



REVIEW ARTICLE

Understanding psychological traumatic birth experiences: A literature review



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ABSTRACT

Background: Traumatic birth experiences can cause postnatal mental health disturbance, fear of childbirth in subsequent pregnancies and disruption to mother-infant bonding, leading to impaired child development. Some women may develop postnatal Post Traumatic Stress Disorder, which is a particularly undesirable outcome. This paper aimed to gain a better understanding of factors contributing to birth trauma, and the efficacy of interventions that exist in the literature.

Methods: A literature search was undertaken in April 2015. Articles were limited to systematic reviews or original research of either high to moderate scientific quality. A total of 21 articles were included in this literature review.

Findings: Women with previous mental health disorders were more prone to experiencing birth as a traumatic event. Other risk factors included obstetric emergencies and neonatal complications. Poor Quality of Provider Interactions was identified as a major risk factor for experiencing birth trauma. Evidence is inconclusive on the best treatment for Post Traumatic Stress Disorder; however midwifery-led antenatal and postnatal interventions, such as early identification of risk factors for birth trauma and postnatal counselling showed benefit.

Conclusion: Risk factors for birth trauma need to be addressed prior to birth. Consideration needs to be taken regarding quality provider interactions and education for maternity care providers on the value of positive interactions with women. Further research is required into the benefits of early identification of risk factors for birth trauma, improving Quality of Provider Interactions and how midwifery-led interventions and continuity of midwifery carer models could help reduce the number of women experiencing birth trauma.

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Summary of relevance:

Issue

A better understanding of predicting and treating women who have traumatic birth experiences is necessary.

What is already known

Traumatic birth experiences can cause postnatal mental health disturbance, fear of childbirth in subsequent pregnancies and

disruption to mother-infant bonding, leading to impaired child development.

What this paper adds

Risk factors for birth trauma are identifiable in the antenatal period and these need to be addressed prior to birth. Consideration needs to be taken regarding quality provider interactions and education for maternity care providers on the value of positive interactions with women.

1. Introduction

Birth trauma can be difficult to define as it is a subjective experience, described as being in the eye of the beholder.¹ Having said this, between 20% and 48% of women around the world are

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reporting their birth experiences as traumatic,^{2,3} which is of high significance considering the negative outcomes related to maternal mental health, mother and infant bonding and infant and child development.⁴

The experience of birth trauma is not isolated to any particular country and appears to be a worldwide phenomenon, with research dedicated to this subject being produced in the United Kingdom, Australia, Canada, the USA, Europe and the Middle East.^{2,3,5–15} When the global birthing community is experiencing childbirth as an event so traumatic that women are developing symptoms of post-traumatic stress (PTS) at a rate of almost 30%⁸ and are coining extreme terminology such as ‘birth rape’ and ‘obstetric violence’^{4,16,17} it is clear that maternity health professionals need to have a better understanding of what is contributing to this phenomenon. It is vital that maternity health professionals are well informed about ways to reduce traumatic birth experiences and how to manage PTS symptoms appropriately as the impacts can have psychological consequences for women that may last a life time.⁶ Health professionals attending births need to consider and reflect upon how particular events and behaviour in the work place, such as obstetric emergencies and poor communication impact on the women they are caring for and what strategies can be employed to appropriately support and counsel women who report traumatic birth experiences.

The aim of this literature review is to gain a better understanding of factors contributing to women experiencing birth as a traumatic event. In addition, this review also aims to determine whether birth trauma can be predicted prospectively and what midwifery-led interventions or strategies can be used to reduce the number of women experiencing birth as a traumatic event and subsequent negative postpartum outcomes. Considering that there is already a wide body of literature dedicated to the topic of physiological trauma related to childbirth, this literature focusses on the lesser studied area of psychological trauma associated with childbirth.

