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ABM Protocol

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ABM Clinical Protocol #37: Physiological Infant Care—Managing Nighttime Breastfeeding in Young Infants

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Abstract

A central goal of the Academy of Breastfeeding Medicine (ABM) is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient. The ABM empowers health professionals to provide safe, inclusive, patient-centered, and evidence-based care. Pregnant and lactating people identify with a broad spectrum of genders, pronouns, and terms for feeding and parenting. There are two reasons ABM's use of gender-inclusive language may be transitional or inconsistent across protocols. First, gender-inclusive language is nuanced and evolving across languages, cultures, and countries. Second, foundational research has not adequately described the experiences of gender-diverse individuals. Therefore, ABM advocates for, and will strive to use language that is as inclusive and accurate as possible within this framework. For more explanation, please read ABM Position Statements on Infant Feeding As a Basic Human Right (https://doi.org/10.1089/bfm.2022.29216.abm).

Keywords: breastfeeding, infant care, newborn, infant, sleep deprivation, sudden infant death

Introduction

AVING A NEWBORN CAN BE OVERWHELMING, even for experienced parents. Infant feeding and getting sufficient sleep are among parents' biggest concerns. Young infants require frequent feedings day and night, particularly those who are breastfeeding. This can be a challenge to parents who are balancing other responsibilities such as work outside the home, caring for older children, and daily household responsibilities. The goal of this protocol is to address managing these challenges in the context of normal physiology for breastfeeding dyads. Academy of Breastfeeding Medicine (ABM) Protocol #6 (Bedsharing and Breastfeeding),¹ serves as an important adjunct to this protocol.

Key Information

Normal maternal-infant physiology

Normal infant feeding patterns. A newborn will breastfeed ~ 8 to 12 times per 24 hours but not necessarily at regular intervals. Newborns need to breastfeed according to their feeding cues. As stated in the rationale to step 8 of the revised Baby-Friendly Hospital Initiative, "Breastfeeding

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involves recognizing and responding to the infant's display of hunger and feeding cues and readiness to feed, as part of a nurturing relationship between the mother and infant."

Responsive feeding (also called on-demand or baby-led feeding) puts no restrictions on the frequency or length of the infant's feeds, and mothers are advised to breastfeed whenever the infant is hungry or as often as the infant wants, acknowledging that healthy infants self-regulate intake by combining nutritive with non-nutritive suckling.² Feeding according to infant cues helps assure that an infant receives all the needed daily nutrition,³ as long as a minimum of eight feedings per 24 hours is met.

Once complementary foods are added at 6 months, the infant may be able to feed less often at night. However, when mothers work outside the home and express their milk while away from their infants, some dyads may engage in reverse-cycle feeding, directly breastfeeding more often during the night to make up for the mother's daytime absence. This direct stimulation by the infant at the breast helps maintain milk production. Intentionally limiting nighttime feeding is associated with early cessation of exclusive breastfeeding.⁴ Expressing milk is less efficient than direct breastfeeding, even with the most efficient breast pumps.⁵ Direct breastfeeding more often at night may thus help with maintaining milk production after returning to work.

Normal infant sleep patterns. Newborns are born without a functional circadian clock.⁶ Melatonin in breast milk is secreted and passed on to the infant in a circadian manner, helping to establish the infant's circadian rhythm.⁷ Being exposed to usual daytime activities, and their differentiation from nighttime activities, helps set an infant's circadian clock and lengthen their nighttime sleep periods. This includes daytime naps without artificially darkening the room or significantly reducing ambient noise.

Continuous proximity and skin-to-skin contact with the mother or other adult help the infant gradually transition to extrauterine life. Infants rely on proximity and skin-to-skin contact with their mothers to regulate their breathing, temperature, and heart rate in the early weeks and months of life.^{8–10} Mother–infant physical contact among breastfeeding dyads (bedsharing and baby-wearing) predicts maternal responsiveness to infant hunger cues, whereas proximity without physical contact does not.¹¹ Responsive feeding, in turn, is associated with longer duration of exclusive breastfeeding.¹¹

