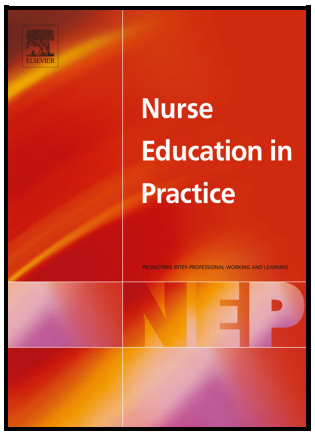
Factors that influence father's experiences of childbirth and their implications upon postnatal mental health: a narrative systematic review



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Factors that influence father's experiences of childbirth and their implications upon postnatal mental health: a narrative systematic review

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Abstract

Aim: To explore factors that influence fathers' experiences of childbirth and implications for their subsequent postnatal mental health.

Background: Fathers who attend the birth of their baby often have very rewarding experiences. However, those who witness a difficult birth may progress to develop subsequent mental health problems, e.g., trauma symptoms that can affect future relationships with partner and infant.

Method: A narrative systematic review of literature was carried out. Two overarching themes were identified, each with 3 underpinning sub-themes: (1) Interpersonal relationships with maternity care professionals; (1b) Communication; (1b) Feeling isolated during labour; (1c) Being prepared; (2) The aftermath; (2a) Support provision; (2b) Effects on relationships; (2c) Psychological trauma.

Conclusions: Findings emphasise that good communication between fathers and midwives is a fundamental part of providing excellent care before, during and post-childbirth, as it can reduce partners' feelings of isolation, improve their relationships and limit development and impact of psychological trauma.

Recommendations for practice: It is important to develop more on-line partner sites, parenthood education programmes and support groups, which include education about how to prevent, recognise, support and treat mental health complications. Also, further in-depth qualitative studies would enhance understanding of specific aspects of labour that traumatise fathers.

Keywords: BSS-R, experience(s), childbirth, father(s), mental health, partner, review, trauma

Introduction

Ten percent of women in developed countries develop significant mental health problems during and post-pregnancy, with levels reported to be even higher in developing countries (WHO, 2009). Also, the recent United Kingdom (UK) MBRRACE report (Knight et al., 2020) accounts that the number of maternal deaths by suicide has increased (Knight et al., 2019). Negative perceptions of care provided during childbirth compared with what was expected, can precipitate development of psychological trauma (Verrecault et al., 2012), with key factors in process including loss of autonomy, feeling disrespected and objectified

(Rodriguez-Almagro et al., 2019). Together these dynamics can progress towards developing Post-Traumatic-Stress-Disorder (PTSD) (Patterson et al., 2019 a&b).

Acknowledging the escalating interest in mental health consequences for mothers, the effects of childbearing on fathers has received relatively little attention, with 4 reviews identified as focusing on this topic (Elmir and Schmied, 2016; Philpott, 2019; Paulson and Bazemore, 2010; Bradley and Slade, 2011).

First, a systematic review of 32 studies by Philpott et al. (2019) indicates that many fathers experience raised anxiety during the perinatal period (Philpott, 2019). In the Philpott (2019) review, anxiety prevalence ranged from 3.4-25.0% in the prenatal period and from 2.4-51.0% in the postnatal period. Causal factors included low level of education, low income, poor co-parenting support, decreased social backing, conflict at work and/or home, partner' anxiety and depression and being present at a prior birth. Experiencing anxiety also has an impact on fathers' mental wellbeing, physical health, social relationships and ability to parent. Within the given context, anxiety was identified to activate stress, depression, tiredness and reduce parenting self-efficacy (Philpott, 2019).

The second review that addressed fathers developing mental health complications post-childbirth was carried out by Paulson and Bazemore (2010), who described point estimates and variability in rates of paternal prenatal and postpartum depression over time and their association with maternal depression. The Paulson and Bazemore (2010) meta-analysis of (n=28,004) participants consisted of 43-studies that found prenatal postpartum depression prevalent in 10% men, which was relatively higher 3-6-month postpartum. Paternal depression was also found to have a moderate positive correlation with maternal depression.

The third review by Bradley and Slade (2011) explored range, prevalence and predictors of fathers' mental health problems in the first-year post-childbirth, with their own parents parenting style, personalities of both father and partner, birth satisfaction, demographics, quality of relationships and perceptions of infant identified as causal factors. Bradley and Slade (2011) identified depression, anxiety, Obsessive-Compulsive-Disorder (OCD), PTSD, bipolar condition and psychosis as combined mental health issues. Fathers' symptoms of postnatal depression were found to effect interaction with baby, partner and other children. In addition, men who attended the birth were more likely to experience disturbing visions and thoughts, especially if they felt pressurised to be present or perceived themselves as being unsupportive (Bradley and Slade, 2011).