2. Methods

Databases were searched in April 2015 and included EBSCO Academic Search Complete, Science Direct, CINAHL, Maternity and Infant Care database, Wiley Science, Medline and the Cochrane Library. Search terms included: birth trauma; traumatic childbirth; childbirth; psychological aspects; and childbirth post-traumatic stress. The searches returned a total of 800 articles. Of these, the majority focused on physical trauma, such as damage to the pelvic floor and physical trauma to the neonate during childbirth. After removing duplicate results and irrelevant articles, 47 articles were found relating to psychological, rather than physical, birth trauma. Articles were further limited to systematic reviews or original research of either high to moderate scientific quality, as per the National Health and Medical Research Council (NHMRC) guidelines,¹ published within the last five years, and written in English. A total of 21 articles were included in this literature review (see Fig. 1).

2.1. What makes a birth experience traumatic?

To understand the experience of traumatic birth, it is firstly important to discuss the factors that comprise and influence a woman's perception of the birth experience as a whole. Sorensen and Tschetter¹³ describe birth perception as a subjective judgement of a woman's global birth experience, indicating personal satisfaction with the birth process and outcome. They argue that the birth experience is multidimensional and can be impacted upon by numerous factors, such as fear for self and the infant, medical interference, perception of personal performance, locus of

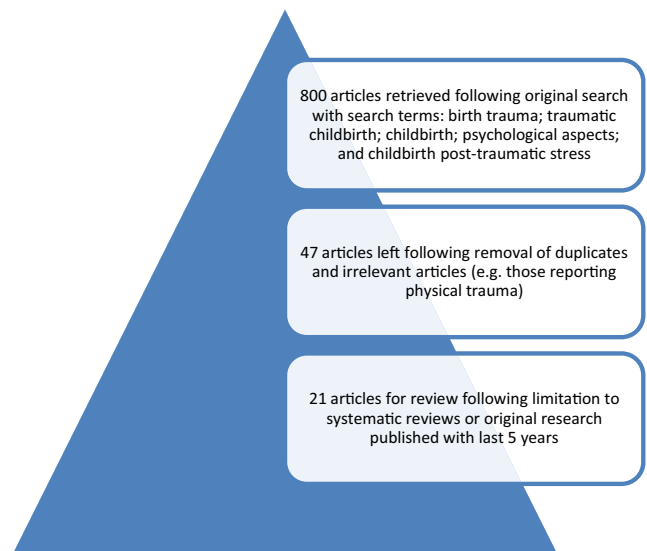


Fig. 1. Flow chart of review articles.

control, type of delivery, ability to achieve priority expectations of birth, adaptability when birth expectations are not met, cultural expectations and environmental factors. The authors also stress that the birth experience is greatly affected by the Quality of the Provider Interactions (QPI) which is defined as the care providers verbal and non-verbal behaviours in relation to meeting the patient's stated and implied needs, as perceived by the patient.¹⁴ For example, when women perceive care provider interactions as negative or unsupportive, these are considered to be low QPI. These low quality interpersonal interactions correlated with women's experiences of perinatal trauma symptoms and depression. Perceived low QPI with care providers during labour and birth were found to affect women's long term memories of negative and traumatic birth experiences.¹³ It was important to note that while the birth experience may appear uncomplicated to care providers, such as doctors and midwives, women may still find the event traumatic if she loses a sense of control or dignity, which can arise from interpersonal interactions that are hostile or disrespectful.^{19,20}

The idea that interpersonal interactions with health care providers during labour and birth can impact on the birth experience is supported by research undertaken by Harris and Ayers.³ The authors identified particular peri-traumatic hot spots associated with women reporting their birth experience as negative or traumatic. The largest category of hot spots to emerge from their research concerned interpersonal difficulties with care providers, most frequently with women describing feeling ignored, unsupported or abandoned. Women who experienced interpersonal difficulties during labour and birth had the highest levels of anger and conflict, resulting in symptoms of Post-Traumatic Stress Disorder (PTSD), avoidance, distress and impairment. Other intrapartum hot spots identified included obstetric events or complications, such as emergency caesarean section, neonatal complications and experiences of lack of control or intrapartum disassociation. Similarly in France, a study citing levels of perceived support and women's perception of negative attitudes from health care providers impacted on the birth experience and increased levels of PTS symptoms, as well as women's perceived level of pain during labour and birth.⁸

