

Working with birth trauma

What is a traumatic birth?

For many women and birthing people, childbirth can be an empowering and positive experience, but for one in three, giving birth is experienced as traumatic¹.

At the iHV, in line with the NMC Code, we value the diversity of all people. The content of this GPP aims to help health visitors support all people who have experienced the birth of their baby. This includes the birthing woman or person, or a partner. The iHV has adopted a gender-additive approach to the language we use that is inclusive of all people where this is possible.

Traumatic childbirth is subjective and what someone perceives as a 'birth trauma' may be seen by others as routine practice. For some women and birthing people, complications or an unexpected assisted delivery may bring up fear for themselves or their baby, and cause them to experience their birth as traumatic. For others it might not. And for some, it may be the birth environment itself and the interactions they have with the people around them that evokes feelings of powerlessness and triggers their trauma. But for every parent, it is the individual and subjective interpretation of what happens during their birth that determines whether or not they experience birth trauma. In that sense, we can think of birth trauma as being 'in the eye of the beholder'².

While not all women and birthing people who experience a traumatic birth will develop postnatal post-traumatic stress disorder (PTSD), studies have shown that between 20% and 48% of people do go on to develop highly distressing symptoms of postnatal PTSD below the formal clinical threshold for a diagnosis³.

Currently, postnatal PTSD does not have a separate clinical classification to PTSD from other trauma events. The American Psychiatric Association describes PTSD in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)⁴ as being characterised by the following symptoms lasting for 1 month or more and causing significant changes to daily functioning:

- Intrusion symptoms such as recurrent, involuntary flashback memories, or traumatic nightmares of the birth or events that happened around the birth.
- Consistent avoidance of trauma thoughts, feelings or triggers such as avoiding the hospital or antenatal clinic, or even avoiding the baby, if they remind women and birthing people of the trauma.
- Changes to thoughts and mood such as negative beliefs and expectations, excessive self-blame, negative trauma-related emotions such as fear, anger, guilt or shame.
- Changes in arousal and reactivity such as irritability, reckless behaviour, an exaggerated startle response, difficulties concentrating, and sleep disturbance.

Despite not having a separate clinical classification, PTSD after birth can be different in many ways from PTSD after other traumas, such as sexual assault, road traffic accidents, or exposure to conflict - because birth is a predictable event. Birth is typically undertaken voluntarily and generally seen by others as positive; this cultural narrative is often internalised by women and birthing people which can mean that, when they experience PTSD after birth, it is hard to make sense of and seek help for it, despite its far-reaching adverse consequences. Research suggests there may also be differences in clinical characteristics of birth trauma, with women or birthing people who experience post-traumatic stress from childbirth being more likely to report re-experiencing symptoms such as intrusive memories, flashbacks, or nightmares of the birth compared to PTSD from other traumas⁵.

More information on page 2

For additional resources see www.ihv.org.uk

The information in this resource was updated on 14/06/2023.

Whilst we have taken every care to ensure the content of our resources is accurate and peer-reviewed at time of publication, evidence and advice may change over time. Therefore, please always exercise your own judgement. The iHV does not warrant or guarantee the accuracy or completeness of the information and cannot accept liability for use of our resources.

Should you doubt the accuracy of any of our content, please contact us: info@ihv.org.uk

Who is affected by birth trauma?

- When we think of traumatic childbirth, it is easy to focus on births that involve obstetric complications or health problems with the baby. And although such complications may increase a woman's or birthing person's risk of birth trauma, it does not guarantee it. Research into birth trauma consistently shows that a woman or birthing person's negative experiences during birth and poor support from those around them during labour and birth is a much stronger predictor of trauma than obstetric complications. Feeling supported during labour and birth can actually buffer against some of the potentially traumatic effects of a birth requiring medical intervention^{6,7}. Similarly, a birth that appears to be 'uncomplicated' can be a traumatic experience for the mother or birthing person if during the birth they felt abandoned, out of control or not treated humanely⁸.
- A traumatic childbirth experience can, for some, lead to PTSD symptoms to develop and it can also be a trigger for previously unresolved trauma. The prevalence of PTSD after birth is between 3% - 4.7% in the general postnatal birthing population⁹. Postnatal PTSD prevalence rates are significantly higher amongst women and birthing people in high-risk groups, such as those who have experienced previous childbirths as traumatic, present with a fear of childbirth, have a history of trauma, experienced pregnancy or birth complications, or whose babies are born preterm^{9,10,11}.
- Women and birthing people facing multiple adversity, social exclusion and ethnicity-associated inequalities may be more susceptible to experience birth trauma^{12,13,14} and poorer outcomes, as highlighted by the latest UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity (MBRRACE)¹⁵.
- The lockdown restrictions imposed in maternity services during the COVID-19 pandemic (such as visitor restrictions, mask mandates, and enforced changes to birth plans) have been associated with a sharp increase in the number of women and birthing people presenting with symptoms of postnatal trauma but do not necessarily meet the clinical cut-off for PTSD diagnosis¹⁶.
- Traumatic childbirth can have a widening 'ripple effect' not only on women and birthing people, but also on their partners present during the birth trauma, the maternity staff who attend the birth, and in some cases on their subsequent relationship with their baby¹⁷. The prevalence of postnatal PTSD in partners is estimated

