principles of safe skin to skin practices.

Supporters of Skin to Skin Care

○ Major national and international organizations in the maternal child health field include STS care in their evidence based recommendations.

Some of these organizations include:

- American Academy of Pediatrics
- American College of Obstetricians and Gynecologists
- Association of Women’s Health, Obstetric and Neonatal Nurses
- Association of Neonatal Nurses
- Academy of Breastfeeding Medicine
- CDC and World Health Organization.
SKIN TO SKIN CARE

- Skin to Skin (STS) or Kangaroo Mother Care has long been documented to improve the health of mother and infant from birth well into the postpartum period.
- There was a Cochrane Review on STS Care in 2016.
- Cochrane Reviews are systematic reviews of primary research in human health internationally recognized as the highest standard in evidenced based health care.

WHAT IS “SKIN TO SKIN”?

- The holding of a diaper clad infant, bare chest to bare chest (ventral surface to ventral surface) by mother, father or other care giver. The infant is placed chest to chest covering the entire ventral surface of the infant and mother from sternum to umbilicus.

WHAT IS “SKIN TO SKIN”?

- This area contains specific C-afferent fibers which are nerve fibers that specifically respond to pressure not stroking.

C- AFFERENT SENSORY FIBERS FUNCTION TO:

- Minimize the stress response of the mother and infant
- Regulate cardio respiratory and temperature stability in the infant
- Stimulate the release of oxytocin, the neurohormonal hormone inducing calmness and connectedness, happiness and bonding.

Infants in STS cry ten times less and have more quiet sleep which is when significant cognitive brain growth is facilitated.

SKIN TO SKIN CARE

- Infants in STS have more stable blood sugars as they are less stressed, conserving energy and have less need to utilize glucose stores.
- Recommended for both breast/bottle-fed infants and NICU infants as their medical condition allows.

- Breastfeeding infants have undisputed benefits of initiation, exclusivity and continuation of breastfeeding when they experience STS care.
Benefits of Skin to Skin Care
- When a baby is skin to skin their nose is near the mother’s skin which is humidified air rather than dry hospital air.
- Babies that room in and are skin to skin with their mother rarely cry and rarely have moro reflexes occur.
- Babies with standard care have a higher incidence of crying and increased incidence of moro reflexes that utilize energy reserves. Crying is a very advanced physiological behavior.
- Causes an increase in oxytocin production in the mother.
- Slight upright position facilitates baby’s oxygenation to improve.
- Skin-to-skin causes temperature stability, heart rate stability and improvement in oxygen levels.
- Blood sugar stabilization

12 STEPS TO SAFELY POSITION A BABY IN STS
- Mother should be upright (30-45 degrees)
- Infant Chest to Chest with mother
- Shoulders flat against mother
- Head is turned to one side
- Face can be seen
- Head is not bent forward or backward
- Neck is straight and not bent
- Legs and arms are flexed
- Back is covered up to shoulders for warmth and tucked under mother for stabilizing position (2 receiving blankets folded in a triangle)
- Nose and mouth are not covered
- Infant and mother are well supported in position with pillow support under mother’s elbows
- If mother is planning on sleeping, place infant on his/her back in the crib for safety.
  Placing infant in or out of STS should take no more than 2-3 minutes to conserve infant reserves.

Safe and Unsafe Skin to Skin

Unsafe Skin to Skin

SKIN TO SKIN CARE BEGINS AT BIRTH
- STS should begin immediately at birth after drying the infant while the initial assessment is completed.
- A hat is recommended for the first 3 hours after birth and for NICU infants but always when and infant is 32 weeks or less.

Birth Skin to Skin
- Some birth positions are not ideal for safe skin to skin.
- Many cases of SUPC occur in the first 2 hours of birth.
- Many variables
  - analgesia, maternal fatigue, maternal obesity, infants more at risk (LPI)
- We need a standardized practice of STS care.

Suzanne Colson, Clinical Lactation, 2014, 5(2), 41-49. Does a Mother’s Posture Have a Protective Role to Play During Skin to Skin Contact.
Birth Skin to Skin SUPC Risks

RISKS
- Flat maternal body tilt/recline
- No neonatal body tilt that protects breathing, optimizing lung function
- Infant’s neck muscles may not be able to counteract the strong gravitational pull down
- Risk of accidental suffocation/asphyxiation
- Infant assessment should be ongoing

Birth Skin to Skin
Infant Assessment should be ongoing

RAPP Assessment Pneumonic
- R—Respiratory Effort
- A—Activity
- P—Perfusion/skin color
- P—Position
- Continuous one to one assessment is needed to minimize the risk of SUPC and enable early detection.

