

# "I Want My Mommy!" The Co-Sleeping Controversy

Laura E. Wilwerding, M.D., F.A.A.P., F.A.B.M.  
Clinical Assistant Professor, Pediatrics, UNMC  
Co-President Heartland Alliance for  
Breastfeeding Advocacy

## Societal expectations vs adaptive infant behavior

- Babies who are well adapted to protect themselves from a potential life-threatening situation (separation from mom) will protest solitary sleep.
- Current recommendations concerning infant sleep management reflect the perceived social needs of parents and older children far more than they do the unique psychological and biological needs of the human infant.
- 30-40% of children in western society suffer some form of sleep problem, suggesting that the needs of the culture are at odds with the needs of human infants.

## The history, basis, and benefits of co-sleeping



## A comfy place to snooze



## Human infants and neurological immaturity

- Infant physiology evolved under conditions of continuous parental contact.
- 75% of brain growth occurs post-natally
- The infant must rely on external regulation and support, especially in the first year of life, for:
  - Heart rate
  - Body temperature
  - Breathing
  - Sleep and arousal patterns

Dr. McKenna's theory:

Infant needs, and parental responses to those needs, constitute a dynamic, co-evolving interdependent system shaped and designed by natural selection to maximize the chances of infant survival and, hence, parental reproductive success.  
(McKenna, 1993)

## Support for the theory

- The Fossil Record
- Human Milk Composition
- Studies of parent-infant separation
- Studies of parent-infant co-sleeping
- Co-sleeping and SIDS

## Composition of Mother's Milk

- Content supports the pattern of close and continuous mother-infant contact, including co-sleeping, as suggested by the fossil record.
- Low in fat and protein, high in lactose, a key nutrient needed for brain growth. The concentration of lactose is highest among primates whose infants are the least neurologically developed.

## The Fossil Record

- To accommodate upright locomotion, the shape of the pelvis and birth canal changed.
- At the same time, for learning and increased social complexity, the brain size increased.
- To accommodate these two conflicting evolutionary trends, the adaptive solution was the birth of neurologically immature infants, with the majority of brain growth occurring outside the womb

## Composition of Mother's milk (cont)

- Non-primate animals' milk is high in fat and protein, as they leave their young for extended periods of time.
- Human milk has fewer calories per feeding, which indicates the need for more frequent feeding.
- Anthropologic evidence suggests that co-sleeping at night and the carrying of infants in body shawls during the day were used to keep infants close for frequent feeding.

## The Fossil Record (cont)

- To offset infant vulnerabilities after birth:
  - Longer duration of parent-young co-sleeping occurred
  - Carrying of infants increased
  - Breastfeeding and resulting immune protection was vital
  - All above are inferred from ethnographic and archeological data, as "human infants, quite literally, need to finish their social and biological gestation after birth." (McKenna, 1993)

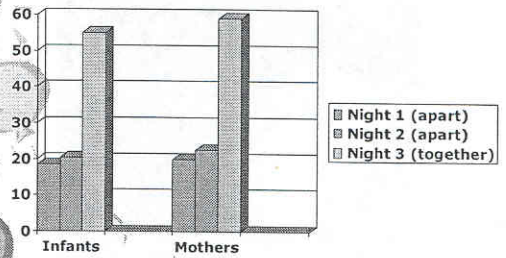
## Studies of parent-infant separation-Animal Models

- Separation from care giver causes infant systems to function inadequately
  - After 3 hours of separation, monkey infants experienced decreased body temperature, decreased stress hormones, arrhythmias, sleep disturbances, and compromises to the immune system

## Human Studies on Separation

- Human infants are even less neurologically developed than other primates, therefore, the effect of separation are likely even greater
- Keene found that "rooming-in" newborns spent more time in restful sleep than infants separated and in the nursery
- Fardig showed that newborns placed in warmers lost up to 1.5 degrees of body temp, compared to skin to skin contact

