



The Experiences of Male Partners of Women with Postnatal Mental Health Problems: A Systematic Review and Thematic Synthesis

Beth Ruffell^{1,2} · Debbie M. Smith^{1,3} · Anja Wittkowski^{1,2}

Published online: 13 July 2019
© The Author(s) 2019

Abstract

Objectives This systematic review thematically synthesised qualitative research exploring men's experiences of their partner's postnatal mental health problems and their impact on men's emotional wellbeing, relationships and support needs. Maternal postnatal mental health problems impact women and their infants. Recognition of the role that men play in supporting women's recovery and infants' development is growing. However, less is known about how maternal postnatal mental health problems affect men and how they wish to be supported.

Methods A systematic review of the literature was conducted in January 2018 by searching five electronic databases (PsycINFO, EMBASE, MEDLINE, PubMed and Web of Science). Qualitative research studies published in English exploring men's experiences of having a partner with postnatal mental health problems were included. Twenty papers met the inclusion criteria and were appraised for methodological quality. Data were thematically synthesised.

Results In addition to nineteen subthemes, 5 main themes were identified: (1) Being a father, (2) Being a partner, (3) Experiencing negative emotions, (4) The ways in which men cope and (5) Where support is needed.

Conclusions Maternal postnatal mental health problems impacted men's roles of being a father and a partner and gave rise to negative emotions. Men coped with these experiences in a number of ways, which were both helped and hindered by personal, social and professional factors. Participants' coping methods were understood in relation to Coping Theory. Recommendations for perinatal mental health professionals included the need for increased public awareness of postnatal mental health.

Keywords Men · Spouses · Fathers · Support · Qualitative

Mental health problems during pregnancy and the first year postpartum are common among women (Howard et al. 2014). To date, research has focused primarily on the impact of postnatal mental health problems on women and their relationship with their baby and attachment (Reid et al.

2017). There is a growing recognition of the important role fathers play in women's mental health as well as in their infant's development, because the support given to women by their partner is positively correlated with the quality of the mother-child-relationship (Cummings and Watson O'Reilly 1997). Furthermore, fathers can buffer the effects of maternal depression on children (Edhborg et al. 2003) and compensate for negative impact through positive parental involvement (Hossain et al. 1994). Yet, fathers are under-represented in child development research (Phares et al. 2005). Transition to fatherhood, especially for first-time fathers, places psychosocial demands on the man and active paternal involvement is a key influence on the father's wellbeing (Genesconi and Tallandini 2009; Kowlessar et al. 2014). For example, Goodman (2008) stressed that there is a link between maternal postnatal mental health problems, such as postpartum depression, and the baby's father experiencing increased depression and stress.

✉ Anja Wittkowski
Anja.wittkowski@manchester.ac.uk

¹ Division of Psychology and Mental Health, School of Health Sciences, Faculty of Biology, Medicine and Health, Manchester Academic Health Science Centre, The University of Manchester, 2nd Floor Zochonis Building, Brunswick Street, Manchester M13 9PL, UK

² Greater Manchester Mental Health NHS Foundation Trust, Manchester, UK

³ School of Social and Health Sciences, Leeds Trinity University, Leeds, UK

Furthermore, these fathers then showed poorer interactions with their infants. Research suggests a moderate correlation between maternal and paternal depression during the postnatal period (Ballard et al. 1994; Dudley et al. 2001 Paulson and Blazemore 2010) and that the former predicts the latter (Areias et al. 1996). However, men are likely to be marginalised and excluded from services, which focus on women (Fletcher et al. 2006). Furthermore, the practices within perinatal services, such as information given and policies, can influence fathers' experiences and hinder father-child-interaction and attachment (de Montigny and Lacharite 2004; Greenhalgh et al. 2000). Women have also highlighted that the information given to their partners by perinatal mental health services is often insufficient (Heron et al. 2012; Robertson and Lyons 2003).

Mental health guidelines have cited the importance of supporting partners and family members, given the impact postnatal mental health problems have on the wider family system (NHS England 2016; NICE 2014). However, little is known about how men should be supported during this time. Therefore, there is a need to better understand the impact women's postnatal mental health problems have on male partners, and how they can be supported to improve outcomes for the woman, the development of the infant, and the wellbeing of the man.

To date no review has systematically synthesised the experiences of men whose partner had postnatal mental health problems. For this reason, the current review aimed at exploring this, with a focus on the impact on men's emotional wellbeing, relationships and support needs. In recognition of the marginalisation of men within perinatal healthcare, the current review focused specifically on the experiences of male partners.

Method

Search Strategy and Selection Criteria

A systematic search was conducted in January 2018, which adhered to PRISMA guidelines for systematic reviews and metasyntheses (Moher et al. 2015), and included all years to ensure maximum retrieval (see Fig. 1). Five databases were searched (PsycINFO, EMBASE, MEDLINE, PubMed and Web of Science). The following keywords were used: (men OR male OR man OR spouse or partner OR father OR paternal OR husband) AND (postpartum depression OR postpartum psychosis OR perinatal period OR perinatal mental health OR postpartum psychiatric disorders OR postnatal period OR postnatal depression OR postnatal

mental illness OR postnatal psychiatric illness OR puerperal disorders OR puerperal depression OR puerperal psychosis). Keywords were truncated; MESH terms and synonyms of search terms were used, when applicable. Broad search terms were used to capture a wide range of studies. The categories of Sample and Phenomenon of Interest from the SPIDER tool were used (Cooke et al. 2012). As systematically identifying qualitative health research remains a challenge, despite improvements in indexing (Atkins et al. 2008), this broad search that did not specify design or research type.

As Fig. 1 illustrates, titles and abstracts for the articles were reviewed using the inclusion criteria, and any irrelevant or duplicate articles were removed. Full text articles were then reviewed and only those that met the inclusion criteria were included. Google scholar was hand-searched, as were reference lists and the most recent issue of the journals for the eligible papers.

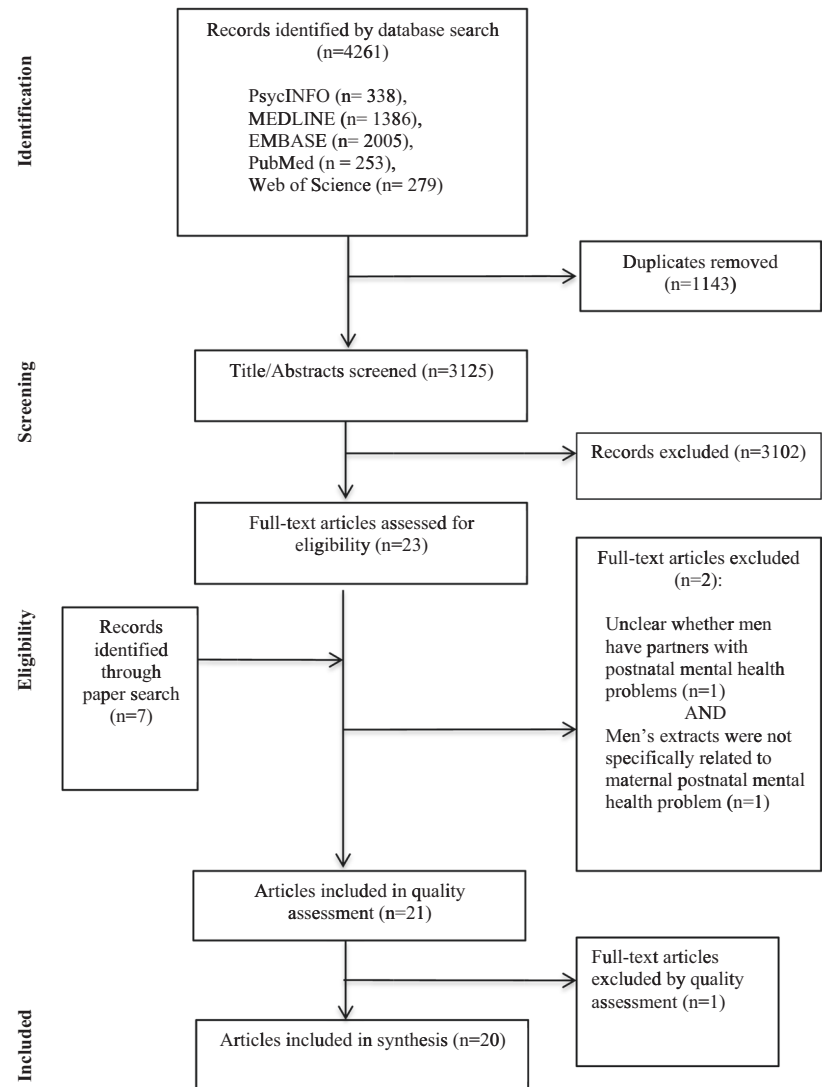
Studies were included if they (1) used qualitative methodology (including mixed methods studies), (2) were published in English in peer-reviewed journals, (3) included male participants whose partner has/had postnatal mental health difficulties and (4) explored the men's experiences of the impact of their partner's postnatal mental health problems and/or the men's own support needs. Studies were excluded if they (1) explored the postnatal experiences of men whose partners had a mental health problem that was not related to the postpartum period, (2) explored men's postnatal experiences generally, without explicit link to the woman's postnatal mental health problem, and/or (3) did not explicitly report the voices of the male partners as separate from other people.

