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(AKA)

How Do We Support Breastfeeding AND Safe Sleep Practices?

- Bedsharing can lead to longer breastfeeding duration. It also leads to more infant deaths. These
 opposing facts represent a major dilemma for those working to improve infant health. It becomes even
 trickier when we dive a little deeper.
- Breastfeeding also correlates with lower sudden infant death syndrome (SIDS) rates, the most common cause of post-neonatal infant deaths.
- In fact, after improving safe sleep environments, breastfeeding is one of the most important behaviors for reducing SIDS, and may reduce the rate by more than 70 percent if breastfeeding continues for at least 6 months, according to Cooper University Hospital's Lori Feldman-Winter, MD, MPH, FAAP.
- In theory, this means that organizations working to reduce sleep-related infant deaths should consider strategies that promote breastfeeding. But, what does that mean when one of those strategies puts babies in danger?

BABY FRIENDLY HOSPITAL INITIATIVE

Global effort for improving the role of maternity services to enable mothers to breastfeed babies for the best start in life. It aims at improving the care of pregnant women, mothers and newborns at health facilities that provide maternity services.

THE 10 STEPS TO
SUCCESSFUL
BREASTFEEDING THE PILLARS OF THE
BABY FRIENDLY
HOSPITAL INITIATIVE

The TEN STEPS to Successful Breastfeeding

























TODAY'S FOCUS

#4 Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.

7 Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day.

#9 Counsel mothers on the use and risks of feeding bottles, teats and pacifiers

DURATION OF BREASTFEEDING AND RISK OF SIDS: AN INDIVIDUAL PARTICIPANT DATA META-ANALYSIS

• This review of 2,267 SIDS cases and 6,837 control infants explored the duration of breastfeeding required to confer a protective effect against Sudden Infant Death Syndrome (SIDS). It found that any breastfeeding for at least two months was associated with half the risk of SIDS. Greater protection was seen with increased duration, both with exclusive and any breastfeeding.

Thompson, JMD, et al (2017), Duration of Breastfeeding and Risk of SIDS: An Individual Participant Data Meta-analysis. Pediatrics, doi: 10.1542/peds.2017-1324



Hospitals **Support mothers** to breastfeed by...

Encouraging skin-to-skin contact between mother and baby soon after birth

Helping mothers to put their baby to the breast right away







THE IMPORTANCE OF EARLY SKIN TO SKIN CONTACT

 Prolonged early mother-baby SSC is widely recommended to improve bonding, facilitate breastfeeding, and promote infant physiologic stability.

 At least one hour of early SSC is an essential component of Step 4 of the Baby-Friendly Hospital Initiative (BFHI) Ten Steps to Successful Breastfeeding

HOSPITALS SHOULD BALANCE SKIN-TO SKIN CONTACT WITH SAFE SLEEP POLICIES

- Health Care Practitioners should be aware of the potential dangers when mothers are fatigued or sedated or left unattended.
- If the baby has required positive pressure ventilation in the delivery room, the Neonatal Resuscitation Program advises "post resuscitation care" in an environment where ongoing evaluation and monitoring are available.
- Hospitals should evaluate mothers after delivery and prior to early SSC or breastfeeding and train staff to recognize high-risk situations that require closer monitoring, such as when the mother has received sedatives.
- "High risk" includes mothers who are exhausted, sedated, ill, even distracted.
 - Goldsmith JP. AAP News. 2013; 34(11).

Informal reports from midwives suggest that the extensive use of smart/mobile phones, messaging and social networking after delivery is an emerging trend, with some mothers writing up to 30 messages during the first 2 hours after delivery"

Acta Paediatrica. 2013; 102:680-88.



SKIN TO SKIN CARE

- The AAP Neonatal Resuscitation Program (NRP) offers a Flow Diagram for assessing infant stability and care that is an excellent protocol for initiating skin-to-skin care immediately following birth.
- The NRP Flow Diagram for routine care starts with assessing if the infant is:
 - Term Gestation
 - Good Tone
 - Breathing or Crying
- If the answer is "yes" to all of those questions, the direction is to remain with the mother and provide routine care which includes maintaining normal temperature, positioning the airway, clearing secretions if needed, drying, and conducting ongoing evaluation.