Nighttime separation from the mother in infants as old as 10 months can cause infant distress and elevated cortisol levels, even if the infant does not appear outwardly distressed.¹² Furthermore, although nighttime separation during the first 4 months may be associated with longer periods of sleep consolidation in the infant¹³ and decreased night-time awakenings,¹⁴ this may not be physiological or safe, and partially explain why sleeping in proximity to the mother is associated with a decreased risk of sudden infant death syndrome (SIDS).¹⁵

Differences in sleep patterns may vary according to race/ethnicity as well as maternal education and household income. Some investigators have examined sleep patterns by race/ethnicity and other sociodemographic variables in an attempt to understand disparities in SIDS rates among certain U.S. groups. Results indicated that lower income and less education, not race/ethnicity, were associated with less sleep duration among dyads.¹⁶ These factors may be markers for stress, which may adversely affect sleep physiology.

After 12 to 16 weeks, the infant will spend more time awake, as the suprachiasmatic nucleus, based on external cues, begins to establish a circadian rhythm.¹⁷ The infant will be able to go longer stretches between feeds and will be able to feel comfortable outside immediate physical contact with their mother. However, their longest sleep periods may not markedly lengthen between 3 and 12 months, whether they are room sharing or sleeping solitary.¹⁸ Mothers may make up for their own nighttime sleep loss with daytime naps.¹⁹ However, their naps may not provide the same restorative value as nighttime sleep.²⁰

Infants also benefit from being carried even when not feeding. A randomized controlled trial in a Western highincome setting showed that increased carrying of infants in arms or in a baby carrier with body contact (baby-wearing) was associated with a 43% reduction in fussing and crying at 6 weeks of age.²¹ Safe baby-wearing (see information)²² can also allow a mother to participate in other tasks. Infants who spend much of their day being carried may benefit from supervised "tummy time" to help achieve developmental motor goals.²³

Challenges to physiological infant care

Expectations of sleeping through the night. In Western high-income countries, there is an expectation that a "good baby" should be able to sleep long stretches through the night from a very young age.⁷ The recommendation of exclusive breastfeeding for the first 6 months of life²⁴ is often the social expectation, but is incompatible with the "good baby" expectation.

The scientific data show that expectations of prolonged infant sleep periods are unrealistic. Infant sleep measured by actigraphy (movement sensors) is similar from ages 4 to 16 weeks, regardless of the infant feeding method or location with respect to mother. However, Western mothers who exclusively formula feed perceive that their infants sleep longer, which reflects and reinforces the myth that it is "normal" for infants to sleep soundly for long periods.²⁵ Parents in Western societies may experience distress and feel unprepared when their infants do not fit the expectation of readily falling asleep alone and staying asleep for long stretches from an early age.²⁶

The mismatch between Western cultural family sleep expectations and the biological realities of human infants undermines parental resilience and compromises family wellbeing.⁷ In contrast to Western mothers, one study showed Japanese mothers do not perceive their sleep to be disturbed, despite the objective measures of infant-related sleep disruption being similar to those found in the U.S. studies of postpartum women who reported sleep disturbance.²⁷

Studies have documented that infant's sleep patterns, although fragmented throughout the night, do not correlate with maternal sleep duration after 6 weeks postpartum.²⁸ Breastfeeding infants sleep as well as or better than their formula feeding counterparts.¹⁹ A systematic review and metaanalysis demonstrated that breastfeeding may be associated with a longer nighttime sleep postpartum and that bedsharing was associated with longer sleep duration in breastfeeding mothers, compared with non-breastfeeding mothers.²⁹

Expectations around solitary sleep. In Western highincome countries, there is an expectation that solitary infant sleep is standard and desirable. Bedsharing has been stigmatized and considered as uniformly unsafe, even in breastfeeding dyads without risk factors for sudden infant death. Parents in most Western countries have been advised against bedsharing since about 2004–2005,³⁰ and strongly advised against any bedsharing since ~2010, and many Western countries continue to advise against bedsharing. Other authorities began removing this recommendation after about 2014–2015.^{31,32} For example, in 2014 the U.K.'s National Institute for Health and Care Excellence advised that there was insufficient research evidence to unambiguously state cosleeping causes SIDS.