The systematic search yielded a total of 14 articles, with an additional seven articles identified by the hand search (the keywords of which did not include all search terms used). To ensure the quality of the search, 10% of articles at both the title/abstract and full text stage of screening was extracted independently by a researcher who was not connected to the study (GCY). The Kappa score for inter-rater reliability was 0.72 for title/abstract screening, indicating a good level of agreement. The authors agreed on inclusion of all full text articles (Kappa score 1).

Quality Appraisal

In order to assess different aspects of methodological and interpretive rigour, the included studies from the systematic review were assessed using the Critical Appraisal Skills Programme (CASP 2018) checklist for qualitative research. The CASP was selected, because it is one of the most

Fig. 1 PRISMA flow diagram of the search process



widely used tools to assess qualitative research. The studies were assessed across 10 items, which were each assigned a score of 1 ('yes'), 0.5 ('can't tell') or 0 ('no'). The checklist states that if the first two items (pertaining to the research aims and qualitative methodology) are not satisfied, the remaining questions should not be considered. On this basis, one paper was excluded from the thematic synthesis (e.g. Morgan et al. 1997).

An independent rater (GCY) assessed 25% of the included studies. The kappa score for the inter-rater reliability was 0.65, indicating a good level of agreement.

Data Extraction and Analysis

Key characteristics from the studies were extracted and tabulated. In order to check for consistency, data extraction for 10% of the studies was carried out independently by a researcher (GCY).

To synthesise the original content of the studies and develop interpretative themes taking an inductive thematic synthesis was conducted (Thomas and Harden 2008). Thematic synthesis is often used to inform policy and practice, including health services (Barnett-Page and Thomas 2009; Tong et al. 2012). The inductive nature means that higher order themes framed in the data can be identified. First, line-by-line coding of content and meaning of the quotes and the reported results from each study was carried out. When studies included data from participants other than male partners, only data pertaining to male partners of women with postnatal mental health problems was extracted. Codes were compared for similarities and differences and grouped into descriptive themes, and then analytic themes were developed (Thomas and Harden 2008). The analysis was conducted independently by two authors, with the first author (BT) leading the development of the analytic themes, which were agreed by all three authors.

Results

Included Studies

The characteristics for the 20 included studies can be seen in Table 1 based on a total of 277 men aged between 20 and 64 years old. The 20 studies reported on 18 samples. Nine studies recruited heterosexual couples, seven of which conducted separate interviews with men and two interviewed couples together. All other studies were conducted with men only. As expected, the diagnoses of postnatal mental health problems given to the women in the studies were diverse (postnatal depression, $n = 12$; postpartum psychosis, $n = 3$; childbirth-related post-traumatic stress disorder, $n = 1$; mixed/unreported diagnoses, $n = 4$). Four studies were conducted with partners of women admitted to a psychiatric mother and baby unit, whereas all other studies were conducted with community samples. All but one of the studies included in this review were conducted in Western countries (UK, $n = 8$, Canada, $n = 6$, Australia, $n = 2$, USA, $n = 2$, Japan, $n = 1$, Sweden, $n = 1$).

As can be seen in Table 2, the overall methodological quality of all the papers was good with all papers presenting with very good methodological properties, as indicated by a score of 16 or above using the CASP tool (2018).

Qualitative Results

As Fig. 2 illustrates, the analysis produced five themes, constituting 19 subthemes. The five main themes were: (1) *Being a father*, (2) *Being a partner*, (3) *Experiencing negative emotions*, (4) *The ways in which men cope* and (5) *Where support is needed*. Themes and subthemes are described below, accompanied by corresponding extracts from the studies.

Figure 2 illustrates how the themes are interconnected, namely that the experiences of being a father and partner within the context of maternal postnatal mental health problems could give rise to a mixture of emotional experiences, including negative emotions. Participants coped with these negative feelings in diverse ways, and the effectiveness of their coping could be both hindered and facilitated by the response of their support networks.

Main theme: being a father

Participants reported on how having a partner with postnatal mental health problems impacted the ways in which the couple parented together, and the men's fathering role. This theme shows how a woman's postnatal mental health problems can provide opportunities for men to grow within the fathering role and develop positive relationship with their partner and baby. However, this experience can also have

negative impacts on the fathering role, such as disrupting a man's transition to fatherhood and his bond with the infant, as well as feelings of burden, anxiety and solitude. This theme consists of four subthemes.

Parenting together

In terms of the experience of parenting, findings were diverse, with some participants reporting harmonious parenting, in which they felt 'in-tune' and collaborated with their partner (Marrs et al. 2014; Reid et al. 2017; Webster 2002), while others described feelings of being criticised and excluded by their partner (Beestin et al. 2014; Boddy et al. 2017; Davey et al. 2006; Engqvist and Nilsson 2011). For those men who found they were parenting alone due to their partners' physical or psychological absence, feelings of solitude and burden prevailed (Beestin et al. 2014; Wyatt et al. 2015).

I was under a lot of pressure as well... I'm literally the one left holding the baby and obviously, I was expecting her to do everything. (Wyatt et al. 2015)

You do the smallest thing and, 'oh no, you're doing it wrong'. Let her get on with it. Ok, it might not be your way but if each of your people and us have different ways of doing it, it doesn't mean we're wrong it just means it's different. (Boddy et al. 2017)

Transition to fatherhood

The transition to fatherhood in the context of the woman's postnatal mental health problems had meant a growth in confidence for some participants, who had 'stepped up' as fathers in their role (Beestin et al. 2014; Boddy et al. 2017; Reid et al. 2017). Other participants reported that this transition had been thwarted or disrupted (Boddy et al. 2017; Davey et al. 2006; Marrs et al. 2014; Reid et al. 2017), leading to unfulfilled expectations of fatherhood and uncertainty around future family planning (Beestin et al. 2014; Boddy et al. 2017; Engqvist and Nilsson 2011; Meighan et al. 1999).

Obviously you have the double whammy. One, you have a partner who is quite poorly. Two, you lose some of the most important weeks of your life with your baby. (Reid et al. 2017)

She was in a really bad situation, so I said I have to do this for her and....show her how good I am, to look

Table 1 Characteristics of the included studies (presented in chronological order)

No	Author(s) year Country	Research aims/ outcomes considered	Sample (male particip ants only)	Woman's postnatal mental health problem	Sample details (male participants only)	Sampling method	Data collection	Method of analysis
1	Boddy et al. (2017) UK	To explore fathers' experiences of early fatherhood and relationships during their partner's MBU admission	7 male partners of MBU patients	Postpartum psychosis	Aged 23–42 years (mean = 31); 5 White British, 1 Black/ African/Caribbean, 1 Mixed race; University degree, 1 postgraduate qualification, 1 A- Levels; employed, 1 unemployed; 5 Married/engaged, 1 cohabiting, 1 'other'; 6 first time father, 1 other children	Purposive sampling from two MBUs during partner's admission	Semi-structured interviews (face-to-face at MBU)	IPA
2	Reid et al. (2017) UK	To explore how fathers felt supported during their partner's and baby's MBU admission.	17 male partners of MBU patients	Data not collected	20–64 years (mean = 38); No cultural or socioeconomic data available; 7 married, 9 cohabiting; 11 (out of 17) new fathers	Purposive sampling from one MBU during partner's admission	Semi-structured interviews conducted (telephone or face-to-face at MBU)	Thematic analysis
3	Bell et al. (2016) Canada	To explore perceived barriers and facilitators to the use of mental health services	30 male partners of women with elevated symptoms of depression (EPDS ≥ 12) in the postpartum period (1 week to 6 months)	Postnatal depression	Mean age 35 years; 13 had a university degree; 15 Canada-born; 13 married, 17 common law; 19 new parents.	Convenience sampling from a larger qualitative study (Feeley et al. 2016)	Semi-structured interviews (face-to-face at participants' homes) Men interviewed separately from partner by a male interviewer	Inductive content analysis
4	Feeley et al. (2016) Canada	To explore the care preferences of women and their partners	30 male partners of women with elevated symptoms of depression (EPDS ≥ 12) up to 12 months postpartum	Postnatal depression	Mean age 35 years (acceptors) and 34 years (decliners); 15 Canada-born; 13 university degree, 6 college/ vocational, 11 high school or less; 26 employed; 13 married, 17 common law; 19 first time fathers	Purposive sampling from obstetrical clinics and a perinatal mental health clinic of two tertiary care hospitals	Semi-structured interviews (face-to-face at participants' homes) Men interviewed separately from partner by a male interviewer	Inductive content analysis
5	Henshaw et al. (2016) USA	To explore how women and their partners detect, evaluate, categorise and respond to maternal mood changes in the first postpartum year.	11 male partners of women with postnatal depression (EPDS ≥ 10)	Postnatal depression	No separate data; All employed	Purposive sample	Semi-structured interviews (face-to-face at participants' homes or alternative location) Men interviewed separately from partner	Qualitative analysis closely associated with grounded theory
6	Mizukoshi et al. (2016) Japan	To explore the experiences of husbands of women with mental health problems and the difficulties they face in the perinatal period	7 husbands of women with postnatal depression (PDPH-R > 7.5)	Postnatal depression	Aged late 20s–early 30 s; No cultural, educational, or fatherhood details given; All married; All employed	Purposive sampling from obstetric clinical in 2 hospitals	Semi-structured interviews (face to face at the hospital or university)	Not specified
7	Habel et al. (2015) Canada	To explore perceptions of the causes of postnatal depression	30 male partners of women with postnatal depression (EPDS ≥ 12) up to 12 months postpartum	Postnatal depression	Mean age 35 years; 15 Canadian-born; 15 French, 7 English, 8 other language spoken; 13 university degree, 5 college, 11 secondary education; 19 new fathers.	Convenience sampling from a larger qualitative study (Feeley et al. 2016)	Semi-structured interviews (face-to-face at participants' homes) Men interviewed separately from partner by a male interviewer	Content analysis

