



City Research Online

City, University of London Institutional Repository

Citation: Delicate, A., Ayers, S. & McMullen, S. (2020). Health-care practitioners' assessment and observations of birth trauma in mothers and partners. *Journal of Reproductive and Infant Psychology*, 40(1), pp. 34-46. doi: 10.1080/02646838.2020.1788210

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: <https://openaccess.city.ac.uk/id/eprint/24904/>

Link to published version: <https://doi.org/10.1080/02646838.2020.1788210>

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online:

<http://openaccess.city.ac.uk/>

publications@city.ac.uk

**Healthcare practitioners' assessment and observations
of birth trauma in mothers and partners**

Amy Delicate^{1*}, Susan Ayers², Sarah McMullen³

Author Notes

¹ PhD Student, Centre for Maternal and Child Health Research, School of Health Sciences, City, University of London, London, EC1V 0HB, UK. * Corresponding Author:

amy.delicate@city.ac.uk

² Professor, Centre for Maternal and Child Health Research, School of Health Sciences, City, University of London, London, EC1V 0HB, UK

³ Head of Knowledge, NCT, 30 Euston Square, London, NW1 2FB

Funding

Amy Delicate is funded by a doctoral scholarship from the NCT and City, University of London.

Keywords: Birth Trauma, Assessment, Parent, Practitioner, Relationship

Word Count (excluding references, tables and figures): 3693

Abstract

Background: Evidence shows that traumatic childbirth can cause ongoing distress, often referred to as birth trauma. This can have an impact on parents and the couple relationship, and consequently identifying and supporting parents with birth trauma is important to practice. Practitioners working with parents in the postnatal period may hold a key role in helping to identify birth trauma, but currently there is limited literature on how this occurs in practice.

Aim: To investigate the experiences of healthcare practitioners from the United Kingdom (UK) in assessment for birth trauma, perceived occurrence of birth trauma, and observed impact on parents and the couple relationship.

Methods: An online survey of UK practitioners working with parents in the first postnatal year. The survey measured assessment practice for birth trauma, perceptions of the incidence of parents affected by birth trauma, observed symptoms, and impact.

Results: A sample of 202 practitioners reported identifying birth trauma in 34.4% of mothers and 25.0% of partners. Assessment for birth trauma was only conducted for 50.3% of mothers and 25.9% of partners. The most observed symptoms were re-experiencing among mothers (87.1%) and avoidance among partners (50.9%). Birth trauma was perceived as impacting on the couple relationship for 29.8% of mothers and 26.9% of partners. Written responses provided more detailed observations of the impact of birth trauma.

Conclusion: Understanding how birth trauma may present differently in mothers and partners could support effective assessment. Once birth trauma is identified, parents require personalised support to help them cope with the impact.

Key Words: Birth Trauma, Assessment, Parent, Practitioner, Relationship

Introduction

There is evidence that 20 to 40% of women report their birth as traumatic (Alcorn, O'Donovan, Patrick, Creedy & Devilly, 2010; Ayers, Wright & Thornton, 2018; Creedy, Shochet & Horsfall, 2000; Soet, Brack, & Di Iorio, 2003). Experiencing emotionally traumatic childbirth that causes ongoing distress is often referred to as birth trauma (Elmir, Schmied, Wilkes & Jackson, 2010). Currently there is no agreed definition for birth trauma, and likewise measurement differs, ranging from asking women whether they perceived their birth to be traumatic to using diagnostic criteria for a traumatic event (e.g. women have to think they or their baby would die or be severely injured; American Psychiatric Association, 2013). The lack of universal diagnostic criteria for birth trauma makes establishing the prevalence of birth trauma difficult.

Similarly, birth trauma is often used interchangeably with the terms posttraumatic stress symptoms (PTSS) and posttraumatic stress disorder (PTSD). However, the perception of birth as traumatic does not necessarily mean women will experience PTSS or PTSD. Symptoms of PTSS include re-experiencing, avoidance, hyperarousal, and negative alterations in mood and thinking. PTSS is evident in 14 to 17% of postnatal women (Boorman, Devilly, Gamble, Creedy, & Fenwick, 2014; Dekel et al., 2017).

If PTSS are severe and meet diagnostic criteria, a clinical diagnosis of PTSD may be made (Dekel, Stuebe, & Dishy, 2017; Simpson, Schmied, Dickson, & Dahlen 2018). Meta-analyses suggest PTSD affects 3 to 4% of women following childbirth (Yildiz, Ayers, & Phillips, 2017). There is emerging evidence that witnessing a traumatic birth may affect a partner's mental health (Hinton, Locock & Knight, 2014), leading to anxiety (Elmir & Schmied, 2015), or PTSS (Bradley, Slade & Leviston, 2008).

