



HELPING PARENTS COPE WITH BABIES' CRYING

EVIDENCE FROM A PILOT
PROGRAMME TO SUPPORT PARENTS
AND KEEP BABIES SAFE

Sally Hogg and Denise Coster

April 2014

HELPING PARENTS COPE WITH BABIES' CRYING

Evidence from a pilot programme to support parents and keep babies safe

Summary

Crying is an issue that affects all families with a young baby, but for some it can be very serious. Research shows that in the worst cases, babies' crying is associated with parental stress, depression and relationship problems. Crying can disrupt parents' developing bonds with their babies, and in extreme cases, can cause parents to get angry and harm their babies. This harm can result in non-accidental head injuries, which are the leading cause of death and long-term disability in babies who are maltreated. In the UK, nearly 200 babies suffer from these injuries each year.

The NSPCC looked at best practice from around the world in how to help parents to keep calm and keep their babies safe. We learned from a programme in America, which had reduced the number of shaken babies by 47 per cent through educating parents about the pressures of crying and the importance of not taking their stress out on their baby.

Working with doctors, midwives, parents and other experts, the NSPCC created a powerful new film to help parents to care for a crying baby, and reduce the risk of them becoming stressed and harming their baby. Over the last two-and-a-half years, we have been piloting the film in 24 hospitals and birthing units around the UK. It has been seen by over 30,000 parents.

The programme has been robustly evaluated and results demonstrate that the film has had a positive impact. Parents remember the film and report that it helped them to keep calm and soothe their baby. Parents who watched the film reported that it helped them to realise that their experiences of being a parent were normal, and they were less likely to feel alone as a result. Most importantly, the evaluation also suggests that the film is helping to keep babies safe.

Our evaluation found that:

- **99 per cent of parents remembered the film at least six months after watching it**
- **82 per cent of parents said they used advice from the film when caring for their baby**
- **the rate of reported injuries among babies with feeding, sleeping or crying difficulties was lower if their parents had seen the film.**

Most of the hospitals involved in the pilot are continuing to show the film to parents, and we are now expanding the programme to test its use in other settings. At the start of May, parents in 19 new areas of the UK will be offered the film either during pregnancy or just after they have returned home with their new baby. We will be evaluating the impact of the film in these areas to learn more about its acceptability and impact when shown in different ways. In the future, we hope that this film will be available to every parent of a new baby born in the UK.

The *Coping with Crying* Programme fits well with a number of the current strategic priorities in health and children's services:

- This is a **low cost service**, with the potential to **generate substantial savings** later on.
- It is a great example of a **preventative service**, an '**early intervention**' that we believe can improve outcomes for children.
- The service provides **both mothers and fathers** with emotional and practical support during the transition to parenthood.
- The programme is **based on robust evidence** and this evaluation will contribute to the evidence base about 'what works'.

Background

Crying is an issue that affects all families with a new baby, but for some it can be very serious. As anyone who has cared for a new baby knows, looking after a crying baby can be challenging. Parents can sometimes struggle to soothe their baby, and may find this upsetting or frustrating. It has been reported that infant crying is the most common reason why parents seek help when they have a small baby, with as many as 1 in 6 parents approaching a medical professional for advice.¹ In 2001, it was estimated that the cost to the NHS of infant crying and sleeping problems was £65 million.²

Research shows that in the worst cases, babies' crying is associated with parental stress, depression and relationship problems. Crying can disrupt parents' developing bonds with their babies and – in extreme cases – cause parents to get angry and harm their babies. Studies have shown that excessive crying is given as a common reason for perpetrating child abuse in infants. In one study, over half of a sample of mothers reported that their child's crying made them feel like harming their child.³ This number rises when infants have particularly high levels of crying: an American study found that 70 per cent of mums with babies who cried inconsolably due to colic had experienced aggressive thoughts or fantasies, and 26 per cent had thought about infanticide.⁴

When young babies are harmed, it can result in non-accidental head injuries. These injuries are also known as abusive head trauma and are typically caused when a baby is shaken or thrown (although they can also result from other forms of abuse). Abusive injury to a child's brain used to be called 'shaken baby syndrome', but this emotive term is now thought to be misleading because it does not encompass the range of ways that head injuries can occur. Damage may happen because of shaking, but injuries can also be inflicted in other ways, including an impact from being hit or thrown against a hard surface.

