Infants who cry a lot, or are awake and fussy at night, are a source of concern for many parents. This article has two main parts to help parents with infant sleeping problems and questions. First, it looks at the evidence, which is based on scientific studies, about the nature of infant sleeping problems and distinguishes these problems from crying problems. Crying problems are more fully described in another article on this website found here: [add link]. Second, it explains this evidence so parents have some helpful guidelines for preventing infant sleeping problems, and dealing with them if they already are occurring.

**Putting the baby to sleep, waking up and ‘sleeping through the night’: What do the studies tell us about normal infant sleeping behavior?**

During the first 12 weeks after they are born, most infants go from short sleep and waking periods, which are spread fairly evenly over 24 hours, to longer periods of sleep during the night. By 12 weeks of age, two thirds of infants are ‘sleeping through the night’ according to reports from parents, while one third continue to wake and cry out or otherwise get their parents’ attention.

This is a remarkable achievement for most infants and an important and much anticipated developmental milestone for many parents. It is, however, a phase in a baby’s life that is often misunderstood. Recent research has helped to explain this change in a baby’s sleeping behavior and also revises some of the things experts thought or understood about infant sleep.

- Until recently, infant crying and sleeping problems have been lumped together, but there is growing evidence that they are separate issues, with different causes. As described in the “crying section” of this website, infant crying peaks around 4-6 weeks of age, with most crying in the late afternoon and evening.

- In contrast, infant sleeping problems, which usually involve babies waking up in the night, don’t occur until after 12 weeks of age. So, sleeping problems occur in the night and at an older age than crying problems. Furthermore, infants who cry a lot in the first 4-6 weeks of age are not particularly likely to disturb their parents in the night at 12 weeks of age or have sleeping problems later.  

- Most babies wake in the night for feeding in the first few weeks after birth and most parents expect this. What concerns the parents is when their baby continues to wake up at
night after most other babies have stopped. This waking up at night does not usually involve a great amount of crying. The chief sources of parental concern are (1) that their baby is behaving differently from most other babies in our society; and (2) that baby being awake at night keeps the parents awake too and therefore disturbs parents’ own sleep.

• The phrase ‘sleeping through the night’ to describe these changes in an infant’s night-time sleeping behavior is actually misleading. Child development studies using infra-red video-recording have found that almost all infants continue to wake in the night even if to the parent they seem to be sleeping all night. By 12 weeks, most babies have started to fall back to sleep by themselves, without waking up their parents. The important question is not why some babies fail to sleep through the night. It is why nearly a third of infants continue to wake and disturb their parents in the night, while most infants stop doing so. Infants who continue to disturb parents at night are known as night-time ‘signalers’.

• Most infants who wake up and ‘signal’ their parents in the night are healthy, put on weight and grow normally, and do not go on to have other developmental problems. The exception to this rule is that night waking after four months of age may be an indicator that the infant will continue waking at older ages. Infants who wake and signal to parents in the night at four months of age may continue to wake up when they are toddlers and pre-school age. Infants who fall back to sleep by themselves at four months of age are likely to maintain this habit.

• It is important to know that most infants who wake up in the night are in good health. This conclusion is also supported by scientific studies of infants who were born prematurely and by studies of parenting methods.
  – Because prematurely-born infants often have a high rate of neurological problems, these babies provide a test case for whether waking up at night is due to neurological disturbance. In fact, several large-scale studies have found low rates of night waking and signaling among infants who were born prematurely.
  – In contrast, careful scientific studies have found that parenting methods do affect whether or not children wake and signal at night. Three separate studies have found that if parents follow simple steps in how they care for their babies, then their babies are more likely to stop signaling in the night by 12 weeks of age. These steps are described below. Two other situations have been found to predict continuation of infant night waking and signaling. They are: breast-feeding (versus formula-feeding) and bed-sharing through the night (compared with an infant sleeping in a separate crib).

• Infant and child night waking and signaling remains the main concern for parents, but other child sleep-waking problems begin to occur at older ages. Difficulties with getting toddlers and young children to settle to sleep (sometimes called bed-time ‘struggles’) become more common after about two years of age. Difficulties’ of this kind often occur together with night waking, but the two can occur separately. Although the evidence is weaker, bed-time struggles are thought to be partly due to how parents manage their children’s bed-times.
• In cases where infant night waking and signaling has become established as a serious and continuing problem, methods which change parenting practices are effective in treating the problem. These methods are described below.