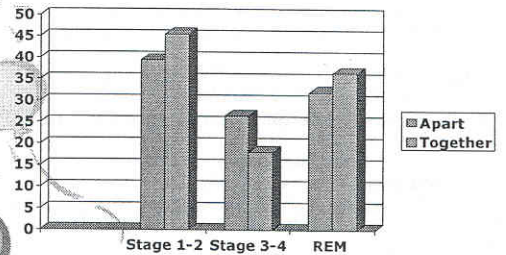
## Mean Percentages of Overlapping Arousals as Mothers and Infants sleep apart or together



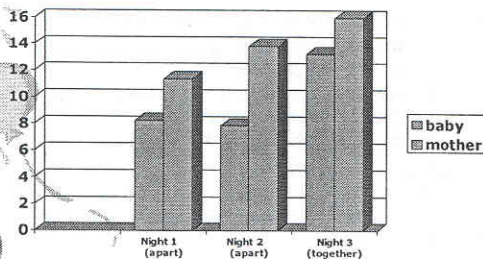
## Studies of infant-parent co-sleeping

- Studies have revealed, on average, infants who co-sleep with their mothers
  - Experience more arousals than when sleeping alone
  - Spend less time in non-rapid eye movement sleep
  - Have more arousals at the same time as mom, thus producing sleep variation in the infant
    - Such partner induced arousals promote more successful arousals in response to internally-based respiratory crises

## Mean Percentage of Babies' Total Sleep time spent in each sleep stage



## Mean frequency of arousals per hour of sleep as mothers and infants sleep apart and together



## Interpretation of co-sleeping studies

- Partner induced arousals may be important as there is a suspected relationship between SIDs and infantile arousal deficiencies.
- Infant arousal responses increase the overall amount of physiological variation and may help to mature the cardio-respiratory and neurologic responses to arousals and sleep shifts.
- Solitary sleep may accelerate the maturation of deep sleep before arousal mechanisms are efficient enough to handle physiological crises.

## Full tummy, happy baby



## Problems with existing sleep research

- Too focused on short term, specific outcomes
  - **Not well suited to measuring long-term or qualitative outcomes**
  - **Co-sleeping is simply one part of a complex of parental choices**
  - **Researchers need to ask long term questions**

## Co-sleeping and SIDS

- No environment is 100% safe, whether co-sleeping or solitary sleeping, infants can be at risk.
- Co-sleeping can be protective from the standpoint discussed thus far
- Co-sleeping, in certain circumstances, can be dangerous
  - Adults using drugs/alcohol
  - Soft or overly blanketed beds
- SIDS rates are highest in countries that practice solitary sleeping. (US, Canada, New Zealand, England)

## Daddy likes to snuggle too



## Problems with existing sleep research

- Cultural Bias
  - Co-sleeping Generally studies are done about subjects from the researcher's culture
  - Research in the United States is highly influenced by the high value Americans place on independence, technology, consumerism, and parent's needs for time and privacy
  - Research from other countries tends to look at the benefits of co-sleeping and how it is integral to family function.

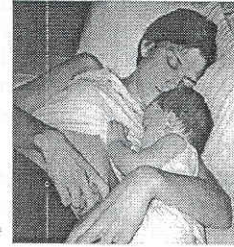
## Basic Benefits of Co-sleeping

- Promotes physiological regulation
  - Improved breastfeeding
  - Sleep self-regulation
  - Better sleep, babies do not have to fully awaken to get response from Mom
  - Moms report feeling better rested
- Long-Term Benefits
  - Higher self-esteem/less guilt and anxiety
  - Less discomfort about physical contact and affection
  - More Positive behavior

## Basic Benefits (cont)

- Parental sensitivity
  - Parents feel more attuned to their baby and child
  - Sensitivity at night translates to sensitivity to daytime needs as well
- Reduction of Bedtime Struggles
  - Reduction of anxiety regarding bedtime
- Fosters an environment of acceptance
  - Parents accept children's need for them day and night
  - The willingness to respond to needs at an earlier age can lead to a closer relationship

## So, Why all the controversy?



## Only the best for me



Straight from the source: the Consumer Product Safety Commission

- "Don't sleep with your baby or put the baby down to sleep in an adult bed. The only safe place for babies is a crib that meets current safety standards and has a firm, tight-fitting mattress."

