Talking About Babies, Toddlers, and Sleep

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Sleep is a critical aspect of a child's early development. It is also essential to family well-being. During their first 3 years, infants and toddlers spend more than 50% of their lives sleeping (Iglowstein, Jenni, Molinari, & Largo, 2003). However, things do not always go smoothly when it comes to sleep. Concerns about sleep and sleep problems are among the most common issues brought to the attention of pediatricians and health care providers (Mindell & Owens, 2009). Sleep can present significant challenges for many families, with studies finding that 20% to 30% of young children have a sleep problem (Mindell, Meltzer, Carskadon, & Chervin, 2009).

Q: Concerns about sleep are probably the number-one issue that parents struggle with in the early years. Why are sleep challenges, especially getting a child to sleep through the night, such a big issue other than just the fact that nobody wants to be exhausted? What is it about babies and sleep that becomes particularly challenging even for parents who have been told it's going to be challenging?
A: Whether or not the parents get a good night's sleep, and whether the baby gets a good night's sleep affects so many aspects of functioning, how they feel that day, how parents feel about their baby, how parents feel about their partner, and whether or not they can think clearly. It just permeates everything, making the night and then the next morning not feeling well. And, you're right—it's basically the number-three question when you meet a parent, and I hear it all the time, such as on an airplane, “Oh, you have a baby? How old is the baby? Is it a boy or a girl? Is the baby sleeping?”

There are a number of things that make sleep issues so challenging. Parents have this image of bedtime being this wonderful cuddly time and they're rocking in this dark room. Instead the reality is they may have a child who's upset and crying, and they're trying to get him to go to sleep, and then at 2:00 in the morning, there's that little face again, wanting some attention. It's just very, very hard for a parent to handle. The reality does not always match the parents' dreams and expectations.

I often talk to parents whose expectations are at both ends of the spectrum. One expectation is that at 6 weeks old a baby should be sleeping 12 hours straight, which is ridiculous. They can't do that. They obviously need nighttime feedings. The other side is parents of 1-year-olds who have a child who is waking twice at night to feed, and parents think that's also normal. It's educating them on the other side, “No, your baby really could sleep through the night and doesn't need that feeding.” So, it's not one side or the other. Parents are not well-educated about what to expect at different ages.

Let's start with newborns. Newborns' sleep is all over the place. The other thing that's dramatic about newborns is that there is dramatic individual variability (Iglowstein et al., 2003). Some newborns are only sleeping 10 hours a day, and others are sleeping 18 hours a day. So, a parent looks at a neighbor's child who's very different than their own, and she tries to compare. Newborn sleep habits are also very different than, say, an 8-year-old. Most 8-year-olds are sleeping about the same amount of time. So, especially in those first few months there are these big varied differences in how much sleep babies need. The other thing to understand is that there's no day or night for a newborn. They don't even develop the hormone that we use as our sleep guide until about 6 to 10 weeks. So parents shouldn't have any expectations about sleep.

At 3 to 4 months old, babies are sleeping anywhere from 8 to 12 hours a night and getting between 3 and 5 hours of sleep during the day.

By 1 year old, things have settled down, and babies are sleeping about 10 or 12 hours a night, and taking typically two naps a day—usually an hour to an hour and a half in the morning, and an hour to an hour and a half in the afternoon. Somewhere between 1 and 2 years—usually by 18 months—most toddlers have given up their morning nap. So they've moved to one nap a day right after lunch, for 1 to 3 hours.

Q: Great. That is so helpful. One of the things you mentioned was sleep habits. Parents are often told that they have to get the baby on a schedule, and let's say, they are at that fork in the road, the baby's 3 months old, really not sleeping in a way that the parents want, is that a time to actually introduce a certain