In 2016, PrevInfad in Spain gave a Level 1 recommendation that there is insufficient evidence that bedsharing is associated with an increased risk of SIDS in breastfeeding infants when there are no other risk factors.³³ In 2019, the United Kingdom removed routine advice against bedsharing, regardless of feeding method.^{34–36} Australia adopted a risk minimization strategy in 2018, which acknowledges that many parents bedshare³⁷ and some Canadian regional health authorities became more accepting of bedsharing after ~2017.^{38,39}

The advice against all bedsharing is still very influential in the United States and elsewhere, and continues to be the stance of the American Academy of Pediatrics.⁴⁰ A famous 2011 U.S. advertising campaign, often cited, replaced a bedsharing mother with a meat cleaver. Mothers who bedshare can be accused of child abuse or neglect in some U.S. jurisdictions.⁴¹ In other words, the normative infant sleeping and feeding pattern is often viewed as aberrant, undesirable, or pathological.^{6,7}

Scientific data show bedsharing to be associated with prolonged duration of any and exclusive breastfeeding.^{42–44} Sleep location is vital to feeding frequency.⁷ A growing body of anthropological research provides evidence that proximate mother–infant sleep combined with side-lying breastfeeding ("breastsleeping")⁴⁵ constitutes the human evolutionary norm.⁷ Bedsharing is associated with improved quality of child attachment and comforting for mother and infant.⁴⁶ Bedsharing is common among U.S. infants⁴⁷ and is common among breastfeeding Turkish infants.⁴⁸

Aspects of bedsharing may be protective against sleep-related infant death. Proximate mother–infant sleep allows the mother to be immediately responsive to the infant, as demonstrated in physiological studies.^{12,49} Mothers and infants are both more arousable,^{49,50} and the mother forms a protective circle around the infant with her arms and legs, as her arm blocks the pillow from the infant (known as the C-position or "cuddle-curl"⁵¹). The infant's head is alongside the mother's breast, and after feeding the infant rolls onto their back, as bedsharing breast-feeding infants would not naturally sleep prone.⁵²

By contrast, videographic evidence shows that mothers who bottle feed their infants may exhibit unsafe practices such as placing their infants to sleep on pillows.⁵³ Furthermore, because bedsharing among breastfeeding dyads is so common, it can be difficult if not impossible to separate out the possible protective effects of bedsharing from the protective effects of breastfeeding on SIDS, and thus could be responsible for some of the decreased risk of death associated with breastfeeding, when hazardous risks are absent.⁵⁴

Direct breastfeeding at night has important physiological functions. In addition to the role of melatonin, breastfed infants who regularly bedshare feed more frequently than those who sleep solitary.⁵⁵ More frequent feeding at night may help maintain milk production and is important for lactational amenorrhea.⁵⁶ Infants' sleeping through the night is associated with a much lower rate of breastfeeding.⁵⁷

Bedsharing affects maternal and infant sleep. Bedsharing breastfeeding mothers wake frequently to feed, are awake for shorter periods, and fall asleep more rapidly than breastfeeding mothers who do not bedshare.⁴⁹ In a laboratory study of breastfeeding mothers, 94% of those who routinely bedshared reported they had obtained "enough" sleep after bedsharing, compared with 80% of routinely solitary sleeping mothers who reported enough sleep after solitary sleeping.⁴⁹

Mothers who routinely slept solitary also rated their sleep quality as lower than bedsharing mothers.⁵⁵ Bedsharing also promotes infant arousals,⁵⁰ which may be protective against SIDS. Breastfeeding mothers sleep $\sim 40-45$ minutes more than formula feeding mothers¹⁹ and fathers of breastfed infants sleep longer than fathers of formula-fed infant infants.⁵⁸

In societies that follow this physiological norm, a typical nighttime behavior may consist of mothers and infants sleeping together, breastfeeding frequently, often with the mother not fully awake, and in the morning, the mother cannot say how often she breastfed.^{7,59} Infants and mothers immediately return to sleep after feedings. Note that infants fed this way are not burped after feeding; burping is rarely necessary in infants fed directly at the breast because they generally do not swallow air during feeding. Note also that infants are not awoken for diaper changes after every bowel movement at night. Research suggests that breastfeeding is associated with a lower risk of diaper dermatitis^{60,61} although not in all studies.⁶² Application of a barrier cream to the infant's diaper area helps prevent diaper dermatitis.⁶³

