Best Practice Guide: Factsheet 2

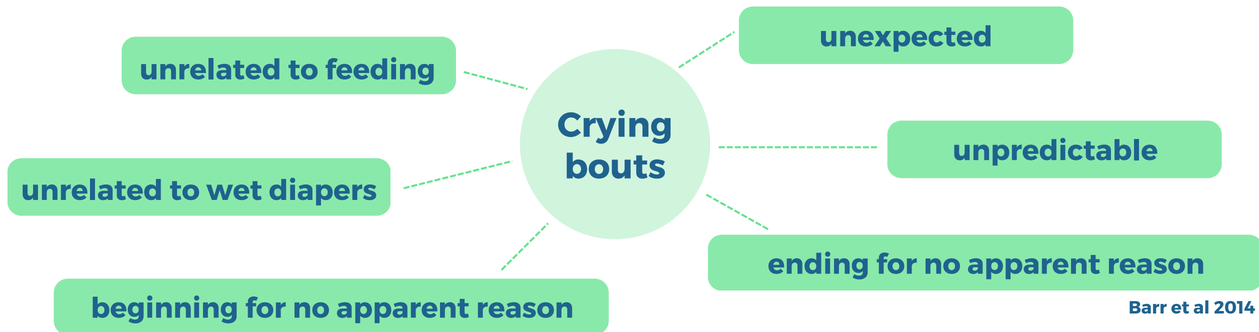
Inconsolable Crying

Infant Colic

The term 'infant colic' that is used to define prolonged and inconsolable crying is based on criteria (i.e. lasting for 3 hours a day, 3 days a week for at least 3 weeks) that have been described as arbitrary, and for which there is very little supporting evidence.

The **crying bouts** that infant's display are often depicted as being unexpected and unpredictable, unrelated to feeding or wet diapers and as beginning and ending for no apparent reason.

(Barr et al 2014)



While the unsoothable nature of such problems has been argued to be a key feature of the distress that parents experience, including abusive caregiving responses such as Shaken Baby Syndrome (Fairbrother et al 2015), a relational perspective on infant crying suggests that the parent's ability to externally regulate the infant is strongly influenced by the parents own attachment status, and related to this their capacity for self-regulation.

In only 5-10% of infants is an organic reason found for the crying
(Douglas and Hill 2011)

During the past two decades there have been extensive attempts to identify the causes of unexplained inconsolable crying with a range of theories being explored and most views attributing it to gastrointestinal (GI) disturbance and pain, leading to the clinical designation of infant colic (James-Roberts et al, 2013).

More recently, however, most of these theories have been discarded because the evidence does not support them, with an emerging alternative, developmental explanation of such crying and its implications (ibid).

The importance of infant crying

Crying is a universal communicative signal in infancy and provides parents with important information about the;

infant's physical state	i.e. discomfort, hunger, tiredness

and

infant's emotional state	i.e. loneliness, fear

Most importantly, the importance of crying as a communicative signal is that it brings caregivers into closer physical proximity to the infant, which provides safety and comfort so promoting survival of the baby and the species more widely.

This is because such proximity is vital for the biological and psychological regulation that supports infant development through repeatedly returning and maintaining the infant to an optimum state of homeostasis.

While the most dramatic changes in infant cry patterns occur in the first 3–4 months, crying and fussing remain a substantial component of infants' communicative repertoire throughout the first year of life. (Vermillot, 2022)

A developmental theory of inconsolable infant crying

A developmental explanation of such crying and its implications has been advanced by one of the leading researchers in the field, and attachment and neural research more widely; this suggests that the best evidence-based explanation for such crying in terms of its occurrence within the first four months of life followed by a gradual reduction, is the neuro-developmental changes that are taking place during this time in terms of the infants increasing ability to regulate such states, and that the fairly universal nature of this pattern, would support such a theory (ibid).

Distress to parents

An excessively crying infant in the family can...

'create desperation', and can 'ruin everyday life, impair breastfeeding, isolate and cast parents into loneliness, strain and break family relationships with feelings of failure as a parent'.

(Botha et al, 2019)

This can lead to physical and mental exhaustion.

The impact on parent-infant relationship is significant...