In addition to the intrapartum hot spots, antenatal risk factors for experiencing birth as a traumatic event have also been noted. Boorman et al.⁷ stated that women who perceive the world as an

unsafe place are more likely to report birth as traumatic, which is suggestive of a pre-existing mental health morbidity or prior traumatic event. The authors identified pre-existing mental health disturbance, primigravidae and caesarean section as risk factors for experiencing birth as traumatic. In regard to caesarean section, the authors noted that while planned and unplanned caesarean section can be predictive of experiencing birth as traumatic, only 30% of women requiring an emergency caesarean section reported their birth as a traumatic event. This may indicate that other factors were involved or influencing their experience of birth as a traumatic event.⁷

Birth trauma can have a profound psychological impact on women, such as having intense negative responses towards themselves and others and developing dysfunctional coping strategies to deal with nightmares and flashback related to their birth experiences.²¹ This meta-synthesis showed that women who reported their birth as traumatic felt a great sense of loss related to their experience of birth, motherhood, ideal family and/or sense of self. Other symptoms reported included sexual dysfunction and intimacy issues, difficulty forming positive attachment with their infant, disruption to family life and suicidal ideation. A major theme was fear of childbirth or secondary tocophobia, which was associated with women making a conscious decision to not have any further pregnancies or elect to have a caesarean section for future births. The authors noted that while defense mechanisms employed by women to cope with their traumatic birth experiences, such as avoidance and withdrawal, may be necessary initially to cope with their reactions and emotions, long term implementation is unhealthy and undesirable.²¹

2.2. Risk factors for postpartum post-traumatic stress disorder

A more extreme, though less likely consequence for women who have a traumatic birth experience is the development of PTSD. This has been reported as occurring in 1.7–9% of childbearing women^{2,6,8} and involves the development of particular symptoms such as persistent, involuntary and intrusive memories, avoidance of stimuli, recurrent distressing dreams, dissociative reactions, altered mood state and intense or prolonged psychological distress following exposure to a traumatic event.²² The Diagnostic and Statistical Manual of Mental Disorders defines a traumatic event as exposure to an actual or perceived life threatening event, either via direct exposure, witnessing the event occurring to others, learning of traumatic events occurring to family or close friends or experiencing repeated or extreme exposure to the details of a traumatic event.²²

A number of studies identified risk factors for developing PTSD following childbirth. Grekin and O'Hara²³ found that pre-existing maternal psychological disorders, including prior diagnosis of PTSD symptoms, quality of interactions with medical staff and perceived social support were all contributing factors to the development of postnatal PTSD. Quality of interactions with care providers has already been cited as a risk factor for experiencing birth as a traumatic event. In relation to developing symptoms of PTSD, however, the authors questioned whether a pre-existing psychological disorder could influence the way in which women exhibiting signs of PTSD in the postpartum period interpreted the behaviours of and interaction with their care providers.²³ The authors also noted a highly comorbid relationship between major depression and PTSD. This again emphasises the subjective nature of the birth experience and the importance of obtaining a thorough psychosocial history of women in the antenatal period.

In terms of women previously diagnosed with PTSD symptoms, it is sometimes difficult to discern whether the development of PTSD in the postnatal period is related to birth experience or a continuance of the pre-existing disorder.²³ The authors highlighted a need to develop independent diagnostic criteria for postnatal

PTSD as symptoms experienced in general diagnosis of PTSD such as irritability and sleep disturbance are somewhat normal in the postnatal period. It is suggested that screening for symptoms such as intrusive thoughts and nightmares related to the birth experience may be more indicative of postnatal PTSD.²³

Risk factors for the development of postpartum PTSD were also examined by Beck et al.⁶ The authors found that there was an increased risk of developing PTSD symptoms in the postpartum period among women who had unplanned pregnancies, had no health insurance, were pressured to have their labour induced or use epidural analgesia in labour, experienced birth by caesarean section, did not breastfeed as long as they desired, had less partner support postpartum and experienced increased physical problems after birth.⁶ Denis et al.⁸ found that lack of coherence between women's anticipated birth experience and the actual experience, excessive feelings of loss of control, previous experience of trauma and the type and amount of postnatal care received by women also impacted on the risk of developing postnatal PTSD.

