

Introduction

In the Western world sleeping in a separate room teaches infants to self soothe in times of distress. In a society that values independence and self-reliance, successful solitary sleep is one of the earliest hallmarks of becoming an independent individual. Not every western mother, or father for that matter, shares such ideas about what is good for a developing infant. They not infrequently sneak their young infant into their own marital bed for either comfort or ease, perhaps with a slight degree of guilt because it goes against at least one prevailing, if unspoken cultural norm. Mayan mothers in South America would experience no such qualms, because co-sleeping and bed sharing reinforce their cultural ideals of interdependence¹.

There are several reasons that even in our own western culture ambivalence toward bed sharing and co-sleeping reigns. First, we are not the fairly homogeneous culture that we were at the beginning of an industrialization process that favored bottle feeding. On the contrary, we have been amply exposed to other cultures with other values and beliefs about infant sleep, living either in our midst or very “close” by virtue of television programs and documentaries.

Second, breastfeeding is now a common practice and is much more easily accomplished in a bed-sharing environment. Studies, in fact, show that mothers who ordinarily place their babies in a bassinet or crib in a separate room, when asked to sleep with their babies in the same bed, automatically increase breastfeeding by 30 percent. It is obviously so much easier. These pro-bed sharing impulses are countered, however, by some contravening ones¹.

Apart from the “cultural assignment” to raise independent children, the fear of inadvertently falling asleep and perhaps rolling over the infant causes anxiety and hesitancy. This is augmented by the fact that under certain circumstances bed sharing has been shown to cause sudden infant death. In the United States, many medical experts in fact vigorously reject the practice of bed sharing.

Information about cultural issues in infant sleep cannot be easily found in the scientific literature. If it exists it is narrowly focused on co-sleeping and bedtime rituals and scattered across several disciplines for instance anthropology, developmental psychology and pediatrics. The fields of neuroscience and sleep physiology are virtually devoid of such information. It is possible that relevant knowledge can be found in a number of foreign languages but few articles have found their way into English. This has prompted a number of individuals to convene a task force to focus on culture and sleep in children².

A supplement to *Pediatrics* in January of 2005 contained the initial results of their work, entitled: *Cultural Issues and Children’s Sleep: International Perspectives*. The core article by Jenni and O’Connor ends with the following statement: ” *Internationally, collaborative and*

¹ James McKenna and Thomas McDade Why babies should never sleep alone: A view of the co-sleeping controversy in relation to SIDS, bedsharing and breast feeding *Pediatric Respiratory Reviews* (2005) 6, 134-152.

² Jenni OG, and O’Connor BB Children’s Sleep: An Interplay between Culture and Biology *Pediatrics* (2005), 115:204-216

broadly interdisciplinary studies are needed to disentangle the respective roles of culture and biology in children's sleep behavior. Subjective and objective measures standardized for different cultures and using both qualitative and quantitative approaches [are needed]...to help clinicians better understand the culture-biology interaction in the establishment of behavioral and developmental norms and expectations and eventually to comprehend what constitutes a sleep problem, when and for whom and how best to approach it."

Since in many western countries about 25% of families have to deal with sleep problems in their children, the question is justified whether we are providing the optimal environment for youngsters³. Are we by any chance too ideology driven and less tuned in to the needs of infants and children?⁴ Are we insufficiently focused on the goodness of fit between infant needs and the sleep environment we provide? An exploration of infant sleep in other cultures could well provide information that broadens our perspective for both the benefit of western parents and pediatricians who wish to take care of them, and for the benefit of parents and children from other cultures and their health care workers.

Objectives:

In collaboration with Dr. Stanislaus Sandarupa of the Anthropology Department of Hasanuddin University of Makassar, we will identify unique cultural characteristics of infant sleep in Toraja, Indonesia to both broaden the western infant sleep database and to provide information to parents and physicians⁵. The target group consists of mothers and their infants between birth and six months of age who live in remote villages, in other words who are not urbanized.

We will carry out a systematic inventory using initially only a qualitative tool. The following questions will be presented to 40 mothers who currently have a baby six months of age or younger. The questions will also be presented to one or more *Balians* or *Dukuns* in each location, indigenous midwives who by tradition are closely involved with childbirth and infant health.

Since the principal investigator does not speak the Indonesian language, Ms. Damita Datu will assist us in translating the open-ended questions from Bahasa Indonesia into the Torajan language. The entire dialogue will be audio-taped.

Individuals will not be identified by name but given a code number, thus assuring confidentiality. Only the following demographic information will be collected:

Present age of the mother, present age of the baby, sex of the baby, is there any electricity or gas in the house?