One review concluded that:
'anxiety, depression, helplessness, anger and frustration in response to infant crying' can lead to 'negative effects on bonding and parental perceptions about the baby, with some parents experiencing thoughts about harming their baby, and subsequent feelings of guilt and shame'.

(Oldbury and Adams, 2015)

Factors influencing the parental response to infant crying

A range of factors can influence parental response to infant crying including being a first-time mother, experiencing maternal doubt and low self-efficacy.

But perhaps most significantly the evidence suggests a neural model of parental response to infant crying that varies based on parental status and gender.

(Witteman et al, 2019).

The parents own early experiences of care also influence these neural circuits:

Mothers assessed as securley attached

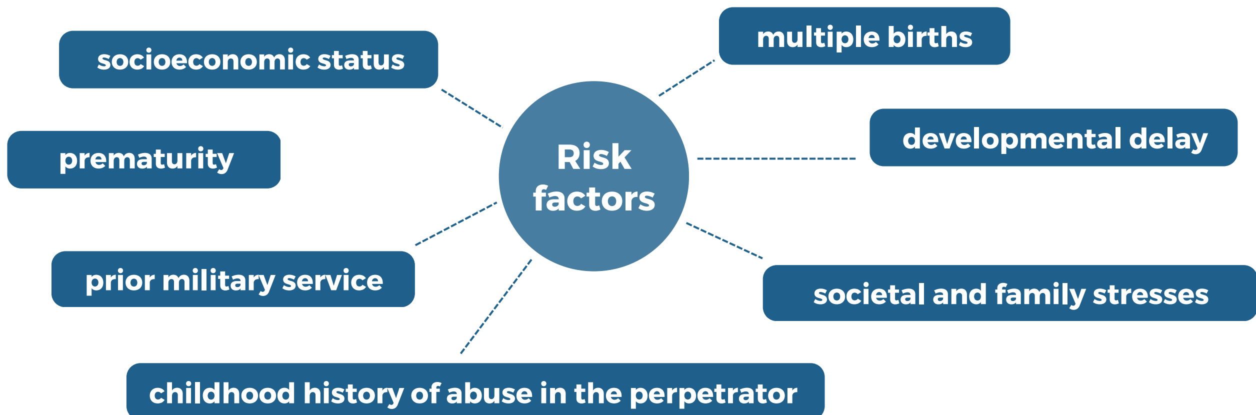
showed a peak and return to normal range of peripheral cortisol which remained stable in response to their infant crying alongside activation of brain regions associated with pleasure and a sense of reward.

Mothers assessed as insecure

showed a sustained peak in peripheral cortisol in response to infant cry alongside an activation of brain regions associated with a sense of pain, disgust and unfairness.

(evidence summarised in Heidemarie et al 2013)

One of the most extreme responses to excessive infant crying is shaking the baby, and the risk factors for **SHAKEN BABY** include:



(evidence summarised in Barr, 2014)

Fathers with a history of childhood maltreatment have been found to have overall poor capacity for self-regulation, with less ability to manage negative emotional experiences.

Such fathers tend to find infant crying particularly difficult and to demonstrate more negative behavioural responses to a crying infant (Buisman et al 2018).

Treatment of 'infant colic'

Overall, there is currently limited evidence to support any of the treatments proposed for 'infant colic' - behavioural/manual therapy; reduced stimulation; increased carrying; probiotics; cranial osteopathy; diet; pain relief; gripe water; herbal; acupuncture (Carnes et al 2018; Biagoli et al, 2016, Lee et al, 2018; Perry et al, 2013; Skjeie et al 2018).

What should we be doing?

1. Health services for prolonged infant crying should adopt a 3-level approach:

Level 1	Level 2	Level 3
Providing parents in general with information and guidance that help them to anticipate, manage, and contain the crying and prevent adverse longer-term outcomes.	Assessment of the parent-infant relationship and support for dyads involving parental vulnerabilities such as depression, social isolation, and lack of support.	Diagnostic assessment to identify the small number of babies with organic disturbances, together with specialist referral procedures to treat the organic problems.