Abstract
Jodi Mindell, PhD, the associate director of the Sleep Center at the Children's Hospital of Philadelphia, describes how parents and caregivers can help children develop healthy sleeping habits beginning in infancy. Healthy sleep habits are an essential skill for children's overall health and well-being, and they impact family functioning. Dr. Mindell shares tips and strategies for helping children learn to fall asleep independently and addresses issues around the use of pacifiers, co-sleeping, and bedtime safety.
pattern that's going to help develop these good habits, or is that too soon?
A: No. By the time the baby is 3 months old parents absolutely want to be developing good sleep habits. And, to be honest, they can even do it at a much younger age and be setting the foundation. Now there are certain pieces they can do at a young age, and some pieces they would wait until later. Parents often feel helpless when it comes to sleep. They feel like they have no control, and it's one of the things that's a biological function that just kind of happens in their baby. They don't realize that parents really guide sleep habits. They can set their baby down a path, to either develop to be very good sleepers or develop to be poor sleepers.

The earliest thing that parents can do from when a baby is very young is start developing a bedtime routine. And I don't mean the day they come home with the baby, but within a couple of weeks they can start developing a bedtime routine. Now, a bedtime routine with a newborn is going to be really simple. It's going to be washing up, changing from one onesie to another onesie, and maybe dimming the lights and singing a lullaby. So, it may only be 5 or 10 minutes, but it's letting the baby know that when I get changed, I'm in dim light, and I hear this lullaby, that means it's time to transition from day to night. And if parents do that at really little age, babies get it very quickly.

Second, by the time a baby is 3 months old parents should start to have a set bedtime. If they have a set bedtime, the baby's internal clock is going to start getting sleepy at that time every single night. And make bedtime early. Babies who go to bed before 9:00 fall asleep faster, wake less often at night, and overall get more sleep (Mindell et al., 2009).

Q: The one part of that routine that I would assume would be fairly typical is nursing or giving the baby a bottle. Do you recommend that feeding be a separate thing, that parents feed the baby, then go through the routine? I mean, if the baby falls asleep at the breast, or falls asleep halfway through the bottle, is it important to put the baby down when he or she is not yet asleep?
A: Right. That's the other piece to it — how does the baby fall asleep? I think of feeding as separate from sleep. I was a very long-time nursing mom, and I know as a nursing mom the easiest way to get your baby to sleep is to nurse. And it's a great trick you're probably going to want to use once in a while. But it's not the trick you want to use every night. Again, I'm not really talking about a 2-week-old, but by 3 months parents really want to separate feedings from sleep and feed before starting the bedtime routine.

Q: That's so interesting. That's really different than a lot of what parents are taught to do.
A: Right. We want breast or bottle, bath, book, and then bed. Not the other way around.

It makes no difference if a parent feeds the baby at 7:00 or if they feed the baby at 7:30 in terms of when she's going to wake up and when she's going to need her next feeding. Parents need to make a little space between feeding to sleep. That's that path I'm talking about — getting babies to start to develop what is probably the most important habit, which is falling asleep independently.

Now I don't want babies forced to be able to fall asleep independently at 1 week or 2 weeks, though there are many newborns who can do this on their own from the start — you bring them home, you put them down, they look at that mobile, and drift off to sleep happily. But by 3 months old parents really want to start putting the baby down when he's drowsy, but awake. I say, "Did you put them down awake?" "Oh, yeah. He opens one eye and looks at me." That's not awake — that's asleep. Parents really want to put their baby down wide awake so that he can develop that skill to fall asleep independently.

And the reason that skill is so important is because all babies wake up between two to six times per night. And that's kind of an "aha" moment for parents. When parents ask the question "Why does my baby wake up during the night?", the answer is that it's normal. Even as adults we wake up multiple times per night. We're just not aware of it. All babies, even the best of the best sleepers, wake up several times during the night, but they fall back right to sleep independently. The problem typically isn't why is she waking up, but the question is why can't she fall back to sleep on her own? If a baby is nurses to sleep, rocked to sleep, driven in a car to sleep, pushed in a stroller to fall asleep, all the things that desperate parents do, then parents are not only going to be doing it at bedtime, but they're also going to be doing it at 1:00 in the morning and 3:00 in the morning.

And it's a skill. It's just like learning to crawl. If a baby is never put on the floor, he'll never learn to crawl. Think of it like learning to ride a bicycle. If a child can ride a bicycle in the morning, he can ride a bicycle in the afternoon. It's just like that with sleep. If a baby can fall asleep independently at bedtime, he's going to be able to do the exact same thing in the middle of the night.