ABM Protocol #6 discusses the evidence to date that bedsharing does not cause SIDS in the absence of hazardous circumstances, despite its association with SIDS,^{1,64} consistent with other national guidelines.³⁴ A well-done case–control study found bedsharing in the absence of hazards to be protective in infants older than 3 months.⁶⁴ ABM advises a risk-minimization approach to bedsharing and breastfeed-ing.¹ Hazardous circumstances include, in order of importance: sofa sharing, sleeping with a parent who is impaired by alcohol or drugs, sleeping next to a smoker, sleeping in the prone position, never having initiated (direct) breastfeeding, sleeping in a chair with an adult, sleeping on soft bedding, or sleeping with an infant who is preterm or low birthweight.

Note that most of these circumstances are amenable to parental control. However, in some cases, bedsharing may be unplanned, in which case it is much more hazardous than when it is planned.⁶⁵ If hazardous circumstances exist, alternatives such as a sidecar may be an option for some families.¹ The risk of bedsharing is unknown in dyads who are fed by exclusive pumping, as infant positioning in bed for a breastfeeding dyad is uniquely related to the anatomical demands required for direct feeding and the mother's arms and legs form a safe environment for the infant.¹

Concerns that waking to breastfeed may contribute to maternal depression. It has been hypothesized that disrupted sleep may contribute to the development and extent of postpartum depression symptoms.⁶⁶ However, it is not clear

whether postpartum sleep problems and mood disorders can be attributed to infant sleep and feeding, as they often existed in pregnancy. In addition, maternal sleep problems may be caused by anxiety and depression. Research showed that although there are significant correlations among maternal sleep and wake disturbance, fatigue, and depression at 32 weeks postpartum, they are not related to infant sleep patterns among Western mothers.⁶⁷ Poor sleep maintenance, as measured by wrist actigraphy, is correlated with maternal depression, rather than maternal sleep duration.⁶⁶

Poor sleep quality is also associated with worsening postpartum depression and anxiety in Western mothers.⁶⁸ Subjective perception of sleep, rather than its objective quality, is associated with immediate and later postpartum mood disturbances.^{20,66} In a longitudinal study of Western mothers, pre-existing poor sleep quality, depression, and eating disorders during pregnancy were associated with worse breastfeeding outcomes, leading the authors to conclude that pre-existing sleep and mood disorders are the risk factors for poor breastfeeding outcomes and postpartum sleep disruption, and not that poor breastfeeding causes sleep disruption and postpartum mood disorders.⁶⁹

Increased maternal depression and anxiety scores are also linked to decreased maternal sleep efficiency. In other words, maternal depression and anxiety are not related to the length of the infant's self-regulated sleep periods, but rather to problems with maternal sleep efficiency, or difficulty of the mother initiating or falling back to sleep.⁷⁰ Sleep efficiency is related to anxiety and increased sympathetic tone, not to the number of times a mother wakes to feed.⁷⁰

Nonetheless, one study in Western mothers showed increased infant feeding, and more disturbed infant sleep was correlated with increased maternal depression.²⁸ A study in Japanese mothers suggested that breastfeeding frequency, subjective fatigue, and decreased objective total sleep time in the first days postpartum may be associated with higher scores on depression scales.⁷¹ It is notable that a comprehensive review and meta-analysis found a reduced risk of postpartum depression associated with breastfeeding.⁷²

Nonphysiological coping strategies

Variations from the normal physiology of proximate mother–infant sleep while breastfeeding have the potential to undermine maternal well-being. Breastfeeding mothers may have different strategies to maximize their sleep and well-being while avoiding bedsharing. These strategies may include nocturnal pumping with bottle feeding, sleep training, formula feeding or early introduction of solids, and use of infant tracking apps, each of which has its own potential drawbacks. Often these strategies involve turning on lights, which markedly disrupt circadian rhythms⁷³ of the whole family.