Susie Ludington-Hoe, Newborn and Infant Nursing Reviews 2014;14(1):28-33, Infant Assessment and Reduction of Sudden Postnatal Collapse Risk During Skin to Skin Contact

Risks of Sudden Unexpected Postnatal Collapse Birth/Post Partum
- Skin to Skin done unsafely
- First breastfeeding attempt
- Primiparity
- Late Preterm Infant
- Prone infant positioning
- Co Sleeping
- Over bundling
- Maternal fatigue
- Maternal medications
- Maternal obesity
- The use of electronic devices
- Our teaching needs to be consistent and individualized.

What we need to do
- Observe frequently in those first 2 hours post birth
- Teach safe Skin to Skin in the moment
- Supervise first breastfeeding attempts
- Integrate safe holding/alignment of babies in this process
- Integrate safe sleep principles in small sound bites in this process
- Address and strategize maternal fatigue
- Discourage the use of electronic devices
  - Our teaching needs to be consistent but individualized.

Post Partum Teachable Moments
- Remember the best way to teach is on the individual level.
- Meet the mother where she is in the moment.
- Carefully targeted messages specific to her.
- These conversations are natural in our work everyday.

Post Partum Teachable Moments
Holding in Alignment and Safety
- Proper alignment protecting infants’ airway
- Appropriate use of pillows, blankets
- Maternal fatigue
- Prevention of infant falls
- Avoidance of over bundling
Post Partum Teachable Moments
Holding in Alignment

Dads, Uncles, Aunts & Grandfathers
Holding in Alignment

Even Siblings.....Take advantage of any teachable moment with families...
Post Partum Teachable Moments
Breastfeeding

- Breastfeeding alignment
- Appropriate use of pillows
- Prevention of infant falls
- Hormonal effects of breastfeeding
- Maternal fatigue
- Individualized teaching as appropriate

Bottle Feeding

- Safety
- Straight upright infant alignment during and after feeding
- Hip flexion
- Follow infant cues
- Observe infant for acceptance

Safety in the Use of Infant Products
**Skin to Skin Helpers and Baby Carriers**

We are a team and we can make a difference

- None of this is meant to raise parental fear but to educate in a way that we build confidence in parents to make safe informed choices and prevent unnecessary infant deaths.

**Thank You**

“People will forget what you said, people will forget what you did, but people will never forget how you made them feel.”

- Meryl Streep

**Skin to Skin Care Competency Checklist: Labor & Delivery**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**References**

- Suzanne Colson, Clinical Lactation, 2014, 5(2), 41-49. Does a Mother’s Posture Have a Protective Role to Play During Skin to Skin Contact.
**Skin to Skin Care Competency Checklist: Postpartum**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Place mother semi-upright, about 30-45 degrees inclined, upper half naked</td>
<td>[ ]</td>
</tr>
<tr>
<td>2.</td>
<td>Turn infant prone on mother's chest between breasts (chest to chest). Infant in diaper only for postpartum and not on for first 3 hours and most NICU infants. Be sure that the infant's shoulders are flat and not constricted throughout skin-to-skin contact with the parent, shoulders flat against mother's</td>
<td>[ ]</td>
</tr>
<tr>
<td>3.</td>
<td>Head is turned to one side or another, not facing toward maternal tissue (face can be seen)</td>
<td>[ ]</td>
</tr>
<tr>
<td>4.</td>
<td>Neck is straight, not bent forward nor backward</td>
<td>[ ]</td>
</tr>
<tr>
<td>5.</td>
<td>Nose and mouth are uncovered so infant can breathe</td>
<td>[ ]</td>
</tr>
<tr>
<td>6.</td>
<td>Infant's arms and legs are flexed and with tone</td>
<td>[ ]</td>
</tr>
<tr>
<td>7.</td>
<td>Infant's back is covered up to shoulders for warmth and tucked under mother for stabilizing position (ideal thickness, 2 receiving blankets folder in triangle)</td>
<td>[ ]</td>
</tr>
<tr>
<td>8.</td>
<td>Infant and mother are well supported in position, pillows appropriately placed under mother's elbows</td>
<td>[ ]</td>
</tr>
<tr>
<td>9.</td>
<td>If mother is sleepy, have someone watch them both, especially the infant while she sleeps or put the infant on back in the bassinet</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Placing or removing an infant into or out of STS should take no more than 2–3 minutes to conserve infant's reserves.**