

Safe Healthy Sleep For Babies? Sleep Like A Baby?
Scientific Studies Of Mother-Infant Co-Sleeping With Breastfeeding...

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

Ann Brown September 29, 1999 to US Media Press Conference.

or

"There is no such thing as a baby, there is a baby and someone"
 D.Winnecott





NYC **Babies Sleep Safest Alone**

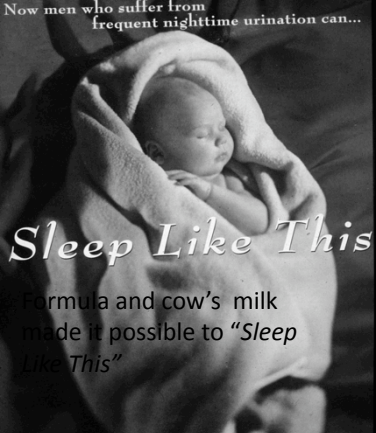
Now men who suffer from frequent nighttime urination can...

The western infant is *disarticulated* from the mother's body...


- No touch;
- No smells;
- No sounds
- No movement (of others) to respond to;
- No body heat exchange
- No breath exchange;
- No parental inspections...physiological regulation

Sleep Like This

Formula and cow's milk made it possible to "Sleep Like This"



the "articulated" mother-infant unit is the appropriate micro-environment within which the infants and mothers biology and behavior is being *mutually regulated*



HERE MOTHER AND BABY FACE EACH OTHER (FEO), AS IS TYPICAL

Where the controversies lie?

(General Questions)

- Bedsharing safety...how safe is safe? Informed parents ? or medical authorities decide?
- Evidence (whose) ? What kind of evidence is privileged or prioritized? Only Epidemiology? Laboratory? Home Studies? Ethological? Evolutionary? Cross-cultural?
- Who decides which lines of evidence are *unimportant* to recommendations?
- Who should decide whose scientific understandings and/or findings and facts should be dismissed?
- Who decides which risks are worth taking and what risks are worth investing in to eliminate?
- Which "authorities" should have the "final say" in formulating societal recommendations?

(Questions Specific to Sleep Research)

- Interpretations of findings: what is healthier and for whom as regards: awakenings? Nighttime feedings vs consolidated sleep? Light maternal-infant sleep vs. deep sleep? Infant's protesting separation? Infants accepting separation? Higher or lower infant body temperatures?
- Long term vs short term findings or is independence and problem solving skills i.e advantages in other domains achieved by routine at birth co-sleepers as valuable or more valuable than willingness to sleep alone, achieved much earlier by routine solitary sleepers?
- Because some cannot bedshare safely does it mean that nobody can...or should be permitted to try?
- Is a simple imprecise and mis-leading message more effective than a mixed- candid message?

So what exactly is our present scientific *and* political predicament as regards “sleeping with baby”...?

is the mother’s (or father’s) sleeping body lethal weapon against which infants need protection..

Nighttime Sleep Care Variability

- Solitary infant turns prone-face down;
- Educated nurse wraps up baby;
- Clinically depressed teen;
- Breastfeeding moms
- Increased sensitivity



Present medical-cultural milieu:

warn mothers about what their their bodies can do TO their infants, rather than FOR their babies, to protect and nurture them.

- “Babies Sleep Safest Alone.”
 - New York State Public Health Campaign
- “For you to rest easy, your baby must rest alone.”
 - Philadelphia Public Health Campaign.
- “We know the value of holding your child, cuddling your child, loving your child. *But if you take the baby to bed with you and fall asleep, you are committing a potentially lethal act*”
 - Deanne Tilton Durfee, Director of the Los Angeles County Inter-Agency Council on Child Abuse and Neglect. Los Angeles Times 4/24/08.

A hidden Fundamental Attack On Civil-Parental Liberties...an attempt to externalize personal-relational decisions..a form of intimidation...