Table 1 (continued)

No	Author(s) year Country	Research aims/ outcomes considered	Sample (male particip- ants only)	Woman's postnatal mental health problem	Sample details (male participants only)	Sampling method	Data collection	Method of analysis
8	Wyatt et al. (2015) UK	To explore how women and their partners make sense of the experience of postpartum psychosis and their relationship	5 male partners of women with a diagnosis of postpartum psychosis (no time limit since onset)	Postpartum psychosis	No details available pertaining to men specifically	Purposive sampling from 3 perinatal mental health services and online via social media	Semi-structured interviews (face-to-face at participants' homes or local buildings) Couples were interviewed together	IPA
9	Beestin et al. (2014) UK	To explore how postnatal depression affects fathering, what men perceive as good fathering in this context, and the ways in which men adapt	14 men who perceived the mother of their children to have experienced postnatal depression (no time limit since onset)	Postnatal depression	Aged 25–50 years (Mean = 33.9); 12 White British, 2 African-Caribbean; All employed; 8 partnership/cohabiting, 5 married, 1 separated; 5 had only experienced fatherhood with their partner having postnatal depression, 9 had experienced fatherhood without this	Purposive sampling from support groups and an outreach worker, and snowball sampling	Narrative interviews (face-to-face at participants' homes, places of work or on university premises)	IPA
10	Marrs et al. (2014) UK	To explore what impact a MBU admission had on father's role and relationship with his family	8 male partners of MBU patients	Data not collected/ reported but all women were admitted to MBU	Aged 28–51 years (Mean = 37.5, SD = 8.14); White British ($n = 7$), Black African ($n = 1$); Employed ($n = 7$), Self-employed (2); All married; 5 first time fathers, 3 had older children	Purposive sampling from two perinatal mental health units	Individual interviews (example questions given, no details about setting for interviews or interviewer)	Grounded theory
11	Doucet et al. (2012) Canada	To explore the support needs, preferences, accessibility to resources, and barriers to support	8 male partners of women with postpartum psychosis (met criteria of by physician within the past 10 years)	Postpartum psychosis	Mean age 36.25 years (SD = 6.65); All White (Canada, $n = 7$, USA, $n = 1$), All English first language; 7 employed (full-time, $n = 6$, part-time, $n = 1$), 1 unemployed; 7 university degree, 1 partial university; 6 married, 2 common-law	Purposive sampling from community and hospital agencies that provide services for mothers with postpartum psychosis	Semi-structured interviews (over the telephone or face-to-face in a mutually agreed-upon setting) Men interviewed separately from partner	Inductive thematic analysis
12	Letourneau et al. (2012) Canada	To explore men's perspectives on their support needs and preferences for coping with their partners postnatal depression	40 male partners of women who experienced postnatal depression within the past 10 years	Postnatal depression	Aged 23–46 years; Canadian born ($n = 36$), immigrants ($n = 4$); USA, UK, Denmark; First language English ($n = 38$), French ($n = 2$); Employed (full-time, $n = 32$, part-time, $n = 2$), Self-employed, $n = 2$), Unemployed ($n = 1$), paternity leave ($n = 1$), student ($n = 2$); Technical school ($n = 11$), university ($n = 14$), graduate programme ($n = 10$); Married ($n = 39$), divorced ($n = 1$); No fatherhood details	Convenience sampling (Phase 1) from a variety of sources including professionals, support groups, social networking site, online adverts and media releases ($n = 37$) 2) of articulate interviewees from Phase 1 ($n = 6$) and additional participants for a 'fresh perspective ($n = 3$)	Phase 1: Semi-structured interviews (telephone) Phase 2: Semi-structured interviews (telephone) with a report of findings and intervention options from Phase 1 provided prior to interview	Thematic content analysis

Table 1 (continued)

No	Author(s) year Country	Research aims/ outcomes considered	Sample (male participants only)	Woman's postnatal mental health problem	Sample details (male participants only)	Sampling method	Data collection	Method of analysis
13	Engqvist and Nilsson (2011) Sweden	To explore men's experience of having a partner with a postpartum psychiatric disorder	11 men whose partner has a postpartum psychiatric disorder (as reported by the men)	Key words searched: postpartum or postnatal disorder; postpartum or postnatal psychosis, postpartum depression	Data not collected	Internet search engine search for written narratives using key words and inclusion criteria	Written narratives identified through internet search engine search	Not specified
14	Letourneau et al. (2011) Canada	To explore how men perceive and receive support when their partners have postnatal depression.	11 men whose partners have postnatal depression (reported symptoms during their last pregnancy and were no longer than 24 months postpartum)	Postnatal depression	Aged 29–44 (Mean = 37); All Canada-born; All English first language; All employed full-time; Technical school ($n = 3$), college/university degree ($n = 3$) graduate programme ($n = 3$); Married ($n = 10$), Single ($n = 1$); 6 first-time fathers and 2 child died within first year	Convenience sampling from community agencies, self-nomination or service provider nomination	Semi-structured interviews (telephone)	Thematic content analysis
15	Muchena (2007) UK	To explore the experience of MBU admission, understand their reactions, coping strategies, stressors, needs and expectations of the fathering role	8 male partners of MBU patients	Postpartum psychosis and postnatal depression	No details	Purposive sampling from a MBU. Stratified sampling: Potential participants were grouped by 1) their partner's diagnosis and 2) whether they were inpatient/ post-discharge then randomly selected from these groups	Semi-structured interviews (face-to-face, no details of location)	Thematic analysis
16	Nicholls and Ayers (2007) UK	To explore the experience and perceived impact of traumatic birth and postnatal PTSD.	6 men whose partner has childbirth-related post-traumatic stress disorder (met DSM-IV diagnostic criteria within the first year)	Childbirth-related post-traumatic stress disorder	No separate age, cultural or socioeconomic details for men reported; All married; 5 first-time parents, 1 second child	Purposive sampling via internet advertisements and self-help organisations.	Semi-structured interviews (face-to-face at participants homes) Men were interviewed separately to partner	Inductive thematic analysis
17	Davy et al. (2006) Australia	To explore experiences of a group treatment programme for male partners	13 male partners of women with postnatal depression (diagnosed in the first year postpartum)	Postnatal depression	Mean age = 29.8 years (SD = 5.4) No cultural, socioeconomic or marital details for men reported Mean children per family = 2 (SD = 1.0)	Two treatment groups ($n = 5$, $n = 8$) recruited from local community through self-referral or health-professional referral (specific recruitment details not reported)- focus groups conducted at the end of the treatment	Focus group interviews- two groups (face-to-face at health service conducted in second half of final treatment group session)	Phenomenological approach (themes generated)
18	Everingham et al. (2006) Australia	To explore the way in which couple's talked about PND and the discrepancies between men and women's understanding, and the ways in which the	6 male partners of women with postnatal depression (EPDS or clinical assessment up to 15 months postpartum)	Postnatal depression	Average age 35 years; All cohabiting; No specific cultural, socioeconomic, marital or fatherhood details reported	Purposive sampling by early childhood health professionals	Semi-structured interviews (face-to-face at participants homes) Men interviewed separately from partner by a male interviewer	Framework analysis

Table 1 (continued)

No	Author(s) year Country	Research aims/ outcomes considered	Sample (male particip ants only)	Woman's postnatal mental health problem	Sample details (male participants only)	Sampling method	Data collection	Method of analysis
19	Webster (2002) UK	diagnostic process had helped/hindered the couples communication Men's perceptions of the effect of PND	8 male partners of women with postnatal depression (identified by health visitor)	Postnatal depression	All cohabiting; No specific age, cultural, socioeconomic, marital or fatherhood details for men reported	Purposive sampling via health visitor	Semi-structured interviews (setting not detailed) Couples were interviewed together	Not specified (themes identified)
20	Meighan et al. (1999) USA	To explore the lived experiences and impact of PND on men	8 male partners of women with postnatal depression	Postnatal depression	No specific age, cultural, socioeconomic, marital or fatherhood details reported for men.	Convenience sampling from previous study (Wood et al. 1997) and purposive sampling through health care professionals and snowballing sampling	(Limited details) Interviews (face-to- face in participants homes) Most women were present in the home but did not participate in interview process	Existential phenomenology

after the children and I want to see her...recover...
She's happy now because, I could be asked to be that
person for that time. (Boddy et al. 2017)

Father-baby-bond

A participant's opportunities to bond with their baby were impacted by their partner's postnatal mental health problems. Participants who developed a positive bond with their baby described how spending time together bought feelings of joy and happiness, providing a distraction from the negative emotions associated with their partner's ill-health (Beestin et al. 2014; Boddy et al. 2017; Mizukoshi et al. 2016; Reid et al. 2017). However, participants who had been separated from their baby felt their bonding had been disrupted (Boddy et al. 2017; Muchena 2007; Wyatt et al. 2015), leading to concerns about being absent in their children's lives, feeling like a 'fleeting figure' (Marrs et al. 2014; Reid et al. 2017) or not giving their children enough attention (Beestin et al. 2014).