**Turning the Scientific Evidence into Guidelines for Preventing or Managing Infant Sleeping Problems.**

1. **Preventing Infant Sleeping Problems.**

At least since Dr Benjamin Spock’s 1979 book on baby and child care, parents have been faced with conflicting advice about the benefits and costs of ‘strict’ versus ‘permissive’ parenting. On one side, parents are told that the use of routine-based care by parents from the early days of infancy is the secret to producing satisfied parents and a happy baby. On the other hand, writers who recommend ‘infant-demand’ parenting (always responding to the infant), have claimed that parents can avoid crying and sleeping problems by following natural instincts to respond quickly, to feed in response to the babies’ cries, and to hold and sleep with them.

Taken together, the evidence summarized above goes some way towards explaining why this disagreement has continued for so long. Rather than one of these parenting approaches being ‘better’, they have different benefits. Parenting which emphasizes responsiveness and physical contact with babies results in less crying in the first few weeks of infancy. But, when continued beyond 12 weeks of age, this form of baby-care maintains infant night waking and signalling, the main kind of infant sleeping problem. The solution, then, involves recognizing the difference between crying and sleeping problems and adjusting parenting methods to infant ages.

Focusing on infant sleeping problems, two pieces of evidence are critical for providing parents with understanding, guidance and things to try:

- There is nothing physically wrong with most infants who wake and signal parents in the night;
- Except for continued sleeping problems, most infants who wake and signal in the night are normal in their long-term development.

Parents, therefore, do not need to adopt one particular form of care because it is ‘correct’ or because the alternatives will harm their baby. It is not the case that parenting approaches such as cuddling a baby to sleep are medically ‘wrong’ or ‘right’. Rather, parents need to choose the form of parenting which fits their values, needs and circumstances best.

Once it is realized that these parenting decisions do not involve sick or abnormal infants, this allows the parent’s social and cultural ways of doing things to be more positively considered. For example, it is easy to understand why a baby who wakes his/her parents at night is a greater problem when both parents have to get up early and work office hours, compared to a situation where parents can adjust their sleep-waking schedules to suit their baby’s behavior.
To a degree, the infant waking up in the night is a problem because of the constraints jobs and other responsibilities impose on many parents. Also, to a degree, what the parents believe is normal, or their families and friends believe is normal, can influence how much of a problem the parents think infant waking up at night can be.

For example, a recent study of Brazilian families found a high rate of bed-sharing, a high rate of infant night waking, but a low rate of infant night-waking problems reported by mothers. Similarly, traditional Japanese and Korean families value closeness and having the infant with them more than American families, which place more emphasis on independence. As a result, Japanese and Korean mothers are more likely to lie next to their babies when settling them to sleep and during the night, but may find that the infant waking up at night is less troublesome than American mothers. Other studies have highlighted the convenience of bed-sharing when parents wish to continue breast-feeding at night, or shown that parents are less likely to view bed-sharing as a problem when it is planned from the outset, and more likely to be judged a problem when it is adopted as a way of coping with conflicts during the night.

If parents lack support from others or experience depression, this can also affect a parent’s ability to cope with night waking.

In summary, choices about parenting techniques need to be based on parents’ values and circumstances, as well as on the evidence described above about the likely effects of using other parenting methods when dealing with infant night waking. These principles translate into the following advice, guidelines and things to try to prevent infant sleeping problems.

- Parenting methods which involve lots of carrying and close physical contact between parents and babies, along with a lot of parental responsiveness to infant signals (sometimes called ‘infant-demand’ care) are valued by some parents because they allow close relationships between the parents and their infants. Parents may also want to use this kind of parenting in the first few weeks of infancy because it can minimize crying at this age.

- Some professionals advise against bed-sharing on the grounds that parents may lie on their babies and cause SIDS (Sudden Infant Death Syndrome, where an infant dies for unexplained reasons). However, this claim is controversial, since some countries where bed-sharing is common have low rates of SIDS, while factors often associated with bed-sharing, rather than bed-sharing itself, may be the true risk factors for SIDS. It is known that settling babies to sleep on their backs or sides (rather than tummies) makes SIDS less likely. Bed-sharing after parents consume alcohol or illicit drugs, or sleeping with an infant on a soft surface such as a sofa, should be avoided. The American Academy of Pediatrics and the Canadian Paediatric Society recommend that parents should not bed share with infants. Both positions are stated in the following link. [Put in link].

- It is known that the continuation of bed-sharing after the first few weeks of age may lead the infant to continue to wake up and signal during the night. Although the evidence is less clear, continuation of bed-sharing may also make it more difficult to persuade an infant...
or young child to leave the parents’ bed and sleep alone at older ages. We do not yet know why this happens in some cases but not others.