Research on the impact of birth trauma on the couple relationship is limited, but is an important issue because the quality of this relationship may affect personal well-being

(Proulx, Helms, & Buehler, 2007). For example, a longitudinal cohort study found PTSS at 8 weeks postnatal were associated with poor couple relationship at 2 years postnatal, and this effect was mediated by depression (Garthus-Niegel et al., 2018). A meta-synthesis of literature on the perceived impact of birth trauma on the couple relationship found five themes. Four negative themes of: strain on relationship; negative emotions; lack of understanding and support; loss of intimacy; and a fifth but positive theme of strengthened relationship (Delicate, Ayers, Easter, & McMullen 2018a). These are similar to themes observed in the impact of the transition to parenthood generally (Delicate, Ayers, & McMullen, 2018b). However, the effect of birth trauma appears to affect the relationship more negatively.

A good quality couple relationship is associated with improved personal physical (Robles, Slatcher, Trombello, & McGinn, 2014), and emotional health (Figueiredo, Field, Diego, & Hernandez-Reif, 2008). During the perinatal period, poor relationship interactions between parents are associated with symptoms of depression and anxiety (Figueiredo et al., 2018). High levels of conflict in the couple relationship is associated with an insecure infant-parent attachment (Finger, Hans, Bernstein, & Cox, 2009; Wong, Mangelsdorf, Brown, Neff, & Schoppe-Sullivan, 2009), which can affect infant well-being (Sroufe, 2005). Breakdown of the couple relationship is associated with child poverty, ill health, lower educational achievement, and behavioural problems (Coleman & Glenn, 2009).

The United Kingdom (UK) has a publicly funded National Healthcare Service (NHS), which offers universal maternity care. Most UK mothers are in contact with a variety of healthcare practitioners in the perinatal period. In particular midwives and health visitors (public health nurses), who are well placed for the prevention, recognition, and support of perinatal mental health (Bayliss-Pratt, 2015; Noonan, Galvin, Doody, & Jomeen, 2017). Family physicians (known in the UK as General Practitioners (GPs)) can be accessed by

parents at any time for physical and mental health support. The final formal postnatal check for a mother and her baby is usually conducted by GPs six to eight weeks postnatally (The National Childbirth Trust (NCT), 2017). Third sector organisations (non-profit and non-government organisations, e.g. charities) also have an important role in helping support parents in the perinatal period (NHS, 2014). Third sector organisations offer support to parents through various practitioners such as: parent educators who facilitate parenting information and support (Ayers & Delicate, 2016); doulas who provide non-clinical birth and postnatal care (Simkin, 2011); peer supporters who are parents trained to help other parents (McLeish & Redshaw, 2017); and lactation specialists who assist parents with infant feeding (Thurman & Allen, 2008).

Whilst most perinatal women have increased contact with numerous healthcare practitioners, detection of mental health problems remains inadequate (Viveiros & Darling, 2019). Women with postnatal distress report positive and negative experiences of healthcare services. Negative perceptions include feeling unheard or uncared for (Coates, Ayers, & de Visser, 2014). Some women report that postnatal care is focused on infant health and physical recovery with limited attention on emotional needs (Byrne, Egan, Mac Neela, & Sarma, 2017; McCarter and MacLeod, 2019). Furthermore, mental health assessment and support for partners is lacking (Baldwin, Malone, Sandall, & Bick, 2018). Service developments are needed to effectively engage partners and meet their needs in maternity services (Burgess & Goldman, 2018).

Despite growing evidence of the prevalence of birth trauma and emerging understanding of the impact, it is not routinely assessed. Current UK clinical guidelines from the National Institute of Health and Care Excellence (NICE), only recommend assessing anxiety and depression in pregnancy and after birth (NICE, 2015). Although practitioners working with parents in the postnatal period could play a key role in helping to identify birth

trauma and its impact, there is very little evidence on how this occurs in practice. Therefore, the present study aimed to examine healthcare practitioners' experiences of assessing birth trauma, and the perceived occurrence of birth trauma in parents. In addition, the current study aimed to investigate practitioners' observations of the impact of birth trauma on mothers, partners, and the couple relationship. Results on the support needed by parents with birth trauma are reported elsewhere (Delicate, Ayers, & McMullen, under review).

Method

The study used an online survey to maximise response rates and ensure a range of practitioners were represented in the sample.

Sample

The study used a convenience sample of UK healthcare practitioners. Practitioners were eligible to participate if they were currently working in the UK supporting parents in the first postnatal year. Practitioners working in clinical and non-clinical care roles, within the NHS or third sector, were eligible to participate. Sample size was not predetermined as the survey was exploratory.

Measurement

A survey was developed to address the study aims, drawing on previous literature. Questions about observed birth trauma symptoms were based on the symptoms listed in the DSM-5 criteria for PTSD (American Psychiatric Association, 2013). Questions about observed impact on the couple relationship were based on themes from a meta-synthesis of the impact of birth trauma on couples (Delicate et al., 2018a). The survey also included open text boxes for practitioners to note how birth trauma assessment was conducted, symptoms in mothers and partners, and the impact on couple relationships. The survey questions were piloted with a small number of healthcare practitioners and adapted following feedback.