[H]e won't go nowhere without his dad, and vice versa you know what I mean? [...] I love spending time with him, I love doing, so for that reason alone and er with what I get back off him now er you know cuddles and wanting to come with his dad and the smiles and you know we're just happy with each other. (Beestin et al. 2014)

Then there's the issue of not being able to spend time with your baby...you only see him for a couple of hours a day. It's as if you're only a temporary father. (Reid et al. 2017)

Impact on the family

Participants were aware of the impact on the whole family, not just their partners (Marrs et al. 2014; Reid et al. 2017). They were concerned about the potential harm caused to their baby from their partners' behaviours or psychological and/or physical absence (Boddy et al. 2017; Engqvist and Nilsson 2011; Reid et al. 2017), which they tried to compensate for by bridging the gap (Beestin et al. 2014; Nicholls and Ayers 2007) and dealing with their children's distress (Marrs et al. 2014).

The first four weeks in particular every night he cried. Things like that, as a father, when your wife, his mother is taken, when she is not in the environment he

Table 2 Quality rating scores studies using the CASP tool*

Paper	Clear research aims	Appropriate methodology used	Appropriate design used	Appropriate recruitment strategy	Appropriate data collection	Relationship between researcher and participants considered	Ethical issues considered	Rigorous data analysis	Clear statement of findings	Valuable research	Total score (T = 10)
Boddy et al. (2017)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Reid et al. (2017)	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9.5
Bell et al. (2016)	Yes	Yes	Can't tell	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	9
Feeley et al. (2016)	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	9.5
Henshaw et al. (2016)	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	9.5
Mizukoshi et al. (2016)	Yes	Yes	No	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	8.5
Habel et al. (2015)	Yes	Yes	Can't tell	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	9
Wyatt et al. (2015)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Beestin et al. (2014)	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Can't tell	Yes	Yes	Yes	8.5
Marrs et al. (2014)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Doucet et al. (2012)	Yes	Yes	No	Can't tell	Yes	Yes	Yes	Can't tell	Yes	Yes	8
Letourneau et al. (2012)	Yes	Yes	No	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	8.5
Engqvist and Nilsson (2011)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Letourneau et al. (2011)	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Can't tell	8.5
Muchena (2007)	Yes	Yes	Can't tell	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	8.5
Nicholls and Ayers (2007)	Yes	Yes	Can't tell	Yes	Yes	No	Yes	Can't tell	Yes	Yes	8
Davey et al. (2006)	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Can't tell	Can't tell	8.5
	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	9

Table 2 (continued)

Paper	Clear research aims	Appropriate methodology used	Appropriate design used	Appropriate recruitment strategy	Appropriate data collection	Relationship between researcher and participants considered	Ethical issues considered	Rigorous data analysis	Clear statement of findings	Valuable research	Total score (T = 10)
Everingham et al. 2006											
Webster (2002)	Yes	Yes	Yes	Yes	Yes	No	Can't tell	Yes	Can't tell	Yes	8
Meighan et al. (1999)	Yes	Yes	Yes	Can't tell	Yes	No	Can't tell	Yes	Yes	Yes	8

Scoring: 'Yes' = 1, 'Can't tell' = 0.5, 'No' = 0

is used to, as in your home. Dealing with that was quite hard. (Marrs et al. 2014)

I know I did try to direct a lot of attention and love to [the baby] because I felt maybe [my wife] wasn't providing that so I was trying to bridge a bit of a gap. (Nicholls and Ayers, 2007)

Main theme: being a partner

This theme illustrates how having a partner with postnatal mental health problems changes the man's role within the couple relationship. In this theme, studies have highlighted how men's role as a partner can be changed and shaped by his experiences. For some men this brought difficult feelings of uncertainty, helplessness and loss, whereas for others this had led to a growth in strength and confidence. Furthermore, a man's understanding of what caused the postnatal mental health problems appeared to influence how he felt towards his partner and the changes in their relationship. This theme is split into four subthemes.

Uncertainty

Living with a person who has postnatal mental health problems can lead to feelings of helplessness and uncertainty within the couple relationship, caused by the perceived unpredictability of their spouses' moods and behaviour (Engqvist and Nilsson 2011; Meighan et al. 1999) and/or not knowing how to help them (Engqvist and Nilsson 2011; Everingham et al. 2006; Letourneau et al. 2011; Meighan et al. 1999; Mizukoshi et al. 2016; Nicholls and Ayers 2007; Wyatt et al. 2015).

The hardest part of it all is the drastic change in mood. /.../When she praises me I take it with a grain of salt because I know that it can turn on a dime. (Engqvist and Nilsson 2011)

I think throughout the experience I had more or less the feeling of like I wasn't able to help her just because I wasn't- I couldn't- I didn't really understand why she couldn't sleep so and didn't understand how bad her anxiety was... and then you're worried about your partner as well, that can be quite stressful. (Letourneau et al. 2011)

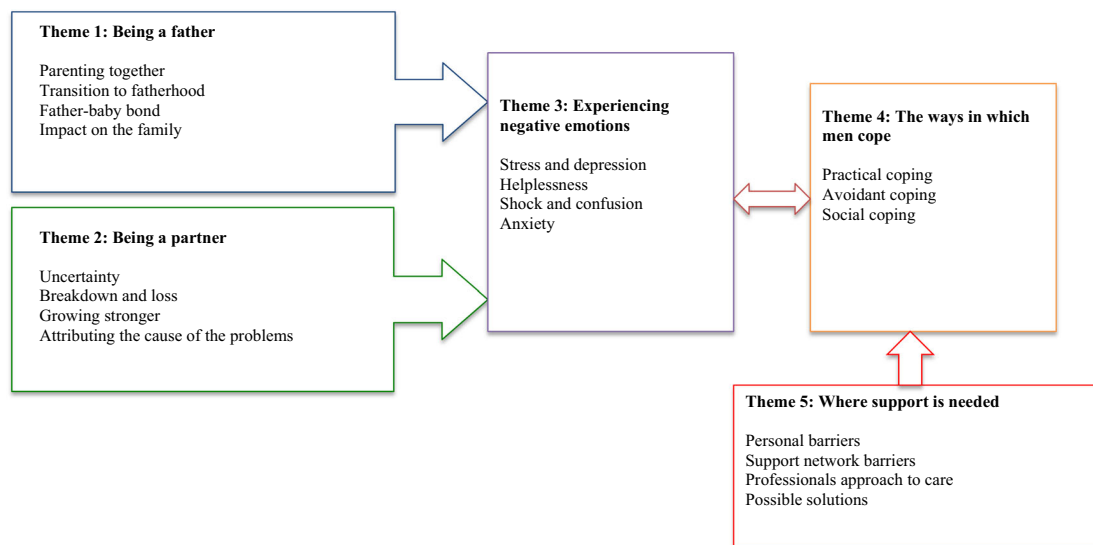


Fig. 2 Diagram illustrating themes, subthemes and the relationship between them

Breakdown and loss

For some participants, their partner's postnatal mental health problem leads to a break down within the relationship, in relation to their trust (Boddy et al. 2017; Engqvist and Nilsson 2011; Marrs et al. 2014) and/or their communication (Davey et al. 2006; Engqvist and Nilsson 2011; Muchena 2007; Nicholls and Ayers 2007; Wyatt et al. 2015), which can ultimately lead in the relationship breaking down entirely (Engqvist and Nilsson 2011; Marrs et al. 2014). Similarly, loss is the predominant emotion felt by men who describe the loss of their partner (Boddy et al. 2017; Engqvist and Nilsson 2011; Meighan et al. 1999; Muchena 2007; Reid et al. 2017; Wyatt et al. 2015), the loss of their role as a partner (Boddy et al. 2017) and/or the loss of intimacy within the relationship (Meighan et al. 1999; Muchena 2007; Nicholls and Ayers 2007; Wyatt et al. 2015).

I'm at a loss to know what to do, we argue over and over about the same things, again and again...I spend time listening, talking about options over and over again. Finally, I get to sleep and think it's all resolved, and then a few days later she bring it up again and says we didn't finish discussing such and such. (Davey et al. 2006)

I felt so lost and confused I didn't know what to do. It was like a stranger had come and replaced my warm and loving best friend with a woman with dead eyes and a cold heart. (Engqvist and Nilsson 2011)

Growing stronger

Alternatively, for some participants, the challenges they have faced as a couple meant growth in communication and collaboration, deepening their understanding of one another and building resilience within their relationship (Everingham et al. 2006; Marrs et al. 2014; Mizukoshi et al. 2016; Muchena 2007; Nicholls and Ayers 2007; Wyatt et al. 2015). Such experiences also led to a growth in men's confidence in their role, which is associated with positive emotions (Bell et al. 2016; Feeley et al. 2016; Henshaw et al. 2016; Marrs et al. 2014; Mizukoshi et al. 2016; Nicholls and Ayers 2007).

