

Allowing babies to cry and coping with 'unsoothable' crying.

Cry-sis is concerned that many parents contacting them believe it is wrong to leave a baby to cry even for a few moments. The worry is that this extreme view may be unrealistic and potentially disruptive for parents and babies alike. How best to cope when a baby keeps on crying in spite of your best soothing efforts is a different question, which is examined separately below. It is important to say that the aim of this review is to help parents to make informed choices not to prescribe the best way to be a parent. How parents care for their baby depends on their values, circumstances and resources so that parenting decisions involve judging the advantages and disadvantages of the alternatives for this family, not pursuing the myth that there is a single best way, which fits all families.

It is important to acknowledge, too, that the scientific evidence is complex, so that the contemporary mantra that health guidance should be 'evidence-based' does not prevent different interpretations. Still, there are ways of distinguishing strong from weak studies and of taking the quality of the evidence into account.

Allowing Babies to Cry.

The contemporary shift towards 'infant-cued' (or 'attachment') parenting may be partly due to the perception that 20th century experts such as Spock, Ferber and Ford were too rigid and parent-focused, rather than baby-friendly, in their recommendations. The emphasis on breast-feeding and need for that to be infant-led, rather than parent-scheduled, is another likely influence. However, the controversy about allowing babies to cry has mainly stemmed from one particular issue – leaving babies to 'cry out' at night to try to resolve infant sleeping problems. This is also known as 'Controlled Crying' 'Extinction' and 'Crying it Out'

The first point to make is that controlled crying is used as a treatment for the minority of infants who do not develop long sleep periods at night. Consequently, it usually involves older infants, around six months of age or more, so that early concerns about weight gain and growth have mostly resolved and the infants involved are in vigorous good health. Their crying is not a sign they are weak or unwell.

The second point is that both scientific studies [1] and popular books [2; 3] now agree that controlled crying and its gentler variations ('checking' or 'graduated extinction' and 'bedtime fading') are often effective –in the sense that they do reduce infant night waking and prolong sleeping for at least 3-6 months following the treatment. The controversy is chiefly about the disadvantages of these parenting methods – whether they are cruel, unethical, stressful and might damage the brains of infants who are left to cry.

The claim that leaving babies to cry causes brain damage can be traced back to a book by Margot Sunderland [3]. She is a psychotherapist, not a neuroscientist, and her book was aimed at parents and marketed by a publisher of popular books, rather than being a scientific textbook. To her credit she makes clear that she does not expect parents to respond immediately to all infant crying: 'it is not crying itself that can affect a child's developing brain: it is prolonged, uncontrolled distress' [p. 38]. Unfortunately, perhaps because she is writing for parents, she uses colourful language (e.g.

'toxic levels of stress chemicals washing over the brain' p. 40) which is very different from the cautious writing in the scientific reports she refers to. Most of the evidence comes from studies of extreme neglect and abuse, not from studies of the use of controlled crying methods by caring parents – and there are many provisos.

Fortunately, since Sunderland's book was published, two studies have directly examined the physical results of controlled crying in infants. The first of these by Wendy Middlemiss and colleagues [4] measured the behaviour and saliva cortisol levels of 25 mothers and their infants, aged 4 to 10 months, during a five-night residential controlled crying sleep training program. Saliva cortisol is used to measure physical stress and, although caveats are needed, evidence of raised infant cortisol levels as a result of the sleep training could be a cause for concern. On the first night, all the babies cried, typically for 10-20 minutes, but leaving them to cry themselves to sleep did not increase their cortisol levels. On the third night, all of the infants settled to sleep by themselves, none cried for more than a few moments, and their cortisol levels remained unchanged. In contrast, their mothers' cortisol levels dropped significantly on the third night. The authors' discussion of their findings focused on this 'asynchrony': the mothers' cortisol reduced, but their infants' didn't. Yet, the infants' cortisol levels did not change at all, in spite of their crying on the first night and quicker settling on night three. We do not know why this was and several interpretations are possible. What is clear is that this study provides no evidence at all that sleep training using controlled crying methods increases cortisol measures of infant stress. The study also had notable weaknesses: there was no control group of infants who did not experience the sleep training, no 'baseline' measures of infant cortisol at home before the training, no measures of waking and crying later in the night, and no follow-up to show what happened after the third night.