When threatening complications occur during labour, fathers risk experiencing psychological trauma. Vallin et al. (2019) conducted a systematic review that focused on describing expectant fathers' experiences of complications during childbirth, which included 10-qualitative studies. The synthesis generated 3 overall themes: (1) Medical professional-father communication, (2) An emotional journey and (3) The physical environment. Vallin et al. (2019) concluded that when unpredictable complications arise during childbirth, maternity care professionals require to step-up support to prevent fathers developing responsive mental health problems, developing feelings of exclusion and experiencing low birth satisfaction.

The fourth review by Elmir and Schmied (2016) reviewed 8 qualitative studies involving (n=100) participants and explored the extent that witnessing birth complications or obstetric emergencies affected fathers' mental health. Four themes were identified: (1) The unfolding crisis, (2) Stripped of my role: powerless and helpless, (3) Craving information and (4) Scarring the relationship. Some fathers described the fear and anxiety they experienced, accompanied by feelings of worthlessness and inadequacy. Others stated that they received

insufficient information about unfolding events, which subsequently affected relationships with partners.

Since parents' encounters of childbirth differ, it is important to also consider fathers' experiences (Belanger-Levesque, 2017). Men's presence during childbirth has been linked to becoming an emotionally engaged and mature father (Johansson et al., 2012), with being informed an important part of enabling feelings of safety and inclusion (Johansson et al., 2015). It is important to note that first-time fathers' experiences of labour may differ with experience, with professionals requiring to respond to individualised needs (van Vulpen et al., 2021). What is clear, is that woman more-often value partner support during labour (Dellman, 2004), with preparation important because an anxious father can intensify stress which slows labour (Wockel et al., 2007). Keogh et al. (2006) identified that women's pain experience is strongly linked with fear, which can be mediated with good partner support (Wockel et al., 2007). Hence, there is value in teaching stress management strategies to fathers, with those that are well-prepared more likely to positively participate and improve birth satisfaction (Diemer, 1997).

With implementation of Best Start in Scotland (UK)(SG, 2017), there is a clear mandate for change in the way that pregnancy, childbirth and postnatal care are delivered, which includes partner and family in care provision. Best Start (SG, 2017) encourages fathers to play an active part in labour, with their attendance at the birth increasing over the decades in westernised countries and now regarded as normal. In addition, the World Health Organisation (WHO, 2015) recommends active participation of fathers during the perinatal period, anticipating that their presence will improve attendance rates at clinics and reporting of problems. Developing such objectives could work towards reducing maternal morbidity and mortality figures. Acknowledging that fathers play a crucial role in supporting mothers during the postnatal period and recognising that poor mental health effects short- and long-

term behaviours and relationships (Nicholls and Ayers, 2007), it is important that midwives, obstetricians, doctors and Health Care Professionals (HCPs) evaluate experiences and effects of childbirth on fathers' mental health. Hence, the aim of the current study was to explore factors that influence father's experiences of childbirth and implications for their subsequent postnatal mental health.

Method

A narrative systematic review of literature was carried out, which aimed to uncover existing research studies that have focused on factors that influence father's experiences and perceptions of childbirth and implications for their postnatal mental health.

Search Strategy

Studies were selected from CINAHL, MedRxiv, PsychInfo and PubMed databases. Keywords included 'father's', 'experiences', 'childbirth', with each annotated with a*, which allowed for the inclusion of closely related terms and relevant words. The following inclusion and exclusion criteria were applied

Inclusion criteria:

- Studies published between 2011-2021. This window uncovered research that was carried out over the past decade, which has been contextualized by modern evidence that guides maternity care professionals to provide family centred care (e.g., SG, 2017). Also, the quantified dates allowed the search to be repeated by a second reviewer.
- Published in English.
- Full-text available.
- Original research or secondary analysis of primary research papers.
- Research that focused on fathers' experiences and perceptions of childbirth.

Exclusion criteria

- Literature reviews, books or book chapters and research reviews.
- Studies that relate to experiences and perceptions of childbirth in a different population, e.g., from the care provider's or woman's perspective.
- Birth partners with alternative gender identities.

Paper selection

Thirty-eight papers were identified, and duplicates removed, which resulted in a final 6 research studies to be screened. Process of paper elimination followed the structure set out in the PRISMA guidelines for systematic reviews (Page et al., 2020) (*Figure 1*).