At the beginning of the survey birth trauma was defined to practitioners as ‘*emotionally traumatic childbirth causing ongoing distress*’. Practitioners were asked to respond to the survey based on their experience of working with parents in the first postnatal year. Survey questions are available online as supplementary material. The survey also included questions about the support needed by parents for birth trauma, which are reported elsewhere (Delicate et al., under review).

Procedure and Recruitment

Ethical approval for the study was obtained from the School of Health Sciences at City, University of London. The survey was hosted online via Qualtrics. Recruitment took place between May and September 2018 through social media (e.g. Twitter and Facebook) and relevant organisations such as: the Institute of Health Visiting; NCT; Midwives Information and Resources Service (MIDIRS); and the Royal College of General Practitioners.

Recruitment information included a link to Qualtrics where potential participants could access and download the participant information sheet. If practitioners decided to participate, they were required to give consent electronically in Qualtrics before being able to access the survey. Responses were recorded anonymously but participants could provide their contact email address if they wished to receive a summary of the results. Survey data were recorded electronically in Qualtrics.

Data Analysis

Data were exported from Qualtrics into SPSS Statistics 25 for analysis and screened to check distributions so parametric or nonparametric tests were used as appropriate. Descriptive statistics were used to examine the sample characteristics including the number of participants per practitioner role, and time since qualification.

Whether practitioners assessed birth trauma or not was examined using frequencies. Chi-square was used to examine difference in whether practitioners assessed mothers or

partners. Written responses for how practitioners assessed birth trauma were labelled as 1) wellbeing scale or questionnaire, or 2) general questions and observation, and frequencies then calculated.

The perceived occurrence of birth trauma in mothers and partners, and the impact on the couple relationship, were examined using means with 95% confidence intervals (CI). A paired sample t-test assessed difference between the perceived rate in mothers and partners. A Pearson's correlation test examined the association between the observed occurrence in mothers and partners.

Frequencies were calculated of whether personal symptoms of birth trauma were observed or not, with chi-square applied to assess for any significant differences between mothers and partners. Likert scale responses to the observed couple relationship symptoms were examined using means and standard deviations (SD). Practitioners written responses regarding the impact of birth trauma on the couple relationship were analysed using content analysis.

Results

Results report practitioners' practice of assessing for birth trauma, perceptions of how frequently birth trauma occurred, the symptoms observed in parents, and impact on the couple relationship. Sample (N = 202) characteristics are shown in Table 1. The largest groups of practitioners in the sample were midwives (n = 66), health visitors (n = 44), and parent educators (n = 41). The most frequent length of qualification for participants was 0 to 4 years (n = 56, 27.7%), then 5 to 9 years (n = 49, 24.3%).

Assessing Birth Trauma

Half of practitioners indicated they assessed mothers for birth trauma (n = 86, 50.3%) but significantly fewer assessed partners (n = 44, 25.9%; $\chi^2(1, n = 169) = 49.81, p < .001$). Some

practitioners (n = 54) gave written information about how they assessed birth trauma with 18.5% (n = 10) reporting using a questionnaire such as the '*PHQ9 and GAD7*' (health visitor) or '*maternal mood assessment*' (health visitor). However, none of the questionnaires listed were specific to birth trauma. The remaining 81.5% (n = 44) reported using general questions and observations to assess birth trauma, for example '*if the language they use or the body language or facial expressions they exhibit seem to suggest some level of distress*' (doula) and '*opportunities given to ask questions relating to birth, if we highlight a particular traumatic delivery then we ask deeper*' (midwife).

Perceived Occurrence of Birth Trauma

The mean proportion of parents that practitioners observed to have experienced birth trauma was 34.4% (n = 169, CI 95% 31.5-37.3) for mothers, and 25.0% (n = 162, CI 95% 22.1-27.8) for partners. The difference in the observed birth trauma rate in mothers and partners was significant ($t_{161} = 8.27, p < .001$). However, the proportion of mothers and partners reported by practitioners to have birth trauma was strongly correlated ($r = .69, p < .001$).

Observed Symptoms of Birth Trauma

The most common birth trauma symptoms (Table 2) observed by practitioners in mothers were re-experiencing symptoms (n = 101, 87.1%), followed by negative thoughts and feelings (n = 79, 68.1%). For partners, avoidance was the most common symptom (n = 59, 50.9%), then hyperarousal and reactivity symptoms (n = 51, 44.0%). The frequency of specific symptoms in mothers and partners was not significantly different, except for negative thoughts and feelings, which were observed in significantly more mothers than partners ($\chi^2(1, n = 116) = 4.84, p = .028$). Analysis of practitioners written responses showed other symptoms they attributed to birth trauma. General mental health problems (n = 6) including '*postnatal depression in both [mothers and partners]*' (health visitor) and '*general anxiety and panic*' (health visitor). Fear of pregnancy and birth (n = 5) including '*belief that*

straightforward birth is dangerous or impossible' (parent educator) and *'fear of being pregnant again'* (health visitor). Effect on relationship with infant (n = 2) described as *'resentment towards baby'* (counsellor) and *'attachment issues'* (health visitor).