The second study, by Michael Gradisar and colleagues [5] included 43 infants, 6–16 months-old, reported by parents to have a sleep problem. They were randomly assigned to receive either graduated extinction, bedtime fading, or into a control group which received sleep information. Sleep measures included both parent-recorded and objective measures of infant sleep-waking. Infant stress was measured via morning and afternoon saliva cortisol and mothers reported their own mood and stress. During the sleep programme, large decreases in time infants took to fall asleep occurred for graduated extinction and bedtime fading groups, and large decreases in number of awakenings after sleep onset for the graduated extinction group. Salivary cortisol showed small-to-moderate declines in graduated extinction and bedtime fading groups compared with control infants. Mothers' stress showed small-to-moderate decreases for the graduated extinction and bedtime fading conditions over the first month. When infants were 12 months old, the mothers assessed their infant's emotional and behavioral problems, and mother-infant pairs underwent the Strange Situation procedure, a standard measure of infant-parent attachment. No differences were found in emotional and behavioral problems, or in insecure attachment styles between groups. This study too had weaknesses – the numbers in each group were smaller than needed and there were no measures of how much the infants cried.

What are we to make of these findings as a whole? First, it is clear that infants who experience controlled crying parenting are, by definition, distressed by it. Parents who object to the crying in principle, or who cannot tolerate it in practice, are unlikely to be able to use these methods effectively. The implication is that discussion of this question between parents and, if possible, with a professional before trying controlled crying methods is desirable. After all, most children will

become settled at night eventually and even a successful sleep training programme provides no guarantee that the sleep problems will not recur in future. Indeed, they sometimes do [6]. Second, the use of controlled crying to treat infant sleep problems is a special situation, often involving parents who are desperate for a solution to their own lack of sleep. There could, of course, be adverse consequences if they do not find a way to cope. Where it is used carefully, there is firm evidence of short-term effectiveness and no evidence that controlled crying parenting stresses infants' bodies, brains or minds to a substantial degree. In stress research, a distinction is often drawn between short occasional ('acute') stresses and persistent or 'toxic' stress. Acute stresses can be beneficial by stimulating learning – it is toxic stress that needs to be avoided. Might controlled crying methods used to extreme produce toxic physical stress and damage an infant's brain? All research studies undergo ethical review and no ethics committee would allow a study which deliberately left babies to cry for long enough to find out whether that caused brain damage. We may never know.

What do parents usually do?

Another approach to the question of whether to allow babies to cry is to measure what parents normally do. Infant crying peaks during the first three months and so does parental concern about excessive crying, so that most of the research on this question involves 1-3 month-old babies. The first three months is also the period when most babies in western countries develop day: night differences in sleep-waking and start to sleep for long periods in the night (sometimes called 'sleeping through the night')

This is where I have to declare an interest, since I carried out these studies together with other researchers [7; 8]. Using infra-red video recording, we measured 101 typical London parents' night-time response times, and their babies associated distress, compared to 19 cases where parents planned from before birth to share beds with their babies and to adopt highly infant-cued parenting methods.

As expected, the 19 bed-sharing parents responded very rapidly to their baby's signals: 95% responding to infant cries within a minute at both newborn and 5-week ages. Perhaps because of their close proximity, this was associated with very little infant crying: bed-sharing infants cried for an average of two seconds before parental contact and 10 of 19 bed-sharing parents detected waking and intervened before infants cried. The 101 more typical London parents took longer to respond and their babies cried more. However, the delays and crying were much less than in 'controlled crying' studies: On average, typical London infants were awake for 3 minute 32 seconds, and fussed or cried for 1 minute 3 seconds, before parental contact.