The final 6 studies identified all used qualitative research methods (Howarth et al., 2019; Etheridge and Slade, 2017; Daniels et al., 2020; Inglis et al., 2016; Hinton et al., 2014; Elmir and Schmied, 2021), with 2 containing a quantitative element that used psychometric scales (Howarth et al., 2019; Etheridge and Slade, 2017)(*Table 1*).

Assessment of methodological quality

The first author appraised quality of the final 6 primary studies using the *Critical Appraisal Skill Programme* (CASP, 2018) tool. The CASP checklist consists of 10-aspects for attention when considering quality of each of the primary qualitative studies. These 10-items were used to evaluate research aims; methodology; design; strategy; data-collection; researcher-participant relationship; ethical issues; data-analysis; findings; and research value. All 6 papers were considered high-quality (Scored 9-10); (Q1) included a clear statement of aim(s), (Q2) used appropriate qualitative research methodology, (Q3) addressed aim(s) of research, (Q6) duly considered relationship between researcher and participants, (Q8) were sufficiently rigorous in data-analysis, (Q9) clearly stated findings and (Q10) were considered valuable studies within the body of evidence. Four out of 6-studies (Q4) used appropriate recruitment

strategies and (Q5) collected data that addressed the research issue. Five out of 6-studies (Q7) considered ethical issues (*Table 2*).

Narrative synthesis

Contents of the 6-papers were organised into themes according to patterns of shared meaning, underpinned by a search for factors that influence father's experiences of childbirth and effects on their postnatal mental health. To extract data, a thematic synthesis approach was followed (Thomas and Harden, 2008), which permitted analytic themes to be clearly identified. Author one manually coded text from the 'findings' line-by-line and matched circumstances. The codes identified were then analysed to categorise patterns, which were then categorised into 2-themes and 6-sub-themes. This process permitted generation of conceptual ideas that progressed thinking about data in the original reportings. The first author organised themes and sub-themes, which were separately validated by the second author.

Findings

The following 2 themes and 6 sub-themes were identified in the literature, with papers from which they emerged also indicated (*Table 3*).

Theme 1: Interpersonal relationships with maternity care professionals

All 6 papers discussed how communication played an integral part in how fathers perceived and experienced childbirth. In this context, having good interpersonal relationships involved the midwife transferring information to the woman and her partner, listening, being honest, displaying positive non-verbal communication and attempting to reduce stress. To make further sense of this first key theme, the data were further sub-divided into 3 sub-themes

called: (1a) *Communication;* (1b) *Feeling isolated during labour; and* (1c) *Being unprepared.*

Subtheme (1a): Communication

All six papers identified that lack of communication directly affected fathers' negative experiences of labour and childbirth. Specifically, fathers' experiences of childbirth was affected by how maternity care experts communicated with them, with good communication positively promoting positive experiences (Elmir and Schmied, 2021; Etheridge and Slade, 2017; Hinton et al., 2014) and bad communication enhancing negative evaluations (Elmir and Schmied, 2021; Howarth et al., 2019; Etheridge and Slade, 2017; Hinton et al., 2014). Inadequate communication was primarily discussed in relation to care received from obstetricians, with father's feeling that dialogues between them heightened their fear and anxiety. During these interactions, some fathers perceived that decision-making was removed from the couple's domain, which the following quote illustrates:

> *Once the specialists took over, my partner and I were not included in any decisions (Howarth et al., 2019, p.936).*

This quote exemplifies the technocratic model of care, where medicalisation of childbirth overrides physiological birth processes. Davis-Floyd (2001) states that doctors often avoid emotional involvement with those they care for, which can elicit anger and fear responses during labour.

Subtheme (1b): Feeling isolated during labour

All six papers discussed fathers' feelings of isolation during labour. Some fathers reported having an unpleasant midwife during their birth experience (Etheridge and Slade, 2017), which was underpinned by feeling ignored and not being listened to. This finding runs

parallel with Khresheh et al. (2019), who found that when women experienced lack of empathy and respect, they also felt ignored and scared. It should be noted that these results cannot be generalised, as they may only be indicative of care provided in specific hospitals or by certain people. In contrast, positive interactions with midwives, doctors, obstetricians and allied HCP's created reports of a higher quality birth experience, with continuity of midwifery care valued (Elmir and Schmied, 2021; Daniels et al, 2021; Howarth et al., 2019), which is a finding in keeping with a Cochrane review of women's experiences of *Continuity of Carer* (CoC) by Sandall et al. (2016). Also, having a good rapport with the midwife increased fathers' feelings of being in control (Etheridge and Slade, 2017; Elmir and Schmied, 2021).