to be 1.2%⁹. Yet, outside of a clinical diagnosis of PTSD, we know that partners who are present during a traumatic birth can experience substantial distress and a sense of inadequacy, fear and powerlessness, which can have consequences for their own mental health as well as their relationship¹⁸. Maternity staff are also vulnerable to developing secondary traumatic stress following birth trauma, which can have a detrimental impact on burnout and emotional fatigue^{19,20}.

What are the risk factors?

Risk factors for the development and maintenance of birth trauma can be considered in three categories: (1) those that occur in pregnancy; (2) those that present during the birth itself; and (3) those that arise postnatally.

1. Pregnancy risk factors

- Symptoms of depression
- Fear of childbirth
- Poor health or complications in pregnancy
- A history of PTSD
- Previous counselling for pregnancy or birth

2. Birth risk factors

- Negative subjective birth experiences
- Having an operative birth (i.e. assisted vaginal or caesarean section)
- Perceived lack of support
- Dissociative symptoms during birth

3. Postnatal risk factors

- Difficulty coping
- Elevated stress levels
- Depressive symptoms

Why is detecting birth trauma so important?

Birth trauma can affect the lives of women, birthing people and their families in a number of ways:

■ Breast/chestfeeding and bonding with the baby

Following childbirth, women and birthing people are often encouraged to have close contact with their baby and form a strong bond, including regular breast/chestfeeding. Those with birth trauma might not create as much milk or have as strong a let-down; likely because of high cortisol and lower oxytocin associated with a trauma response²¹. Those experiencing postnatal PTSD are less likely to initiate or continue breast/chestfeeding²². Yet for some, breast/chestfeeding after a traumatic birth can be experienced as a helpful way to recover after a difficult delivery²³.

More information on page 3

■ Couple relationship difficulties

Birth trauma can have consequences for the couple relationship. Couples report more negative emotions, problems understanding and supporting each other, loss of intimacy²⁴ including avoidance of sex in order to avoid conception and triggering PTSD symptoms²⁵. Birth trauma carries a heavy burden of blame for events that occurred during the birth, which can be expressed inwardly towards oneself and outwardly towards partners²⁶. There is also evidence of comorbidity within couples, with the partner's symptoms having an impact on the woman or birthing person's own PTSD²⁷.

■ Decisions about future pregnancies

Traumatic childbirth can impact a woman or birthing person's self-worth, and generate feelings of inadequacy, guilt and shame, and challenge their identity as a parent⁸. Birth trauma is strongly associated with fear of childbirth in subsequent pregnancies²⁸. Women and birthing people with PTSD after birth may delay or avoid future pregnancies or request elective caesarean section as a means of avoiding vaginal delivery²⁹, or similarly request a vaginal birth after a traumatic caesarean.