SUDDEN UNEXPECTED POSTNATAL COLLAPSE (SUPC)

- A rare but potentially fatal event in otherwise healthy-appearing term newborns.
- Incidence is estimated to be 2.6 to 133 cases per 100,000 newborns
- One-third of SUPC events occurring in the first 2 hours of life, one-third occurring between 2 and 24 hours of life, and the final third occurring between 1 and 7 days of life.

ACUTE LIFE-THREATENING EPISODES

- May be referred to as "a brief resolved unexplained event"
- May be low risk and require simple interventions such as
 - positional changes
 - Brief stimulation, or
 - procedures to resolve airway obstruction

SUPC: RISK FACTORS

- The transition from fetal to extrauterine life may make the newborn more vulnerable during the first hours of life.
 - The initial surge of catecholamines after birth is followed by a period of diminished responsiveness to external stimuli and increased vagal tone.
- This study identified previously documented risk factors for SUPC:
 - primiparous mother, infant prone position
 - first breastfeeding attempt;
 - co-bedding;
 - mother in episoitomy position; and
 - parents left alone with baby during the first hours after birth.
- 3 cases involved breastfeeding mothers who were using their mobile phones in the absence of other caregivers.
 - Acta Paediatrica. 2013; 102:680-688.

SUPC: PREVENTIVE MEASURES

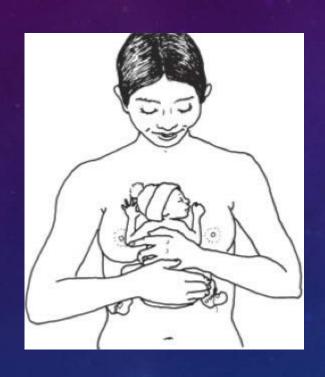
- The concept of safe early skin-to-skin (S-SSC) integrates the benefits of SSC and gentle monitoring of vulnerable newborns.
- Possible components of S-SSC:
 - 1) checklists for medical and nursing staff;
 - 2) oral and written parent information;
 - 3) a schedule for monitoring of infants' status, especially in the first 3 hours postpartum;
 - 4) observation of first breastfeeding attempts; and
 - 5) reducing the risk of distractions.
- The potential use of unobtrusive wireless heart rate monitors has been raised.
 - Pejovic NJ, Herlenius E. Acta Paediatrica. 2013; 102:680-688.

RAPP: A RAPID NEWBORN ASSESSMENT TOOL TO REDUCE THE RISK OF SUPC DURING SSC

Respiratory, Activity, Perfusion, and Position tool (RAPP)

- R Stands for Respiratory Effort: "easy breathing" or "increased work of breathing"
- A Stands for Activity: "asleep," "quiet alert," "active alert," "crying," breastfeeding," or "non-responsive"
- The 1st P Stands for Perfusion: "pink," "acrocyanosis," "pale," "dusky," "gray," or "cyanotic/blue"
- The 2nd P Stands for Position:
 - The mother should be <u>upright</u> and supported by 3-4 pillows.
 - The infant: "head upright and turned to one side," "neck erect in midline," "nares and mouth visible," "well flexed," or "limp, flaccid."
 - Ludington-Hoe and Morgan. NAIRN. 2014;14(1):28-33

ELEMENTS OF SAFE POSITIONING



- Infant body vertically aligned (spine to neck to head), lower extremities tucked
- Neck straight, not bent
- Head of infant at chest level, not into breast tissue
- Head of infant turned to side, face fully visible
- Color pink
- Tone reflexive, not limp even when asleep
- Easy respirations seen/heard
 - (Luddington-Hoe & Morgan, 2014)

PARENT EDUCATION

Parent's Guide to Safe Baby Positioning During Skin-to-Skin



Safe skin-to-skin positioning starts with placing the newborn upright onto Mom/Dad's bare chest, baby's tummy to adult's chest.

Ensure infants head is turned to the side so that infant's airway is open.



In this position, the infant's color and breathing can be observed for signs of respiratory effort and perfusion.