For me it was almost natural to think that it's our problem, not your problem...one attitude is, it's your problem, solve it, and another one is, the problem is yours, but we have to sort it together, we have to be together in the process. (Nicholls and Ayers 2007)

We were obviously very close and open with each other but I do think possibly we'd be more open with each other now just 'cause of what's happened. (Wyatt et al. 2015)

Attributing the cause of the problems

In attempting to understand the changes to their relationship, men may form ideas about the cause of their partner's postnatal mental health problem, which can in turn shape their perception of and emotional responses to their partner.

Participants who attributed the problems as stemming from physical and/or birth-related events, viewed these changes as uncontrollable, and therefore place less blame on their partner (Everingham et al. 2006; Habel et al. 2015). Similarly, when the blame was placed on the wider social context, such as social expectations and pressures placed on mothers to conform to an idealised motherhood, participants felt less negatively towards their partner (Everingham et al. 2006; Habel et al. 2015; Wyatt et al. 2015). In contrast, when participants placed the cause within the woman, such as aspects of her personality or behaviour, they perceived these as more controllable, and therefore placed more blame on their partner (Everingham et al. 2006; Habel et al. 2015).

(She) is such an anxious person, when there's change. She's not real big on change. So that's probably the biggest change in her whole life. (Everingham et al. 2006)

Let's say that I think that modern society asks too much... Before, a woman was staying at home and taking care of the kids. Now, a woman is a professional, a mother, a lover... So it is heavy in terms of demands. (Habel et al. 2015)

Main theme: experiencing negative emotions

This theme highlights how maternal postnatal mental health problems can affect men's emotional wellbeing. This theme demonstrates that the experience of having a partner with postnatal mental health problems contributes to a diverse mix of negative emotions for men, relating to the couple relationship, family life and their imagined future. The strategies men find to cope with these emotions were likely to impact their adjustment to this situation. This theme is divided into four subthemes.

Stress and depression

Having a partner who is unwell creates changes in lifestyle, disturbed routines and increased responsibilities for men, who are required to divide efforts between work and home life, as well as having financial implications, which can lead to increased stress (Engqvist and Nilsson 2011; Meighan et al. 1999; Mizukoshi et al. 2016; Muchena 2007; Reid et al. 2017; Wyatt et al. 2015). For participants who were unsupported, emotional and physical isolation can dominate (Beestin et al. 2014; Bell et al. 2016; Meighan et al. 1999; Wyatt et al. 2015). These experiences can lead to depressive symptoms, such as low mood, hopelessness, exhaustion and reduced enjoyment (Beestin et al. 2014; Doucet et al. 2012;

Engqvist and Nilsson 2011; Letourneau et al. 2011; Meighan et al. 1999; Webster 2002).

When you have had no sleep, you are pulling your hair out and you have bags under your eyes and you think, why have I bothered, why are we having a family, I don't want to feel like this...is that depression? Could be, I don't know. (Webster 2002)

I needed emotional support. I felt I was becoming depressed. It was everything, the long days at the hospital. I saw things that I never saw before and that affected me. I kept thinking, when is she going to snap out of it? Why is this happening? I thought having a baby was going to be the best thing to happen. (Doucet et al. 2012)

Helplessness

Helplessness and powerlessness were other strong emotions felt in relation to helping their partner (Boddy et al. 2017; Davey et al. 2006; Engqvist and Nilsson 2011; Everingham et al. 2006; Letourneau et al. 2011; Marrs et al. 2014; Meighan et al. 1999; Muchena 2007; Nicholls and Ayers 2007), keeping their partner safe (Engqvist and Nilsson 2011) and feeling as though they are trapped within the relationship (Everingham et al. 2006; Meighan et al. 1999; Muchena 2007; Nicholls and Ayers 2007).

I thought her suicide would be an answer, then I felt guilty for [having] those feelings. (Meighan et al. 1999)

I also had no idea how to get help. Nothing in my life has come close to causing as much worry, desperation, anger, frustration, despair, and fear as dealing with PPD. (Engqvist and Nilsson 2011)

Shock and confusion

Shock and confusion were common experiences for participants in response to the unexpected change in their partner and the resulting events (Boddy et al. 2017; Marrs et al. 2014; Mizukoshi et al. 2016; Muchena 2007), including her diagnosis (Boddy et al. 2017; Engqvist and Nilsson 2011; Everingham et al. 2006; Muchena 2007; Reid et al. 2017). Two studies reported that participants had been traumatised by their experiences (Boddy et al. 2017; Meighan et al. 1999).

I couldn't understand it, really, but I had nothing to compare it with, so I just thought oh, is it just hormones and things after having the baby and it'll settle down. But maybe somewhere in the back of my mind I knew something wasn't quite right. (Boddy et al. 2017)

At first, I was just scared...I didn't know what it was and she didn't know what it was. (Meighan et al. 1999)

Anxiety

The uncertainty about their partner's treatment and recovery can cause feelings of worry and anxiety for participants (Doucet et al. 2012; Engqvist and Nilsson 2011; Marrs et al. 2014; Reid et al. 2017). Anxiety and worry were also felt within the relationship, with participant's feeling as though they were 'walking on egg-shells' (Letourneau et al. 2011; Nicholls and Ayers 2007). Men also reported being hypervigilant about the safety and potential harm to their partner and/or their children (Boddy et al. 2017; Engqvist and Nilsson 2011; Letourneau et al. 2011; Meighan et al. 1999).

In terms of anxiety, certainly some anxiety because we would actually just walk around the house on eggshells wondering if (wife) is going to have one of these episodes and what is the effect going to be on her and on our little guy. (Letourneau et al. 2011)

It was really scary, especially I think going home at night and things. Like just lying awake and then, I dunno, obviously I hadn't been sleeping well as well so the thoughts that [partner] was speaking to the psychologist, I was getting the same kind of thoughts. Not wanting to kill myself but just that I couldn't concentrate on anything. I couldn't relax because my mind was racing... (Marrs et al. 2014)

Main theme: the ways in which men cope

Participants described various ways in which they coped with the difficult emotions when adjusting to their partner's postnatal mental health problems. These included *Practical coping*, which increased their sense of control, *Avoidant coping*, which distanced them from these emotions and *Social coping*, which reduced their isolation and increased their sense of support. Access to effective support from

social networks or professionals was an effective way of coping for partners.

Practical coping

In dealing with their uncertainty and helplessness, some participants took a problem-solving approach to increase their sense of control. This involved seeking information about the diagnosis, treatment and recovery (Boddy et al. 2017; Engqvist and Nilsson 2011; Henshaw et al. 2016; Mizukoshi et al. 2016; Reid et al. 2017), seeking to be involved in their partner's care, and searching for resources (Boddy et al. 2017; Davey et al. 2006; Engqvist and Nilsson 2011; Everingham et al. 2006; Letourneau et al. 2011; Meighan et al. 1999; Muchena 2007). Participants also sought out professional support for their partner. Their partner receiving a diagnosis (Engqvist and Nilsson 2011) and admission to a MBU (Boddy et al. 2017; Marrs et al. 2014; Muchena 2007; Reid et al. 2017) were experienced as helpful and a relief. Furthermore, participants spoke about how professionals had offered them both emotional (Letourneau et al. 2011) and practical information and advice (Davey et al. 2006; Doucet et al. 2012; Engqvist and Nilsson 2011; Everingham et al. 2006; Feeley et al. 2016; Letourneau et al. 2011).

I called her [the doctor] and she explained to me what was happening, how these kinds of things can happen. She talked me through what I needed to do. (Engqvist and Nilsson 2011)

I think at the time probably what I would...my overriding kind of emotion would have been relief that finally she was in a place where people understood what was going on. (Marrs et al. 2014)

Avoidant coping

Participants also used avoidance strategies to manage their intense negative emotions, some of which involved the use of substances to numb feelings (Reid et al. 2017). Withdrawing from partners, families and social networks both physically (Davey et al. 2006; Everingham et al. 2006; Letourneau et al. 2011) or emotionally (Beestin et al. 2014; Engqvist and Nilsson 2011; Meighan et al. 1999) helped some participants avoid experiencing difficult emotions. Other participants coped by hiding their feelings from their partners and 'putting their own feeling on hold', as a way of distancing themselves from negative feelings (Beestin et al. 2014; Doucet et al. 2012; Marrs et al. 2014; Muchena 2007). However, the responsibility to 'be strong' for their

family gave some participants a sense of empowerment, even if it did mean compromising their own needs (Beestin et al. 2014; Doucet et al. 2012; Meighan et al. 1999; Mizukoshi et al. 2016; Wyatt et al. 2015).