Observed Effect of Birth Trauma on the Couple Relationship

Practitioners perceived that the couple relationship was impacted for 29.8% (n = 102, CI 95% 24.9-34.6) of mothers, and 26.9% (n = 88, CI 95% 21.3-32.4) of partners). The difference in the observed rate of impact of birth trauma on the couple relationship for mothers and partners was significant ($t_{87} = 2.49, p < .05$). However, the perceived rates of impact on the couple relationship reported for mothers and partners was strongly correlated ($r = .84, p < 0.001$).

Table 3 details the mean and standard deviations for the different ways in which birth trauma was observed to impact on the couple relationship. Lack of intimacy was most common, being observed a moderate amount. Other common impacts were increased negative emotions; lack of understanding; reduced communication; and strain on relationships. Strengthening of the couple relationship was least common.

Perceived Impact of Birth Trauma on the Couple Relationship

Content analysis of written comments about the impact of birth trauma on the couple relationship (n = 42) found four themes, presented here with example quotes. Theme one (n = 13) was that the impact on the couple relationship can be profound:

'It can really test a relationship. Parents will grieve in different ways and this needs to be recognised by each other' (health visitor);

'It is something that couples don't imagine happening so it can be a strain very early on in the parenting journey.' (midwife).

Theme two (n=8) was that parents often cope alone (n = 8):

'I think that parents are expected to get on with parenthood once their baby is born without any thought as to how the birth may have affected them psychologically.' (midwife);

'So many couples suffer in silence.' (doula).

Theme three (n = 6) was that stigma is a barrier to mothers and partners getting support:

'I think birth trauma is still a taboo subject and parents feel they should just "put up with it as part of childbirth". Couples can see themselves as failing by disclosing trauma.'

(health visitor);

'Men in particular often feel they need to 'man up' seeing themselves as less important as she has done the hard part of birth. Feeling they must be strong and that mental health disorders are a weakness.' (parent educator).

Theme four (n = 12) was that more personalised birth trauma support is required:

'It affects each person individually. So although couples may want support together, each may also need one to one support for specific things.' (health visitor);

'Access to relationship/sex counselling after traumatic birth should be made much easier and one to one birth planning to reduce anxiety around subsequent birth choices.'

(doula).

Discussion

The current study aimed to examine UK healthcare practitioners' experiences of assessing for birth trauma, observed rates of birth trauma, and impact on parents and the couple relationship. Despite observing that one third of mothers and one quarter of partners are affected by birth trauma, results indicate that only half of practitioners assessed mothers, and

one quarter assessed partners for birth trauma. This limited assessment for birth trauma is consistent with prior findings (Byrne et al., 2017; Noonan, Jomeen, Galvin and Doody, 2018) but contrasts with clinical recommendations for maternity services to have equal emphasis on emotional and physical well-being (Bayliss-Pratt, 2015) to ensure early detection of mental illness (Oates, 2015).

Reported differences in targeted assessment for birth trauma and perceived higher rates in mothers versus partners, highlight a potential bias towards identification of birth trauma in mothers. This could be due to a lack of understanding that partners may also be affected by birth trauma (Burgess & Goldman, 2018), or partners being marginalised in maternity services (Inglis, Sharman, & Reed, 2016). Alternatively, practitioners could be using their professional judgement to assess only those women and partners they deem at risk of birth trauma. Such an approach could be unreliable if based on obstetric complications, as birth trauma is more strongly related to the subjective experience of childbirth than objective events (Ayers et al., 2016; Slade, 2006).

Limited assessment for birth trauma may lead to underestimating the prevalence of birth trauma, lack of relevant training for practitioners, and absence of support services for affected parents. Whilst a wide range of questionnaires exist for considering the experience of childbirth, no universally accepted birth trauma measurement tool exists, which creates a barrier to effective assessment (Nilvér, Begley, and Berg, 2017). Validated assessment measures for birth-related PTSD are available (Ayers, Wright, & Thornton, 2018; Handelzalts, Hairston & Matatyahu, 2018; Stramrood et al. 2010), which may facilitate future standardised assessment and more robust identification of birth trauma.