Subtheme (1c): Being unprepared

Five of the 6 papers discussed effects of being unprepared to experience childbirth, with some fathers reporting that they felt ill-prepared when information conveyed to them focused only on normal childbirth. In response, when deviations actually occurred during labour and childbirth some fathers felt helpless, with the following quote emphasising this point:

> *Antenatal classes are too positive and preparation for all eventualities was poor (Daniels et al., 2020, p.5).*

Hinton et al. (2014) and Etheridge and Slade (2017) identified that when fathers were given information about what was happening during childbirth and after, this had a positive effect on their experiences and reduced their levels of anxiety and fear. With similarity, a systematic review by Chang et al. (2018) explored effectiveness of interventions used to improve communication with labouring women, with quality experiences making a significant difference to birth satisfaction when experiencing complications (e.g., postpartum

haemorrhage). It is important to note that the Chang et al. (2018) review did not relate to fathers, with further studies required to evaluate interventions designed to improve communication across the childbearing spectrum and into the postnatal period.

Theme (2): The aftermath

All six papers discussed repercussions some fathers experienced post-childbirth, with this second overarching theme divided into 3 sub-themes, which include: (2a) *Support provision*; (2b) *Effects on relationships; and* (2c) *Psychological trauma.*

Theme (2a): Support provision

Four of the 6 papers discussed men receiving support post experiencing labour and childbirth (Daniels et al., 2020; Inglis et al., 2016; Hinton et al., 2014; Elmir and Schmied, 2021). The first observation included fathers being unable to ask for support for their mental health problems post-birth (Daniels et al., 2020; Elmir and Schmied, 2021; Hinton et al., 2014, Inglis et al., 2016).

Theme (2b): Effects on relationships

Three of the six papers discussed men struggling in their relationships with partners post-childbirth (Howarth et al., 2019; Etheridge and Slade, 2017; Daniels et al., 2020). In addition, some fathers' inability to ask for support when they are struggling with their mental health will complexify the situation, with evidence supporting that many men struggle to communicate openly in an effort to 'keep it together' (Daniels et al., 2020; Elmir and Schmied, 2021; Hinton et al., 2014, Inglis et al., 2016).

Theme (2c): Psychological trauma

All 6 papers discussed fathers developing psychological trauma post-labour and childbirth. Feelings of stress, anxiety and fear during labour, culminated in some fathers developing PTSD post-childbirth (Elmir and Schmied, 2021; Daniels et al., 2020; Howarth et al., 2019;

Etheridge & Shade, 2017; Hinton et al., 2014). Also, some fathers described difficulties in concentrating during tasks (Etheridge and Slade, 2017), reliving their experiences of childbirth (Elmir and Schmied, 2021; Etheridge and Slade, 2017; Inglis et al., 2016; Hinton et al., 2014) and actively avoiding potential future repetition of events, with some going to the extreme of having a vasectomy (Inglis et al., 2016). Hanley and Williams (2020 a&b) also found that some men experience poor mental health, which culminated in suicide attempts, repetitive flashbacks and subsequent difficulties with partner and infant relationships.

Discussion

The aim of this narrative systematic review was to explore factors that influence father's experiences of childbirth and subsequent effects on their postnatal mental health. In response to the findings (*Table 3*), it became clear that maternity care professionals (Theme 1) require to cultivate an inclusive birthing environment for both parents. For example, improving communication (Subtheme 1a) between maternity care providers and fathers could work towards reducing isolation experienced (Subtheme 1b). Also, in relation to (Subtheme 1c), whilst antenatal education prepares fathers for their role, studies report that some men perceive that they have received limited information and feel relegated to the periphery of care and overtly excluded (Chandler and Field., 1997; Fenwick et al., 2012; Vehviläinen-Julkunen and Liukkonen, 1998) (Subtheme 2a). Fenwick et al. (2012) also found that some men perceive themselves to be side-lined during labour and birth and in response experience feelings of isolation through being ignored by maternity care staff. Such Care Provider Interactions (CPIs) do not promote or build trust and reduce men's capacity to feel in control and actively play a part in decision-making (Ellberg et al., 2008; Fenwick et al., 2012). Experiences of this nature do little to assist men with supporting their partners and positively negotiate their transition to fatherhood (Fenwick et al., 2012). Given the limited research that has been carried out on the topic of men feeling isolated, further examination of men's

perceptions of midwives, obstetricians, doctors and allied HCPs and their reasons for attending during maternity care provision is clearly warranted.