This is the second time my wife has had PND. It's been really hard. I have avoided going home at times. (Davey et al. 2006)

Switching off my feelings... to make like your own, kind of like your own postnatal depression pills. (Beestin et al. 2014)

Social coping

The participant's support network was also emphasised as an effective means of coping which reduced their sense of isolation. Some participants sought support from friends and family (Boddy et al. 2017; Letourneau et al. 2011; Marrs et al. 2014; Webster 2002), who provided emotional (Muchena 2007; Reid et al. 2017; Wyatt et al. 2015) as well as practical help (Doucet et al. 2012; Engqvist and Nilsson 2011; Meighan et al. 1999; Mizukoshi et al. 2016; Reid et al. 2017; Wyatt et al. 2015). Socialising and sport were effective coping strategies for some participants, and for others, peer support helped them feel less alone and gave them hope about coping and recovery (Davey et al. 2006; Engqvist and Nilsson 2011; Feeley et al. 2016; Letourneau et al. 2011; Reid et al. 2017). Furthermore, two studies highlighted how the woman was an important social support for men during this time (Mizukoshi et al. 2016; Reid et al. 2017).

My partner has been extremely loving and supportive towards me through this whole process. (Reid et al. 2017)

Help from the parents was so big that I could sleep completely through the night. I understood that it was hard to become a parent and thanked my parents. We were at a loss when the baby cried. Nothing could be done by us, and we felt powerless. (Mizukoshi et al. 2016)

Main theme: where support is needed

This theme, divided into four subthemes, illustrates how seeking support was sometimes a challenge for the men, and the suggested solutions they identified in relation to this challenge. In this theme, participants described the barriers

that stand in the way of them seeking much needed support during this time. These consisted of barriers inherent in the beliefs held by participants and their social networks as well as the responses of healthcare professionals. In addition to stating the barriers, participants suggested potential solutions, which they believed could reduce these barriers and therefore enable them to seek support.

Personal barriers

Participants' own beliefs around help seeking, such as feeling unable to reach out to others, feeling too overwhelmed, worrying they might burden others, and/or believing that others would perceive them as 'weak', were significant challenges for men in seeking support (Davey et al. 2006; Doucet et al. 2012; Everingham et al. 2006; Henshaw et al. 2016; Letourneau et al. 2011; Webster 2002). A lack of an understanding of the needs of both them and their partner was a barrier for some men to seek professional help (Boddy et al. 2017; Everingham et al. 2006; Feeley et al. 2016; Henshaw et al. 2016; Letourneau et al. 2011; Marrs et al. 2014; Letourneau et al. 2012; Muchena 2007; Webster 2002; Wyatt et al. 2015). For other participants, the thought of seeking help was associated with fears of external judgement, stigma or negative consequences for their family, which prevented them from reaching out (Beestin et al. 2014; Bell et al. 2016; Boddy et al. 2017; Davey et al. 2006; Everingham et al. 2006; Letourneau et al. 2011; Reid et al. 2017).

I didn't know what I was looking for. I didn't recognise there was as much of a problem as there actually was. (Letourneau et al. 2011)

I wish I was able to send an SOS out to bring us casseroles or to help around the house. I couldn't do that because I have difficulty asking for support. It's a guy thing. (Doucet et al. 2012)

Support network barriers

Participants described how their friends and family's lack of understanding and knowledge about postnatal mental health problems created a barrier to them seeking support from their social network (Doucet et al. 2012; Letourneau et al. 2011; Letourneau et al. 2012; Reid et al. 2017; Wyatt et al. 2015). Furthermore, the woman's wish to not seek help for herself, due to her believing that she did not have a problem or because she wanted to protect others was another challenge men faced in seeking professional support for them

and their partner (Bell et al. 2016; Letourneau et al. 2011; Mizukoshi et al. 2016).

She said, ‘I will be fine, it will pass.’ (Bell et al. 2016)

Extended family should be afforded some educational sessions on what’s going on...they would like to help but if they don’t understand what is going on, what’s the point? (Letourneau et al. 2012)

Professionals approach to care

Participants’ perception of health professionals influenced whether they sought support from services. Perceiving health professionals as having a lack of awareness or knowledge about maternal postnatal mental health problems reduced men’s trust of services, and therefore prevented them from seeking support for them and their partner (Boddy et al. 2017; Letourneau et al. 2012; Meighan et al. 1999). In addition, participants felt as though their needs were not considered, and felt excluded by services, making it difficult to seek support (Bell et al. 2016; Boddy et al. 2017; Doucet et al. 2012; Feeley et al. 2016; Henshaw et al. 2016; Letourneau et al. 2011; Letourneau et al. 2012; Marrs et al. 2014; Webster, 2002). Participants spoke about the quality of the support interventions being a barrier, such as when the content of resources was insufficient (Doucet et al. 2012; Engqvist and Nilsson, 2011; Feeley et al. 2016; Letourneau et al. 2012; Muchena, 2007; Reid et al. 2017; Webster, 2002), or the communication with professionals was ineffective (Doucet et al. 2012; Marrs et al. 2014; Reid et al. 2017).

They [health care professionals] focus a lot on the newborn. Services focus on the baby’s health, not on the mother’s health and definitely not on the father’s health. (Bell et al. 2016)

Erm nobody had ever really explained to me I don’t think the real purpose of her being in the unit. I don’t think anybody ever really sat me down and said, you know ‘this is what we are hoping to do. Not just keep your wife and daughter together’. Erm it felt a bit strange at times. It almost felt like you were going down to visit somebody in hospital. (Marrs et al. 2014)

Possible solutions

Participants suggested that improvements in access to quality information about diagnosis, treatment, recovery,

relapse (Doucet et al. 2012; Engqvist and Nilsson 2011; Feeley et al. 2016; Letourneau et al. 2011, 2012; Reid et al. 2017), and professional advice on how to support their partner would help them feel better supported (Doucet et al. 2012; Everingham et al. 2006; Mizukoshi et al. 2016). They also suggested that professionals could provide emotional support (Davey et al. 2006; Doucet et al. 2012; Letourneau et al. 2011), including helping to improve their coping skills (Davey et al. 2006). Participants suggested that professionals should approach support proactively and flexibly, which would reduce the impact of the personal barriers to support and increase their engagement (Bell et al. 2016; Doucet et al. 2012; Letourneau et al. 2012). Peer support was cited as an effective way to reduce their sense of isolation and stigma (Doucet et al. 2012; Letourneau et al. 2012). Participants in one study also stated that increased support by their employers, such as granting them time off work, could help them cope with the demands of the situation (Letourneau et al. 2012). Greater public awareness to increase participants’ understanding and recognition of postnatal mental health problems, as well as that of professionals, support networks and employers, was suggested as a way to reduce systemic barriers to help-seeking (Boddy et al. 2017; Letourneau et al. 2012; Muchena 2007).

I needed advice on how to handle the illness and what to say. Also, information on the early signs of relapse to watch for and if it was to the point that I needed to get help. (Doucet et al. 2012)

I think taking about it is better than just pretending it hasn’t happened...My partner is quite willing...to say to people, ‘look, this is what happened afterwards’... what people need to look out for...I’m a great believer in that people need to shout about things to get people to listen. (Boddy et al. 2017)

Discussion

The themes arising out of the thematic synthesis of 20 studies (illustrated in Fig. 2) show how these experiences impacted participants’ roles as fathers and partners and their own emotional wellbeing. Participants talked about the impact on the transition to fatherhood and bonding with their baby as well as how they had parented in the context of postnatal mental health problems. Therefore, maternal postnatal mental health problems can add an additional layer of difficulties to men who are already experiencing various emotions in relation to this transition, including helplessness and hopelessness (Goodman 2005; Kowlessar

et al. 2014). According to Goodman (2008), partners of women with postnatal depression demonstrated less optimal interactions with their infants compared to partners of non-depressed mothers. Given this observation it is important to recognise that there could be an impact on the father's relationship with his infant. The finding that participants tried to counteract the impact of maternal postnatal mental health issues on their children was comparable to previous research showing that fathers buffer or compensate for maternal mental health problems (Edhborg et al. 2003; Hossain et al. 1994). Being a partner had led to difficult feelings of uncertainty and loss in some fathers, whereas others had experienced a growth in confidence. Furthermore, the ways in which men attributed the cause of the postnatal mental health problems impacted their perceptions of their partner.

These findings are important given that the strength of the couple relationship can influence women's mental health treatment and recovery (Burgess 2011; Grube 2005; Plunkett et al. 2016), the mother-child-relationship and overall outcomes for the family (Cummings and Watson O'Reilly 1997). In terms of emotional wellbeing, participants clearly described symptoms of increased stress, low mood, helplessness and anxiety. These results are similar to Goodman's (2008) findings that maternal postnatal depression was associated with increases in paternal depression and parenting stress, and to findings illustrating an association between maternal and paternal postnatal depression (Areias et al. 1996; Ballard et al. 1994; Dudley et al. 2001; Paulson and Blazemore 2010). The findings demonstrated that men cope with these adverse experiences in a variety of ways, a process described as the person attempting to manage demands that are felt as overwhelming their individual resources, by regulating their emotions, or altering the situation causing distress (Folkman et al. 1986; Lazarus and Folkman 1984), which has been considered crucial to families attempting to adapt to a crisis (McCubbin and Patterson 1983). Participants' descriptions of practical coping and avoidant coping strategies are similar to the problem-focused coping and emotion-focused coping described in the coping literature (Folkman and Lazarus 1980). Furthermore, previous research has cited gender difference in coping styles, with men scoring significantly higher than women on 'rational' and 'detachment' coping styles, which should be considered when supporting couples (Matud 2004).