- Trial ordered in death of baby who slept with parents
 - February 13th, 2008 @ 5:50pm
 - WEST JORDAN, Utah (AP) -- A Salt Lake County couple will face trial in the death of their son who was sleeping with them in the same bed.
- Trevor Merrill and Echo Nielsen went to bed with Kayson Merrill, who was 3 1/2 months old in August 2006. The Utah medical examiner believes Kayson likely died because *he rolled onto his stomach during the night.*
- Merrill and Nielsen, both 24, *are charged with a third-degree felony, child-abuse homicide.* The Salt Lake Tribune says a trial was ordered this week.
- In 2003, their first child also died while sleeping with them.
- Defense attorneys claim Kayson may have died from chronic meningitis, based on the autopsy. But the baby's doctor says he was healthy.
- Information from: The Salt Lake Tribune Copyright 2008 by The Associated Press.

Nothing illustrates the philosophy espoused by some medical authorities better than this:

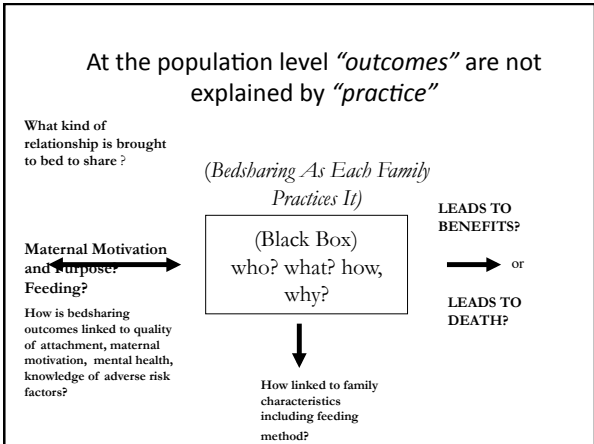
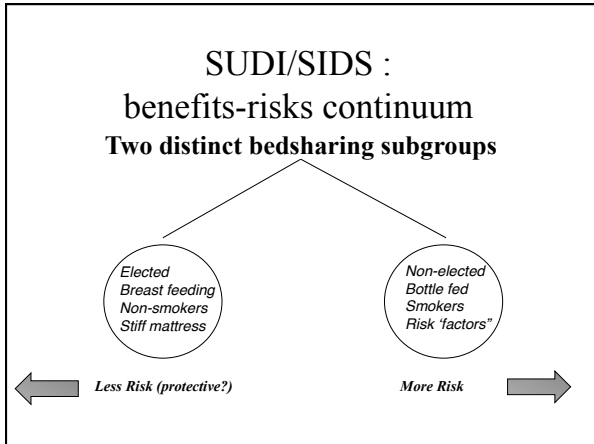
Following the tragic death of a bedsharing infant whose teen mother drank 18 cans of beer before retiring to bed with her infant,

Marian Sokol (then) President of SIDS Alliance writes to the Editor of the San Antonio Tribune, 2000

- “Sharing an adult bed with an infant is not cool, nor is it an indicator of educated parenting.”


Double standard of “cause” “diagnosis” and “remedy” of crib vs. co-sleeping deaths must be challenged

- Infant dies sleeping prone in crib
 - Cause: sleeping prone...
 - Diagnosis: SIDS
 - Remedy: turn infants supine, educate and inform
- *A tragic problem to be solved*
- Infant dies sleeping prone in bed with parents
 - Cause: bedsharing
 - Diagnosis: Asphyxiation by overlay
 - Remedy: eliminate all bedsharing, retract safety information on safer bedsharing, condemn the practice;
- *A deadly practice to eliminate*




Unsafe Bedsharing Occurs Under A Variety of Social and Structural Conditions

Fluffy Beds, Infant Alone **Overcrowded**




Mother-Baby Nocturnal Behavior Under the Cover of Darkness (or an infra red lamp)




- Dark Room Appears Bright

Real Care vs. Perception of Care (Ideal vs. Practice)



- Mother alert to SIDS safety, places infant on pillow face down.
- 47% (n=102) of young teen moms do not follow what they previously described claim is "safe sleep" procedures

Normative Nighttime Behavior



- Babies can't seem to get too close...

Examination beyond most salient risk factors, "99% of the infant bedsharing deaths had at least one *known mortality risk factor*."

Conclusions:

"This secondary finding shows that Alaska needs to provide education about safe infant sleep environments and ensure that all families are provided with accurate and complete information on risk factors for infant mortality, that they can provide a safe sleeping environment for their infants, and that they can make an informed choice about sharing a bed with their infant."

