Challenging Case

Cosleeping (Bedsharing) Among Infants and Toddlers

CASE. Jaquette, a 4-month-old African-American infant, is brought to the pediatrician for a health supervision visit. She was born full term after a healthy gestation, labor, and delivery. She nurses vigorously, developmental milestones are normal, and her physical examination reveals an emotionally robust, active, and physically healthy child. When the pediatrician inquires about her sleep-wake pattern, the mother informs him that she nurses Jaquette frequently through the night in the bed they share. Both parents state that they are comfortable with this arrangement.

CASE. Paul, an 18-month-old toddler, has always slept in the same bed with his mother. A single professional woman who read extensively concerning child rearing before Paul's birth, his mother was aware that most child health specialists recommend separate sleeping areas for children and parents. At previous visits to her pediatrician, she intentionally avoided the subject. Although she stated that she enjoyed nursing Paul on demand while sharing a bed, she was beginning to feel ambivalence. She wanted to wean him from the breast, but she was unclear about how to initiate the process, especially at night. J Dev Behav Pediatr 18:408–412, 1997

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Patterns of child rearing reflect cultural values and contemporary circumstances. The Old Testament tells the stories of beloved infants and children sacrificed so that a mother or father could demonstrate allegiance to a spiritual deity. The sacrifice usually meant death, e.g. the willingness of Abraham to kill his son, Isaac; at other times, the outcome of a maternal sacrifice was unknown (the baby Moses sent down a river by a loving mother in hopes of a better life). Other examples are found in historical and contemporary child rearing practices. For example, circumcision of children had its origin in religious doctrines as well as the cultural belief that removing the foreskin in a boy or altering the genitalia of a girl would dampen innate sexual energy. Pacifiers became popular as a way to soothe infants only after industrialization mean. that more women worked outside the home and that mother's breast milk was not always available. Without the availability of formula, wet nurses ensured an adequate milk supply when a mother was ill, dead, or could not successfully nurse. The invention of infant formulas, which had the secondary effect of diminishing breastfeeding, was a result of technological advances in nutritional

These child care practices did not evolve and flourish in a vacuum; culture and technology guided their acceptance and persistence. This sociological perspective might bring clinical insight to the practice of bedsharing or cosleeping found in the families of Jaquette and Paul. Cosleeping is the practice of having an infant or young child share a bed with his or her mother (and often, father as well); the child often is

nursed intermittently through the night. It has been suggested that cosleeping had an important evolutionary survival value, i.e., as a way to assure adequate nutrition and physical safety. In the late 20th century, some child development theories generate tension among parents and clinicians concerning the appropriateness of cosleeping.

Does cosleeping impede the developmental task of independence? Is it more appropriate in a society that encourages dependency in childhood and interdependence as adults? Is cosleeping associated with more sleep disturbances in the child and parent? Does it impair the adult sexual relationship? Is it physically dangerous to infants? These questions should be asked by clinicians when faced with the situations described in this challenging case.

Frankly, in the recent past, I thought I knew the answer to many of these questions. As a pediatrician trained to understand the necessary developmental steps taken in the first 3 years of life, from a dependent, emotionally attached infant to an independent, psychologically separated child, cosleeping seemed counterproductive to developmental growth. I found this perspective more difficult to defend, however, with the emergence of new studies on cosleeping coupled with the discovery that more patients than I had imagined were cosleeping with their parents. Can data change (or at least challenge) a 25-year practice pattern? I hope so!