Non-accidental head injuries are the leading cause of death and long-term disability in babies who are maltreated. Around 25 per cent of children will die as a result of such injuries, and between 50 and 80 per cent of children who survive will suffer from severe and life-changing disabilities, including learning and behavioural issues, cerebral palsy, seizures and blindness.^{5,6}

Nearly 200 babies will suffer from non-accidental head injuries each year. In the UK, the prevalence of these injuries has been estimated to be in the region of 24 per 100,000 babies under 12 months.⁷ This is likely to be an underestimate, because it is very difficult to identify non-accidental head injury when it does occur. Some babies may be injured but not taken to hospital, and others may be seen by doctors but their injuries may not be recognised as non-accidental.

Infants who are under six months old are at greatest risk of non-accidental head injury. A Scottish study of non-accidental head injury cases found that the median age of victims was 2.2 months, coinciding with the time when many babies cry the most.⁸ Boys, babies born pre-term, and those with low birth weight are at increased risk.^{9, 10}

Figure 1: The relationship between crying and maltreatment

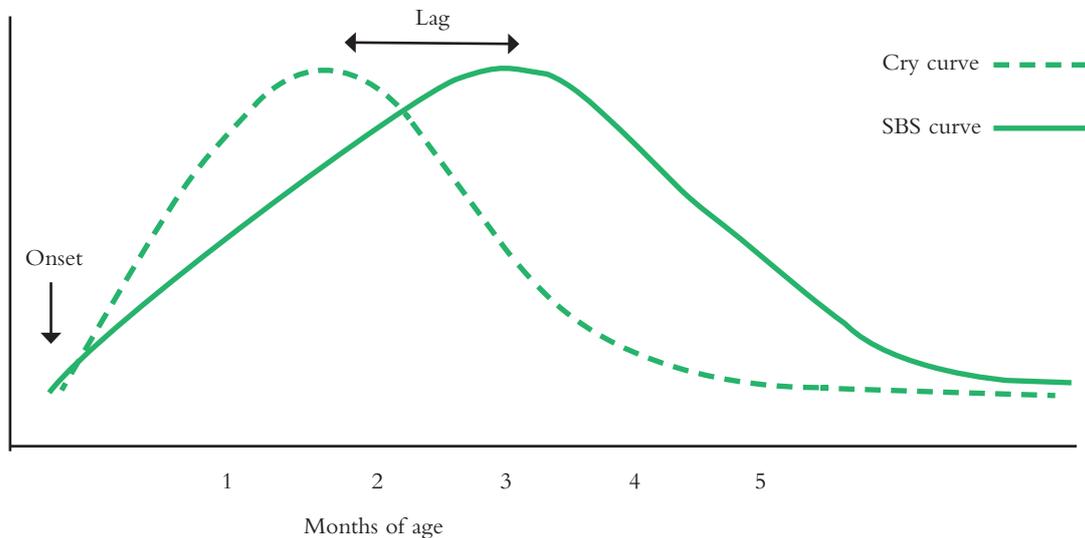


Figure 1 illustrates the close relationship between the time when babies cry the most (represented by the Cry curve) and the timing of the peak incidence of maltreatment (represented by the SBS or ‘Shaken Baby Syndrome’ curve). Reprinted with permission from Barr, R. © Curves of early infant crying and SBS incidence. Proceedings of the Fourth National Conference on Shaken Baby Syndrome (2002) Sept 12-15: Salt Lake City, Utah.

The NSPCC looked at best practice from around the world in how to help parents to keep calm and keep their babies safe. Studies show that explaining to parents that crying can be part of normal development, and helping parents to understand their frustration with it, are important factors in enabling them to seek help and reduce the risk of abuse.^{11, 12} Demonstrating soothing techniques can also help to reduce feelings of doubt or helplessness. It is also important that parents understand the dangers associated with shaking a baby: five American studies found that between 25 and 50 per cent of people did not have information about the dangers of shaking a baby. Some respondents admitted to shaking a baby, but stated that they were not aware of the dangers of doing so.¹³

We learned from a programme in America, which had reduced the number of shaken babies by 47 per cent through educating parents about the pressures of crying and the importance of not taking their stress out on their baby. This programme involved showing mums and dads a film about the risks of non-accidental head injuries just before they were discharged from hospital after having a baby.¹⁴

Our programme

Working with doctors, midwives, parents and other experts, the NSPCC created a powerful new film to help parents care for a crying baby and reduce the risk of them becoming stressed and harming their baby. The film was developed with Warwick Medical School and Great Ormond Street Hospital. It prepares parents for their baby's crying, gives them tips about soothing a baby and managing their own stress, and tells them about the dangers of shaking a baby.