Night pumping. Nighttime pumping while feeding an infant a bottle of expressed milk would be expected to markedly disrupt maternal sleep. In addition, feeding milk pumped from a different time of day would not provide the appropriate level of melatonin. Circadian rhythms are not only disrupted by turning on lights, but by sitting up and engaging in any active activity.⁷⁴

After feeding, a bottle-fed infant may require burping. If the infant is not sleeping next to their parent, further sleep disruption to parents and infant may occur, as the infant may not fall asleep readily while alone, and may require time for calming and soothing. Exclusively pumping is also associated with shorter breast milk feeding duration and earlier introduction of formula compared with feeding at the breast with or without pumping.⁷⁵

Sleep training. A number of techniques are designed to condition infants and toddlers to sleep for longer periods at night.⁷⁶ They are based on reducing the infant's expectation of a specific behavior associated with sleep onset and conditioning infants to "soothe themselves" back to sleep, alone, without adult intervention, when they have normal sleep cycle awakening.^{76,77} Training young infants to sleep alone by failing to respond to their crying in a distant crib causes significant infant stress, as indicated by elevated infant cortisol levels, which persist on the nights when the infant is no longer crying.¹² Parents often experience distress at not responding to their infant's cries.^{78,79} and often find sleep training is not effective.⁷⁹

Objective measures of infant sleep outcomes do not find that these methods "improve" the sleep of the infants who undergo this training. Infants cease to signal distress to their parents, but they do not cease to wake or remain awake, so they are not actually "soothing themselves back to sleep."^{80,81} Sleep training in infants younger than 6 months of age can impact breastfeeding success due to separation from mother and reduced nighttime feedings.⁸⁰ In addition, having the infant sleep in a separate room as part of sleep training strategy could be associated with an increased risk of SIDS.⁷⁰

However, some studies show sleep training conducted under research conditions can be effective when the outcomes relate to maternal self-reported sleep outcomes, maternal reports of infant night waking, or maternal mental health.⁸² One randomized control trial of 14 infants⁷⁶ showed no connection between graduated sleep interventions and emotional or behavioral problems 12 months later, but these results are too small to be generalizable.

Nonbreast milk feeding. In the pursuit of additional infant sleep, some mothers add or switch to formula to attempt to get more sleep.^{83,84} However, wrist actigraphy shows that parents of infants who were breastfed in the evening slept an average of 40–45 minutes more than parents who gave formula.¹⁹ Wrist actigraphy also showed that parents of infants giving formula reported more sleep disturbance than parents of exclusively breastfed infants.¹⁹ Data regarding early introduction of solids are mixed. A randomized clinical trial of infant cereal before bedtime did not show improved sleep.⁸⁵

A randomized trial of early introduction to solid food at 3 months versus exclusive breastfeeding to 6 months showed an average of 17 minutes increased sleep time with solids, and fewer awakenings.⁸⁶ However, in another study, there was no improvement in sleep at 1 year of age.⁸⁷ Possible minimal increased sleep needs to be balanced against the possibility that adding early solids may interfere with the protective mechanisms to prevent SIDS, and lead to overweight^{88,89} and premature weaning.

Lighting at night. Lighting at night is disruptive to sleep and circadian rhythms.⁹⁰ Blue light from digital devices (which has a short wavelength) has been found to suppress melatonin and disrupt sleep.⁹¹ Thus, activities at night that require lighting, such as pumping or changing diapers, should be minimized. Low-intensity red lighting (which has a long wavelength) has minimal effects on the sleep-wake cycle in mice,⁹² so may be useful for circumstances that require lighting.

Use of infant tracking apps and related digital technology. Although tracking apps used to monitor infant feeding and sleeping may be marketed with claims of reducing parental anxiety, they can paradoxically increase anxiety and reduce parent-baby interaction when observing the baby becomes replaced by checking the app.93 Apps and devices that allow parents to monitor infant sleep from afar normalize parent-infant separation and imply that some fundamental aspects of infant caregiving can be outsourced to technology.⁹

Supporting physiological infant care

Provider practices that support physiological infant care. Approaches such as the Possums Sleep Program, which are based on normal physiology, can help support parents.94,95 This type of approach is an infant-centered cued care program that can result in more consolidated sleep when used in infants over 6 months of age and does not negatively impact breastfeeding.⁹⁶ Aggressive marketing of commercial milk formula has no place in the health care setting and can undermine breastfeeding and mothers' confidence.^{97,98} Encouraging the family to provide household help in a culturally expected manner has been shown to be a positive factor in preventing postpartum psychological distress.99