At three months of age, the bed-sharing infants had shorter sleep periods and woke more often during the night than the typical London infants. Where the typical London parents delayed responding for a few minutes and, particularly where they introduced a short interval before feeding (e.g. by nappy changing) twice as many of their babies slept for long night-time periods at three months of age, compared to the rest of the typical London and bed-sharing infants. Notably, babies whose parents were slower to respond sometimes settled themselves back to sleep before their parents intervened. These infants then slept for longer periods at three months of age [9].

Apart from the small number of bed-sharing cases (they are hard to find, probably because of medical guidance that bed-sharing is unsafe), this study's weaknesses include the use of observational, rather than controlled trial, methods. These methods tell us what usually happens, but cannot reveal anything about causation: it is just as likely that easy babies allowed their parents to delay responding as it is that delayed responding caused infants to sleep for long periods at night. Randomised trials of the sort used by Gradisar and colleagues above provide better information about causation but they have not obtained conclusive evidence about infant sleeping so far. I will include some further reading on that issue below [10]. For the moment, the conclusion from this study is that London parents typically delay responding for a few moments but do not allow their babies to cry for long periods of the kind employed by controlled crying studies. Other studies have found that western parents typically becomes less infant-cued as infants get older – at least in families in Norway [11] and the Bristol area of England [12]. It seems likely that parents' initial concern about their baby's well-being and weight gain gives way to a more 'wait and see' approach to infant night-time cries – particularly if they are not crying intensely - as infants grow older.

In summary, it is generally accepted that infant-cued feeding and parenting are desirable in the first few weeks to help breast feeding and infant growth to become established. After that, the evidence is not conclusive, but suggests that continuing to always respond rapidly may prevent infants from learning to settle themselves to sleep at night. The crucial question for parents may not be whether to ever allow a baby to cry. Rather, the question is when – at what infant age - to start to postpone parental responding in order to encourage infants to develop the ability to sooth themselves [8].

Coping with excessive infant crying

Although responding will often soothe a baby's crying, another consideration is that parents are only partly in charge of this situation. As parents contacting Cry-sis know well, some bouts of crying in the first few months are difficult or impossible to soothe. While the cause of these bouts and the associated 'peak' in infant crying in the first three months are not well understood, evidence has accumulated that most such infants are healthy and grow and develop normally (13; 14), that many infants have a crying 'peak' at around one to two months of age (15;16), and that this crying peak and the 'unsoothable' crying bouts which distress parents usually resolve spontaneously by five months of age (17). Studies have concluded that only about 5% of infants cry a lot because of organic disturbances (18;19); in most cases the crying is due to normal developmental processes (20; 21).

This evidence has re-focussed contemporary research towards understanding how parents cope with the crying and with the factors which lead to good and poor coping. Crying's aversive sound and bouts which resist soothing techniques - a feature particular to 1-4 month-old infants- trigger frustration in many parents [22]. However, its impact on parental emotions and actions depends on how parents cope with it, which is affected by parents' circumstances and resources.

This growing awareness has begun to lead to websites and other resources designed to provide information and guidance which help parents to manage the crying. In addition to the Cry-sis website, others have appeared in Australia and Canada & USA, and Cry-sis has recently been a partner in developing what we hope will eventually be a NHS service for parents of excessively crying babies in the UK [23]. I'll end this article by summarizing some messages about what to do if your baby's crying becomes overwhelming which studies of the websites have found to be helpful:

Where a baby's crying becomes overwhelming:

- It's normal to feel upset and angry because of the crying. It's what you **do** that matters.
- put the baby down in a safe place (such as a cot).
- leave the room, and focus on doing something else. Make some tea, listen to music, do whatever helps you to calm down.
- By all means ask someone to keep an eye on your baby, but a crying baby will not be harmed by being left alone in a safe place for 5 or 10 minutes.
- Try not to focus on negative thoughts: feeling distressed or guilty will not help. Think positively: the crying is not your fault; your baby is well. After all, your baby must be in vigorous health to be able to cry so much! How much worse if your baby was ill and quiet. This crying period is temporary and you can find ways to get through it.
- Do not go back to your baby until you feel in control.

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Websites providing further information

www.cry-sis.org.uk/

<http://purplecrying.info/>

http://raisingchildren.net.au/articles/cry_baby_program.html/context/255

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