- Ann Brown, Commissioner of Consumer Product Safety, September 29, 1999

## What if my baby never leaves my bed????

- This has not specifically been studied, but anecdotal experience from co-sleeping families doesn't show this
- Most children leave the bed with little or no persuasion once they mature physically, emotionally, and cognitively
- Also, a process of finding the child's own sleeping space can be family process
- Co-sleeping is not a bad habit that needs to change, it is an established pattern that can evolve into various other patterns to fit into the changing family dynamics

## The Crib: truly the only safe place???

- No proof or evidence was provided with this recommendation, in fact, world-wide data refutes it
- No evidence bed-sharing or co-sleeping increases the risk of infant death when confounding circumstances are controlled for
- Ultimately, infants should not sleep outside the context of a responsible, adult caregiver

## The Basis for the CPSC recommendation

- Summation, description, and categorization of hazard's in the infant sleep environment, found anecdotally using death certificates
- There was no study, no research question, no hypothesis
- No evidence is provided regarding overlying, only that it "allegedly" had occurred

Scheers, Rutherford, and Kemp... "Pediatrics" article Oct 2003

- Reported an increasing risk of suffocation in parent beds and sofas and recliners, compared to cribs.
- Used death certificates and demographic data as reported to the CPSC, as well as a random survey by the National Infant Sleep Position Study.
- Addressed only infants who died of suffocation, did not include infants who died of "SIDS" in the crib
- Anecdotal data was taken from the 80's and 90's respectively

## The CPSC recommendation: Inappropriate?

- No relative risks are calculated (risk of mortality vs morbidity)
- Death certificates are subjective in the context of coroner's comments, cultural bias is evident
- In 394 of the deaths cited, no knowledge of whether parent was present or not at time of death

## 1997 Infant birth and death statistics

- 3,880,894 infants were born in America
- 64 infants (0.0000164%) died alone on parental or child beds, and/or from alleged suffocation by overlay (adult or sibling)
- 2,705 infants (0.000697%) died from SIDS, usually alone in a crib
- 50 infants died from crib suffocations

## CPSC recommendation Inappropriate

- Incorrectly assumes moms and dads are unresponsive to infant needs while asleep, or believes mothers and fathers are no more capable of responding to needs than an older sibling
- Assumes incorrectly that co-sleeping is inherently lethal and does not take into account the mental and physical status of the parent (ie. Under the influence of drugs or alcohol)

## Cultural and Scientific Bias



## Cultural and Scientific Bias

- "Bias is evident where for one, but not both, sleeping conditions become the argument against the practice, while for the other arrangement (crib sleeping), dangers remain simply....problems to be solved"

» McKenna, 1997)

## Security in Mom's arms



## Example of Bias in the recommendation

- The CPSC bypassed learned research committees such as the AAP's task force on Breast Feeding, with alternative experience and viewpoints
- Failed to consult with relevant U.S. and British researchers
- Ignored published benefits in over 30 peer-reviewed papers
- Deprives parents of necessary education to insure safe sleeping
- What is The CPSC's jurisdiction? Are parents products?????

## Proposed New Recommendation

- "Whenever possible, infants should not be left alone to sleep especially on an adult or child's bed.. Or in a crib, outside the company of a responsible caregiver."

McKenna, 1997

## Examples of Bias (cont)

- The recommendation led to unprecedented public media attention on the potential benefits of co-sleeping in the form of bedsharing, and how to practice it safely...creating an appreciation of parental choice, of family diversity and of sleep environment complexity
- 92% of infant deaths occurred without a parent present
- So why was the recommendation against bedsharing made, and not against solitary sleeping????