Q: Right. And the biggest challenge for parents, particularly because they're tired, is when they put babies down, it's hard to just let them cry it out. And should parents let them cry it out?
A: Let's separate those into two different parts. One part is prevention of sleep problems, and developing good sleep habits early. If parents do it early enough, they don't have the crying, because they haven't developed a bad habit that they now have to change. I really recommend to parents, at 4 weeks, 6 weeks, 8 weeks, put the baby down awake and see what happens. I'd say half the time the babies just drift off to sleep, and the parents are stunned about it.

Now, the other babies, if they do cry, please go to them right away. I don't want a 4-week-old or an 8-week-old left to cry. And you can see it in large families. By the time it's the parents' fourth child, they're not in that room rocking them to sleep for an hour and a half. They can't. They don't have the time. The babies all go down awake.

Q: I have a friend who has triplets, and, believe me, she never went through any problem with getting her kids to sleep.
A: Right. Because there's just not enough hands available. And so they all go down awake. So, one part is prevention. The other part is what professionals call intervention, which is what to do if parents now have a problem — they now have a 9-month-old, or a 1-year-old, a 2-year-old, or even a 6-year-old who's never fallen asleep independently. Will there be tears? Yes. There will be tears. Any change is hard. And they're tired, and all they want to do is fall asleep. Now, the tears, though, are typically fairly minimal. It's usually a few nights of tears. One thing I always recommend to parents is start with bedtime first.

At first, only a baby down awake at bedtime. In the evening, parents have the wherewithal to do it. At 2:00 in the morning, I want all parents responding to their children in the middle of the night when they first start sleep training. Again, it's a skill. Once babies
I never had experienced such a sense of accomplishment! But those first two nights were really tough. I was actually doing something, which I don’t know whether you recommend, of going in, not even touching her, but just saying, “You’re okay,” and then going back out.

A: Exactly. The big question is what should parents do during that 45 minutes of the baby being upset. Parents should be looking for that golden moment of their baby falling asleep on her own. How parents get to that golden moment doesn’t really matter. So, they can go in every 30 seconds. They can go in every 5 minutes. They can go in every 10 minutes. I recommend, though, that parents please go in and not just wait out the 45 minutes. I find that the crying lasts longer if parents don’t go and check. I also really worry about making sure the baby’s okay.

What parents do when they walk in is to present the sense to their child that everything’s okay. Babies pick up their cues from their parents. So, parents need to fake it a little bit and just be like, “It’s okay. It’s night-night time. I love you. I’ll see you in the morning.” And they should just say that same calming statement every time, even if they’re not feeling it, and the baby’s going to sense that everything is okay. Can the parent pick them up? Some of the families in our clinic who really struggle with doing this, they tell us they pick up their child for a moment and put him right back down. But it works better if parents just walk in, say “You’re okay,” and leave again. Parents should do what they feel is most comfortable doing. Some parents don’t feel comfortable with leaving and feel like in the beginning they need to just sit there. I recommend if they’re sitting there, they have a book or a magazine. They may not get any reading done, but at least they’re not just staring at the baby and the baby staring back at them. They have something else to look at for a little bit of break in that eye contact. They have to decide how they get to that golden moment of their child’s falling asleep independently. How they get there is really their comfort level. But getting there is key, and we’ve done studies all around the world (Mindell, Sadeh, Kohyama, & How, 2010; Mindell, Sadeh, Wiegand, How, & Goh, 2010) and found the key to sleeping through the night is falling asleep independently.

Q: One of the things you haven’t said, but is so critical, and I know is a big part of your work, is reframing this for themselves. What I tell parents is they have to think empowerment not punishment; that they are teaching their child a critical skill. Not just critical for their own sanity, but for the child’s well-being. If parents think about it that way, as though they’re actually giving babies the gift of learning to do this—being able to self-soothe and go to sleep is a gift to kids. I just spoke to a father recently who was asking my advice about this, and he said, “And of course my wife and I don’t believe in letting our child cry.” And I said, “Well, Bob, you’re going to have a problem. Not because I advocate that you let the child cry and cry for hours, but if you think it’s a punishment, you’re thinking about this the wrong way.”