*M. Blabey and B. Gessner 2009:533
Infant Bed Sharing Practices an Associated Risk Factors
Among Births and Infant Deaths In Alaska
Public Health Reports (2009) 204: 527-584*

"Some agencies, including the AAP, have simplified their recommendations for safe sleep and advised against all bedsharing. The ADPH message recognizes the profound cultural, social and potential health benefits (such as breastfeeding and parent-infant bonding) associated with bedsharing."

"Moreover, Alaska has taken the position that issues of autonomy and equity demand the most accurate presentation of available data to the public."

Babley and Gessner 2009:533

Findings (Alaska)

Of 891 deaths occurring between 1992-2004)...

- 291 (33%) were identified as SIDS or asphyxia,
- with 246 (84%) of these providing bedsharing information;
- 126 of the 246 of them occurred while bedsharing
 - 39 (31%) had one risk factor while bedsharing
 - 44 (35%) had two risk factors, 36 (29%) with more than two risk factor .

For the Alaska Comparative Study Five Risk Factors Were Used:

1. Sleep position..infants put to sleep prone? Or found prone (if no information);
2. Non-Caregiver sleep partner: infant sleeping with someone not the primary person responsible for the infants care at time of death;
3. Maternal tobacco use (either pre or post natal);
4. Impairment of bedsharing partner i.e. infant sleeping with person impaired by alcohol, other drugs or tobacco;
5. Surface: infant sleeping on a sofa or water bed

Study revealed..

94% of infants who died while bedsharing had at least one of the five risk factors in the initial evaluation.

(75% of bedsharing deaths involved pre or post- natal tobacco use)

Second most common risk factor (43%) involved the infant sharing a bed with a person documented to have been using tobacco, alcohol

(25%) or other impairment-causing drugs;

26% infants slept prone,

17% infants slept on sofa or water bed;

A best public health strategy regarding bedsharing..?

Why not begin by asking those most effected.

- **OBJECTIVE:** To understand parents' motivations for bed sharing with their infants aged 1-6 months, their beliefs about safety concerns, and their attitudes about bed-sharing advice.
- **METHODS:** Researchers conducted 4 focus groups with primary caregivers of infants ages 1-6 months who regularly shared beds with their infants.
- Recruited participants from an inner-city primary care center in Pittsburgh, serving primarily African American families who received medical assistance.
- Chianese J, Ploof D, Trovato C, Chang JCIinner-city caregivers' perspectives on bed sharing with their infantsAcad Pediatr. 2009 Jan-Feb;9(1):26-32 Department of Pediatrics, University of Pittsburgh School of Medicine, Pittsburgh, PA 15213, USA.

Results? Who, What, And Most Useful Stratgey?

- (A total of 28 caregivers aged 17-50 participated.)
- The majority were African American (86%), female (93%), single (50%), and high school graduates (71%). Eleven percent of participants breast-fed their infants.
- *Common to all groups was the finding that clinicians' advise against bed sharing did not influence parents' decision, but advise to increase safety when bed sharing would be appreciated."*
- Chianese J, Ploof D, Trovato C, Chang JCIinner-city caregivers' perspectives on bed sharing with their infants. Acad Pediatr. 2009 Jan-Feb;9(1):26-32

Dr. Peter Blair (Swiss Study)

- Fleming and Blair developed the SWISS (South West England Infant Sleep Study) to look more closely at the sleeping environment. They collected data from all SIDS infants aged 0-2 years in the South West over a four-year period from 2003-2006. There were 90 cases of SIDS, and 86 were analysed and allocated randomised controls, weighted for age and day or night sleep.
- However, if we demonise co-sleeping we have tired mothers who need to feed their babies sometimes several times during the night. *We cannot use simplistic labels saying bed sharing is safe or unsafe, advised Dr Blair. We should be in the business of explaining to parents the specific circumstances where co- sleeping should be avoided.*

Conclusion..Consistent with predictions the emerge when *human biology and not a priori ideologies are front and center.*

- "Parents' motivation to bed share outweighed the concerns and the warnings of others. An understanding of parents' perspectives on bed sharing should inform counseling to promote safe sleeping practices."

Infant sleep safety is maximized, per family, per infant, per night, when parents are properly empowered by having access to information, by being *truly* informed.