A lack of control over the birth experience as a risk factor for developing PTSD was also found by Ford and Ayers.² They noted that women with a history of trauma were particularly vulnerable to the effects of low support levels, especially if they experienced high levels of obstetric intervention. Other risk factors associated with experiencing PTSD symptoms in the postpartum period included depression during pregnancy and the number of interventions experienced during labour and birth, although the association between obstetric intervention and PTSD symptoms in general was described as weak.²

Birth trauma in relation to birthplace and development of postnatal PTSD has been studied. Stramrood et al.¹⁴ conducted a multicentre cross sectional study to determine whether place of birth impacted on rates of postpartum PTSD. While the authors found no difference in PTSD symptoms between women planning to give birth at home and those planning a hospital birth, they did note that women who gave birth in either a secondary or tertiary hospital were more likely to report their birth experience as being traumatic or worse than expected. Higher scores for PTSD symptoms were reported among women who were transferred from home to hospital during labour, experienced severe labour pain, had high risk pregnancies, experienced induction of labour and those who experienced either an emergency caesarean section or instrumental delivery.¹⁴

As well as birthplace and intrapartum events being linked to PTSD, predicting PTSD symptoms has been studied. A prospective longitudinal study undertaken in Australia by O'Donovan et al.¹³ surveyed 933 women in the antenatal period to examine predictive factors of birth-related trauma and development of postpartum PTSD. The authors found fourteen variables that significantly differed between women who developed postpartum PTSD and those who did not. In particular, fourteen predictive factors were identified in relation to the development of PTSD, seven of which were related to previous traumatic events in the lives of the participants. Therefore, it was concluded that the most important predictive factor for developing postpartum PTSD was a prior traumatic life event.¹³

Other investigations into predictive factors for developing postpartum PTSD have been conducted in Canada by Verreault et al.¹⁶ This prospective cohort study of 308 women found that a history of sexual trauma was the strongest predictor of developing postpartum PTSD which is consistent with O'Donovan et al.¹³ In addition to prior sexual trauma, Verreault et al. found heightened anxiety, sensitivity, and negative birth experiences were associated with an increased risk of experiencing postpartum PTSD and recommended that routine screening for PTSD symptoms be included during postnatal visits, as well as screening for postnatal depression.¹⁶

In addition to investigating predictive factors for postpartum PTSD, Ford, Ayers and Bradley¹⁹ used an established cognitive model in an attempt to predict postpartum PTSD, based on the work of Ehlers and Clark.²⁴ This model proposed that PTSD occurred when an individual processed a traumatic event or its sequelae in a manner that produced a sense of current threat to themselves, which arose from individual vulnerability, such as coping style, personal beliefs and life experiences.¹⁹ The model identified prior history of a mental health disorder and prior experience of trauma, instrumental birth and emergency caesarean section, sense of lack of control, sense of powerlessness, inadequate support and care during birth and coping with distress during labour and birth through disassociation as predictive of postnatal PTSD.¹⁹ Similar to the research undertaken by Verreault et al.,¹⁶ Ford et al.¹⁹ found that good social support can reduce the severity of PTSD symptoms and facilitates recovery, and as such is a protective factor against developing PTSD. Positive intrapartum relationships with midwives have also been found as protective against women developing postpartum PTSD.²⁵ This emphasises the need for a focus on supportive care during birth and effective communication between women and their care providers.