A: Exactly. It’s just like a child learning to walk. They stumble, they fall, they cry. Parents don’t say, “Oh, you can never walk again.” They pick them right up and put them right back down, because it is such a critical skill. And I agree with you in thinking about it as a gift. I always tell parents, “You’re not being selfish about this. Your baby will feel better not waking up three times a night just like you’re going to feel better not waking up three times a night.” I also worry that a parent can’t expect that 100% of time they’re going to be there at bedtime. One night it would be nice for the parents to go out and have a babysitter, or have Grandma or somebody else be able to put the baby to sleep. Parents need their baby to be flexible in this world, because the world isn’t always constant.

Q: Exactly. This is great advice. Let’s say parents do have the child on a schedule at night, or at least they have the child developing what are good habits going to sleep, sleeping pretty much through the night. But let’s say naptime is a challenge. Do they go from the nighttime routine to the nap routine? Or do they do them at the same time?

A: In terms of falling asleep independently, I always have parents do it in three steps. We do bedtime first, we do nighttime next if they need it, and then we do naps third. Naps are much harder. Bedtime is clear. Their baby is tired. It’s time to go to bed for the night. Naps are not clear. Parents put them down and they cry for 45 minutes. Is that the end of the nap? Or do the parents get them up? Or do they let them go? So, I find once that once babies have the skill in place from bedtime it’s a little easier to deal with naps. I even have parents start with just one nap. During the second nap, parents can do whatever they can to get their child to go to sleep.

Very young babies nap on one of two different schedules. The first schedule is what I call “by the clock”: they nap every day at 9:00 and 2:00, or 9:30 and 2:30. And that’s pretty typical. Then there’s the others, and my daughter was one of those other ones, who take about a 30- to 45-minute nap, wake up happy as can be, and then are awake for 2 hours. They go down to sleep for 30 to 45
minutes and they're awake again for 2 hours. I call that the "5-hour rule"—taking a nap after being awake for 2 hours. Neither one is right or better. It's just the child's internal clock. But it can drive parents crazy, because it makes the day a little unpredictable and they think something's wrong that the child's only napping for 45 minutes. But the child's fine.

Q: That's so important. A big part of what ZERO TO THREE has been able to share with parents and with providers and people who work with parents is that no child is the same. Baby number two is not going to be the same as baby number one. Getting to know the baby, getting to know what works, is such a critical part of helping the baby get a good night's sleep and letting parents get a good night's sleep.

A: And we see that with twins all the time. Parents come into clinic and they have one little baby with them, and this is their problem sleeper, and then it comes out that it's a twin—the other one's fine.

Q: During the toddler years, where it's a little bit about "You can't tell me what to do," or a lot of pushback in terms of, "No," and not wanting to go to bed, do parents still stick to the same idea that they need a schedule, that children may need to be able to go to sleep independently, or do parents have to change their strategy once they're dealing with a toddler?

A: Toddlers are their own little animals. And they're very cute. And those terrible as really start more like at 18 months. It's a long terrible 2 phase. But in terms of the basic sleep rules, it's the same. Parents still should have a schedule, a bedtime routine, and falling asleep independently. But there are some tricks that parents can start to do by 2 or 2½ years that really help. One is a bedtime routine chart. It's a chart that literally shows what's going to happen. And parents can say, "What do we do next?" We brush our teeth, then we put on our pajamas, and then we read two books." And they should put a picture of two books, and therefore there's no argument about it. Another thing is making an absolutely favorite activity be the very last thing of the bedtime routine. We had one family we worked with, and all their son wanted to do was play with his G.I. Joes. He fought his bath and he fought his bedtime routine. So we set in place that he and the dad got to play G.I. Joes the last 5 minutes before lights out, and we put it on his bedtime routine chart. That kid just zipped through it all.