Notify the nurse immediately if the infant's color changes or appears to have difficulty breathing.

Is My Baby Okay Positioned Like This?

<u>Respiratory Effort</u>: Is Infant breathing easily? **Does the baby seem to be struggling to breathe** or breathing too fast or too slow? Call the nurse immediately.

<u>Activity:</u> Is infant awake or asleep? Even a sleeping baby will respond to touch or movement. If the baby doesn't respond, call the nurse immediately.

<u>Perfusion/Color:</u> Does the baby look "pink"? Any paleness, grey, blue or dusky color should be evaluated immediately. Call the nurse immediately.

<u>Position:</u> Baby should be positioned upright, head turned to the side, mouth and nose visible. Extremities should not be limp. If infant appears to be limp, call the nurse immediately.

(RAPP Assessment ©K. Morgan, 2013)

DOES MOTHER'S POSTURE PLAY A PROTECTIVE ROLE DURING SSC?

Visual materials depicting early SSC tacitly promote maternal supine postures, with the naked baby lying prone atop the mother's body, parallel to the floor, a position strongly associated with SIDS.

 Biological nurturing (BN) research, which has examined maternal postural effects on breastfeeding success, suggests that a semi-reclined maternal position is optimal for breastfeeding initiation.

 The maternal body slope ensures that the baby lies tilted upward and maintains the baby's head, shoulders and arms elevated, a position known to promote oxygenation and optimize lung function.

• Clinical Lactation; 2014; 5(2):41-50



BIOLOGICAL NURTURING (BN) AND MATERNAL RECLINE

- Two of an infant's inborn defensive reflex behaviors that safeguard breathing--spontaneous head lifting and a variation of head righting—serve to protect the airway or signal the mother.
- These protective antigravity reflexes may be adversely affected when a baby is lying prone in a nearly horizontal position.
- Similarly, supine mothers must lift their head against gravity to gaze at their babies.
 - Clinical Lactation; 2014; 5(2):41-50.

WE CAN SAVE HUNDREDS OF INFANT LIVES EACH YEAR BY EFFECTIVELY EDUCATING HEALTH CARE PERSONNEL AND FAMILIES CONCERNING:

 Safe positioning of infants during early skin-to-skin contact and the initiation of breastfeeding;

Creating a safe infant sleep environment; and

 Ensuring appropriate surveillance of newborns during the first days of life.

WHAT'S WRONG WITH THIS PICTURE?



BETTER?





ROOMING-IN

Hospitals **Support mothers** to breastfeed by...

Letting mothers and babies stay together day and night Making sure that mothers of sick babies can stay near their baby









ROOMING-IN

- Rooming-in has been recommended for infant health and safety for decades.
- It is an evidenced-based practice that is beneficial to both mothers and infants.
- Mothers will be naturally exhausted and potentially sleep-deprived or may sleep in short bursts.
- They may also be unable to adjust their position or ambulate safely while carrying a newborn.
- The postpartum period provides unique challenges regarding falls/drops and is understudied compared with falls in the neurologically impaired or elderly patient.

SET UP

Many of the same concerns that occur during SSC in the immediate postnatal period continue to be of concern while rooming-in, especially if the mother and infant are sleeping together in the mother's bed on the postpartum unit.

Family members and staff can be available to assist mothers with transitioning the newborn to safe sleep location

More hazards were associated with stand-alone bassinets than side-car bassinets.

Given the level of disability in mothers who have had a cesarean delivery, sidecar technology holds promise for improvement in the safety of the rooming-in environment.

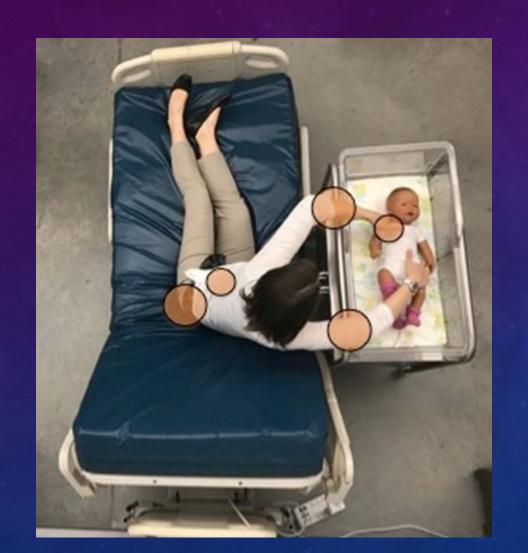




WHO BED-SHARES AND WHAT IS THE RELATIONSHIP WITH BREASTFEEDING DURATION?