In relation to fathers feeling unprepared for their role (Subtheme 1c) during childbirth, studies have shown that often they feel confused and experience receiving lack of information and support, which can adversely affect their mental health outcomes (Jouhki et al., 2015; Vallin, 2019; Singley and Edwards, 2015; Jarneid et al., 2020). As such, providing fathers with knowledge about childbirth increases their chance of having a more positive birth experience (Etheridge and Slade, 2017), with information, support and advice provided before, during and post-childbirth, facilitating them to feel more prepared, cared for and included. Providing birth preparation classes for 'birth partners' would help equip fathers with a role during labour and childbirth and develop their understanding about what to expect (Hollins Martin, 2008). To augment support provided to fathers' post-birth, professionals could also organise support groups and counselling to help the deal with the aftermath (Subtheme 2).

In addition to the importance of experiencing quality interpersonal interactions with maternity care staff, it is also important to consider subsequent effects of poor support (Subtheme 2b) and communication on relationships between couples' post-childbirth (Howarth et al., 2019; Etheridge and Slade, 2017; Daniels et al., 2020) (Subtheme 2b). Related to professional support provided, Barimani et al. (2017) identified that having unrealistic expectations, feeling stressed, losing control, being unprepared for actuality, lacking information about reality and insufficient professional support and information, can all have an impact on quality of transition to parenthood. What we know is that the meaning of transition is clarified and confirmed through interactions with people, which highlights the importance of developing trusting relationships with the maternity care professionals who provide guidance and confirm feelings (Meleis, 2000). Other factors shown to influence

future relationships between a couple are birth satisfaction and PTSD, both of which can result in a wide-range of negative consequences (Garthus-Niegel et al., 2018) (Subtheme 2c).

In addition, Mayers et al. (2020) investigated resources available to help fathers provide effective postnatal support to childbearing women, with limited information available about their own mental health. Hodgson et al. (2021) also states that postnatal needs of fathers are not currently being met by the UK NHS, with such provision working towards reducing subsequent mental health problems like PTSD. Also, when father's do seek out help, they often will find little information or support available in the UK. One exception is NHS South London and Maudsley (2021), who have introduced a *Good Practice Guide* that addresses perinatal mental health and its effects on the whole family. This on-line facility includes guides that address fathers' mental health, advice for maternity care professionals and mental health screening information. Nonetheless, this *Good Practice Guide* omits to address fathers' negative experiences of childbirth and their potential to cause mental health repercussions. Ertan et al. (2021) emphasises how experiencing a traumatic birth, along with limited support post-birth, can culminate in developing PTSD in both partners. These points regarding development of psychological trauma, also emphasise need to progress mental health pathways designed to prevent, identify and reduce subsequent mental health symptoms post-childbirth. In addition to telephone and web-based provision and to provide effective individualised care to fathers' post-childbirth, midwives and HCPs may also use validated psychometric instruments to identify their levels of birth satisfaction and psychological trauma. For example, the validated *Birth Satisfaction Scale-Revised* (*BSS-R*) (Hollins Martin and Martin, 2014) is a 10-item psychometric scale specifically designed to measure experiences of labour (https://www.bss-r.co.uk).

In relation to communication, there are two sides to the story: (1) Quality of provision of care and (2) quality of care experienced (Chang et al., 2018). Good communication

involves staff being sensitive, caring and kind (Down e et al., 2018), which includes talking and listening to women, practicing and encouraging effective non-verbal communication, being honest, availability of interpreters and providing empathy (Shakibazadeh, 2017). In contrast, bad communication involves staff being distant, insensitive and rude (Down e et al., 2018). In relation to fathers, methods require to be developed to prepare, monitor and sustain interventions that support effective communication.

In addition to a father having a bad birth experience, psychological trauma symptoms may arise. PTSD is a psychological disorder that results from experiencing a distressing and terrifying situation where the person feels they have no control (Hanley & Williams, 2020). In relation to trauma, the DSM-IV (APA, 2013) classifies PTSD symptoms into four categories: (1) reliving the event (through flashbacks or nightmares), (2) avoidance of triggers (places, people, activities) that relate to the event (in this case childbirth), (3) intrusive thoughts or feelings and (4) reactive symptoms (anger, insomnia). Symptoms of PTSD or Complex-PTSD (CPTSD) can be assessed using the *International Trauma Questionnaire* (ITQ) (Cloitre et al., 2019) in accordance with ICD-11 symptoms (WHO, 2018). Acknowledging that mental health symptoms can be seriously debilitating, it is important that maternity care professionals are trained to recognise, assess and make appropriate referral when trauma symptoms become evident (Bromley et al., 2017).