Participants also highlighted barriers to seeking support, within their own held beliefs and understanding, and the knowledge and approach of their social and professional support networks. These findings therefore provide possible solutions to minimise the exclusion and marginalisation of this population reported in other studies (Fletcher et al. 2006; Lever Taylor et al. 2017), as well as the personal barriers

men experience to seeking support (Lever Taylor et al. 2017). The findings also identified key ways in which professional services could facilitate access to support, including improving the quality of resources, and taking a proactive approach to support. Previous research has demonstrated that women want their partners to be supported by professionals, so that they can be better supported, including giving them information on postnatal mental health problems (Plunkett et al. 2016). Thus, this review emphasizes a need to improve perinatal resources for partners, already called for by other researchers (e.g. Heron et al. 2012; Lever Taylor et al. 2017; Robertson and Lyons 2003).

The current review represented the experiences of 277 male partners of women with postnatal mental health problems from six different countries. Consistencies were identified in themes across the studies, which suggests a potential transferability of the findings to other male partners of women with postnatal mental health problems. However, it is recognised that the countries included were mostly Western countries with established mental health care systems, which is likely to influence the participants' knowledge and understanding of mental health and their view of mental health services.

Although the goal of qualitative research is not to produce generalisable findings (Thomas and Harden 2008), the fact that the search was limited to papers published in English, excluded research published in other languages, and from both developed and developing countries, may be considered methodological limitations.

As this review aimed at synthesising qualitative research into the broad area of male partners' experiences, the populations included in these studies were diverse in terms of the women's diagnoses, which reflects the aims of perinatal mental health services. However, the inclusion of both community and inpatient populations meant that the severity of mental health problems between the samples in the studies was diverse, and therefore that in drawing comparisons between these populations, the nuanced experiences linked to these factors may have been lost. As research into male partners' experiences of postnatal mental health is growing, future reviews should look specifically at specific populations, both with regards to diagnosis and treatment, to add to our understanding.

The findings from this review result in clear recommendations for male partners, healthcare professionals (including clinical psychologists), community and inpatient perinatal mental health services, and for wider society. Male partners should be made aware antenatally of the impacts maternal postnatal mental health problems can have on their own wellbeing, and therefore monitoring this and seeking help would be advisable. Furthermore, the results illustrate that practical and social coping, through seeking support and information can increase men's mastery and decrease

their isolation, thus men are advised to utilise such strategies to manage the difficult emotions they experience. For healthcare professionals, improving their awareness and knowledge around postnatal mental health problems, including the impacts these have on the wider family, including male partners, would be one recommendation. Another recommendation would be for healthcare professionals to work towards effective communication with male partners and to have a proactive and inclusive approach to supporting them. Clinical psychologists have specialist training in psychological theory and intervention for emotional difficulties, including coping, adjustment to parenthood, diagnoses, loss and change. Therefore, clinical psychologists are in a strong position to help male partners of women with postnatal mental health problems. Psychologists could develop psychologically informed resources for partners, provide training and supervision for healthcare professionals on how to support male partners or, when appropriate, offer psychological interventions for partners and families.

Perinatal mental health services should improve the quality of the information and resources for male partners and working to include partners more in their spouse's care. Encouraging examples of good practice exist: The findings of a recent survey on specialist Mother and Baby Units (MBUs) in the United Kingdom found that services are providing support for partners, including information (Turner et al. 2017), in line with clinical standards on support for partners (NHS England 2016) which state that services should ensure that 'appropriate emotional, informational and practical support is offered to partners and significant others to robustly encourage their understanding and participation in the mother's treatment, care and recovery and to promote their bond with the infant'.

Finally, in terms of wider society, partners have emphasised a need for greater public awareness of perinatal mental health, so public mental health campaigns are clearly indicated and should be supported by the government and other non-government agencies.

In conclusion, men's emotional wellbeing and their relationships with their partner and infant are impacted by maternal postnatal mental health problems. In attempting to cope and adjust to their partner's mental health problems, men draw on a number of strategies, including seeking support from others. Men's efforts to cope are hampered by a number of barriers, relating to both internal factors, and factors within their support network, including professional services. Increased awareness of men's support needs, and improvements in the delivery of support could reduce the negative impact of maternal postnatal mental health problems on male partners, and improve outcomes for men, women and their families.

Acknowledgements The authors would like to thank Dr. Gokce Cokamay Yilmaz for her contributions to this review.

Author Contributions B.R. designed and executed the study, analyzed the data, and wrote the initial draft. D.S. and A.W. contributed to the design and analysis and contributed to the writing of all drafts. A.W. oversaw the whole review process

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Publisher's note: Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

References

- Areias, M., Kumar, R., Barros, H., & Figueiredo, E. (1996). Correlates of postnatal depression in mothers and fathers. *British Journal of Psychiatry*, 169(1), 36–41. <https://doi.org/10.1192/bjp.169.1.36>.
- Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: lessons learnt. *BMC Medical Research Methodology*, 8(1), 21. <https://doi.org/10.1186/1471-2288-8-21>.
- Ballard, C. G., Davis, R., Cullen, P. C., Mohan, R. N., & Dean, C. (1994). Prevalence of postnatal psychiatric morbidity in mothers and fathers. *British Journal of Psychiatry*, 164(6), 782–788. <https://doi.org/10.1192/bjp.164.6.782>.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: a critical review. *BMC Medical Research Methodology*, 9(1), 59. <https://doi.org/10.1186/1471-2288-9-59>.
- *Bell, L., Feeley, N., Hayton, B., Zekowitz, P., Tait, M., & Desindes, S. (2016). Barriers and facilitators to the use of mental health services by women with elevated symptoms of depression and their partners. *Issues in Mental Health Nursing*, 37(9), 651–659. <https://doi.org/10.1080/01612840.2016.1180724>.
- *Beestin, L., Hugh-Jones, S., & Gough, B. (2014). The impact of maternal postnatal depression on men and their ways of fathering: an interpretative phenomenological analysis. *Psychology and Health*, 29(6), 717–735. <https://doi.org/10.1080/08870446.2014.885523>.
- *Boddy, R., Gordon, C., MacCallum, F., & McGuinness, M. (2017). Men's experiences of having a partner who requires mother and baby unit admission for first episode postpartum psychosis. *Journal of Advanced Nursing*, 73(2), 309–409. <https://doi.org/10.1111/jan.13110>.
- Burgess, A. (2011). Fathers' roles in perinatal mental health: causes, interactions and effects. *New Digest*, 53, 24–29.
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10), 1435–1443. <https://doi.org/10.1177/1049732312452938>.
- Critical Appraisal Skills Programme (2018). *CASP qualitative checklist*. <https://casp-uk.net/casp-tools-checklists/>.