Social practices that support physiological care. Physiological infant care is best supported when mothers are able to take sufficient time off from work after giving birth to recover, establish breastfeeding, and bond with their infant. At least 12 weeks of paid leave is associated with improved maternal and infant health, decreased intimate partner violence, improved infant attachment and child development, decreased maternal and infant rehospitalizations, and increased initiation and duration of breastfeeding.¹⁰⁰ Flexible work schedules are important for families with infants. Physiological infant care is also supported when partners are able to take time off from work to support the mother and bond with their infant.

Recommendations

For each recommendation, the quality of evidence (levels of evidence 1, 2, and 3) and the strength of recommendation (A, B, and C) are noted as defined by the strength of recommendation taxonomy criteria.¹⁰¹

1. Help parents understand normal physiology and to care for their infants in a responsive manner. It is important for health professionals to understand the normal physiological expectations and educate parents accordingly. Professional organizations should work to minimize the impact that advertising has on promoting nonphysiological practices.

Level of evidence: 2. Strength of recommendation: B.

2. In the absence of hazardous circumstances, mothers sleeping in proximity to their infants is recommended. Breastfeeding with proximate sleep in the absence of hazards may allow mothers to maximize their rest and well-being if sleep deprivation is a concern. Breastfeeding with proximate sleep may protect against sleep-related death, and is associated with responsive infant feeding and longer durations of any and exclusive breastfeeding. Level of evidence: 2. Strength of recommendation: B.

3. Mitigate potential risks of bedsharing while allowing the infant to sleep within arms' reach. Using a sidecar attached to the adult bed if concerns exist for hazardous circumstances, or if hazardous circumstances could sometimes exist (e.g., if parents occasionally use alcohol or sedating substances).

Level of evidence: 2. Strength of recommendation: B.

- 4. Mitigate potential risks of bedsharing by teaching safe positioning in bed. Owing to lack of data for exclusively pumping dyads, it is unknown whether these dyads represent a hazardous circumstance for bedsharing. The C-position (cuddle curl) should be taught to exclusively pumping parents, recognizing that bedsharing is common and may occur unintentionally. Level of evidence: 3. Strength of recommendation: C.
- 5. Avoid nonphysiological disruptions to maternal and infant nighttime sleep as strategies for improving parental well-being. These include nighttime pumping, bottle feeding, and placing the infant to sleep outside the parents' reach. Consider a dim red light if the need for lighting is anticipated.

Level of evidence: 2. Strength of recommendation: B.

- 6. Encourage the mother and infant to return to sleep without interruption after nighttime breastfeeding while bedsharing. Avoid burping the infant after breastfeeding, and avoid unnecessary diaper changes during the night. A barrier cream applied to the diaper area can help prevent diaper dermatitis. Level of evidence: 2-3: Strength of recommendation: C.
- 7. Sleep training in approximately the first 6 months of life is contraindicated, and sleep training in the first year is not recommended. A cued care program for infant sleep may be a physiological-based alternative for parents who desire a sleep intervention.

Level of evidence: 2. Strength of recommendation: B.

- 8. Encourage the mother to sleep when the infant sleeps, when this is possible, and remind parents that not all sleep must occur during the nighttime hours. Level of evidence: 2. Strength of recommendation: B.
- 9. Encourage the mother to get help with other household tasks so that she can focus on breastfeeding and caring for the infant.

Level of evidence: 2. Strength of recommendation: B.

10. Encourage the safe use of baby carriers during the day to promote physical contact with the infant. Babywearing can help mothers manage daytime tasks while keeping the infant calm.

Level of evidence: 1. Strength of recommendation: A.

11. Including some supervised "tummy time" may be important to help achieve developmental motor goals. Level of evidence 2. Strength of recommendation: B

- 12. Avoid early introduction of solids or breast milk substitutes such as formula as a strategy to improve infant or maternal sleep. Avoid exposure to formula marketing materials in hospitals and health care settings. Level of evidence: 2. Strength of recommendation: B
- 13. Encourage parents to directly monitor infant feeding and sleeping cues, and discourage use of tracking apps and monitoring devices for infant feeding and sleeping. Level of evidence: 2, 3. Strength of recommendation: C.
- 14. Advocate for at least 12 weeks of paid maternity leave in countries that currently do not have it. Level of evidence: 1. Strength of recommendation: A.