Good practice points for health visitors

- Start a conversation about birth early. There is evidence that a significant cause or contributor to a woman or birthing person perceiving their birth experience as traumatic are the actions of maternity staff, which can result in care being experienced as dehumanising, disrespectful or uncaring⁸. While health visitors do not generally attend births, their earlier involvement in the antenatal period offers an opportunity to discuss the planned birth and acknowledge parents' needs and preferences, ensuring their desires relating to their labour and birth are listened to as part of a wider conversation about different possible eventualities. Sensitive and clear communication and a trusting relationship between health visitor and family can equip and empower parents to self-advocate during their labour and birth. Parents who feel they have 'a voice and a choice' during birth are more likely to feel empowered and subsequently less likely to experience birth trauma, and fostering birth empowerment begins antenatally^{30,31}.
- Ask about previous birth experiences. As there is evidence that previous trauma is predictive of vulnerability to recurrent trauma³², health visitors are well placed to identify women and birthing people who have previously experienced trauma, either in the perinatal period or more generally, and ensure that these women or birthing people are identified early as being potentially more vulnerable. If a woman or birthing person discloses a previous traumatic birth experience, an early referral can be made to a specialist perinatal or maternal mental health psychology service (if available, and a general psychology service if not). This is particularly important if the previous traumatic birth is now associated with fear of childbirth. One of the interventions that is often offered in these services to women or birthing people with a history of previous birth trauma is the development of a psychologically-informed birth plan, and health visitors may be able to request a copy.
- Be vigilant to signs of birth trauma after birth. Diagnosis of birth trauma can be complicated as a result of the nature of life with a newborn. For example, sleep disturbance, difficulties with concentration, and hypervigilance to threat are all symptoms of PTSD, but are also to some extent normal for new mothers³³. Similarly, PTSD after birth is frequently associated with symptoms of low mood and is therefore often missed by health professionals, as it is mistaken for postnatal depression or anxiety³⁴. Symptoms to look out for that distinguish PTSD from depression are the intrusion symptoms, such as flashbacks, nightmares, or uncontrollable intrusive thoughts about the birth^{33,34}.
- Be aware that it may be hard for some parents to label their birth as 'traumatic' and acknowledge distress after a traumatic birth. Parents often blame themselves for not being able to give birth in a certain way – so guilt, self-blame and shame can be a barrier to discussion²⁵. Additionally, parents may avoid talking about the birth as it triggers distressing memories. They may also feel that bringing it up during one of the mandated visits or child health clinics wouldn't be a good place to open this discussion due to perceived different agendas about the purpose of these contacts. Offering validation and actively asking parents about their birth experience in a caring and non-judgemental way can help them make sense of their experience and allow them to explore options of support early³⁵.

More information on page 4

www.ihv.org.uk

Institute of Health Visiting c/o Royal Society for Public Health, John Snow House, 59 Mansell St, London E1 8AN.

Email: info@ihv.org.uk Phone: 020 7265 7352 Registered Charity: 1149745

Follow us on Facebook [facebook.com/iHealthVisiting](https://www.facebook.com/iHealthVisiting) Twitter @iHealthVisiting or LinkedIn

© Institute of Health Visiting 2023

- Do not offer formal trauma debriefing. There is no evidence to support the use of formal debriefing immediately following birth trauma with the aim of preventing the onset of trauma symptoms³⁶. NICE guidelines state that single-session high-intensity psychological interventions with an explicit focus on 're-living' the trauma should not be offered to women who have a traumatic birth. This means that formal, structured debriefing services should not be offered to women and birthing people by health visitors, midwives or other professionals. However, research does show that women value the space to discuss their birth experiences³⁷. Therefore, it may be useful to check-in with your local Birth Afterthoughts service (sometimes called Birth Listening/Reflections) and signpost parents who wish to talk about their birth with a healthcare professional.
- Signpost parents for specialist trauma assessment and treatment. In some areas of the country, this referral may be to local mental health services such as the Improving Access to Psychological Therapies. You can find your local service here: <https://bit.ly/3Tvg77R>
- However, wherever possible, trauma treatment should be provided within a perinatal context, by a practitioner with access to the place of birth (this is particularly pertinent when providing some evidence-based treatments that rely on exposure to the place in which the traumatic event occurred). Current recommended treatments are trauma-focused cognitive behavioural therapy (CBT) and eye movement desensitisation and reprocessing (EMDR) which are helpful in PTSD following other traumas, and are promising areas for treatment of PTSD after birth (e.g. Ayers et al., 2007³⁸; Peeler et al., 2013³⁹), although more research is required in this area. Given the mounting awareness of birth trauma, there are a number of short-term treatments that have been developed (such as the Rewind Technique) which have not yet been rigorously evaluated and as such are not recommended.
- Given the potential for a worsening of symptoms or adverse outcomes in relation to trauma, it is important to refer women and birthing people for evidence-based therapies. Psychological therapy services are widely available across the UK and accept referrals for single-event traumas such as birth trauma and provide both trauma-focused CBT and EMDR.
- Support and signpost struggling parents for further support with the parent-infant relationship. Although most women or birthing people with PTSD after birth have no problems in their relationships with their babies, a small percentage are at risk of feeling detached from their babies which may result in them either becoming disengaged or, in some cases, overly intrusive⁴⁰. These parents and their babies may benefit from an additional health visitor-led intervention to support the parent-infant relationship (a video-feedback intervention or the Brazelton Newborn Behavioural Observation⁴¹) and, if the difficulties are complex, then a referral to an appropriate specialist parent-infant therapy service should be considered.
- Protect time for personal reflection and supervision. As mentioned above, professionals working with families who have experienced a traumatic birth can be vicariously traumatised themselves. To prevent burnout and continue to offer compassionate care, it is important that health visitors practise self-care. Take time to reflect on conversations with families, consider the impact on one's own wellbeing, particularly if cases resonate personally or if there is a sense of a deviation in one's own professional boundaries when working with a family. Given the importance of the relationship between families and healthcare professionals during the perinatal period, access to good, reflective supervision, peer-to-peer support and training is crucial to ensure the health and wellbeing of all professionals who establish and maintain such core, empathic relationships.