They are not informed, in my opinion, when the information given to them is filtered, selected and/or limited by well-intentioned "officials" or "authorities" be they medical or governmental who make social judgments and decisions for parent as to what specific information should be important to them, which information or lines of evidence should be dismissed, or ignored, and what kind of information they (as parents) are capable of digesting or using...or, worse, what "sacrifices" they are or are not willing to make for the benefit of sleeping safely with their infants...

Sleeping with ones baby, or not, remains a relational, intensely personal decision, and is not necessarily at a "medical" decision..*nor is it illegal or irresponsible...*

Parents should be reminded that the only power county health commissioners and medical representatives, coroners, including peditricians have over them is what THEY AS CITIZENS choose to give them.....

Governmental employees are paid by our tax dollars....We live in a democracy and they serve us..we do not serve them....Distinctions must be made as to over what domains civil authorities can in fact dispense that authority.

A little (anthropological) corrective... perhaps as not as an end point leading directly to answers, solutions or recommendations but to a more comprehensive beginning point for explanation and discussion ?

Primate Immaturity At Birth and Slow, Prolonged
Childhoods Necessitates Proximity, Contact,
Cosleeping



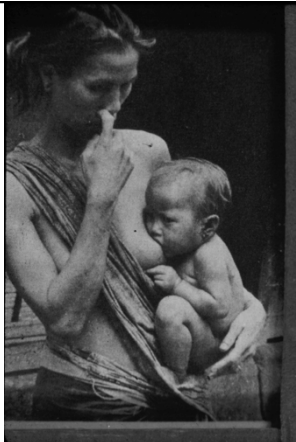
*Biology of Mother's Milk Predicts
Mothering Behavior*

- **Feed and Leave Species**
 - (Ungulates)
 - High fat
 - High protein
 - Low carbohydrate
- **Contact, Co-sleeping, And Carry Species**
 - (Primates—Humans)
 - Low fat
 - Low protein
 - High carbohydrate
- **High calorie = long feeding interval;**
- **Low calorie = short feeding interval;**

(to avoid predators nested infants do not defecate or cry in mother's absence)

(carried infants cry in mothers absence and defecate spontaneously)

Consider the physical intimacy of the maternal-infant relationship



Balinese Mother and infant

...socially and medically obscured by western culture

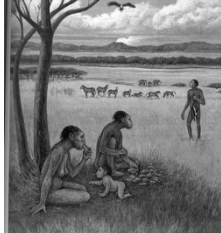


Navaho woman at Bosque Redondo, with baby in cradleboard on her back. *Laboratory of Anthropology, Inc., Santa Fe, N. M.*

“Will the Real Pleistocene Family Please Stand Up?”
 (after Hrdy 2008)
Will the Real EEA Please Stand Up?

Environment of Evolutionary Adaptedness??

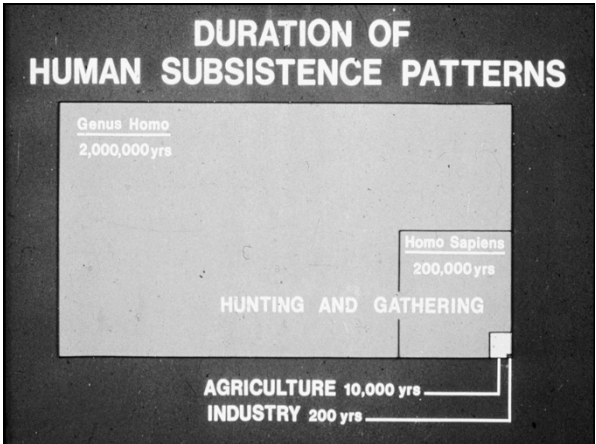
For the sake of the babies... what was a day like in the life of an 800,000 year old Homo?



Shortened birth intervals explained by:

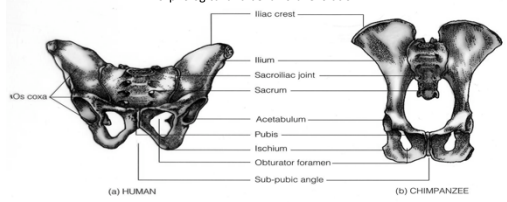
- Cooperative breeding (Hrdy 2008) ?
- Direct male care (Gettler in press) ?