2.3. *The impact of a traumatic birth experience on women, infants and families*

Birth trauma can have devastating effects on women and their families. In particular, postpartum PTSD symptoms have been linked to negative changes in family and social relationships which include a moderate link between parenting distress, difficulties with mother-child interactions and childbirth related trauma.¹¹

Qualitative studies have also demonstrated the extreme consequences postnatal PTSD has on women.^{5,6} A meta-ethnographic study by Elmir et al.⁵ reported women felt overwhelmed, angry, disappointed and a sense of loss after a traumatic birth which was overwhelmingly due to poor or unsupportive care from midwives, nurses and doctors. Women described disconnecting from their partners and infants and experiencing symptoms of depression, sometimes with reports of suicidal ideation. The authors of this study also stated that traumatic birth experiences impacted on outcomes for infants and children, noting that infants of women with poor mental health often had poorer cognitive functioning, physical, psychosocial, emotional and behavioural disturbances and impaired language functioning.⁵ Considering the link between traumatic birth experience and unsupportive midwifery, nursing and obstetric care, the authors recommended that maternity health professionals receive training on the provision of adequate support and effective communication with women during their labour and birth.⁵

Supporting these findings, Ionio and Di Blaso¹⁰ examined the impact of postpartum PTSD symptoms on early mother-child interactions. Participants in this study who experienced higher rates of PTSD symptoms two months after birth displayed more intrusive behaviours with their infants during play phases, including reducing typical interaction distances and touching their child more often in order to attempt to build a relationship through physical contact. In response to women with higher rates of postpartum PTSD symptoms, infants showed less interest in nearby objects and more avoidance behaviours, such as physically distancing themselves from the adult. The authors note that while their research was limited by a small sample size of 19 participants, their results emphasised the importance of assessing and managing postpartum PTSD symptoms early, in order to improve maternal mental health and reduce negative impacts of these symptoms on mother and infant bonding.

In addition to disruption to mother-infant bonding, family and social relationships, traumatic birth experience has also been

associated with fear of childbirth, or secondary tocophobia, resulting in requests for elective caesarean section and avoidance of further pregnancies.²⁰ Development of psychological distress and disorders, such as PTSD, secondary tocophobia and sterilisation by choice are highly undesirable outcomes of traumatic birth experience that need to be addressed. Midwives, in their role as maternity service providers, are well placed to identify, respond to and participate in the treatment of birth trauma and its sequelae.

2.4. *Midwifery-led interventions*

Emotional support from midwives can be invaluable during both the antenatal and postpartum period. One intervention strategy that has been investigated for managing and treating birth trauma is postnatal debriefing. While some positive outcomes of postnatal debriefing have been identified, the benefits have often been unclear or inconclusive.²⁶ Through a meta-ethnographic literature review, Baxter et al.²⁶ found that there is generally a positive response from women in regard to debriefing, as women value the opportunity to discuss their birth experience and validate their feelings. However, it was acknowledged that midwives were not trained counsellors and questions were raised around the feasibility of developing appropriate training for midwives to provide debriefing services to women due to the depth of emotional exploration required.²⁶ While formal debriefing may be beyond the midwifery scope of practice at this time, other research has been undertaken relating to a midwifery-led counselling intervention.

Australian research by Fenwick et al.²⁷ examined the efficacy of a specific counselling intervention for women who experienced emotional distress after childbirth by introducing a midwife-led counselling intervention, known as PRIME (Promoting Resilience In Mothers Emotions).²⁷ Women were randomised to one of three groups: the PRIME counselling intervention, an active control group called Parenting Support (PS) programme or the matched control group. The study showed that those in the PRIME group reported positive outcomes, although personalised postnatal care was most desirable overall. Whilst postnatal debriefing and midwifery-led counselling after birth are potentially important interventions for managing and treating women who have experienced birth as traumatic, earlier intervention is also important.