Three professionals with different training and clinical experiences commented on the two cases. Dr. Calvin A. Colarusso, a clinical professor of psychiatry at the University of California, San Diego, is a child psychiatrist and psychoanalyst with more than 30 years of experience in practice and teaching. He is a training analyst at the San Diego

Psychoanalytic Institute and past director of the child psychiatry residency and fellowship program at the University of California, San Diego. Dr. James J. McKenna is a professor of anthropology and the director of the Center for Behavioral Studies of Mother-Infant Sleep at the University of Notre Dame, South Bend, Indiana. He pioneered the use of the sleep physiology laboratory for the study of neurobehavioral characteristics of infants and mothers. He evaluated the effect of cosleeping on breastfeeding, sleep patterns (including maternal-infant synchrony of arousal), prone versus supine infant sleep preferences, and sudden infant death syndrome. Dr. Nancy G. Powers is a clinical associate professor in the department of pediatrics at the University of Kansas School of Medicine—Wichita, and she is also the medical director of lactation services at Columbia Wesley Medical Center in Wichita, Kansas. She has had an extensive clinical experience as a lactation consultant and teacher. Dr. Powers coauthored a recent lactation guide for clinicians in Pediatrics in Review.

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These two case vignettes will be familiar to pediatricians, child psychiatrists, and psychologists because the issue of cosleeping is so frequently encountered in clinical practice. These two cases could be considered as one because of the movement from comfort with cosleeping at 4 months of age to the presence of ambivalence and uncertainty in the 2nd year of life.

Human infants cannot care for themselves at birth and require parental care to survive. Nine months of physical and psychological attunement during pregnancy and a desire to love, bond with, enjoy, and stimulate this new life, this extension of themselves, promotes the normal parental desire to care for their offspring, sometimes in the form of cosleeping. From birth onward, and certainly by 3 to 4 months of age, there is discernable evidence that the healthy infant is engaged in a separation-individuation process. As infants creep, crawl, walk, and talk, they move away from mother and father physically and psychologically. Stimulated by physical maturation, language and cognitive development, the toddler develops a constantly growing capacity for physical autonomy and a sense of self as distinct from mother and father.

Sleeping alone facilitates the emergence and development of these profoundly important mental capacities. Cosleeping, particularly when it continues into the 2nd year of life and beyond, impedes the development of this necessary movement toward autonomy and independence and encourages an unhealthy, exaggerated dependence on mother and father. During the 2nd and 3rd years of life, in the process of developing a sexual identity, toddlers become aware of anatomical differences between the sexes and how they relate to each other. This normal process develops most easily when the child is not overstimulated by nightly contact with parental

bodies but is allowed gradually, during the course of the child-hood and adolescent years, to integrate an awareness of sexuality consonant with their constantly evolving physical and psychological maturation. A third reason mitigating against cosleeping is its interference with the resumption and elaboration of parental sexuality and intimacy. In addition to the pathological effect on the child's development, a third person in the sexual bed is at least a distraction and always a competitor for the concern, attention, and affection of one or both of the sexual partners.²

For these reasons, I recommend that infants and young children not occupy the parental bed from birth onward. During the first several months of life, a bassinet beside the parental bed will provide convenience and facilitate bonding. Beyond that, a separate room, or at least a separate bed, will promote infant and parental psychological development.

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When practiced safely and by choice, mothers and infants sleeping side-by-side (cosleeping) is potentially ideal for promoting breastfeeding and healthy social relationships among family members. Where bedsharing (a specific type of cosleeping) and breastfeeding occur together in a nonsmoking environment, both mother and infant can derive physiologic benefits from the arrangement. The situation described in Case 1 seems to be an example in which the pediatrician can and should be supportive of the family's choice to bedshare.

Recent child care innovations practiced in Western societies often substitute for protective maternal contributions, which before industrialization could only have been provided if every mother breastfed and maintained night-time contact with her infant. This, however, does not alter the human infant's extreme developmental immaturity at birth and a baby's ability or need to respond to a mother's night-time touches, smells, sound, and movements. These sensory experiences were designed by evolution throughout hundreds of thousands of years before technology supplanted the mother's night-time nurturing. These responses by infants to maternal contact might still regulate and benefit the infant's development either in the short or long run, although these regulatory effects are not necessarily easily observed, as work by Hofer suggests.² For example, compared with breastfeeding solitary sleeping infants, routinely bedsharing infants at this age breastfeed twice as much for three times the duration.3 This increased nocturnal breastfeeding could increase the effectiveness of the mother's nutritional and protective immunological contributions to her infant, including average daily weight gains, and at the same time potentially lengthen the time before the mother's next pregnancy. Recent evidence supports the hypothesis that the mother's ability to ovulate is suppressed by the increased prolactin levels maintained by more feeds and reduced breastfeeding intervals, i.e., by the structure of breastfeeding, not breastfeeding itself. Moreover, compared with routinely solitary sleeping mother and infants, routinely bedsharing mothers and infants exhibit increased sensitivity to each other while bedsharing, as indicated by briefly arousing to each other's movements or sounds. S