The film is 10 minutes long and features:

- parents talking about their experiences of looking after a new baby, including times when they felt stressed
- parents sharing practical tips and ideas about how to soothe a crying baby
- expert advice about infant crying
- expert information about the risks of non-accidental head injuries, including an animation about the impact of shaking on a baby's brain
- a case study of a child who was injured through shaking.

The film is subtitled and/or dubbed in different languages, and supported by a leaflet and website to reinforce the key messages to parents.

Over the last two-and-a-half years, we have been piloting the film in 24 hospitals and birthing units around the UK. In these settings, the film has been shown to parents shortly before they are discharged from hospital after having their baby. This is a time when parents are likely to be receptive to information about looking after their new baby. It is also an opportunity to show the film to both mums and dads, which is important because research suggests that men are more likely to be perpetrators of non-accidental head injury.¹⁵ The film is shown to parents by midwives or maternity support workers, who talk to parents after the film to respond to any questions or concerns they may have.

During the pilot phase over 30,000 parents saw the film.

The evaluation

The programme has been robustly evaluated, using three approaches:

- **Information collected from more than 30,000 parents** who saw the film was analysed to understand their characteristics.
- **Focus groups with practitioners and parents** were conducted to understand their experiences of the programme, and gain insight into the practicalities of showing the film.

- **A telephone survey of over 1500 parents** was carried out to understand the impact of the film on parents' attitudes, knowledge and behaviour. Parents with babies between six and nine months old were invited to participate in the survey. Some of these parents had seen the film, and some had not, which allowed for comparison between the two groups.

Evaluation results demonstrate that the film has had a positive impact.

Nearly all parents remembered watching the DVD. Although hard-hitting and painful for some to watch, the messages did seem to get through. Parents said they thought about the DVD at stressful moments and made use of the coping strategies. There is evidence to suggest that, because parents acted on the messages, babies were safer. A summary of the results is explained here, and the full findings of the evaluation can be found on the NSPCC website: www.nspcc.org.uk/evidence.

Results

Parents remembered the film and reported that it had helped them to keep calm and soothe their baby. Nearly all (99 per cent) of parents remembered the DVD, with 83 per cent saying they remembered it very or fairly well. A key reason why the film is so memorable is that the content is so relevant to parents. Both first- and second-time parents recognised the value of the film and the issues it raised.

"I think it's very good. I think every first-time parent should watch it."

Watching a DVD was seen as a welcome mode of communication, rather than being expected to read a leaflet.

"If you've got a new-born baby you don't even get a chance to wipe your own nose, really, let alone read a leaflet."

Understanding the fragility of a baby's head was a key message that parents retained after watching the film. Parents who saw the DVD were significantly more likely to agree with the statement that 'you shouldn't handle your baby roughly.' In focus groups, parents talked about the weakness of babies' necks, how their heads have to be supported, and the importance of taking extra care. They said that this information came back to parents at times when their baby's head was vulnerable, such as when a younger child was bouncing on a bed near the baby, or when they were moving their baby more vigorously than usual.

Some parents were quite anxious about the fragility of their baby's head and this meant they took the information very seriously. Watching the DVD led parents to think more about how to handle and respond to their baby, an important illustration of how information about the vulnerability of babies was important in protecting them.

“I think I've only seen it once, and that was the day we were getting out, and the main thing I remember, I think it went into the baby's head rolling back, as you say, and I think it went into the theory about what this can do, and this kind of played on my mind, especially when it's like four and five in the morning, and you've got a lack of sleep and the baby's just screaming in your ear, and I can remember going: 'Don't shake him, don't shake him.' That's just something that stayed in my mind, anyway.”

The DVD shows parents the challenges of being at home with a new baby so that they are prepared. First-time parents in particular spoke in the focus groups about how the DVD made them realise that when their baby was crying this was normal, and in the survey, parents who watched the DVD were less likely to say they felt alone in their experiences. Because they identified with the stories in the DVD, some parents felt less isolated, which helped them to cope.

“To be fair, I thought about the DVD a few times. I thought 'You know what, every parent goes through this. It's not just me,' and that makes a big difference, to know you're not just the only one.”

Parents also talked about how the film helped them to realise the importance of seeking help from family and friends when they were finding things difficult.

“I think the main thing for me was that if you feel like you're not coping, that there is help out there. That was obviously the main message that came across to me, and to not suffer on your own if you think you're feeling like you're not coping, to get help.”

Even for parents who have a good knowledge of how babies behave, there are times when a baby's crying can feel unmanageable. The DVD suggests tips for parents to use to calm their babies or cope with their own stress, and 82 per cent of parents reported that they had used at least one of those tips from the DVD when they were struggling with their baby's crying. These parents also had a better knowledge of coping strategies than parents who had not watched the DVD.