It's a win-win. Parents want bedtime to be successful for everyone. They want it to be a time that everybody looks forward to. So they can think about what's the favorite thing that their child always wants to do, and make that a special bedtime activity.

Q: The difference, of course, between toddlerhood and babyhood is they can get out of bed.

A: Right. And that's a challenge. Many parents move their child to a bed when they can first climb out of a crib, and a lot of them are still too young to be in a bed. Most 2-year-olds can't stay put. They just don't have the behavioral control, I often recommend a crib tent. And it is all in the sell. Let the child know that now that she is older, she gets this cool tent, and that's what big kids get. And a 2-year-old will immediately buy it—"Oh, okay. That's great." A crib tent can keep them safe and secure. I worry a lot about a 20-month-old who's wandering around her room or the house in the middle of the night. It's much more dangerous than being safely ensconced in her crib and a crib tent. If they're not ready for a bed, they're not ready. It's not worth the 6 months of fighting it, and the tears and the lack of sleep on everyone's part. I'd rather keep them put in their crib where they sleep well. And by 2 years old, kids have more behavioral control and most of them don't get out of their bed at bedtime.

Q: Let's talk about the impact on parents when there are sleep challenges. One of the interesting findings in the Hart research (Hart Research Associates, 2010) that was done for ZERO TO THREE was the gender differences around sleep challenges. Twice as many fathers as mothers said sleep and bedtime issues were the top childrearing challenge. My first thought was maybe that's because they're around more for the sleep time, and so they have to deal with it. But, is there anything else that occurs to you, or do you think it's just that more dads may be coming home at that time of night?

A: Right. It's the witching hour. The evening hour when kids are falling apart, and right around dinnertime is stressful for families because the kids are tired and they're hungry. At the same time parents are trying to get dinner on the table. So, some of the fathers may be just more present for that difficult time of the day. There's been some really interesting research which shows that fathers' involvement in sleep and nighttime care leads to fewer night awakenings, which is interesting (Tikotzky, Sadeh, & Glickman-Gavris, 2011). So professionals do want fathers clearly involved. And I get asked this question all the time. I gave a talk the other day and a pediatrician asked the question, "What do I do about the family where Dad comes home and starts roughhousing at bedtime?" I really want to encourage different parenting styles and different ways of interacting. But that roughhousing is probably better done at a different time of day. Encourage something else they like to do. Maybe they like to do puzzles instead of read books, or something like that.

Q: Let's talk just a little bit about a topic that's gotten a lot more press, which is this issue of co-sleeping. There are some developmental experts who say that it's really important for bonding and attachment. Do you have any sense of what the research shows, and, more important, what's the impact of co-sleeping on sleep?

A: Let's take each piece of that. There is no research that shows whether or not co-sleeping is good for babies or bad for babies and the impact on attachment and things like that. Professionals can't do that research. We can't say to 100 families, "You need to sleep with your baby every night," and say to another 100 families, "You're not allowed to," and then look at them at 5 years old.

So we just can't do that research. Parents who are loving and wonderful, and have babies who are well-attached during the day, need to decide what works best for their family in terms of where they want their child sleeping.

And we talk about two different kinds of families who co-sleep. There are the families where it's a lifestyle choice, where the parents think it's important for their child to be close to them during the night. Culturally we know, in many, many Asian countries that co-sleeping is just the norm, and that's the
expectation. The other group are what we call reactive co-sleepers, which is, "At 1:00 in the morning, I can't stand it anymore. I just put her into my bed." That's a family where we want to make a change.

What researchers do find is that co-sleeping is associated with more nighttime wakings, later bedtimes, and less total sleep. But it really has nothing to do with co-sleeping. It has to do with that parental presence at bedtime. Those parents who are present at bedtime, that is have children who do not fall asleep independently, have children who wake more often at night and need their parents versus those who are falling asleep independently, it's just that for families who co-sleep, parents are more likely to be there at bedtime.

We really encourage co-sleeping families to have their child fall asleep independently even if the child is going to be there all night, because parents usually go to bed later than their child anyway. I hope that children are going to bed early enough and not at the parents' bedtime.