The 4-month-old Latino infants we studied spent more time asleep while bedsharing than they did when sleeping in separate rooms, and their mothers also slept as much if not more, contrary to popular understandings! Perhaps more surprising is that routinely bedsharing mothers evaluate their sleep more positively than do breastfeeding mothers sleeping in different rooms than their infants. In fact, when cosleeping is created or preferred by a family, such as in Case 1, infant-parent sleep struggles are nonexistent or significantly reduced. This is not the case, however, if parents do not choose to bedshare but do so only as a response to the child's unwillingness to sleep alone.

Some important additional safety information should be communicated to the parents. Bedsharing without breastfeeding and combined with maternal smoking increases the risk of sudden infant death syndrome.8 Therefore, if mothers smoke, bedsharing should be avoided just as it should if mothers take drugs or are otherwise sedated by medications or alcohol. No infant sleep environment is risk free. For example, like crib mattresses, soft mattresses should not be used for adult-infant bedsharing. Moreover, cosleeping should not occur on couches where babies can become trapped against the back and fall into a crevice created by the seat cushion. A baby's head should never be covered during sleep and to prevent overheating infants should not be blanketed any more heavily than the adult. To prevent infants from slipping between a mattress and the bed frame or headboard, there should be a tight fit at all mattress-frame intersections, and care should be taken to make sure that an infant cannot roll out of the bed.

Weaning a bedsharing toddler during the night is not very different from weaning a child who sleeps separately. Surely, any one technique does not work for all mother-child pairs. One method is to breastfeed the child before bedtime (waking the child if necessary) and outside of the bed itself. The mother should be less willing to meet the child's night-time requests for food in the bed during the sleep period. For example, some mothers make the child get out of bed and go to another room to eat if a request is made. Lengthening the intervals between feedings will also have the effect of more rapidly drying up the milk, especially at this age, during which the child is eating substantial amounts of solid food. In addition to this, the mother could give the child a night-time snack just before bed that can more fully satiate the child, thereby reducing the probability of an early morning request.

In our expanding multicultural society, it is unfortunate that so many parents like the one in Case 2, who choose to bedshare, are made to feel so unsupported in their choice that they feel it necessary to hide their decision from their physician. Surely, this limits the physician's effectiveness. In this case, one wonders if the mother's ambivalence concerning her arrangement stems not from her own evaluation but from

her increasing discomfort with the threat of disapproval or censure. This mother might well be correct in thinking that her physician assumes that bedsharing is always less healthy than solitary sleeping arrangements, even though this widely held view has never been scientifically substantiated.

In part, this view represents a personal and arbitrary judgment that anyone is entitled to make as long as it is not passed on as scientific fact. Such judgments are based on Western values favoring the perception of how individualism and infant autonomy are best promoted and obtained. No study has shown, however, that the goals for separateness and independence (or happiness, for that matter) are obtained in the individual by, among other things, separate sleeping arrangements for parents and children, nor do any studies demonstrate negative consequences for children or parents who choose to cosleep for ideological or emotional purposes, except when cosleeping is part of a larger psychologically disordered set of family relationships or when cosleeping occurs under dangerous social or physical circumstances. The only studies of the psychological or social effects of cosleeping reveal not negative but positive consequences. One study among military families revealed that cosleeping children receive higher evaluations of their comportment from their teachers than do solitary sleeping children and are under-represented among psychiatric populations, when compared with children who do not cosleep.9 Lewis and Janda 10 found that college-age students who coslept as children were better adjusted and more satisfied with their sexual identities and behavior than college-age students who did not cosleep. Clearly, we need to change our conceptualization concerning what constitutes a normal or healthy childhood sleep pattern!

