Cosleeping and Biological Imperatives: Why Human Babies Do Not and Should Not Sleep Alone

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Where a baby sleeps is not as simple as current medical discourse and recommendations against cosleeping in some western societies want it to be. And there is good reason why. I write here to explain why the pediatric recommendations on forms of cosleeping such as bedsharing will and should remain mixed. I will also address why the majority of new parents practice intermittent bedsharing despite governmental and medical warnings against it.

Definitions are important here. The term cosleeping refers to any situation in which a committed adult caregiver, usually the mother, sleeps within close enough proximity to her infant so that each, the mother and infant, can respond to each other's sensory signals and cues. Room sharing is a form of cosleeping, always considered safe and always considered

protective. But it is not the room itself that it is protective. It is what goes on between the mother (or father) and the infant that is. Medical authorities seem to forget this fact. This form of cosleeping is not controversial and is recommended by all.

Unfortunately, the terms cosleeping, bedsharing and a well-known dangerous form of cosleeping, couch or sofa cosleeping, are mostly used interchangeably by medical authorities, even though these terms need to be kept separate. It is absolutely wrong to say, for example, that "cosleeping is dangerous" when roomsharing is a form of cosleeping and this form of cosleeping (as at least three epidemiological studies show) reduce an infant's chances of dying by one half.

Bedsharing is another form of cosleeping which can be made either safe or unsafe, but it is not intrinsically one nor the other. Couch or sofa cosleeping is, however, intrinsically dangerous as babies can and do all too easily get pushed against the back of the couch by the adult, or flipped face down in the pillows, to suffocate.

Often news stories talk about "another baby dying while cosleeping" but they fail to distinguish between what type of cosleeping was involved and, worse, what specific dangerous factor might have actually been responsible for the baby dying. A specific example is whether the infant was sleeping prone next to their parent, which is an independent risk factor for death regardless of where the infant was sleeping. Such reports inappropriately suggest that all types of cosleeping are the same, dangerous, and all the practices around cosleeping carry the same high risks, and that no cosleeping environment can be made safe.

Nothing can be further from the truth. This is akin to suggesting that because some parents drive drunk with their infants in their cars, unstrapped into car seats, and because some of these babies die in car accidents that nobody can drive with babies in their cars because obviously car transportation for infants is fatal. You see the point.

One of the most important reasons why bedsharing occurs, and the reason why simple declarations against it will not eradicate it, is because sleeping next to one's baby is biologically appropriate, unlike placing infants prone to sleep or putting an infant in a room to sleep by itself. This is particularly so when bedsharing is associated with breast feeding.

When done safely, mother-infant cosleeping saves infants lives and contributes to infant and maternal health and well being. Merely having an infant sleeping in a room with a committed adult caregiver (cosleeping) reduces the chances of an infant dying from SIDS or from an accident by one half!

Research

In Japan where co-sleeping and breastfeeding (in the absence of maternal smoking) is the

cultural norm, rates of the sudden infant death syndrome are the lowest in the world. For breastfeeding mothers, bedsharing makes breastfeeding much easier to manage and practically doubles the amount of breastfeeding sessions while permitting both mothers and infants to spend more time asleep. The increased exposure to mother's antibodies which comes with more frequent nighttime breastfeeding can potentially, per any given infant, reduce infant illness. And because co-sleeping in the form of bedsharing makes breastfeeding easier for mothers, it encourages them to breastfeed for a greater number of months, according to <u>Dr. Helen Ball's studies</u> at the University of Durham, therein potentially reducing the mothers chances of breast cancer. Indeed, the benefits of cosleeping helps explain why simply telling parents never to sleep with baby is like suggesting that nobody should eat fats and sugars since excessive fats and sugars lead to obesity and/or death from heart disease, diabetes or cancer. Obviously, there's a whole lot more to the story.

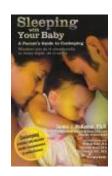
As regards bedsharing, an expanded version of its function and effects on the infant's biology helps us to understand not only why the bedsharing debate refuses to go away, but why the overwhelming majority of parents in the United States (over 50% according to the most recent national survey) now sleep in bed for part or all of the night with their babies.

That the highest rates of bedsharing worldwide occur alongside the lowest rates of infant mortality, including Sudden Infant Death Syndrome (SIDS) rates, is a point worth returning to. It is an important beginning point for understanding the complexities involved in explaining why outcomes related to bedsharing (recall, one of many types of cosleeping) vary between being protective for some populations and dangerous for others. It suggests that whether or not babies should bedshare and what the outcome will be may depend on who is involved, under what condition it occurs, how it is practiced, and the quality of the relationship brought to the bed to share. This is not the answer some medical authorities are looking for, but it certainly resonates with parents, and it is substantiated by scores of studies.