## What can we do?

- Several organizations have started educational programs to encourage safe infant sleep practices.
- Public information via health departments and medical professionals.
- Organizations like La Leche League can play a role by disseminating accurate information to its members and the community

# Babies Sleeping Safe: Guidelines for Safe co-sleeping

- Infants should sleep on firm, clean surfaces
- Baby should be on the back unless nursing
- Smoke free environment, no mind altering substances
- Light, but comfortable blanket, never covering the infant's head
- No stuffed animals or soft pillows around baby's head
- No sheepskin or fluffy material including beanbag mattresses
- No waterbeds, mattresses should inset tightly in the bed frame
- No co-sleeping on couches or recliners

# Conclusions

- Co-sleeping is the norm, despite being relatively unpopular in American Culture
- There are many benefits to co-sleeping, as suggested by both anthropological data, historical experience, and clinical research
- The controversy regarding co-sleeping generally results from cultural bias and misleading information
- No situation is 100% safe, but there are ways to increase the safety and success of co-sleeping.

## Babies Sleeping Safe Co-Sleeping With Your Baby

### HOW TO KEEP YOUR BABY SLEEPING SAFE WITH YOU?

#### Some Important Safe Things to Know...



The Milwaukee Health Department's **PICTURED ALERT!** is promoting a **Babies Sleeping Safe** Campaign to increase the awareness of parents about the benefits and risks of co-sleeping.

Some mothers have had a baby who was born in the bed after the delivery and were not aware of the risks of co-sleeping. Many families prefer to co-sleep because they believe it promotes maternal bonding, breastfeeding and better response to the baby's cries and needs.

### Steps Towards Safe Co-Sleeping

1. Lay your infant on its back. The back is the safest position but when necessary, consider the baby's sleeping position for infants. If you lay the infant on its side, do not use anything to prop the infant up and be sure not to have any loose bedding, pillows, or stuffed animals around the baby's arm which is tucked in the bed as well as placed forward to hold them in bed. Never tuck baby into a stroller.
2. If you are on medication that makes you drowsy, sleepy, faint, or are extremely tired, be sure to position yourself and your baby at a reasonable distance apart to help avoid the danger of accidentally placing or enclosing the infant.
3. Be careful with the type of bedding or covering available to you. If you use towels, sheets, blankets, plastic, and loose bedding around the infant, and should be removed when babies sleep. Your baby should sleep on a firm flat surface, which is covered by a tight fitting sheet.
4. If breastfeeding while co-sleeping, be sure to monitor your baby's eating behavior.

5. If you or your partner have been drinking alcohol or using drugs, DON'T HAVE YOUR BABY SLEEPING WITH YOU! PARENTS CAN CAUSE SERIOUS CHANGES IN THEIR BABY'S BLOOD WHILE THEY ARE UNDER THE INFLUENCE OF ALCOHOL OR AN ILL LEGAL DRUG.

### Other Tips For Safe Sleeping

1. DON'T SMOKE AROUND YOUR BABY. Second-hand smoke and/or carbon monoxide affect the normal breathing of an infant and can cause respiratory failure. DON'T smoke if you are a smoker.
2. DON'T sleep with your baby in a sofa, couch chair, or waterbed.

**AVOID OVERHEATING YOUR BABY.** Your baby should be lightly covered for sleep, and one hand on the forehead should be felt comfortable for a lightly clothed adult. Overheating should be avoided, and the baby should not be tucked in the body.



# Conclusions (cont)

- Ultimately, the decision to co-sleep, bed-share or crib sleep is up to the individual family.
- As health professionals, it is important to understand the behaviors that can make any of the above sleep situations more dangerous or more safe.
- It is our job to provide information so families can make informed decisions.

The Babies Sleeping Safe Campaign celebrates the importance of maternal and family bonding and supports actions that will promote infant health and survival. If families follow the steps presented in this brochure, you are helping to prevent many risk factors for SIDS and infant mortality. If you have any further questions, please call:

(414) 374-1880

## Babies Sleeping Safe

Co-Sleeping With Your Baby

Milwaukee Health Department  
131 East Franklin, Suite 252  
Milwaukee, Wisconsin 53202