- This study explored the link between breastfeeding duration and bed-sharing frequency among women reporting a prenatal intention to breastfeed.
- It was found that women with strong motivation to breastfeed frequently bedshare.
- The authors note that, given the complex relationship between bed-sharing and sudden infant death syndrome (SIDS), appropriate guidance balancing risk minimization with support for breastfeeding mothers is crucial.
 - Ball, H. L. et al (2016). Bed-sharing by breastfeeding mothers: who bed-shares and what is the relationship with breastfeeding duration? Acta Paediatrica, DOI: 10.1111/apa.13354.

EXAMINING THE FURNITURE











FALLS



- Mothers may become suddenly and unexpectedly sleepy, ill, or unable to continue holding their infant.
- Fathers or other support people providing SSC may also suddenly become unable to continue to safely hold the newborn because of lightheadedness, fatigue, incoordination, or other factors.
- If a hospital staff member is not immediately available to take over, unsafe situations may occur, and newborns may fall to the floor or may be positioned in a manner that obstructs their airway.

EVEN PRINCES FALL ASLEEP!



http://www.bbc.com/news/av/uk-43904249/duke-of-cambridge-battles-sleep-as-he-sits-next-to-meghan-markle

SUGGESTIONS TO IMPROVE SAFETY WHILE ROOMING IN

Staffing Ratio -No more than 3 mother baby dyads assigned to 1 nurse to avoid situations in which nursing staff are not immediately available and able to regularly monitor the mother-infant dyads throughout the postpartum period (AWHONN Recommendation)

• Mothers and families who are informed of the risks of bedsharing and guided to place newborns on separate sleep surfaces for sleep are more likely to follow these recommendations while in the hospital and after going home.

SUGGESTIONS TO IMPROVE SAFETY WHILE ROOMING IN

- Use fall risk assessment tools.
- Monitor mothers according to their risk assessment: for example, observing every 30 minutes during nighttime and early morning hours for higher-risk dyads.
- Family members and staff can be available to assist mothers with transitioning the newborn to safe sleep location
- Regular staff supervision facilitates the recognition of sleepy family members and safer placement of the newborns in bassinets or side-cars.
- Use a patient safety contract with a particular focus on high-risk situations



HELPFUL CONVERSATIONS

- Motivational interviewing. Here, the nurse or doctor asks an open-ended question such as, what do you like about bedsharing? Or, why do you choose to bedshare?
- Another approach is L.O.V.E. With this technique, providers
 - "Listen" to what the families are saying
 - ask those "Open-ended" questions
 - "Validate" their feelings and
 - provide targeted "Education" that addresses families' concerns
- Be Practical
- For conversations to be successful, they need to be judgement-free.

10 STEPS TO SUCCESFUL BREASTFEEDING

"OLD" step 9: Give no pacifiers or artificial nipples to breastfeeding infants.

"REVISED" Step 9: Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.



EXCLUSIVE BREASTFEEDING, PACIFIERS & SAFE SLEEP

Baby-Friendly USA (BFUSA) promotes exclusive breastfeeding and the safe implementation of practices that support exclusive breastfeeding while also reinforcing safe sleep and Sudden Infant Death Syndrome (SIDS) reduction messages and practices.

BFUSA believes strongly that the promotion of exclusive breastfeeding, safe sleep, and SIDS reduction are complimentary initiatives.

In fact, breastfeeding is recommended as a strategy for reducing SIDS and other sleep-related infant deaths.

The protective effect of breastfeeding increases with exclusivity.