In the antenatal period, one strategy involved flagging women who had pre-existing mental health concerns, such as anxiety, depression and previous experience of a traumatic event.¹² These women were flagged by use of a pink 'psychology alert' sticker, placed on the front of their hand held notes. At the time of implementing the pink sticker system, midwives also received training on perinatal psychology to ensure that women identified as being at risk received supportive, emotionally intelligent care during their labour and birth. As a result, 85% of women reported that they felt more cared for, safe and had their wishes during labour respected. They also reported feeling that their midwives better understood their individual needs and concerns. Feedback from the midwives involved reporting that the system improved communication, made it easier to quickly identify women who needed additional support and allowed for more open discussion around what would normally be considered difficult topics to address, without requiring the women to raise these issues themselves. Interestingly, none of the women involved in the use of the pink sticker system reported experiencing birth as a traumatic event as a result of perceived poor care and postnatal referrals to mental health services declined by 44% during the study period.¹²

Continuity of midwifery models of care offer women the opportunity to develop strong working relationships with midwives and for midwives to develop good insight into the history and needs of the women they care for, thus being able to ensure

they receive the most appropriate level of care to meet their individual needs. No literature was found in relation to midwifery-led continuity of care models and birth trauma.

In summary, it is evident that implementing antenatal risk management strategies, improving interactions with women and developing midwifery-led emotional support programmes are beneficial in reducing psychological morbidity and improving outcomes for women and their families in the short and long term.^{4,5,12,14,20,27} It is therefore important that care providers receive appropriate training in regard to interpersonal relationships and QPI to better understand how their behaviours in the workplace impact upon the wellbeing of the women they are caring for. As previously mentioned, the birth experience is completely subjective to the individual and a 'one fits all' mentality in regard to maternity care is not ideal. It is vital that women develop a good rapport with their care providers and that their labour and birth care is tailored to meet their individual needs.

In addition to improving QPI during labour and birth, the identification of antenatal risk factors for birth trauma can assist care providers to put in place appropriate care plans and support services for women who may be more likely to experience birth as a traumatic event, such as those who have previously been exposed to traumatic events, those who have previously diagnosed mental health disorders and primigravidae.⁸ The main aim for care providers during the antenatal period and at the time of labour and birth should be to reduce women's risk of experiencing birth as a traumatising event in their lives through the provision of appropriate support, planning and development of good quality professional relationships. This could potentially be achieved by improving access to midwifery-led emotional support services^{26,27} and continuity of midwifery models of care, such as caseload and group practice midwifery services.

There were three main limitations noted for this literature review. Firstly, the lack of RCTs lowered the quality of the review overall, however due to the subjective nature of birth trauma and ethical issues around randomising women to standard treatment in comparison to treatment of higher standard, RCTs may not be appropriate for this subject area. Secondly, a significant number of the studies presented in this review recommended caution when interpreting results and findings due to factors such as small samples sizes and ambiguity of results, often citing a need for further research into the subject area. Finally, no literature was available relating to the potential benefits of continuity of midwifery care and reducing the incidence of birth trauma.

3. Conclusion

Reducing the risk of women experiencing their birth as a traumatic event should be a priority for maternity care providers as the ill effects can have long-term negative implications for women and their families. Risk factors for birth trauma are identifiable in the antenatal period and these need to be addressed prior to birth. Consideration needs to be taken regarding quality provider interactions and education for maternity care providers on the value of positive interactions with women. There needs to be further research on the potential value of continuity of midwifery

care in regard to reducing birth trauma and subsequent mental health morbidity in the postnatal period.