Understanding Recommendations

Recently, the American Academy of Pediatrics (AAP) SIDS Sub-Committee for whom I served (ad hoc) as an expert panel member recommended that babies should sleep close to their mothers in the same room but not in the same bed. While I celebrated this historic roomsharing recommendation, I disagreed with and worry about the ramifications of the unqualified recommendation against any and all bedsharing. Further, I worry about the message being given unfairly (if not immorally) to mothers; that is, no matter who you are, or what you do, your sleeping body is no more than an inert potential lethal weapon against which neither you nor your infant has any control. If this were true, none of us humans would be here today to have this discussion because the only reason why we survived is because our ancestral mothers slept alongside us and breastfed us through the night!

I am not alone in thinking this way. The Academy of Breast Feeding Medicine, the USA Breast Feeding Committee, the Breast Feeding section of the American Academy of Pediatrics, La Leche League International, UNICEF and WHO are all prestigious organizations who support bedsharing and which use the best and latest scientific information on what makes mothers and babies safe and healthy. Clearly, there is no scientific consensus.



What we do agree on, however, is what specific "factors" increase the chances of SIDS in a bedsharing environment, and what kinds of circumstances increase the chances of suffocation either from someone in the bed or from the bed furniture itself. For example, adults should not bedshare if inebriated or if desensitized by drugs, or overly exhausted, and other toddlers or children should never be in a bed with an infant. Moreover, since having smoked during a pregnancy diminishes the capacities of infants to arouse to protect their breathing, smoking mothers should have their infants sleep alongside them on a different surface but not in the same bed.

My own <u>physiological studies</u> suggest that breastfeeding mother-infant pairs exhibit increased sensitivities and responses to each other while sleeping, and those sensitivities offers the infant protection from overlay. However, if bottle feeding, infants should lie alongside the mother in a crib or bassinet, but not in the same bed. Prone or stomach sleeping especially on soft mattresses is always dangerous for infants and so is covering their heads with blankets, or laying them near or on top of pillows. Light blanketing is always best as is attention to any spaces or gaps in bed furniture which needs to be fixed as babies can slip into these spaces and quickly to become wedged and asphyxiate. My recommendation is, if routinely bedsharing, to strip the bed apart from its frame, pulling the mattress and box springs to the center of the room, therein avoiding dangerous spaces or gaps into which babies can slip to be injured or die.

But, again, disagreement remains over how best to use this information. Certain medical groups, including some members of the American Academy of Pediatrics (though not necessarily the majority), argue that bedsharing should be eliminated altogether. Others, myself included, prefer to support the practice when it can be done safely amongst breastfeeding mothers. Some professionals believe that it can never be made safe but there is no evidence that this is true.

More importantly, parents just don't believe it! Making sure that parents are in a position to make informed choices therein reflecting their own infant's needs, family goals, and nurturing and infant care preferences seems to me to be fundamental.

Our Biological Imperatives

My support of bedsharing when practiced safely stems from my research knowledge of how and why it occurs, what it means to mothers, and how it functions biologically. Like human taste buds which reward us for eating what's overwhelmingly critical for survival i.e. fats and sugars, a consideration of human infant and parental biology and psychology reveal the existence of powerful physiological and social factors that promote maternal motivations to cosleep and explain parental needs to touch and sleep close to baby.

The low calorie composition of human breast milk (exquisitely adjusted for the human infants' undeveloped gut) requires frequent nighttime feeds, and, hence, helps explain how and why a cultural shift toward increased cosleeping behavior is underway. Approximately 73% of US mothers leave the hospital breast feeding and even amongst mothers who never intended to bedshare soon discover how much easier breast feeding is and how much more satisfied they feel with baby sleeping alongside often in their bed.

But it's not just breastfeeding that promotes bedsharing. Infants usually have something to say about it too! And for some reason they remain unimpressed with declarations as to how dangerous sleeping next to mother can be. Instead, irrepressible (ancient) neurologically-based infant responses to maternal smells, movements and touch altogether reduce infant crying while positively regulating infant breathing, body temperature, absorption of calories, stress hormone levels, immune status, and oxygenation. In short, and as mentioned above, cosleeping (whether on the same surface or not) facilitates positive clinical changes including more infant sleep and seems to make, well, *babies happy*. In other words, unless practiced dangerously, sleeping next to mother is good for infants. The reason why it occurs is because... *it is supposed* to.

Recall that despite dramatic cultural and technological changes in the industrialized west, human infants are still born the most neurologically immature primate of all, with only 25% of their brain volume. This represents a uniquely human characteristic that could only develop biologically (indeed, is only possible) alongside mother's continuous contact and proximity—as mothers body proves still to be the only environment to which the infant is truly adapted, for which even modern western technology has yet to produce a substitute.