The perceived rate of birth trauma in mothers reported in the current study is reasonably consistent with other studies of traumatic birth experiences resulting in ongoing distress (Alcorn et al., 2010, Creedy et al., 2000; Soet et al., 2003). Conversely, practitioners

perceived one quarter of partners to have birth trauma which is higher than prior studies reporting 5% of fathers with severe PTSD symptoms (Ayers, Wright & Wells, 2007), and 12% with subclinical PTSS (Bradley et al., 2008). The seemingly higher rate of partners with birth trauma in this study could be due to non-clinical practitioners in the sample. Such practitioner roles may have more contact with partners to enable identification of distress (Ayers & Delicate, 2016). Whilst promotion of maternal perinatal mental health is growing in maternity and early years services (Ayers & Shakespeare, 2015), research on effective support for partners' mental health remains limited (Rowe, Holton & Fisher, 2013).

Partners may experience birth trauma differently as they experience the traumatic birth vicariously as an observer. However, research exploring partners' lived experience of birth trauma and how their symptoms may vary compared to mothers is limited. The results of the current study suggest differences in birth trauma symptoms for mothers and partners, the most common being re-experiencing in mothers, and avoidance in partners, which is consistent with prior research (Creedy et al., 2000; Etheridge & Slade, 2017). This difference in the presentation of symptoms could distort the perceived prevalence of birth trauma in partners, as avoidance behaviours have less visible distress to identify, compared to re-experiencing symptoms.

Similarly, practitioners reported observing significantly more mothers with symptoms of negative changes in thoughts and mood compared to partners. This may be due to routine use of the Whooley questions and Edinburgh Postnatal Depression Scale with mothers in the UK (NICE, 2014), as the questions in these scales coincide with the PTSS category of negative alterations in thoughts and mood. Beyond observations of PTSS, practitioners indicated additional birth trauma symptoms of general mental health problems and fear of pregnancy and childbirth. This is consistent with evidence that birth trauma is often comorbid with depression (Ayers et al., 2016), anxiety (Dikmen-Yildiz, Ayers, & Phillips

2017), and fear of birth (Hofberg & Brockington, 2000). Whilst co-morbidity of mental health problems is commonplace, for some parents birth trauma may be not acknowledged because healthcare is focused on postnatal depression (Coates, de Visser & Ayers, 2015).

The postnatal period can already be an inherently stressful period (Ayers et al., 2019) and the way that birth trauma is experienced by parents may be different to PTSS or PTSD at other times in life (Ayers, Joseph, Mc-Kenzie-McHarg, Slade, & Wijma, 2008). The current study indicates that birth trauma has the potential to create further stress on parents due to a negative impact on the couple relationship. Practitioners' observed common impacts on the couple relationships of lack of intimacy; reduced communication; lack of understanding; and strain on the relationship. Though it is well documented that the general transition to parenthood can affect the couple relationship (Delicate et al., 2018b), the impact due to birth trauma appears to be more negative and acute (Delicate et al., 2018a).

Understanding more about how birth trauma presents in mothers, partners, and affects the couple relationship could lead to better assessment for birth trauma. Furthermore, many healthcare practitioners are well placed to raise awareness of birth trauma in parents and reduce stigma around disclosing mental health problems. Once birth trauma is identified, more needs to be done to ensure that parents have the necessary support to reduce the resulting effect of birth trauma. Healthcare services need to provide effective referral pathways (NHS, 2018) that enable evidenced based (Lapp et al., 2010), personalised support, for mothers, partners, and the couple relationship.

Limitations of the current study need to be acknowledged, not least the use of a self-selected sample. Likewise, the sample size and demographics are not representative of the range of practitioners supporting postnatal parents. The survey used unvalidated questions which were developed by the authors to investigate the study aims. The birth trauma symptoms that practitioners were asked to report on were based on symptoms listed in the

diagnostic criteria for PTSD, which may not have fully encompassed birth trauma symptomology. Survey responses are based on practitioners' observations, not clinical diagnoses, and are therefore not indicative of prevalence. Similarly, practitioners were providing generalised responses based on a range of experiences with parents, so results are an approximate benchmark which may have been affected by recall bias.

The current study is unique in combining insight from healthcare professions and third sector practitioners working with parents in the postnatal period. Whilst exploratory, findings add to a limited body of evidence of practitioners' perceptions of birth trauma and impact on parents. The study highlights that both mothers and partners are observed experiencing birth trauma and that their manifestation of symptoms may differ. The main implications of the study are that support for birth trauma could be enhanced through effective assessment, and the development of evidence-based support services to address current disparities in provision.

Supplementary Material

The questions used in the survey are available as supplementary material online at [INSERT URL].