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What could be more normal than a healthy 4 month-old infant who is exclusively breastfed? The American Academy of Pediatrics and the World Health Organization recommend "around 6 months" of exclusive breastfeeding, followed by the gradual introduction of weaning foods, with continued breastfeeding for 1 to 2 years or longer. Yet, when informed by a parent that she sleeps with her infant, many health professionals express a negative response. The pediatrician's perspective has been that infant and parents sleep better if infants are in their own beds. Furthermore, there is a belief that sleep disturbances and bedsharing are linked. The current widespread movement to encourage sleep training for young infants by teaching them to fall asleep on their own at an early age reflects this point of view. 1.2 There is also a widespread belief by parents and professionals that bedsharing is physically dangerous and a strong cultural bias that cosleeping interferes with parental sexual relations. Another concern is that children who sleep with their parents will become too dependent or spoiled.

Recently, some of these beliefs were tested in a sleep laboratory, in which physiologic parameters of a nursing infant and mother were measured simultaneously. Bedsharing was associated with enhanced infant arousals and synchronicity in infant and maternal arousals. Cosleeping was also associated with an increase in the duration and frequency of breastfeeding. Breastfeeding allows rapid response to infant hunger cues. Responsive and contingent caregiving promotes the development of trust and fosters security in young children. In addition, the La Leche League International, an organization of knowledgeable breastfeeding mothers, advocates the family bed as a legitimate option for parenting.

Breastfeeding is a demanding activity in the first months of life; the mother must feed as often as 8 to 12 times every 24 hours. Bedsharing allows the mother to feed without fully awakening, contributing to her total sleep. Some working mothers find that night feedings are the only realistic way to maintain milk production, and sleeping with the infant is the only way to combine breastfeeding, working, and sleep!

The parental sexual relationship is certainly a consideration. A decision to sleep with the infant is merely one aspect of the changing roles that parents must communicate and negotiate with each other. If the infant is sleeping in their bed, they will no doubt create other opportunities for sexual activity that do not directly expose the child to such activity. Many couples put the infant in its own bed for part of the night.

What about the breastfeeding toddler? Biological determinants indicate that breastfeeding in humans would "naturally" continue for between 2.5 to 7 years, as stated by Dettwyler. "Nursing toddlers in the United States are much more common than most people think...but you do not see

or hear about them for several reasons. By the time a child is more than 2 years old, she or he is probably only nursing a few times a day...People outside the family just assume that the child has been weaned. More importantly, because women know that our society is not supportive of nursing toddlers...it is easier to tell people that 'yes, the child has been weaned.''6 Because of the criticism they anticipate, many women keep this relationship secret.⁷

Finally, there are some practical aspects of bedsharing with night feedings that deserve comment. A safe sleeping surface for the infant is essential: a firm mattress and no small areas between mattress and bed frame where the infant might become wedged. The height of the bed and the positioning of the baby is important to minimize the chance of injury from falling out of bed. In addition, frequent night feedings might contribute to dental caries. Proper dental care and fluoride supplementation (if indicated) once the teeth have erupted should be ensured.

Parents will want to consider at what age to move the child into its own bed, and how to accomplish this maneuver. This task is relatively easy to accomplish between 4 and 9 months, but becomes more difficult as the older infant becomes more vocal and sleep routines are more habituated. To wean a toddler either from the parental bed or from breastfeeding, a discussion concerning parental motivation is critical. The parent must have no ambivalence concerning the decision and can then follow through with any of the gradual weaning methods outlined in numerous child care publications.

Cosleeping is a normal part of breastfeeding and human behavior. We must revise our view of mother-infant interaction in the context of the intimate nature of the breastfeeding relationship. If we expect families to accomplish the breastfeeding goals we set, we must give parents permission to sleep with their child during the breastfeeding years. We can then congratulate and support the parents in these two cases for successful breastfeeding experiences.