^{*} Baby Friendly USA Exclusive Breastfeeding, Pacifiers and Safe Sleep Statement https://www.babyfriendlyusa.org/get-started/the-guidelines-evaluation-criteria/ebf--pacifiers-safe-sleep

BABY FRIENDLY USA DESIGNATION CRITERIA RELATED TO PACIFIER USE

 The BFUSA Guidelines and Evaluation Criteria (GEC) related to Step 9 state that:

"Breastfed infants should **not** be given pacifiers by hospital staff and that mothers who request that their infants be given a pacifier be educated about how pacifier use could affect the success of breastfeeding."

- Early and frequent breastfeeding in the newborn period is essential to building up a mother's milk supply.
- Pacifier introduction too early in the breastfeeding relationship may interfere with this important biological process and mask potential breastfeeding problems
- Infants who are not being directly breastfed can begin pacifier use as soon as desired.

AAP AND BFUSA ALIGNMENT

Since the AAP SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment continues to call for pacifiers to be delayed until breastfeeding is firmly established, BFUSA will require hospitals distributing safe sleep materials to provide additional verbal and written education to mothers that includes the following:

- 1. Pacifier use in the breastfed infant should be delayed until breastfeeding is well established, usually around 3-4 weeks of life.
- 2. How mothers can know that breastfeeding is well established.
- 3. Breastfeeding is associated with a reduced risk of SIDS, and the protective effect increases with breastfeeding exclusivity.

HOW MOTHERS CAN KNOW THAT BREASTFEEDING IS WELL ESTABLISHED

- The exact timeframe for the establishment of breastfeeding may vary from mother to mother, but rarely occurs during the first 2 days of life
- Some signs that breastfeeding is going well :
 - Infant is feeding 8-12 times in 24 hours
 - Diaper output is adequate (at least 2-3 stools & 6+ wets /24 hours)
 - Infant is gaining weight (2/3 to 1 oz per day, back to birthweight by 2 weeks of age on mom's milk alone
 - After a feeding, mom's breast feels softer and baby seems reasonably content.



COUNSEL MOTHERS ON THE USE AND RISKS OF FEEDING BOTTLES, TEATS AND PACIFIERS

PACIFIERS SHOULD BE AVOIDED WHEN:

- Pacifier use reduces your baby's frequency or duration of feeds (newborns should be nursing at least 8 to 12 times a day).
- Baby is having difficulties nursing well (this may be due to nipple confusion).
- Baby is having problems with weight gain (in which case baby needs to nurse as often as possible).
- Mom is having problems with sore nipples (baby may be causing this due to nipple confusion)
- Mom is having milk supply problems (in which case she needs to put baby to breast, not pacifier, at every opportunity in order to increase milk supply).
- Mom and/or baby have thrush, particularly if it's hard to get rid of or repeated.
- Baby is having repeated ear infections (an increased incidence of ear infections has been linked to pacifier use).

Information for breastfeeding families

Are Pacifiers a Problem for the Breastfed Baby?



Mothers often ask about whether it is OK to use a pacifier. Some want to use them to calm their baby, others are afraid to. What are the issues to consider?

Shorter Duration of Breastfeeding

Long thought to be a help for crying babies and frazzled parents, there are some new insights into the use of pacifiers for breastfeeding babies. The innocuous pacifier, or "soother" as it is called in some countries, may affect initiation of breastfeeding as well as duration of breastfeeding.

In a study by Righard and Alade it was found that the use of a pacifier before 2 weeks of age resulted in superficial and ineffective suckling technique in many infants. These infants were more likely to have breastfeeding problems. Their "findings suggest that the prerequisite of an uncomplicated and uninterrupted breastfeeding period is a correct sucking technique from the outset, and that excessive use of pacifiers and the early introduction of occasional bottles should be avoided." They also found a shorter duration of breastfeeding in the group who used pacifiers.

Victoria et al. found in surveying 354 mothers that there was a threefold risk of early weaning from the breast in breastfeeding infants who used a pacifier. They speculate that either less breast stimulation may result in lowered breastmilk production or that pacifier use may be a marker for breastfeeding difficulties, or that mothers use it to initiate early weaning.