Limitations

There are some limitations relevant to this narrative systematic review. First, fathers' experiences of labour and childbirth were reviewed without differentiating between first and second-time prior experience. Second, it is important to consider that not all families constitute a mother-father dyad, with the selection criteria in this review excluding birth partners with alternative gender identities. A third limitation is that the findings have only scratched the surface of factors that can influence father's experiences of labour and

childbirth and their consequences on potential postnatal mental health, with clearly further research required.

Conclusion

This narrative systematic review offers some insight into research that has previously explored fathers' experiences of childbirth and subsequent effects on their mental health. Clearly, interpersonal relationships with maternity care professionals are important, with high-quality communication essential towards preventing fathers feeling isolated during labour and reduce their risk of developing subsequent related mental health problems. Education to prepare fathers for childbirth is important, along with providing guidance about how to detect potential development of psychological trauma and other mental health complications. Clearly more research is required to gain deeper understanding of fathers' needs, with in-depth qualitative analysis enhancing understanding of specific aspects of labour and childbirth that traumatise fathers. In addition, gathering of quantitative data using tools such as the BSS-R (Hollins Martin and Martin, 2014) and the ITQ (Cloitre et al., 2019) will reveal levels of birth satisfaction and psychological trauma fathers' experience post-childbirth. Clearly, it is important to develop, implement and measure effectiveness of interventions designed to prepare fathers for childbirth, improve communication during labour with maternity care professionals, provide support across the childbearing spectrum and ascertain barriers that limit access to appropriate support.

Ethical approval details

Not required

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Credit authorship contribution statement

Emma McNab: Conceptualization, review, formal analysis, methodology, writing of original draft.
Caroline J Hollins Martin: Writing and conceptualising drafts and idea, review validation, editing.
Gail Norris: Writing of drafts, review validation, editing.

Declaration of competing interest

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Figure 1: *Prisma Flow Diagram (Moher et al., 2009)*