More information on page 5

www.ihv.org.uk

Institute of Health Visiting c/o Royal Society for Public Health, John Snow House, 59 Mansell St, London E1 8AN.

Email: info@ihv.org.uk Phone: 020 7265 7352 Registered Charity: 1149745

Follow us on Facebook [facebook.com/iHealthVisiting](https://www.facebook.com/iHealthVisiting) Twitter @iHealthVisiting or LinkedIn

© Institute of Health Visiting 2023

References

1. Alcorn K, O'Donovan A, Patrick J, Creedy D & Devilly G. A prospective longitudinal study of the prevalence of post-traumatic stress disorder resulting from childbirth events. *Psychological Medicine*. 2010; 40(11): 1849-1859. Available from: doi:10.1017/S0033291709992224
2. Beck CT. Birth trauma: in the eye of the beholder. *Nursing Research*. 2004; 53(1): 28–35. Available from: doi.org/10.1097/00006199-200401000-00005
3. Ayers S. Delivery as a traumatic event: prevalence, risk factors, and treatment for postnatal posttraumatic stress disorder. *Clinical Obstetrics and Gynecology*. 2004; 47: 552-567. Available from: doi:10.1097/01.grf.0000129919.00756.9c
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. 5th ed. APA: Arlington, VA; 2013.
5. Harrison, SE, Ayers S, Quigley MA, Stein A, & Alderdice F. Prevalence and factors associated with postpartum posttraumatic stress in a population-based maternity survey in England. *Journal of Affective Disorders*. 2021; 279: 749–756. Available from: doi.org/10.1016/j.jad.2020.11.102
6. Ford E, Ayers S. Support during birth interacts with prior trauma and birth intervention to predict postnatal post-traumatic stress symptoms. *Psychology & Health*. 2011; 26(12): 1553–1570. Available from: doi.org/10.1080/08870446.2010.533770
7. Baptie G, Andrade J, Bacon AM, & Norman A. Birth trauma: the mediating effects of perceived support. *British Journal of Midwifery*. 2020; 28(10):724-730.
8. Elmîr R, Schmied V, Wilkes L, & Jackson D. Women's perceptions and experiences of a traumatic birth: a meta-ethnography. *Journal of Advanced Nursing*. 2010; 66(10): 2142–53. Available from: doi: 10.1111/j.1365-2648.2010.05391.x.
9. Heyne CS, Kazmierczak M, Souday R, Horesh D, Lambregtse-van den Berg M, Weigl T, et al. Prevalence and risk factors of birth-related posttraumatic stress among parents: A comparative systematic review and meta-analysis. *Clinical Psychology Review*. 2022; 94: 102157. Available from: doi: 0.1016/j.cpr.2022.102157
10. Grekin R, O'Hara MW. Prevalence and risk factors of postpartum posttraumatic stress disorder: a meta-analysis. *Clinical Psychology Review*. 2014; 34(5): 389–401. Available from: doi: 10.1016/j.cpr.2014.05.003
11. Yildiz PD, Ayers S, Phillips L. The prevalence of posttraumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis. *Journal of Affective Disorders*. 2017; 208: 634-645. Available from: doi: 10.1016/j.jad.2016.10.009.
12. Peter M, Wheeler P. The Black Maternity Experiences Survey: a nationwide study of black women's experiences of maternity services in the United Kingdom. *FiveXMore*; 2021. Available from: <https://bit.ly/3XtBWqR> [Accessed on 25/01/2023]
13. Health and Wellbeing Alliance. *Trans & Non Binary Experiences of Maternity Services: Survey findings, report and recommendations (ITEMS)*. LGBT Foundation; 2022 Available from: <https://bit.ly/3HrRZzV> [Accessed on 25/01/2023]
14. Boardman J. Social exclusion and mental health-How people with mental health problems are disadvantaged: nn overview. *Mental Health and Social Inclusion*. 2011; 15(3):112-121. Available from: doi: 10.1108/204283011111165690
15. Knight M, Bunch K, Patel R, et al. (eds.) *Saving Lives, Improving Mothers' Care Core Report- Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2018-20*. MBRRACE-UK Oxford: National Perinatal Epidemiology Unit, University of Oxford, 2022. Available from: <https://bit.ly/3wqDZQy> [Accessed on 25/01/2023]
16. Diamond RM, Colaianni A. The impact of perinatal healthcare changes on birth trauma during COVID-19. *Women and Birth*; 2021. 25(5):503-510. Available from: doi.org/10.1016/j.wombi.2021.12.003
17. Beck CT. Middle Range Theory of Traumatic Childbirth: The Ever-Widening Ripple Effect. *Global Qualitative Nursing Research*. 2015; Available from: doi.org/10.1177/2333393615575313