• If parents wish to prevent their infant from waking and signaling in the night after 12 weeks, there is strong evidence that using ‘structured’ parenting from about 6 weeks of age is likely to help. Since no benefits of this approach were apparent before 6 weeks of age, parents may wish to delay introducing it until this age. An important advantage is that this approach is effective with breastfed infants and that, unlike ‘controlled crying’ methods used to treat infant sleeping problems after they have arisen, it does not involve leaving babies to cry.

• The three steps proven effective are:
  – Quiet a baby thought to be sleepy in a crib or similar place, and avoid feeding or cuddling them to sleep, at night-time.
  – Reduce the light and social interaction at night.
  – Once the baby is at least three weeks old, healthy and putting on weight normally, begin to delay feeding for a few moments when the baby wakes at night. The short delay means that waking is not immediately rewarded by feeding. This is done gradually, using handling or diaper changing to add a short delay, but this does not involve leaving the baby to cry for a long time.

2. Treating Infant or Child Sleeping Problems

When it is determined that the infant is normal and healthy but continues to wake up at night after 6-12 months of age, there is strong evidence that changing the parents’ behavior is effective in stopping infant night waking and signalling. There are two main ways to do this:

1) ‘Controlled Crying’ methods
The first step is for parents to agree on a realistic bedtime and length of sleeping for the infant or child. He/she is then settled in their crib at the agreed time, often following a set of pleasurable activities, such as bathing, designed to calm the baby and establish a bed-time routine.

The ‘standard’ approach involves ignoring the crying and other protests which occur during settling, waking or resettling during the night, so that these are not rewarded by parental attention. Parents should not pick the infant up or take the infant into bed with them. In effect, the infant is left to cry until the crying stops. A method called ‘Checking’ allows the parents to make regular checks on their infant after he/she is placed in a crib, to ensure safety and provide limited comforting and reassurance. The checks should be minimal in length and in the amount of interaction between the infant and the parent. These “checks” can initially take place every five minutes, but this time between them is often set following a discussion between the parents of what the infant and parents can tolerate. The amount of time can then be gradually increased to 10 and 15 minutes, in the same or following nights. Another
method allows parents to stay in the room with the infant, but having minimal interaction with the infant.

Parents who wish to use these methods should consult a healthcare professional for guidance and advice before doing so. An important consideration is that some parents are unable to leave an infant to cry because they find this stressful or cruel. Unfortunately, half-hearted use of these methods is likely to worsen the problem, so a full discussion of what parents can manage is an important first step before these strategies are used. Parental resources, values and circumstances are also very important. For some parents, finding ways of tolerating and coping with their child’s night waking may prove less disruptive for the family as a whole than trying to impose some of these methods to stop the night waking. Parents can also be reassured that many children will eventually stop waking them in the night on their own.

2) Positive Behavior Methods

This term is used for methods which avoid the need to leave babies to cry. The word ‘positive’ refers to methods which involve active steps to support and reward infants who quiet down and go to sleep at night. The main methods are like those used to prevent infant sleeping problems, described above. The main difference is that these are added in response to sleeping problems and, usually, at an older age. The steps involve adding a nightly routine of pleasurable, calming activities before bed-time. Feeding or rocking to sleep is discouraged. These calming activities should take place in the same place at approximately the same time each evening. Lighting in the place where the baby sleeps is reduced at night and increased in the morning, to encourage the infant to link sleep to darkness and times they are awake to daylight. Unfortunately, there is far less evidence that these methods are effective in dealing with infant sleep problems once they have arisen, and they are not as effective as the controlled crying methods described earlier.

Finally, a different group of infants has been identified who have multiple problems (prolonged crying, night waking, feeding and other problems), and these multiple problems continue after four months of age. These infants seem to be quite different from those who just have sleeping problems on their own. There is evidence that infants who have multiple problems after four months of age are more likely to have continuing difficulties which last up to school age. Cases of this kind are much rarer, with only about 5% of infants who have these multiple and continuing problems. Unfortunately, our understanding of this recently recognized group of infants is poor. Therefore if parents believe that their infant or child fits into this category, they should contact a health professional for advice.

It is worth remembering that being woken by a child in the night can be stressful, but is usually a sign that the child is in good health. How much better to have a child who wakes in the night than one who is quiet and sick! It can help, too, to bear in mind that most children will eventually stop waking and signaling in the night as they get older.