(James-Roberts, Alvarez, Hovish, 2013)

Universal interventions to help parents prepare for parenthood, and to respond positively to crying are strongly recommended, as are opportunities for parents to discuss their feelings towards their baby, to reduce the impact of infant crying on bonding and attachment.

Early identification of parents experiencing difficulties in coping with infant crying is essential, as is an assessment of the parent-infant relationship, and risk in relation to potential abuse.

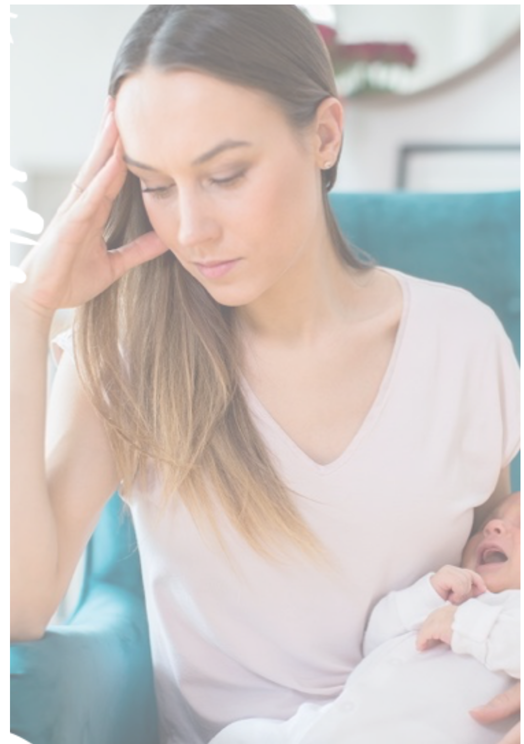
2. 'Infant colic' should not be used as a term to describe inconsolable crying

P – PEAK OF CRYING
U – UNEXPECTED
R – RESISTS SOOTHING
P – PAIN-LIKE FACE
L – LONG LASTING
E – EVENING

- The **Period of PURPLE Crying** is a way to help parents understand this time in their baby's life, which is a normal part of infant's development
- It is confusing and concerning to be told your baby 'has colic' because it sounds like it is an illness or a condition that is abnormal
- When the baby is given medication to treat symptoms of colic, it reinforces the idea that there is something wrong with the baby, when in fact, the baby is going through a very normal developmental phase
- That is why we prefer to refer to this time as the **Period of PURPLE Crying**

https://dontshake.org/purple-crying

3. Targeted Support - the Surviving Crying Programme



- The programme is designed to be accessible and can be used by parents in their own home.

  It includes access to a website, printed booklet, and a programme of Cognitive Behavioural Therapy (CBT)-based sessions delivered to parents by a specially trained health visitor.

- The initial trial with 52 parents showed reductions in the number of parents reporting the crying to be a large or severe problem - from 28 to 3 parents - or feeling very or extremely frustrated by the crying - from 31 to 1 parent. Other findings included improvements in parents' confidence, their knowledge of infant crying and their sleep. There was also a reduction in their contact with NHS services.

- All parents and 85% of the 50 health visitors involved, agreed the package should be included in the NHS, and 94% of the health visitors wanted materials of this kind to be included in their training.

- The national trial will test the clinical and cost effectiveness of health visiting services supplemented by Surviving Crying, compared to statutory health visiting services alone (https://www.ntu.ac.uk/about-us/news/news-articles/2022/12/programme-to-support-parents-of-babies-who-cry-excessively-to-be-trialled-nationally)

Key messages

The evidence suggests the need for a **relational approach to inconsolable infant crying** because:

i) there is currently limited evidence to support the suggestion that inconsolable crying is the result of infant colic, rather that it is a universal developmental stage

ii) there is also limited evidence to support any of the existing methods of treating such colic

iii) parental responses to infant crying have a neural basis, with attachment research suggesting that the parents own attachment status and their capacity for self regulation are key factors influencing there response.

Parents should be empowered to develop strategies and sources of support to help them cope, and health visitors have a key role to play in supporting parents to do this.

Early identification of parents experiencing difficulties in coping with infant crying is essential, as is an assessment of the parent-infant relationship, and risk in relation to potential abuse.

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