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Women's experiences of interventions for fear of childbirth in the perinatal period: A meta-synthesis of qualitative research evidence

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ABSTRACT

Issue: Fear of childbirth (FOC) can be debilitating, impacting women's lives in pregnancy, the puerperium and beyond. Research investigated various interventions for FOC in the perinatal period, but there been no synthesis of the experiences of women who engaged with these interventions, which would inform clinical practice guidance and the development of future interventions.

Aim: To conduct a review and synthesis of qualitative studies of interventions for fear of childbirth in the perinatal period and women's experiences of them.

Methods: A meta-synthesis was performed to examine all relevant qualitative studies describing women's experiences of interventions for FOC, in all languages. A comprehensive search of relevant databases from 1978 to 2019 was conducted. In total, following appraisal, seven qualitative studies were eligible for inclusion. The findings were integrated using thematic synthesis for the final stages in the thematic analysis.

Findings: One overarching theme "Ownership of Childbirth" and three analytical themes "Facing the fear", "Feeling empowered", "Managing the fear with a sense of security" were generated through the synthesis. There were no studies outside of Scandinavia located.

Discussion: This meta-synthesis provides a new way to describe the process of moving from fear to "Ownership of childbirth". The first step in the process appears to be acknowledging and identifying the individual's fears. Women can be empowered to self-manage FOC but may be influenced by external factors such as the support of partners and staff.

Conclusion: These findings provide evidence to inform the development of future interventions for FOC and highlight the need for further qualitative research globally.

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Statement of significance

Individual qualitative research studies have investigated the experiences of women who engaged with interventions for FOC, but there is no meta-synthesis of these findings.

FOC is poorly defined and encompasses a spectrum of fear in childbearing women.

FOC can be extremely debilitating for women and is associated with a negative birth experience, poor partner relationships and post-traumatic disorder (PTSD).

This meta-synthesis provides a new way of framing women's experiences of engaging with interventions for FOC and navigating the birth process.

Highlights significant gaps in the literature suggesting an urgent need for further qualitative studies, particularly outside of Scandinavia.

1. Introduction

Fear of childbirth (FOC) is a specific, distressing emotion which impacts women and men's everyday lives [1–3]. Approximately 80% of women [4] experience FOC, ranging from normal anxieties and worries in the perinatal period to Pregnancy Specific Anxiety (PSA), to a severe phobic fear, termed tocophobia [1,5,6]. PSA

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relates to fears, worries and anxiety related to pregnancy and birth, and may overlap with FOC [6]. According to a systematic review and meta-analysis, the prevalence of FOC in pregnant women worldwide was 14%, and in a subgroup analysis according to parity it was 16% in nulliparous women versus 12% in multiparous women [7]. Studies included in this meta-analysis [4] were all undertaken in first world countries, however, there has since been a prevalence study performed in Kenya which indicates a similar prevalence of 14% in primigradas in this developing country, while FOC prevalence was lower in multigravidas (8%) [8]. This may be an underestimation, since prevalence studies have not included women whose FOC is so severe that they do not get pregnant or who choose abortion as a result of tocophobia. Furthermore, in a study of over 1000 Swedish expectant fathers, 13% experienced FOC [2]. FOC in fathers may impact women's self-esteem and may drive the decision to request an Elective Caesarean [2]. Men with antenatal FOC are more likely to experience birth as frightening and may benefit from interventions for FOC [3].