References

- NHMRC. *NHMRC additional levels of evidence and grades for recommendations for developers of guidelines*. 2009 Available from: https://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/developers/nhmrc_levels_grades_evidence_120423.pdf. [retrieved 29.07.15].
- Beck CT. Birth trauma in the eye of the beholder. *Nurs Res* 2004;**53**(1):28–35.
- Ford E, Ayers S. Support during birth interacts with prior trauma and birth intervention to predict postnatal post-traumatic stress symptoms. *Psychol Health* 2011;**26**(12):1553–70.
- Harris R, Ayers S. What makes labour and birth traumatic? A survey of intrapartum 'hotspots'. *Psychol Health* 2012;**27**(10):1166–77.
- Elmir R, Schmied V, Wilkes L, Jackson D. Women's perceptions and experiences of a traumatic birth: a meta-ethnography. *J Adv Nurs* 2010;**66**(10):2142–53.
- Taghizadeh Z, Irajpour A, Nedjat S, Arbabi M, Lopez V. Iranian mothers' perception of the psychological birth trauma: a qualitative study. *Iran J Psychiatry* 2014;**9**(1):31–6.
- Beck CT, Gable RK, Sakala C, Declercq ER. Posttraumatic stress disorder in new mothers: results from a two-stage U.S. national survey. *Birth* 2011;**38**(3):216–27.
- Boorman RJ, Devilly GJ, Gamble J, Creedy DK, Fenwick J. Childbirth and criteria for traumatic events. *Midwifery* 2014;**30**(2):255–61.
- Denis A, Parant O, Callahan S. Post-traumatic stress disorder related to birth: a prospective longitudinal study in a French population. *J Reprod Infant Psychol* 2011;**29**(2):125–35.
- Ionio C, Di Blasio P. Post-traumatic stress symptoms after childbirth and early mother-child interactions: an exploratory study. *J Reprod Infant Psychol* 2014;**32**(2):163–81.
- McDonald S, Slade P, Spiby H, Iles J. Post-traumatic stress symptoms: parenting stress and mother-child relationships following childbirth and at 2 years postpartum. *J Psychosom Obstet Gynaecol* 2011;**32**(3):141–6.
- McKenzie-McHarg K, Crockett M, Olander EK, Ayers S. Think pink! A sticker alert system for psychological distress or vulnerability during pregnancy. *Br J Midwifery* 2014;**22**(8):590–5.
- O'Donovan A, Alcorn KL, Patrick JC, Creedy DK, Dawe S, Devilly GJ. Predicting posttraumatic stress disorder after childbirth. *Midwifery* 2014;**30**(8):935–41.
- Sorenson DS, Tschetter L. Prevalence of negative birth perception: disaffirmation, perinatal trauma symptoms, and depression among postpartum women. *Perspect Psychiatr Care* 2010;**46**(1):14–25.
- Stramrood CAI, Paarlberg KM, Huis In't Veld EMJ, Berger LW, Vingerhoets AJ, Schultz WC, et al. Posttraumatic stress following childbirth in homelike- and hospital settings. *J Psychosom Obstet Gynaecol* 2011;**32**(2):88–97.
- Verreault N, Da Costa D, Marchand A, Ireland K, Banack H, Dritsa M, et al. PTSD following childbirth: a prospective study of incidence and risk factors in Canadian women. *J Psychosom Res* 2012;**73**(4):257–63.
- Kitzinger S. Birth as rape: there must be an end to 'just in case' obstetrics. *Br J Midwifery* 2006;**14**(9):544–5.
- Ford E, Ayers S, Bradley R. Exploration of a cognitive model to predict post-traumatic stress symptoms following childbirth. *J Anxiety Disord* 2010;**24**(3):353–9.
- Borg Cunen N, McNeill J, Murray K. A systematic review of midwife-led interventions to address post partum post-traumatic stress. *Midwifery* 2014;**30**(2):170–84.
- Fenech G, Thomson G. Tormented by ghosts from their past': a meta-synthesis to explore the psychosocial implications of a traumatic birth on maternal wellbeing. *Midwifery* 2014;**30**(2):185–93.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
- Grekin R, O'Hara MW. Prevalence and risk factors of postpartum posttraumatic stress disorder: a meta-analysis. *Clin Psychol Rev* 2014;**34**(5):389–401.
- Ehlers A, Clark DM. A cognitive model of posttraumatic stress disorder. *Behav Res Ther* 2000;**38**(4):319–45.
- 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**(4):377–88.
- Baxter JD, McCourt C, Jarrett PM. What is current practice in offering debriefing services to post partum women and what are the perceptions of women in accessing these services: a critical review of the literature. *Midwifery* 2014;**30**(2):194–219.
- Fenwick J, Gamble J, Creedy D, Barclay L, Buist A, Ryding EL. Women's perceptions of emotional support following childbirth: a qualitative investigation. *Midwifery* 2013;**29**(3):217–24.