References

- Alcorn, K. L., O'Donovan, A., Patrick, J. C., Creedy, D., & Devilly, G. J. (2010). A prospective longitudinal study of the prevalence of post-traumatic stress disorder resulting from childbirth events. *Psychological Medicine*, 40(11), 1849-1859.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*, 5th ed. Arlington, VA: American Psychiatric Publishing.
- Ayers, S., Bond, R., Bertullies, S., & Wijma, K. (2016). The aetiology of post-traumatic stress following childbirth: a meta-analysis and theoretical framework. *Psychological Medicine*, 46, 1121–1134.
- Ayers, S., Crawley, R., Webb, R., Button, S., Thornton, A., Smith, H.,... Gyte, G. (2019). What are women stressed about after birth? *Birth*, 46(4), 678-685.
- Ayers S., & Delicate A. (2016). *Perinatal Mental Health*. Available at: http://openaccess.city.ac.uk/17201/1/Ayers_Delicate_perinatalmentalhealth_Perspective_s_final%2520V2.pdf (Accessed: 15 January 2019).
- Ayers S., Joseph S., McKenzie-McHarg K., Slade P., & Wijma, K. (2008). Post-traumatic stress disorder following childbirth: current issues and recommendations for future research. *Journal of Psychosomatic Obstetrics and Gynecology*, 29(4), 240–250.
- Ayers, S., & Shakespeare, J. (2015). Should perinatal mental health be everyone's business? *Primary Health Care Research & Development*, 16(4), 323-325.
- Ayers, S., Wright, D.B., & Thornton, A., (2018). Development of a measure of postpartum PTSD: the city birth trauma scale. *Frontiers in Psychiatry*, 9, 409.
- Ayers, S., Wright, D.B., & Wells, N. (2007). Symptoms of post-traumatic stress disorder in couples after birth: association with the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, 25, 40–50.

- Baldwin, S., Malone, M., Sandall, J., & Bick, D. (2018). Mental health and wellbeing during the transition to fatherhood: a systematic review of first time fathers' experiences. *JBIC Database of Systematic Reviews and Implementation Reports*, 16(11), 2118–2191.
- Bayliss-Pratt, L. (2015). *Caring for Women with Mental Health Problems Standards and Competency Framework for Specialist Maternal Mental Health Midwives*. Available at: <https://www.rcm.org.uk/media/2340/caring-for-women-with-mental-health-difficulties.pdf> (Accessed: 6 December 2019).
- Boorman, R.J., Devilly, G.J., Gamble, J., Creedy, D.K., & Fenwick, J. (2014). Childbirth and criteria for traumatic events. *Midwifery*, 30, 255–261.
- Bradley, R., Slade, P., & Leviston, A. (2008). Low rates of PTSD in men attending childbirth: a preliminary study. *British Journal of Clinical Psychology*, 47, 295–302.
- Burgess, A. & Goldman, R. (2018). *Who's the Bloke in the Room? Fathers During Pregnancy and at the Birth in the UK*. Available from: <http://www.fatherhoodinstitute.org/wp-content/uploads/2017/12/Whos-the-Bloke-in-the-Room-Full-Report.pdf> (Accessed: 6 December 2019).
- Byrne, V., Egan, J., Mac Neela, P. & Sarma, K. (2017). What about me? The loss of self through the experience of traumatic childbirth. *Midwifery*, 51, 1–11.
- Coates, R., Ayers, S., & de Visser, R. (2014). Women's experiences of postnatal distress: a qualitative study. *BMC Pregnancy and Childbirth*, 14, 359.
- Coates, R., de Visser, R., & Ayers, S. (2015). Not identifying with postnatal depression: a qualitative study of women's postnatal symptoms of distress and need for support. *Journal of Psychosomatic Obstetrics & Gynecology*, 36(3), 114-121.
- Coleman, L. & Glenn, F. (2009). *When Couples Part: Understanding the Consequences for Adults and Children*. Available from: <https://www.nuffieldfoundation.org/sites/default/files/when%20couples%20part%20exe>

- cutive_summary.pdf (Accessed: 15 January 2018).
- Creedy, D.K., Shochet, I.M. & Horsfall, J. (2000). Childbirth and the development of acute trauma symptoms: incidence and contributing factors. *Birth*, 27, 104-111.
- Dekel, S., Stuebe, C. & Dishy, G. (2017). Childbirth induced posttraumatic stress syndrome: a systematic review of prevalence and risk factors. *Frontiers in Psychology*, 8, 1–10.
- Delicate, A., Ayers, S., Easter, A. & McMullen, S. (2018a). The impact of childbirth-related post-traumatic stress on a couple's relationship: a systematic review and meta-synthesis. *Journal of Reproductive and Infant Psychology*, 36(1), 102–115.
- Delicate, A., Ayers, S. & McMullen, S. (2018b). A systematic review and meta-synthesis of the impact of becoming parents on the couple relationship. *Midwifery*, 61, 88–96.
- Delicate, A., Ayers, S. & McMullen, S. (under review) Health care practitioners' views of the support parents require for birth trauma: current practice and potential improvements
- Dikmen-Yildiz, P., Ayers, S., & Phillips, L. (2017). Depression, anxiety, PTSD and comorbidity in perinatal women in turkey: A longitudinal population-based study. *Midwifery*, 55, 29-37
- Elmir, R. & Schmied, V. (2015). A meta-ethnographic synthesis of fathers' experiences of complicated births that are potentially traumatic. *Midwifery*, 32, 66–74.
- Elmir, R., Schmied, V., Wilkes, L., & Jackson, D. (2010). Women's perceptions and experiences of a traumatic birth: a meta-ethnography. *Journal of Advanced Nursing*, 66(10), 2142-2153.
- Etheridge, J. & Slade, P. (2017). "Nothing's actually happened to me.": the experiences of fathers who found childbirth traumatic. *BMC Pregnancy and Childbirth*, 17(1), 80.
- Figueiredo, B., Canário, C., Tendais, I., Pinto, T.M., Kenny, D.A. & Field, T. (2018). Couples' relationship affects mothers' and fathers' anxiety and depression trajectories over the transition to parenthood. *Journal of Affective Disorders*, 238, 204–212.