Summary

Compared with many strategies that mothers may use to cope with the demands of nighttime parenting, side-lying breastfeeding with proximate sleeping may be one of the safest strategies for maternal and infant well-being, in the absence of hazardous circumstances. Physiological research suggests that it may be protective for the infant, ^{12,49,50,52} and if the natural physiology of proximate sleep is disrupted, these protections are lost. Accidental suffocation death is extremely rare among bedsharing breastfeeding infants in the absence of hazardous circumstances.¹ Other coping strategies may have more overall adverse effects to mother and infant.

Areas for Future Research

More research is needed about physiological infant care, particularly in the context of diverse cultural beliefs and values. Research is needed into whether there is a role for pacifiers (dummies) in physiological infant care. Continued research into the optimal duration of paid leave for mothers and their partners would be helpful. More evidence is needed on the benefits of bedsharing and breastsleeping. It is known that breastfeeding is associated with a reduced risk of SIDS,¹⁵ but if this association is causal, it is unclear what aspects of breastfeeding are protective. It is likely that the protective effect is at least partially behavioral and not only from the milk itself, and if so, bedsharing would contribute to and confound the protective effectiveness of breastfeeding on SIDS.

More data on bedsharing in dyads who exclusively pump are necessary to ascertain their infants' risk of sleep-related death. More epidemiological and videographic data on an assortment of feeding methods, including in transgender parents, would be helpful. Finally, it would be vitally important to be able to consistently collect infant feeding data on all cases of sleep-related death.

Authors' Contributions

All authors contributed to the conception and drafting of this article.

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ABM protocols expire 5 years from the date of publication. Content of this protocol is up to date at the time of publication. Evidence-based revisions are made within 5 years or sooner if there are significant changes in the evidence.

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Physiologic Infant Care: Supporting breastfeeding, sleep, and well-being

Welcoming a new baby can be challenging. Breastfeeding at night stimulates milk production. Night breastfeeding helps your baby grow.

At night-time:



Sleep near your baby.

You and your baby will fall asleep more easily. Consider using a co-sleeper attached to your bed (also called a sidecar). Breastfeed while lying on your side.

Avoid getting up at night. Sitting up and getting out of bed will disrupt your sleep. Skip most diaper changes at night. Protect your baby's bottom with a barrier cream. Breastfed babies don't usually require burping.

Keep the lights off at night.

Turning on lights disrupts your family's sleep. Avoid night-time activities that require lighting or use a dim red light. Close electronic devices.

Breastfeed at night rather than pump

or use bottles, if you can. Your night-time milk contains melatonin. Melatonin helps your baby sleep. Pumping and bottle feeding disrupt sleep.

Avoid feeding solids or formula to

improve sleep. Parents of formula fed babies may experience more sleep disruption than parents of breastfed babies. Giving solids or formula before 6 months may decrease milk production.

Do not sleep train in the first 6 months. It is not recommended in the first year. Instead, a cued care program for infant sleep can help parents cope.

Bedsharing safety is very important.

Bedsharing is often unplanned. Everyone should make their bed safe for baby. See ABM's Bedsharing and Breastfeeding handout. Feeding from the bottom breast. Breast can be supported on your bent elbow if desired.

In the daytime:

Wear your baby in a baby-wrap

or baby-carrier. Wearing your baby keeps baby calm. Your hands will be free to get things done. Make sure you baby's back is supported and your baby is held firmly to your body. Your baby's face should be free.

Daytime activity may help your baby sleep better at night. Expose your baby to normal daytime light and noises. Include some supervised tummy-time.

Nap when your baby naps, if you can.

Focus on your baby's behavior cues. Tracking apps are not needed.

Ask for help. Other caregivers can change, bathe, and dress your baby. They can help with cooking, cleaning, and older children.



Feeding from the top breast means you do not have to roll over to feed from both sides.



This information is a general guide to discuss with your health care professional. It may not apply to your family or situation.