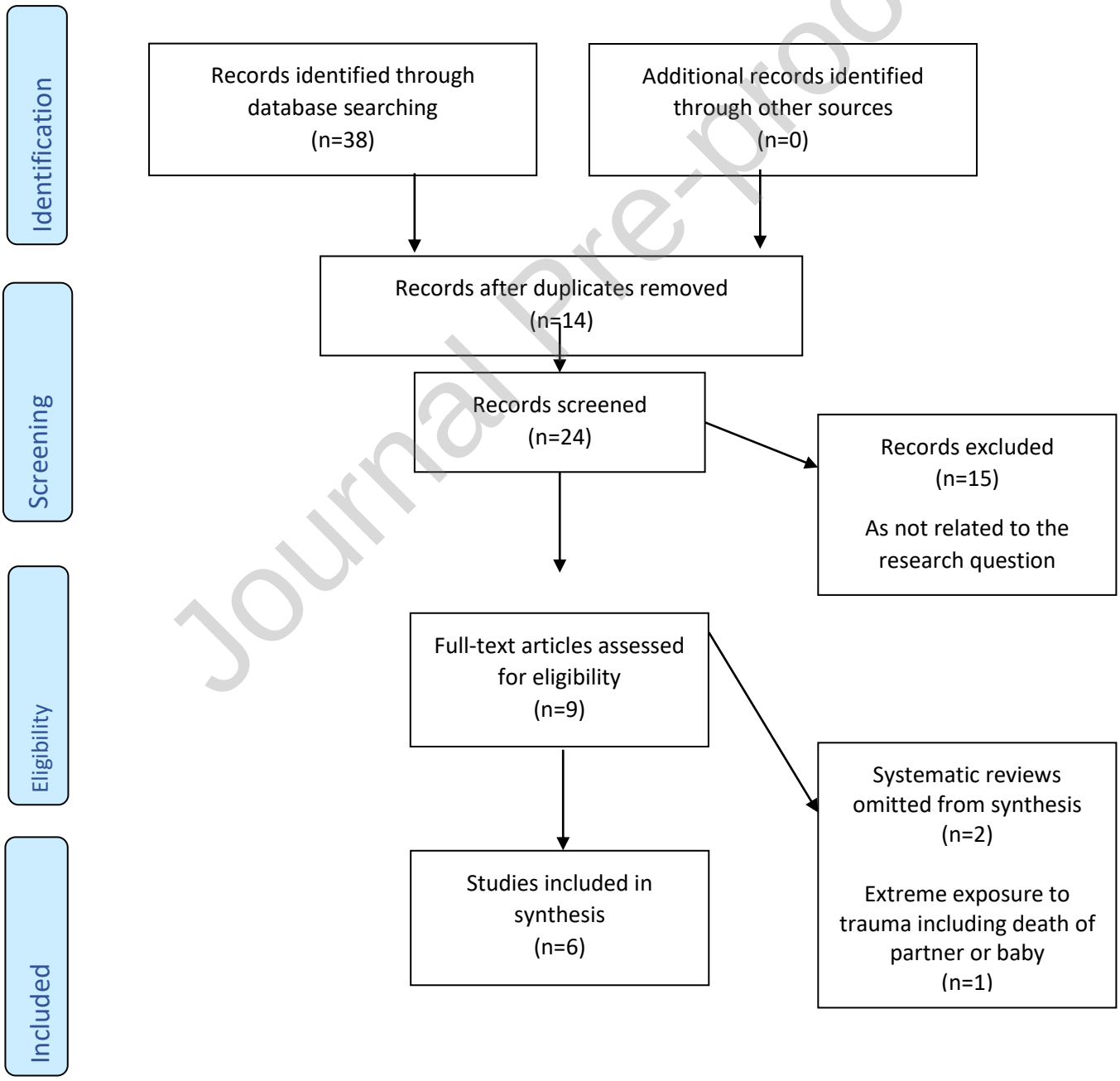

Table 1: Data Extraction Table

Author, Title, Country	Sample size and participant demographics	Aims	Study Design	Results and Emergent Themes	Recommendations
Howarth, A., Scott, K., Swain, N. (2019). First-time father's perception of their childbirth experiences. New Zealand	(n=155) first-time fathers recruited. Inclusion: 18 years and older. Couples that were living together and planning on raising the baby together. Being literate.	Provide more evidence about the role of first-time fathers and reflect on their birth experiences.	Mixed method study design, using Mackey Childbirth Satisfaction Rating Scale New Zealand Adaptation, with qualitative data retrieved in	• Safety of mum and baby. • Understanding their role in supporting during labour. • Mum's bodily autonomy and level of pain. • Care and communication	Father's experience during birth needs to be taken into consideration during labour. Helping fathers be more involved and included along with

			addition to this, expanding on rated answer. Phenomenological thematic analysis used to analyse qualitative data using IPA.	during the intrapartum period.	their partners'.
Etheridge, J., Slade, P. (2017). "Nothing's actually happened to me.": the experiences of fathers who found childbirth traumatic.	(n=11) fathers were recruited. Inclusion criteria, aged 16 and over, living in the UK. Witnessing partners' birth trauma. Exclusion	To investigate how men coped with these birth experiences and the impact it has	Mixed method in design, using questionnaires and semi-structured phone interviews. Template analysis	• Fear for partner and baby's life. • Trying to not show emotion, keeping it together. • Helplessness • Lack of	Current maternity care provision worsening levels of fathers' distress after birth. There needs to be

United Kingdom	criteria: death of partner or baby, or baby spending more than 7 days in Neonatal unit.	had on their lives and what they felt would have reduced the distress experienced.	used to analyse interview data.	communication. Father's feeling that they focused on the traumatic event but unable to deal with how they felt, therefore beginning to avoid the event to try and cope.	increased awareness of fathers in the labour room, ensuring that fathers are involved validating their emotional responses as well as the women they look after.
Daniels, E., Arden-Close, E., Mayers, A. (2020). Be quiet and man up: a qualitative questionnaire study into fathers who witnessed their	(n=61) fathers were recruited. Eligibility criteria for participants; fathers aged 18 and over, living in the UK, having	Explore fathers' experiences witnessing traumatic birth and how this has	Qualitative study design, using online questionnaires. Thematic analysis used to generate	3 themes emergent. • Father's understanding of the event. • Life after the trauma.	Training for staff involved with the intrapartum period to improve communication between themselves

Partner's birth trauma. United Kingdom	witnessed partner's traumatic birth (not involving loss of life)	impacted their mental wellbeing and what support received during and after the event.	results in the form of themes.	• Support received compared with what they wanted. Witnessing partners' birth trauma had an impact on them. Affecting their mental wellbeing and relationships.	and partners. Implementation of support system for partners after a traumatic birth. Improved focus on importance of partners in the postnatal period.
Inglis, C., Sharman, R., Reed, R. (2016). Paternal mental health following	(n=69) 7 participants involved with additional interviews.	Exploring experiences and perceptions of fathers	Qualitative study design. Using online qualitative questionnaire, followed by semi-	• Lack of communication between staff and partners. • Sense of isolation,	Improving communication between staff and fathers during the intrapartum period.