18. Elmîr R, Schmied V. A meta-ethnographic synthesis of fathers' experiences of complicated births that are potentially traumatic. *Midwifery*. 2016; 32:66-74.
19. Sheen K, Spiby H, Slade P. What are the characteristics of perinatal events perceived to be traumatic by midwives? *Midwifery*. 2016; 40: 55-61.
20. Aydin, R, Aktas S. Midwives' experiences of traumatic births: A systematic review and meta-synthesis. *Eur J Midwifery*. 2021; Jul 26(5):31. Available from: doi: 10.18332/ejm/138197
21. Dewey K. Maternal and Fetal Stress Are Associated with Impaired Lactogenesis in Humans *The Journal of Nutrition*, 131:(11) 3012S–3015S 2001. <https://bit.ly/3KO4hTH> [Accessed on 12/03/2023]
22. Garthus-Niegel S, Horsch A, Ayers S, Junge-Hoffmeister J, Weidner k, & Eberhard-Gran M. The influence of postpartum PTSD on breastfeeding: A longitudinal population-based study. *Birth*. 2018; 45(2):193-201. Available from: doi:10.1111/birt.12328.
23. Beck CT, Watson S. Impact of birth trauma on breast-feeding: a tale of two pathways. *Nursing Research*. 2008; 57(4): 228-236.
24. Delicate A, Ayers S, Easter A, & McMullen S. The impact of traumatic childbirth on a couple's relationship: a systematic review and metasynthesis. *Journal of Reproductive & Infant Psychology*. 2018; 36(1): 102-115. Available from: doi: 10.1080/02646838.2017.1397270.
25. Fenech G, Thomson G. Tormented by ghosts from their past': a meta-synthesis to explore the psychosocial implications of a traumatic birth on maternal well-being. *Midwifery*. 2014; 30(2): 185–93. Available from: doi: 10/1016/j.midw.2013.12.004
26. Nicholls K, Ayers S. Childbirth-related post-traumatic stress disorder in couples: a qualitative study. *British Journal of Health Psychology*. 2007; 21(4): 491– 509. Available from: doi:10.1348/135910706X120627
27. Iles J, Slade P, Spiby H. Posttraumatic stress symptoms and postpartum depression in couples after childbirth: the role of partner support and attachment. *Journal of Anxiety Disorders*. 2011; 25(4): 520–30. Available from: doi: 10.1016/j.janxdis.2010.12.006
28. Størksen, HT, Garthus-Niegel S, Vangen S, & Eberhard-Gran M. The impact of previous birth experiences on maternal fear of childbirth. *Acta Obstetrica et Gynecologica Scandinavica*. 2013; 92(3): 318-324. Available from: doi.org/10.1111/aogs.12072
29. Creedy DK, Shochet IM, Horsfall J. Childbirth and the development of acute trauma symptoms: incidence and contributing factors. *Birth*. 2000; 27(2): 104–11. Available from: doi: 10.1046/j.1523-536x.2000.00104.x
30. Baptie G, Januário EM, Norman A. Empowered or powerless? Contributing factors to women's appraisal of traumatic childbirth. *British Journal of Midwifery*. 2021; 29(12): 674-682. Available from: doi.org/10.12968/bjom.2021.29.12.674
31. Henrikson L, Grimsrud E, Schei B, Lukasse, M. (2017). Factors related to a negative birth experience-A mixed methods study. *Midwifery*. 2017; Aug; 51:33-39. Available from: doi: 10.1016/j.midw.2017.05.004
32. Czarnocka J, Slade P. Prevalence and predictors of post-traumatic stress symptoms following childbirth. *British Journal of Clinical Psychology*. 2000; 39(1): 35– 51. Available from: doi: 10.1348/014466500163095
33. McKenzie-McHarg K, Ayers S, Ford E, Horsch A, Jomeen J, Sawyer A, Stramrood C, Thomson G & Slade P. Post-traumatic stress disorder following childbirth: an update of current issues and recommendations for future research. *Journal of Reproductive and Infant Psychology*. 2015; 33(3): 219-237. Available from: doi: 10.1080/02646838.2015.1031646
34. Cigoli V, Gilli G, Saita E. Relational factors in psychopathological responses to childbirth. *Journal of Psychosomatic Obstetrics & Gynecology*. 2006; 27: 91-97. Available from: doi:10.1080/01674820600714566
35. Slade P, Molyneux R, Watt A. A systematic review of clinical effectiveness of psychological interventions to reduce post traumatic stress symptoms following childbirth and a meta-synthesis of facilitators and barriers to uptake of psychological care. *Journal of Affective Disorders*. 2021; 281:678-694. Available from: doi:10.1016/j.jad.2020.11.092