- Figueiredo, B., Field, T., Diego, M. & Hernandez-Reif, M. (2008). Partner relationships during the transition to parenthood. *Journal of Reproductive and Infant Psychology*, 26(2), 99–107.
- Finger, B., Hans, S.L., Bernstein, V.J. & Cox, S.M. (2009). Parent relationship quality and infant-mother attachment. *Attachment and Human Development*, 11(3), 285-306.
- Garthus-Niegel, S., Horsch, A., Handtke, E., von Soest, T., Ayers, S., Weidner, K. & Eberhard-Gran, M. (2018). The impact of postpartum posttraumatic stress and depression symptoms on couples' relationship satisfaction: a population-based prospective study. *Frontiers in Psychology*, 9, 1–10.
- Handelzalts, J.E., Hairston, I.S. & Matatyahu, A. (2018). Construct validity and psychometric properties of the hebrew version of the city birth trauma scale. *Frontiers in Psychology*, 9, 1726.
- Hinton, L., Locoock, L. & Knight, M. (2014). Partner experiences of “near-miss” events in pregnancy and childbirth in the uk: a qualitative study. *PLoS One*, 9(4), 91735.
- Hofberg, K., & Brockington, I. (2000). Tokophobia: an unreasoning dread of childbirth: a series of 26 cases. *The British Journal of Psychiatry*, 176(1), 83-85.
- Inglis, C., Sharman, R. & Reed, R. (2016). Paternal mental health following perceived traumatic childbirth. *Midwifery*, 41, 125–131.
- Lapp L, Agbokou C, Peretti C & Ferreri F (2010). Management of post traumatic stress disorder after childbirth: a review. *Journal of Psychosomatic Obstetrics & Gynecology* 31, (3), 113-122.
- McCarter, D., & MacLeod, C. E. (2019). What do women want? Looking beyond patient satisfaction. *Nursing for Women's Health*, 23(6), 478-484.
- McLeish, J. & Redshaw, M. (2017). Mothers' accounts of the impact on emotional wellbeing of organised peer support in pregnancy and early parenthood: a qualitative study. *BMC*

- Pregnancy and Childbirth*, 17, 28-31.
- NCT. (2017). *The Hidden Half: bringing postnatal mental illness out of hiding*. Accessed at: www.nct.org.uk/hiddenhalf (Available from: https://www.nct.org.uk/sites/default/files/2019-04/NCT%20The%20Hidden%20Half_0.pdf (Accessed: 15 January 2018)).
- NHS. (2014). *Five Year Forward View*. Available from: <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> (Accessed 15 January 2018).
- NHS. (2018) *The perinatal mental health care pathways*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2018/05/perinatal-mentalhealth-care-pathway.pdf> (Accessed: 21 November 2019).
- NICE. (2014). *Antenatal and Postnatal Mental Health: Clinical Management and Service Guidance Clinical Guideline [CG192]*. Available from: <https://www.nice.org.uk/guidance/cg192> (Accessed: 15 January 2018).
- NICE. (2015). *Identifying and Assessing Mental Health Problems in Pregnancy and the Postnatal Period*. Available from: <https://pathways.nice.org.uk/pathways/antenatal-and-postnatal-mental-health/identifying-and-assessing-mental-health-problems-in-pregnancy-and-the-postnatal-period> (Accessed: 15 January 2018).
- Nilvér, H., Begley, C., & Berg, M. (2017). Measuring women's childbirth experiences: a systematic review for identification and analysis of validated instruments. *BMC Pregnancy and Childbirth*, 17(1), 203.
- Noonan, M., Galvin, R., Doody, O. & Jomeen, J. (2017). A qualitative meta-synthesis: public health nurses role in the identification and management of perinatal mental health problems. *Journal of Advanced Nursing*, 73(3), 545–557.
- Noonan, M., Jomeen, J., Galvin, R. & Doody, O. (2018). Survey of midwives' perinatal mental health knowledge, confidence, attitudes and learning needs. *Women and Birth*

31(6), 358–366.