The following seven overarching issues will be addressed:

³ Owens JA, Introduction: Culture and Sleep in Children. *Pediatrics* (2005) 115: 201-203

⁴ Valentin SR, Commentary: Sleep in German Infants—The “Cult” of Independence. *Pediatrics* (2005) 115:269-271

⁵ James McKenna, Cultural Influences on Infant Sleep. *Sleep and Breathing in Children: A Developmental Approach*. J Loughlin, J Carroll and C Marcus (Eds) Marcell Dekker, 2000, pages 199-230.

a. **Infant sleep, physical arrangements:**

Where does the infant sleep at night in relation to his/her parents?
At night, do infants sleep in the same room as the parents or in a separate place?
Are their sleep wrappings/clothes/blankets involved and if so what kind?

b. **Maternal sleep**

Is there a separate sleeping location for women and men?
What does Mom consider a good night sleep for herself?
How does her sleep change during pregnancy?
How does her sleep change after the baby is born?

c. **Co-sleeping details**

When infants sleep during the day, do they sleep with a sibling or another person? Does somebody watch the baby?
At night is the sleeping surface during the night the same as that of the parent(s)?
Is there skin to skin contact between mother and baby?
What sensory clues about the baby available to the mother (visual, auditory, tactile, smell)?

d. **Breast feeding details**

What is the mother's body position if she sleeps with the baby? On her back? On her stomach? On her side? If the latter, with her legs drawn up or stretched out?
What is the mother's body position during breastfeeding?
Breastfeeding on demand? How often does the mother think she breastfeeds the baby throughout the night?
Is there a first and second stretch of parental sleep with wakefulness in between? Does the mother breastfeed between first and second parental sleep, if it exists?
Is breast feeding initiated by infant vocalization? By mother's initiative?
At what time/ age are solids introduced?
Does the mother eat something special when she is breastfeeding? Does the mother smoke? If yes, how many cigarettes. Does the father smoke in the house? If yes what does he smoke, and how many times a day. Does somebody else smoke around the baby? How often and what?

e. **Infant sleep** (ask questions for both nap and night sleep)

When is the infant put to sleep? With everybody else or before? How is the baby put to sleep, on the back, on the stomach or on the side? Does the baby change position during sleep spontaneously? Does the mother change the baby's position? Are there any unattended sleep times?

Are any sleeping aids used such as pacifier, thumb sucking, blanket?
Is self soothing encouraged when the infant cries?
Is the baby rocked during nap or night sleep?
Is the transition from wakefulness to sleep marked by bedtime rituals or is it fluid?
Does the mother wrap the baby for security or warmth?
Does the infant have control over its micro-environment[Can he or she remove blanket, touch its face, suck fist or fingers, move to and from the mother's breast]?
How does baby's sleep differ from the mother's sleep, according to her?
How often does the baby cry and wake her up during the night?
Does the baby's sleep change between birth and six months of age and when, according to the mother?
Is this baby's sleep different from that of siblings at the same age?

f. **What are seen as infant sleep problems?**

Excessive crying?
Inability to fall asleep?
Inability to awaken for feeding?
Excessive sleepiness?
Excessive number of arousals throughout the night?
Restlessness during sleep?
Sweating during sleep?
Snoring?
Lying awake a great deal?
Infection of the umbilical stump? How is the umbilical stump cared for after birth?
What is the best thing to do [for the mother, the baby, the community, the soul, spirits] if the baby has a sleep problem, or any physical problem? Are there any specific treatments if the baby has any of these conditions? Are there any potions, herbs or substances that are used to treat these conditions?
How and when did the mother learn about what to do? Is there a special role for the grandmother when an infant sleeps or gets sick?

g. **Parental sleep cognitions:**

Are there any special types of sleep to worry about or prevent [Language of infant sleep]?
Do healthy babies sometimes never wake up and if this is true, what explanation is given for the infant's death?
How many hours of sleep does the Mother think the baby needs right after birth, after naming the baby and @ 6months.
Can anything go wrong if the baby sleeps a lot or very little?
Should babies sleep a long time without interruptions or be awakened frequently? If so, why?
Does a baby dream?
Is it OK to awaken a baby at night?

Does sleeping reveal something about the baby's health or illness?
What happens with a baby when he/she sleeps?
What is the purpose of sleeping for a baby?
What is the purpose of rocking?
Does the mother ever fear that she will crush the baby during her own sleep?
Is safety ever an issue? What can happen?

h. Questions for physicians and western trained midwives

What are the most common causes of infant mortality beyond the newborn period in Indonesia?

Have you ever heard of the diagnosis: sudden infant death syndrome (SIDS, ICD-9)?

Have you ever encountered SIDS in your practice?

This interview will probably take at least one to two hours. Mothers will be reimbursed for the time it takes to answer the questions at a rate that is an average reimbursement per hour in the community.