The DVD suggests to parents that if they are feeling stressed with their baby, they should ensure their baby is safe and then take a few minutes to calm down. The survey showed that parents remembered this message. Parents who had viewed the DVD were more likely to agree that it is alright to leave your baby to cry for a few minutes when you are stressed and finding it hard to cope. Parents in the focus groups explained what it was about this message that had made it seem so important and why they had used it. They felt that the DVD gave them *permission* to take a few minutes out and leave the baby in a safe place when the crying got too much for them. The DVD gave parents a sense of *control*, so that when nothing else was working, they were at least able to do something constructive.

“But since then there’s been testing times with her when I’ve been quite stressed and then it’s sprung to my mind, only subconsciously, about it’s OK to put the baby down. Because I think when you’re a new mum you think ‘I’m not doing it right, I can’t just leave you,’ but to be told that it’s alright to just put them down and walk away I think was key, and you’re not a bad mum if you have to do that kind of thing.”

The evaluation did show that some parents found the DVD ‘scary’ or difficult to watch.

“I watched this video and I burst into tears not because of what I thought I was capable of or anything like that but the stories it brings back to you and how easy it is to get to that point.”

Some parents reported that the film made them anxious about how they would react to their baby’s crying. However, there is no evidence from the evaluation that parents’ confidence or coping was actually affected. In fact, knowing from the DVD what it might be like at home with a baby could be important, as this parent explained:

“But I think in a way I’d rather be prepared for the worst and then end up finding out it’s not as bad as you think it’s going to be, than not be prepared and then you end up being overwhelmed and you end up in the situations where you can’t cope. So I think being prepared for the worst, even though it’s scary, is better.”

Importantly, the evaluation suggests that the film is keeping babies safe.

The evaluation shows that parents acted on the messages from the DVD and were better prepared, more careful with their babies and, in some cases, used coping strategies at times of desperation. The ultimate aim of the DVD is that this will result in babies being safer. Importantly, the evaluation found that parents with ‘difficult’ babies (those with feeding, sleeping or crying difficulties), reported a lower rate of injuries that had resulted in their baby seeing a doctor or nurse, when compared with parents who had not watched the DVD. Although this finding relates to all injuries rather than just non-accidental ones, it indicates that babies of parents who watched the DVD were indeed safer and it is reasonable to suggest that this was because of the actions parents took.

The Next Steps

The pilot programme in hospitals is now complete, but most of the hospitals involved in the pilot are continuing to show the film to parents.

We have learned that in some units, parents are discharged within hours of having a baby and therefore there is no time to show them the film. The busy nature of maternity units and staff shortages in many areas meant that, on average, only around 30 per cent of parents of new babies had the opportunity to see the film. Our evaluation shows that these parents were representative of the wider population, suggesting that it was due to the pressures on midwives that parents missed out, rather than the programme being targeted.

To investigate new ways to show the film we are starting an exciting extension of this programme in May 2014. This extension will test how the film can be used in other settings during either the antenatal or postnatal period. Nineteen local authority areas and health trusts in four regions of the UK and Channel Islands will be piloting the use of the film at different times, such as in antenatal education classes or postnatal home visits. In all cases, parents will have the chance to talk to a trained professional or volunteer about the film. This pilot will enable us to understand how the film can be used in different services, which delivery mechanisms reach the largest proportion of parents, and the relative impact that it has when shown at different times and in different places.*

In the future, we hope that this film will be available to every parent of a new baby born in the UK. We plan to use the findings from the two pilot programmes to review the resources and create implementation guidance about how to show the film to parents in order to ensure the best experience for parents, and maximise the DVD's impact. This guidance, the film and all the programme materials will be available to all providers across the UK and Channel Islands in 2015.

Our partners

We would like to thank the following people and organisations for their support in the development, implementation and evaluation of the programme:

The hospitals and birthing units involved in the first stage of the pilot.

- Arbroath Infirmary
- Blackpool Victoria Hospital
- Chorley Birthing Centre

* The film was originally called *I Promise*, which was similar to the American title *A Portrait of Promise*. However after feedback from parents and professionals, it has recently been renamed *Coping with Crying*.