- Oates, M. (2015). *Perinatal Mental Health Services: Recommendations for the Provision of Services for Childbearing Women, College Report [CR197]*. Available from: https://www.rpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/college-reports/college-report-cr197.pdf?sfvrsn=57766e79_2 (Accessed: 15 January 2018).
- Proulx, C.M., Helms, H.M. & Buehler, C. (2007). Marital quality and personal well-being: a meta-analysis. *Journal of Marriage and Family*, 69(3), 576–593.
- Robles, T.F., Slatcher, R.B., Trombello, J.M. & McGinn, M.M. (2014). Marital quality and health: a meta-analytic review. *Psychological Bulletin*, 140(1), 140–187.
- Rowe, H. J., Holton, S., & Fisher, J. R. (2013). Postpartum emotional support: a qualitative study of women's and men's anticipated needs and preferred sources. *Australian Journal of Primary Health*, 19(1), 46-52.
- Simkin, P. (2011). Pain, suffering, and trauma in labor and prevention of subsequent posttraumatic stress disorder. *Journal of Perinatal Education*. 20(3), 166–76.
- Simpson, M., Schmied, V., Dickson, C. & Dahlen, H.G. (2018). Postnatal post-traumatic stress: an integrative review. *Women and Birth*, 31(5), 367–379.
- Slade, P. (2006). Towards a conceptual framework for understanding post-traumatic stress symptoms following childbirth and implications for further research. *Journal of Psychosomatic Obstetrics & Gynecology*, 27(2), 99–105.
- Soet, J.E., Brack, G.A. & Di Iorio, C. (2003). Prevalence and predictors of women's experience of psychological trauma during childbirth. *Birth*, 30, 36–46.
- Sroufe, L.A. (2005). A prospective, longitudinal study from birth to adulthood. *Attachment and Human Development*, 7(4), 349–367.
- Stramrood, C.A., Huis in 't Veld, E.M., Van Pampus, M.G., Berger, L.W., Vingerhoets, A.J.,

- Schultz, W.C.W...Paarlberg, K.M. (2010). Measuring posttraumatic stress following childbirth: a critical evaluation of instruments. *Journal of Psychosomatic Obstetrics & Gynecology*, 31(1), 40-49.
- Thurman, S.E. & Allen, P.J. (2008). Integrating lactation consultants into primary health care services: are lactation consultants affecting breastfeeding success? *Pediatric Nursing*, 34(5), 419–425.
- Viveiros, C., & Darling, E. (2019) Perceptions of barriers to accessing perinatal mental health care in midwifery: a scoping review. *Midwifery*. 70, 106–118.
- Wong, M.S., Mangelsdorf, S.C., Brown, G.L., Neff, C. & Schoppe-Sullivan, S.J. (2009). Parental beliefs, infant temperament, and marital quality: associations with infant-mother and infant-father attachment. *Journal of Family Psychology*, 23(6), 828–838.
- Yildiz, P.D., Ayers, S. & Phillips, L. (2017). The prevalence of posttraumatic stress disorder in pregnancy and after birth: a systematic review and meta-analysis. *Journal of Affective Disorders*, 208, 634-645.

Table 1. Survey Sample (N = 202)

Practitioner Role	n (%)
Breastfeeding Counsellor	2 (1.0)
Community Midwife	66 (32.7)
Community Nurse	4 (2.0)
Doula	24 (11.9)
Family Support Worker	2 (1.0)
General Practitioner	7 (3.5)
Health Visitor	44 (21.8)
Maternity Care Assistant	2 (1.0)
Parent Educator	41 (20.3)
Peer Supporter	1 (0.5)
Psychological Counsellor/Therapist	9 (4.5)

Length of Qualification	n (%)
Student	20 (9.9)
0-4 Years	56 (27.7)
5-9 Years	49 (24.3)
10-14 Years	31 (15.3)
15-19 Years	20 (9.9)
20 + Years	26 (12.9)

Table 2. Observed Personal Symptoms of Birth Trauma (N = 116)

	Mothers	Partners	χ^2	p
	n (%)	n (%)		
Reexperiencing Symptoms	101 (87.1)	48 (41.4)	1.54	.215
Avoidance Symptoms	73 (62.9)	59 (50.9)	.19	.664
Negative Changes in Thoughts and Feelings	79 (68.1)	31 (26.7)	4.84	.028
Arousal and Reactivity Symptoms	66 (56.9)	51 (44.0)	3.54	.060

Table 3. Perceived Impact of Birth Trauma on the Couple Relationship (N=111)

	Mean (SD) ^a
Increased Conflict	2.46 (0.96)
Increased Negative Emotions	3.12 (1.00)
Lack of Intimacy	3.31 (1.17)
Lack of Understanding	3.18 (0.99)
Lack of Support	2.86 (0.98)
Reduced Communication	3.17 (0.96)
Relationship Breakdown	2.16 (0.85)
Strain on Relationship	3.12 (0.99)
Strengthening of Relationship	2.14 (0.86)

^a Response scale ranged from 1 *not at all* to 5 *a great deal*