The Cholecystokinin Link

The hormone, cholecystokinin, is released in the infant's gut in response to suckling. This release comes in two waves: the first, about 10 minutes into the feeding, is thought to be initiated by suckling stimulation to the vagal nerve and the second, about 30 minutes into the feeding, is stimulated by the presence of milk (fat) in the gut.

Cholecystokinin causes satiety, sedation and sleepiness. This response happens when the infant is feeding at the breast and can happen while sucking on a pacifier. Parents should be cautioned about the over-use of pacifiers resulting in missed feedings and failure to gain weight.

Pacifier use and Sudden Infant Death Syndrome. The use of a pacifier has been associated with reduction in the incidence of SIDs, and the American Academy of Pediatrics has recommended the use of pacifier while going to sleep. In order to minimize the negative effect on breastfeeding, it is recommended not to use a pacifier until breastfeeding is well established (the first few weeks). The risk of SIDs is highest in the 2nd and 3rd months of life.

The use of a pacifier while going to sleep is recommended then. When the infant is asleep and the pacifier falls from his mouth, it does not need to be replaced.

Feel free to duplicate Lactation Education Resources 2016. Please be aware that the information provided is intended solely for general educational and informational purposes only. It is neither intended nor implied to be a substitute for professional medical advice. Always seek the advice of your healthcare provider for any questions you may have regarding your or your infant's medical condition. Never disregard professional medical advice or delay in seeking it because of something you have received in this information.

EVIDENCE FOR EFFICACY

Studies demonstrate that the sucking and feeding that occur with pacifiers and artificial nipples can be detrimental to the establishment of a breastfeeding practice and that reducing or eliminating their use with healthy term infants in the hospital setting can improve breastfeeding outcomes.

Pacifier Use

- . The mechanics involved in sucking on a pacifier differ from the way in which a baby suckles at the breast, 20-21
- The use of pacifiers during the maternity stay is associated with breastfeeding problems such as poor suckling technique, sore nipples and nipple trauma.²²⁻²⁵
- Infants who use pacifiers may feed less often and for shorter periods in a 24-hour period than infants who do not.²⁶
- Use of pacifiers during the period in which milk supply is being established may reduce suckling at the breast and interfere with the body's adjustment of milk supply to the baby's requirements, resulting in insufficient milk supply.^{94,30,37}
- Use of pacifiers during the period in which milk supply is being established is associated with shorter duration of breastfeeding and reduced exclusivity of breastfeeding.^{8, 9, 11, 28-27}

Artificial Nipple and Bottle Use for Infant Feeding

Although most available research has failed to differentiate between feeding types (e.g., breastmilk vs. formula) and feeding delivery methods (e.g., breast vs. bottle), some evidence demonstrates that the use of artificial nipples while establishing milk supply may negatively impact breastfeeding outcomes.

- The mechanical and dynamic sucking processes of an infant feeding from an artificial nipple differ from suckling that occurs during breastfeeding.^{20,21,38-41}
- Use of artificial nipples and bottles during the time that breastfeeding is being established may interfere
 with a baby's ability to learn to effectively suckle
 at the breast and is associated with shorter
 duration of breastfeeding. ^{84, 31, 42}
- A Cochrane review of the literature examining cup-feeding versus bottle-feeding found that cupfed infants were more likely to leave the hospital exclusively breastfed, and it found no difference in weight gain between the two groups.⁴³

The Cochrane review examining cup-feeding versus bottle-feeding found there was poor compliance with the cup-feeding regime, with a large percentage of the randomized cup-feeding group also receiving bottles. One study included in the review reported longer hospital stays for the cup-feeding group due to policies that infants were not allowed to be discharged until cup-feeding was discontinued. Therefore, policies should be developed to support successful cup-feeding and facilitate timely discharge from the hospital.





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- 2017 Breastfeeding and Safe Sleep Evidence-Based Practices Health Care Provider Guidance Document
 –Indiana Perinatal Quality Improvement Governing Council
 http://www.in.gov/laboroflove/files/breastfeeding-safe-sleep-guidance-document.pdf
- http://hospital.nuroobaby.com/wp-content/uploads/2016/04/RAPPT-Scoring-Tool-2015.pdf

QUESTIONS?



THANK YOU!

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