- Cummings, E. M., & Watson O'Reilly, A. (1997). Fathers in family context: effects of marital quality on child adjustment. In M. E. Lamb (Ed.), *The role of the father in child development* (pp. 49–65). Hoboken, NJ: John Wiley & Sons Inc.
- *Davey, S. J., Dziurawiec, S., & O'Brien-Malone, A. (2006). Men's voices: postnatal depression from the perspective of male partners. *Qualitative Health Research*, 16(2), 206–220. <https://doi.org/10.1177/1049732305281950>.
- de Montigny, F., & Lacharite, C. (2004). Fathers' perceptions of the immediate postpartal period. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 33(3), 328–339. <https://doi.org/10.1177/0884217504266012>.
- *Doucet, S., Letourneau, N., & Blackmore, E. R. (2012). Support needs of mothers who experience postpartum psychosis and their partners. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 41(2), 236–245. <https://doi.org/10.1111/j.1552-6909.2011.01329.x>.
- Dudley, M., Roy, K., Kelk, N., & Bernard, D. (2001). Psychological correlates of depression in fathers and mothers in the first postnatal year. *Journal of Reproductive and Infant Psychology*, 19(3), 187–202. <https://doi.org/10.1080/02646830124397>.
- Edhborg, M., Lundh, W., Seimyr, L., & Widstrom, A. (2003). The parent-child relationship in the context of maternal depressive mood. *Archives of Women's Mental Health*, 6(3), 211–216. <https://doi.org/10.1007/s00737-003-0020-x>.
- *Engqvist, I., & Nilsson, K. (2011). Men's experience of their partner's postpartum psychiatric disorders: narratives from the Internet. *Mental Health in Family Medicine*, 8(3), 137–146.
- *Everingham, C. R., Heading, G., & Connor, L. (2006). Couples' experiences of postnatal depression: a framing analysis of cultural identity, gender and communication. *Social Science & Medicine*, 62(7), 1745–1756. <https://doi.org/10.1016/j.socscimed.2005.08.039>.
- *Feeley, N., Bell, L., Hayton, B., Zerkowitz, P., & Carrier, M.-E. (2016). Care for postpartum depression: what do women and their partners prefer? *Perspectives in Psychiatric Care*, 52(2), 120–130. <https://doi.org/10.1111/ppc.12107>.
- Fletcher, R. J., Matthey, S., & Marley, C. G. (2006). Addressing depression and anxiety among new fathers. *The Medical Journal of Australia*, 185(8), 461–463.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21(3), 219–239. <https://doi.org/10.2307/2136617>.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992.
- Genesconi, L., & Tallandini, M. (2009). Men's psychological transition to fatherhood: an analysis of the literature, 1989–2008. *Birth*, 36(4), 305–317. <https://doi.org/10.1111/j.1523-536x.2009.00358.x>.
- Goodman, J. H. (2005). Becoming an involved father of an infant. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 34(2), 190–200. <https://doi.org/10.1177/0884217505274581>.
- Goodman, J. H. (2008). Influences of maternal postpartum depression on fathers and on father–infant interaction. *Infant Mental Health Journal*, 29(6), 624–643. <https://doi.org/10.1002/imhj.20199>.
- Greenhalgh, R., Slade, P., & Spilby, H. (2000). Fathers' coping styles, antenatal preparation and experiences of labour and the postpartum. *Birth*, 27(3), 177–184. <https://doi.org/10.1046/j.1523-536x.2000.00177.x>.
- Grube, M. (2005). Inpatient treatment of women with postpartum psychiatric disorders—the role of the male partners. *Archives of Women's Mental Health*, 8(3), 163–170. <https://doi.org/10.1007/s00737-005-0087-7>.
- *Habel, C., Feeley, N., Hayton, B., Bell, L., & Zerkowitz, P. (2015). Causes of women's postpartum depression symptoms: men's and women's perceptions. *Midwifery*, 31(7), 728–734. <https://doi.org/10.1016/j.midw.2015.03.007>.
- *Henshaw, E. J., Durkin, K. M., & Snell, R. J. (2016). First-time parents' shared representation of postpartum depressive symptoms: a qualitative analysis. *Social Science & Medicine*, 160, 102–110. <https://doi.org/10.1016/j.socscimed.2016.05.025>.
- Heron, J., Gilbert, N., Dolman, C., Shah, S., Beare, I., Dearden, S., & Muckelroy, N., et al. (2012). Information and support needs during recovery from postpartum psychosis. *Archives of Women's Mental Health*, 15(3), 155–165. <https://doi.org/10.1007/s00737-012-0267-1>.
- Hossain, Z., Field, T., Gonzales, J., Malphurs, J., & Del Valle, C. (1994). Infants of “depressed” mothers interact better with their non-depressed fathers. *Infant Mental Health Journal*, 15(4), 348–356. [https://doi.org/10.1002/1097-0355\(199424\)15:43.CO:2-Y](https://doi.org/10.1002/1097-0355(199424)15:43.CO:2-Y).
- Howard, L. M., Molyneaux, E., Dennis, C.-L., Rochat, T., Stein, A., & Milgrom, J. (2014). Non-psychotic mental disorders in the perinatal period. *The Lancet*, 384(9956), 1775–1788. [https://doi.org/10.1016/S0140-6736\(14\)61276-9](https://doi.org/10.1016/S0140-6736(14)61276-9).
- Kowlessar, O., Fox, J. R., & Wittkowski, A. (2014). First-time fathers' experiences of parenting during the first year. *Journal of Reproductive and Infant Psychology*, 33(1), 4–14. <https://doi.org/10.1080/02646838.2014.971404>.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- *Letourneau, N., Duffett-Leger, L., Dennis, C. L., Stewart, M., & Tryphonopoulos, P. D. (2011). Identifying the support needs of fathers affected by post-partum depression: a pilot study. *Journal of Psychiatry and Mental Health Nursing*, 18(1), 41–47. <https://doi.org/10.1111/j.1365-2850.2010.01627.x>.
- *Letourneau, N., Tryphonopoulos, P. D., Duffett-Leger, L., Stewart, M., Benzie, K., Dennies, C., & Joschko, J. (2012). Support intervention needs and preferences of fathers affected by postpartum depression. *Journal of Perinatal Neonatal Nursing*, 26(1), 69–80. <https://doi.org/10.1097/JPN.0b013e318241da87>.
- Lever Taylor, B. L., Billings, J., Marant, N., & Johnson, S. (2017). How do women's partner's view perinatal mental health services? A qualitative meta-synthesis. *Clinical Psychology & Psychotherapy*, 25(1), 112–129. <https://doi.org/10.1002/cpp.2133>.
- *Marrs, J., Cossar, J., & Wroblewska, A. (2014). Keeping the family together and bonding: a father's role in a perinatal mental health unit. *Journal of Reproductive and Infant Psychology*, 32(4), 340–354. <https://doi.org/10.1080/02646838.2014.920951>.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401–1415. <https://doi.org/10.1016/j.paid.2004.01.010>.
- McCubbin, H. I., & Patterson, J. M. (1983). The family stress process: the double ABCX model of adjustment and adaptation. *Marriage & Family Review*, 6(1–2), 7–37. https://doi.org/10.1300/J002v06n01_02.
- *Meighan, M., Davis, M. W., Thomas, S. P., & Droppleman, P. G. (1999). Living with postpartum depression: the father's experience. *American Journal of Maternal Child Nursing*, 24(4), 202–208. <https://doi.org/10.1097/00005721-199907000-00009>.
- *Mizukoshi, M., Ikeda, M., & Kamibeppu, K. (2016). The experiences of husbands of primiparas with depressive or anxiety disorders during the perinatal period. *Sexual & Reproductive Healthcare: Official Journal of Swedish Association of Midwives*, 8, 42–48. <https://doi.org/10.1016/j.srhc.2016.02.002>.
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., & Shekelle, P., et al. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews*, 4(1), 1. <https://doi.org/10.1186/2046-4053-4-1>.
- Morgan, M., Matthey, S., Barnett, B., & Richardson, C. (1997). A group programme for postnatally depressed women and their

- partners. *Journal of Advanced Nursing*, 26(5), 913–920. <https://doi.org/10.1046/j.1365-2648.1997.00433.x>.
- *Muchena, G. (2007). Men's experiences of partners' postnatal mental illness. *Nursing Times*, 103(48), 32–33.
- *Nicholls, K., & Ayers, S. (2007). Childbirth-related post-traumatic stress disorder in couples: a qualitative study. *British Journal of Health Psychology*, 12(4), 491–509. <https://doi.org/10.1348/135910706x120627>.
- National Institute for Health and Clinical Excellence (NICE) (2014). *Antenatal and postnatal mental health: clinical management and service guidelines (Clinical Guideline 192)*. London: NICE. <http://www.nice.org.uk/guidance/cg192>.
- NHS England (2016). *Perinatal involvement and support for partner/significant other (Mental Health Program of Care Scheme MH7)*. <https://www.england.nhs.uk/nhs-standard-contract/cquin/pres-cquin/>.
- Paulson, J., & Blazemore, S. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: a meta-analysis. *Journal of the American Medical Association*, 303(19), 1961–1969. <https://doi.org/10.1001/jama.2010.605>.
- Phares, V., Lopez, E., Fields, S., Kamboukos, D., & Duhigm, A. M. (2005). Are fathers involved in paediatric research and treatment? *Journal of Paediatric Psychology*, 30(8), 631–643. <https://doi.org/10.1093/jpepsy/jsi050>.
- Plunkett, C., Peters, S., & Wittkowski, A. (2016). Mothers' experiences of recovery from postnatal mental illness: a systematic review of the qualitative literature and metasynthesis. *JSM Anxiety and Depression*, 1(4), 1019.
- *Reid, H., Wieck, A., Matrunola, A., & Wittkowski, A. (2017). The experiences of fathers when their partners are admitted with their infants to a psychiatric mother and baby unit. *Clinical Psychology and Psychotherapy*, 24(4), 919–931. <https://doi.org/10.1002/cpp.2056>.
- Robertson, E., & Lyons, A. (2003). Living with puerperal psychosis: a qualitative analysis. *Psychology and Psychotherapy: Theory, Research and Practice*, 76(4), 411–431. <https://doi.org/10.1348/147608303770584755>.
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1), 45. <https://doi.org/10.1186/1471-2288-8-45>.
- Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology*, 12(1), 181. <https://doi.org/10.1186/1471-2288-12-181>.
- Turner, B., Garrett, C., & Wittkowski, A. (2017). Male partners of women admitted to MBUs in the UK: a survey of available psychological and psychological interventions. *Women's Health Research*, 1(1), 25–36.
- *Webster, A. (2002). The forgotten father: the effect on men when partners have PND. *Community Practitioner*, 75(10), 390–393.
- Wood, A. F., Meighan, M., Thomas, S. P., & Droppleman, P. G. (1997). The downward spiral of postpartum depression. *MCN, The American Journal of Maternal Child Nursing*, 22, 308–317.
- *Wyatt, C., Murray, C., Davies, J., & Jomeen, J. (2015). Postpartum psychosis and relationships: their mutual influence from the perspective of women and significant others. *Journal of Reproductive and Infant Psychology*, 33(4), 426–442. <https://doi.org/10.1080/02646838.2015.102718>.