More information on page 6

www.ihv.org.uk

Institute of Health Visiting c/o Royal Society for Public Health, John Snow House, 59 Mansell St, London E1 8AN.

Email: info@ihv.org.uk Phone: 020 7265 7352 Registered Charity: 1149745

Follow us on Facebook facebook.com/iHealthVisiting Twitter @iHealthVisiting or LinkedIn

© Institute of Health Visiting 2023

36. Bastos MH, Furuta M, Small R, McKenzie-McHarg K, & Bick D. Debriefing interventions for the prevention of psychological trauma in women following childbirth. *Cochrane Database of Systematic Reviews*. 2015; 10(4): CD007194. doi:10.1002/14651858.CD007194.pub2.
37. Bailey M, Price S. Exploring women's experiences of a Birth Afterthoughts Service. *Evidence-Based Midwifery*. 2008; 6 (2):52-58.
38. Ayers S, McKenzie-McHarg K, Eagle A. Cognitive behaviour therapy for postnatal post-traumatic stress disorder: case studies. *Journal of Psychosomatic Obstetrics & Gynecology*. 2007; 28:177-184. Available from: doi:10.1080/01674820601142957
39. Peeler S, Chung MC, Stedmon J, & Skirton H. A review assessing the current treatment strategies for postnatal psychological morbidity with a focus on post- traumatic stress disorder. *Midwifery*. 2013; 29: 377-388. Available from: doi:10.1016/j.midw.2012.03.004
40. Christie H, Hamilton-Giachritsis C, Alves-Costa F, Tomlinson M, Hallingah SL. The impact of parental posttraumatic stress disorder on parenting: a systematic review. *European Journal of Psychotraumatology*. 2019; 10(1):1550345. Available from doi:10.1080/20008198.2018.1550345
41. Nugent JK, Keefer, CH, Minear S, et al. *Understanding Newborn Behavior & Early Relationships: The Newborn Behavioural Observations (NBO) System Handbook*. Baltimore, Maryland, Paul H Brookes Publishing Co; 2007. Available from: <https://bit.ly/3wqDZQy> [Accessed on 25/01/2023]

This GPP was updated in 2023 by

Dr Camilla Rosan

Consultant Perinatal Clinical Psychologist,
Anna Freud National Centre for Children and Families

Dr Grace Baptie

Research Fellow,
Anna Freud National Centre for Children and Families

Professor Susan Ayers

Professor of Maternal and Child Health,
School of Sciences, City, University of London