Even here in *whatever-city-USA*, nothing a baby can or cannot do makes sense except in light of the mother's body, a biological reality apparently dismissed by those that argue against any and all bedsharing and what they call cosleeping, but which likely explains why most crib-using parents at some point feel the need to bring their babies to bed with them —findings that our mother-baby sleep laboratory here at Notre Dame has helped document scientifically. Given a choice, it seems human babies strongly prefer their mother's body to solitary contact with inert cotton-lined mattresses. In turn, mothers seem to notice and succumb to their infant's preferences.

There is no doubt that bedsharing should be avoided in particular circumstances and can be practiced dangerously. While each single bedsharing death is tragic, such deaths are no more indictments about any and all bedsharing than are the three hundred thousand plus deaths or more of babies in cribs an indictment that crib sleeping is deadly and should be eliminated. Just as unsafe cribs and unsafe ways to use cribs can be eliminated so, too, can parents be educated to minimize bedsharing risks.

Moving Beyond Judgments to Understanding

We still do not know what causes SIDS. But fortunately the primary factors that increase risk are now widely known i.e. placing an infant prone (face down) for sleep, using soft mattresses, maternal smoking, overwrapping babies or blocking air movement around their faces. In combination with bedsharing, where more vital normal defensive infant responses and may be more important to an infant (like the ability to arouse to bat a blanket which momentarily falls to cover the infants face when its parent moves or turns) these risks become exaggerated especially amongst unhealthy infants. When infants die in these obviously unsafe conditions, it is here where social biases and the sheer levels of ignorance associated with actually explaining the death become apparent. A death itself in a bedsharing environment does not automatically suggest, as many legal and medical authorities assert, that it was the bedsharing, or worse, suffocation that killed the infant. Infants in bedsharing environments, like babies in cribs, can still die of SIDS.

It is a shame and certainly inappropriate that, for example, the head pathologists of the state of Indiana recommends that other pathologists assume SIDS as a likely cause of death when babies die in cribs but to assume asphyxiation if a baby dies in an adult bed or has a history of "cosleeping". By assuming *before any facts are known* from the pathologist's death scene and toxicological report that any bedsharing baby was a victim of an accidental suffocation rather than from some congenital or natural cause, including SIDS unrelated to bedsharing, medical authorities not only commit a form of scientific fraud but they victimize the doomed infant's parents for a third time. The first occurs when their baby dies, the second occurs when health professionals interviewed for news stories (which commonly occurs) imply that when a baby dies in a bed with an adult it must be due to suffocation (or a SIDS induced by bedsharing). The third time the parents are victimized is when still without any evidence medical or police authorities suggest that their baby's death was "preventable," that their baby would still be alive if only the parents had not bedshared. This conclusion is based not on the facts of the tragedy but on unfair and fallacious stereotypes about bedsharing.

Indeed, no legitimate SIDS researcher nor forensic pathologist should render a judgment that a baby was suffocated without an extensive toxiological report and death scene investigation including information from the mother concerning what her thoughts are on what might or could have happened.

Whether involving cribs or adult beds, risky sleep practices leading to infant deaths are more likely to occur when parents lack access to safety information, or if they are judged to be irresponsible should they choose to follow their own and their infants' biological predilections to bedshare, or if public health messages are held back on brochures and replaced by simplistic and inappropriate warnings saying "just never do it." Such recommendations misrepresent the true function and biological significance of the behaviors, and the critical extent to which dangerous practices can be modified, and they dismiss the valid reasons why people engage in the behavior in the first place.

For More Information:

A Popular Parenting Book

<u>Sleeping with Your Baby: A Parent's Guide to Cosleeping</u> by James J.McKenna (2007). Platypus Press.

<u>The Arm's Reach Co-Sleeper</u> – a bassinet/crib which Dr. McKenna has recommended as one way to enjoy close proximity with a baby for parents who are concerned about bedsharing

The Scientific Perspective

McKenna, J., Ball H., Gettler L., <u>Mother-infant Cosleeping</u>, <u>Breastfeeding and SIDS: What Biological Anthropologists Have Learned About Normal Infant Sleep and Pediatric Sleep Medicine</u>. Yearbook of Physical Anthropology 50:133-161 (2007)

McKenna, J., McDade, T., <u>Why Babies Should Never Sleep Alone: A Review of the Co-Sleeping Controversy in Relation to SIDS, Bedsharing and Breastfeeding</u> (pdf). Paediatric Respiratory Reviews 6:134-152 (2005)