perceived traumatic childbirth. Australia	84% married, 4.3% single, 4.3% divorced/separated. 78% no previous metal health issues. Varying methods of delivery experienced. 91.4% clinical environment.	after childbirth and impact on mental health after experiencing a perceived traumatic birth.	structured interviews. Thematic analysis undertaken to code verbal and written responses.	during and after the traumatic birth. Event having a negative effect on them and their relationship with their partner. Support available from friends and family.	Debrief after the perceived traumatic event.
Hinton, L., Locock, L., Knight, M. (2014). Partner Experiences of "Near Miss" Events in Pregnancy and	(n=46) 35 women, 10 male partners, 1 lesbian partner. 20 professionals,	Exploring the impact of a near miss obstetric emergency,	Qualitative study design, with an interpretive approach. Interviews, video and audio, using	• Powerlessness and exclusion. • Witnessing. • Support. • Contact with baby.	Effective communication about the situation being conveyed by relevant staff.

Childbirth in the UK: A qualitative Study. United Kingdom	skilled manual 13, unskilled 4, other 13.	primarily focusing on partners.	thematic analysis.	• Communication. Father's/partners recovery. Often recalling the event with vivid detail. Avoiding repeat situation-vasectomy. Very little support available what support there is, it is inadequate. Aftermath isolating from friends and family.	Support being available from staff and family. Increased awareness of paternal mental health, ability to refer to resources that will help such as counselling. Awareness that although mental health is suffering, partners unlikely to seek out help themselves.

Elmir, R., Schmied, V.A (2021) qualitative study of the impact of adverse birth experiences on fathers. Australia	(n=17) Fathers. Aged between 24-48 years old.	Explore the present and longer-term impact on witnessing a traumatic birth and how this affected their role as a father	Qualitative research design, using interpretation. Thematic synthesis used the interpret data collected. Semi-structured interviews conducted face to face, over the telephone or by email.	• Worst experience of their life. • Negotiating their place in the labour room. • Communication with the HCPs. • Growing together or falling apart. Being excluded from labour and birth contributed to feelings of worry and fear. Wanted to be involved and support partner but felt	Further study to be conducted with young, older, same sex fathers to evaluate the antenatal and perinatal support offered can mitigate feelings of distress and negativity towards birth.

				pushed aside. Importance of communication after with HCPs.	

Table 2: Quality appraisal of selected papers

	Howarth et al, 2019	Etheridge & Shade, 2017	Daniels et al, 2020	Inglis et al, 2016	Hinton et al, 2014	Elmir & Schmied 2020
Section A: Are the results Valid						
1. Was there a clear statement of aims of research?	Yes	Yes	Yes	Yes	Yes	Yes

2. Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes	Yes
3. Was the research design appropriate to address the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes
4. Was the recruitment strategy appropriate to the aims of the research?	?	Yes	Yes	Yes	?	Yes
5. Was the data collected in a way that addressed the research issue?	Yes	Yes	Yes	?	?	Yes
6. Has the relationship between researcher and participants been adequately considered?	Yes	Yes	Yes	Yes	Yes	Yes
Section B: What are the results?						
7. Have ethical issues been taken into consideration?	?	Yes	Yes	Yes	Yes	Yes
8. Was the data analysis sufficiently rigorous?	Yes	Yes	Yes	Yes	Yes	Yes
9. Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes	Yes

Section C: Will the results help locally?						
10. How valuable is the research?	Valuable	Valuable	Valuable	Valuable	Valuable	Valuable
Total out of 10 items (maximum 10 points available).	9	10	10	9.5	9	10

Table 3: Table detailing themes and subthemes and their emergence in papers

	Theme (1) Interpersonal relationships with maternity care professionals			**Theme (2)** The aftermath		
	Subtheme (1a)	**Subtheme (1b)**	**Subtheme (1c)**	**Subtheme**	**Subtheme**	**Subtheme (2c)**

Papers	Communication	Feeling isolated during labour	Being unprepared	**(2a)** Support provision	**(2b)** Effects on relationships	Psychological trauma
Howarth et al. (2019)	x	x	x		x	x
Etheridge & Shade (2017)	x	x	x		x	x
Hinton et al. (2014)	x	x		x		x
Daniels et al' (2020)	x	x	x	x	x	x
Inglis et al. (2016)	x	x	x	x		x
Elmir & Schmied (2021)	x	x	x	x		x