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The two cases of an infant and toddler cosleeping and breastfeeding illustrate a common clinical practice that challenges some traditional pediatric perspectives on early childhood development. Dr. Colarusso noted that a major task of parents is to assist young children in the process of separation-individuation. This is a particularly useful clinical construct that provides a framework for a multitude of physical, physiological, and psychological events that provide an impetus to defining oneself as separate from parents. Erikson's notion of psychological autonomy that characterizes the 2nd and 3rd years of development is an expression of this goal, i.e., to separate and individuate into autonomous toddlers who begin to recognize their own individuality.²

To assume that specific events or developmental milestones are required for a successful separation and individuation oversimplifies both theory and practice. For example, the deaf child might not develop adequate expressive language to communicate verbally in early childhood, but a variety of other developmental skills (including play experience, self regulation in feeding and falling to sleep, and gross motor skills that encourage exploration) are available to psychologically separate from parent and discover a personal self. Another example is illustrated by toddlers who have not given up their bottles at nap and night time and who still use a pacifier occasionally for soothing themselves during stressful moments. Is it correct to assume that these children have experienced a developmental arrest? Certainly not before more information is obtained. If, for example, these toddlers are usually outgoing, engage with peers, enjoy sustained play with their toys, and feed themselves comfortably, there is adequate evidence that they are successfully negotiating the skills that reflect psychological autonomy. In context, the residual use of a bottle and pacifier might not be viewed as developmentally harmful. They might even be useful transitional objects for these children.3

Dr. McKenna's observations that cosleeping enhances neurophysiologic aspects of sleep in a manner that synchronizes arousal states between a cosleeping infant and mother is fascinating to pediatricians trained to observe associations between neurological function and behavior. That these synchronized arousals lead to an increased frequency and duration of breastfeeding, as well as other potential benefits to the child and mother (Table 1), challenges traditional developmental tenets.

It could be argued that, although cosleeping might inhibit independence and the separation process as noted by Dr. Colarusso, the practice of bedsharing and nursing could solidify the bond between mother and child. With the emergence of many other social, language, and motor milestones noted above that fuel the drive toward individuation, cosleeping into the 2nd year of life might maintain and strengthen the maternal-child attachment at night while the toddler experiments with independence during daytime hours. This kind

Table 1. Potential Benefits Derived From Cosleeping

Benefits to Infant

Breastleeding increased (in frequency and total duration) Sleep time increased

Mother's nurturing through sensations (touch, smell, sound, movements)

Synchronized sleep arousal with mother

Occurrences of Sudden Infant Death Syndrome decreased (controversial)⁴

Benefits to Mother

Sleep time and quality improved

Ovulation decreased

of diurnal-nocturnal specialization of tasks might allow greater psychological energy to be directed to daytime functions that lead to separation and individuation while simultaneously maintaining a means for nocturnal refueling. Cosleeping could be conceptualized, in Margaret Mahler's terminology, as a continuous psychological refueling or rapprochement, potentially available from birth through at least the first 2 years of life. I

Cosleeping is a case study that illustrates the importance of understanding a health care tradition in the context of both contemporary and historical values and needs. The new field of ethnopediatrics encourages a critical analysis of the cultural context of medical practices that affect children.⁵ Rather than look to developmental theory as a sounding board for child care practices, ethnopediatrics encourages an analysis of practices found in both pre- and post-industrialized society for clues to optimal child rearing. Whether modern conveniences (formula, home temperature control, home safety) and societal trends (working mothers, emphasis on independence in early childhood) have adversely changed infant and toddler sleeping patterns away from cosleeping is an important question for families and professionals concerned with optimal health practices. If cosleeping is the "natural ecological setting" for sleep, as described by Dr. McKenna⁶ and supported by Dr. Powers, perhaps it is time to re-evaluate our recommendations to parents.

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