- Cossham Birth Centre
- Leicester General Hospital
- Leicester Royal Infirmary
- Liverpool Women's Hospital
- Montrose Royal Infirmary
- Neath Port Talbot Hospital
- Ninewells Hospital
- Perth Royal Infirmary
- Preston Royal Hospital
- Prince Charles Hospital
- Princess of Wales Hospital, Bridgend
- Royal Glamorgan Hospital
- Royal Victoria Hospital, Belfast
- Singleton Hospital
- Southmead Hospital
- St Mary's Birth Centre, Melton Mowbray
- St Michael's Hospital
- Wishaw General Hospital
- Ysbysty Maelor
- Ysbyty Glan Clwyd
- Ysbyty Gwynedd

Our expert partners.

- Caroline Bryson, Bryson Purdon Social Research
- Dr Carlos DeSouza, Great Ormond Street Hospital
- Professor Mark Dias, Penn State University
- Professor Ruth Gilbert, University College London
- Dr Arturo Gonzalez-Izquierdo, University College London
- Professor Alison Kemp, Cardiff University
- Dr Nick Lessof, Great Ormond Street University
- Professor Robert Minns, University of Edinburgh
- Susan Purdon, Bryson Purdon Social Research
- Dr Angela Underdown, Warwick University Medical School

The NSPCC project team.

- Chris Cuthbert
- Sally Hogg
- Denise Coster
- Alex Stevenson
- Annette Algie
- Bernadette Oxley
- Bronagh Muldoon
- David Ward
- Jessica Law
- Kate Tilley
- Nicole Appleby
- Paul Stewart
- Richard Cotmore
- Sue Walls

The NSPCC teams around the country who supported the delivery of the programme.

All the parents who starred in the film and participated in the evaluation.

References

- 1 Kaley, F., Reid, V., and Flynn, E. (2011) The psychology of infant colic: A review of current research. *Infant Mental Health Journal* 32 (5): 526-541.
- 2 Morris, S., St James-Roberts, I., Sleep, J., and Gillham, P. (2001) Economic evaluation of strategies for managing crying and sleeping problems. *Archives of disease in childhood* 84(1): 15-19.
- 3 Lester, B. M., Boukydis, C. F., Garica-Coll, C. T., and Hole, W. T. (1990) Colic for developmentalists. *Infant Mental Health Journal* 11(4): 321-333.
- 4 Patrick, S., Garcia, J., and Griffin, L. (2010) The role of family therapy in mediating adverse effects of excessive and inconsolable neonatal crying on the family system. *Families, Systems, and Health* 28(1): 19.
- 5 Karandikar, S., Coles, L., Jayawant, S., and Kemp, A. M. (2004) The neurodevelopmental outcome in infants who have sustained a subdural haemorrhage from non-accidental head injury. *Child Abuse Review* 13(3): 178-187.
- 6 Jayawant, S., Rawlinson, A., Gibbon, F., Price, J., Schulte, J., Sharples, P., and Kemp, A. M. (1998) Subdural haemorrhages in infants: population based study. *British Medical Journal* 317(7172): 1558-1561.
- 7 Barlow, K. M., and Minns, R. A. (2000) Annual incidence of shaken impact syndrome in young children. *Lancet* 356(9241): 1571.
- 8 Barlow and Minns (2000) - *ibid*.
- 9 Cogley, C., and Sanders, T. (2007) *Non-Accidental Head Injury in Young Children: Medical, Legal and Social Responses*. Philadelphia: Jessica Kingsley Publishers.
- 10 Spencer, N., Wallace, A., Sundrum, R., Bacchus, C., and Logan, S. (2006) Child abuse registration, foetal growth, and preterm birth: a population based study. *Journal of epidemiology and community health* 60(4): 337-340.
- 11 Barr, R. G., Rivara, F. P., Barr, M., Cummings, P., Taylor, J., Lengua, L. J., and Meredith-Benitz, E. (2009) Effectiveness of educational materials designed to change knowledge and behaviors regarding crying and shaken-baby syndrome in mothers of newborns: a randomized, controlled trial. *Pediatrics* 123(3): 972-980.
- 12 Patrick et al (2010) - *ibid*.
- 13 Showers, J. (1992) "Don't shake the baby": The effectiveness of a prevention program. *Child Abuse and Neglect* 16(1): 11-18.
- 14 Dias, M. S., Smith, K., Mazur, P., Li, V., and Shaffer, M. L. (2005) Preventing abusive head trauma among infants and young children: A hospital-based, parent education program. *Pediatrics* 115(4): e470-e477.
- 15 Sanders, T., Cogley, C., Coles, L., and Kemp A. (2003) Factors affecting clinical referral of young children with a subdural haemorrhage to child protection agencies. *Child Abuse Review* 12(6): 358-373.