Figure 20.11 • Reconstructed environment of a hominid in the late Pleistocene. The illustration shows a hominid in a savanna-like environment with a large tree and a river. The hominid is surrounded by other hominids, some of whom are carrying large objects. The background shows a landscape with a river and a large tree.



Pelvic Girdles

**Shift to terrestriality and bipedality had enormous effects on direction of human morphological and behavioral evolution

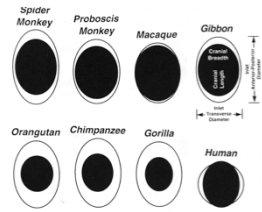


(a) HUMAN (b) CHIMPANZEE

Acetab. 37 (Figure A-6) © 1997 Wadsworth Publishing Company

- **Rotation of ilium (hip bones) forward and shortening of ischium fro upright posture creates a bowl-shaped pelvic concavity...**
- **That is, fetal head size is getting larger at same time that pelvic outlet is getting smaller...creating an "obstetrical dilemma"..and the solution is?**

Enter...*MORE human biology*...



- The human "obstetrical dilemma";
- Human Fetal Head Size Exceeds Outlet Dimensions *With Emergence of Bipedalism*

Figure 8.1. Relationship of maternal pelvis (dark outline) and fetal head (solid dark oval) (after Schultz, 1948).

At birth the human infant is the least neurologically mature primate of all, and the most reliant on physiological regulation by the caregiver for the longest period of time.

Percentage of Adult Brain Size:

Chimpanzee Infant Human Infant

<u>At Birth</u>	45	25
3 months	50	35
6	60	45
9	65	50
1 year	70	60
2	75	70
4	85	80
8-9	100	95

*(100% at 14-17 years)

Is the Following Statement True? How Do We Know?

“ ...There would be little if any difficulty exchanging a Cro-Magnon and a modern infant, but great incongruity in making the same switch amongst adults of both cultures.”

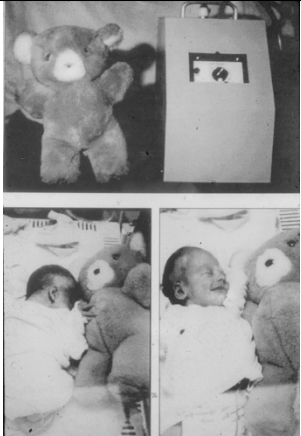
David Barash: *The Tortoise and The Hare* (1987)

Massaged Babies

- gained weight 47% faster (per day),
- were more alert,
- left hospital 6 days earlier than non-treated babies (Field et al 1987) ..
- touch stimulates the vagus nerve (to stimulate the gastro-intestinal tract making digestion more efficient;
- facilitates endorphin release reducing stress.. Stress cortisol levels

Breathing mechanical Teddy Bear!
(reduces infant apneas by 60%)

(Evelyn Thoman 1985)



The image shows a teddy bear and a mechanical device. Below are two photographs of a baby using the device.

Negative Effects of Shorterm Mother-Infant Separation (Nonhuman primates)

- immunological compromises (depressed antibody count);
- increased ACTH stress hormones
- cardiac arrythmias
- breathing irregularities
- depressed body temperature
- sleep patterns disrupted
- behavioral abnormalities (excessive self-stimulation, hyperactivity, anaclitic depression)

Benefits of Contact (Skin-to-Skin) Newborns

- axillary and skin temperatures significantly higher
- blood glucose levels higher; oxygen saturation increased
- less frequent crying, shorter average duration
- preserve glycogen stores
- nursing established earlier, more firmly
- accelerated weight gain
- Sources: Barr 1993, Field et al. 1988, Christensson et al. 1993, Acolet et al 1989

the "articulated" mother-infant unit is the appropriate micro-environment within which the infants and mothers biology and behavior is being *mutually regulated*



HERE MOTHER AND BABY FACE EACH OTHER (FEO), AS IS TYPICAL

The “dyad” IS the unit of study

Human infant (parental)
social care is synonymous
with
physiological regulation

“For species such as primates, the mother IS the environment.”

Sarah Blaffer Hrdy, *Mother Nature* (1999)



Nothing an infant can or cannot do makes sense, except in light of
mother's body

Babies Celebrated, Beatrice Fontanel and Claire D'Harcourt, © 1998 Harry N. Abrams, Inc.