So, back to that bigger picture of whether parents should co-sleep or not. They really, as a family, have to make that decision based on what is important for them, what works for the family, what gets everyone the most sleep at night, and make that as an informed decision with the codicil that we've got to make sure babies are safe.

Q: So, what's safest for the baby? Let's talk about one of the most successful campaigns to help prevent sudden infant death syndrome, which is Back To Sleep. Is that still something that should be every parent's mantra?
A: The Back To Sleep Program has been instrumental in reducing sudden infant death by almost 50% here in the United States and almost 50% in every country that has adopted it. We want all babies sleeping on their backs right from the day that they are born. It's going to make a critical difference. Now, at some point the baby's going to start rolling over. Once they start rolling over, they're typically past the risk period and parents can't keep them on their back. So, it's the Back To Sleep Program until babies start rolling over. And then at that point they're usually fine.

Other safety issues that researchers are really concerned about, again, with co-sleeping, is that we don't want any comforters, any pillows—anything that a child can suffocate on. We don't want parents with sleep problems themselves, like snoring and sleep apnea, rolling over on their babies. So, if they're going to co-sleep, the most safe way to do it is with a co-sleeper, which attaches to the side of the bed. The baby's then right there within reach, but she's in her own safe space.

Q: What about pacifiers? Can they be a good thing in terms of safety and sleep?
A: First of all, I'm a big pacifier supporter. There are just babies who really need to suck. It really soothes them and it's important for them. And there's a little initial data showing that pacifier use also reduced SIDS (Moon & Fu, 2007; Moon, Tanabe, Yang, Young, & Hauck, 2011).

So, I wouldn't discourage a baby who's a pacifier user. There are a few months when parents have to pop it in the baby's mouth in the middle of the night because their baby can't reach it yet, but then they become great sleepers. A few other safety practices are to make sure that the crib is safe, that all bolts are tightened securely, and that slats are the right distance apart and it doesn't have cutouts on it. Finally, make sure that where the child sleeps isn't near any cords, either electric cords or cords hanging from blinds.

As I said in the beginning, sleep problems can be a real challenge for families. However with just a few changes, parents can make a major difference, resulting in their child sleeping well and the entire family sleeping well.

References


## Jargon Buster

Given the multidisciplinary nature of our work with infants, toddlers, and families, we often come across words or acronyms that are new or unfamiliar to us. To enhance your reading experience of this issue of Zero to Three, we offer a glossary of selected technical words or terms used by the contributing authors in this issue. Please note that these definitions specifically address how these terms are used by the authors in their articles and are not intended to be formal or authoritative definitions.

<table>
<thead>
<tr>
<th>Phrase</th>
<th>What it means</th>
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<tr>
<td>Continuity of Care</td>
<td>Continuity of care helps children develop close bonds with their caregivers. In the context of high-quality child care, continuity of care refers to the practice of assigning a primary caregiver to a child upon entry into the child care program, and maintaining that relationship throughout the time of enrollment. (Find it in Daniel, page 42)</td>
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<tr>
<td>Executive Functioning</td>
<td>Executive functioning refers to the mental processes involving cognitive skills and self-control. (Find it in Jones Harden, page 54)</td>
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<tr>
<td>Looking-Time Technique</td>
<td>Looking-time technique is a research method used on young infants that takes advantage of the fact that babies look longer at things that are surprising or unexpected than they do at things that they expect or predict. (Find it in Gopnik, page 12)</td>
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<tr>
<td>Still-Face Experiment</td>
<td>The Still Face Experiment (Tronick, Adamson, Als, &amp; Brazelton, 1975) is an experimental procedure for studying infant social and emotional development. During the experiment, an infant and a parent interact playfully before the parent suddenly stops responding and looks away. After a short period, the parent reengages with the Infant. The infant's reaction to a suddenly unresponsive parent and his or her behavior when the parent resumes interaction have been used to study many aspects of early social and emotional development. (Find it in Thompson, page 6)</td>
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<tr>
<td>Theory of Mind</td>
<td>Theory of mind refers to the cognitive ability to understand the mind of another human being. (Find it in Gopnik, page 12)</td>
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