Although fear is a distinct emotion from anxiety, FOC is categorised under the umbrella of anxiety disorders, and they share some common symptoms, such as elevated sensitivity to threat, excessive worrying, fatigue, and difficulty sleeping [6,9–11]. Importantly, it may be normal for women to feel anxious due to the lack of predictability of birth, experiencing unspecific recurrent thoughts, but FOC may be experienced as continuous, specific and strong thoughts which hinder the psychological preparation for birth, how birth is experienced and the transition to parenthood [4,12–14]. There is a lack of an operational definition of FOC [4], but the Wijma Expectancy/Experience Questionnaire Part A (W-DEQ A) [15] and Fear of Birth Scale (FOBS) [16] are specific tools which have been widely used to measure and identify FOC [4]. Furthermore, if a woman requests support for FOC this may be considered a definition [4,17]. Most countries do not routinely screen for FOC [6,14], but NICE guidelines (CG 192) recommend universal screening for anxiety in pregnancy [18]. This recommendation is based on expert consensus rather than evidence and has not been widely adopted. Universal screening for anxiety anticipates early intervention and the prevention of other perinatal or co-morbid mental conditions. However, the evidence suggests that screening for anxiety would not identify women with FOC, which is a separate, although poorly defined, concept [18–20].

Recognising and responding to FOC in the perinatal period is important as cumulative evidence suggests an association between FOC and heightened pain perception in labour, lower pain tolerance, greater use of epidural analgesia in labour, longer duration of labour [21,22] and increased likelihood of CS [9]. FOC can cause anxiety and depression [20,23]. In the postnatal period, women with FOC are more likely to report a negative birth experience [24,25], develop PTSD [26,27] and have poor partner relationships [26]. Ultimately, women with FOC may decide to avoid pregnancy [28] or in women with secondary FOC, decide to have no further children [6,29]. Moreover, the existing body of research suggests that elevated, prolonged anxiety in pregnancy is linked with adverse emotional and behavioural outcomes in children [30]. Yet, despite increasing recognition of the impact on health and well-being, research into FOC, anxiety and the effectiveness of perinatal interventions has been neglected [31].

Factors influencing FOC have been explored in several studies. These include women with low birth self-efficacy, anxiety, a history of depression, history of sexual abuse, poor partner support, partner dissatisfaction, previous negative birth experience, and previous operative births [32–35]. Socio-demographic risk factors include; younger maternal age, lower income, lower education, and low social support [9,34]. Women who experienced FOC in a previous pregnancy or a previous operative birth are at significant risk of experiencing FOC in a subsequent pregnancy [33].

One previous meta-synthesis by Sheen et al. [14] aimed to identify and synthesise the key elements of FOC reported by women and included 25 papers from 24 studies from 12 countries, mainly Swedish and Australian. Based on the study findings, Sheen et al. [14] suggested enhancing tolerance of uncertainty, developing confidence, self-efficacy and ability to cope with labour may be key components for consideration when developing interventions for women with FOC. However, given the study aim, these conclusions may go beyond the scope of the study.

While FOC is commonly experienced by women, and it is well-recognised that comprehensive maternity care should provide specifically for women with FOC, provisions in maternity services for women with FOC have been lacking. National surveys in Sweden and the UK reported disparity in the availability of services, and varied approaches, with different health care professionals leading the care [36,37]. Although a multi-dimensional approach may generally promote well-being in pregnancy, it is important to use specific interventions in order to see an improvement in symptoms [35,38].

1.1. Women's experiences of interventions for FOC

While quantitative approaches have been used, there is a paucity of qualitative evidence on women's experiences of interventions for FOC. Qualitative approaches may facilitate more depth of understanding of complex experiences than can be gleaned from quantitative data. A study by Airo-Tovanen [13] in Finland measured dimensions of FOC, positive and negative emotions about childbirth in primiparous women attending a group intervention. However, little is known about how the women experienced the intervention. Most intervention trials have focussed on a quantitative measure of FOC and the final preferred mode of birth as a primary outcome (CS or vaginal birth), and a qualitative component of these studies appeared to be lacking. For example, an RCT from Finland ($n=4575$) of a group psycho-education with relaxation intervention in nulliparous women, identified a reduction in the number of CS and fewer postnatal depressive symptoms as well as a reduction in women with severe FOC [39], and an Australian RCT of telephone psycho-education by midwives similarly reported positive quantitative outcomes of reduced FOC and improved childbirth self-efficacy [40].

Out of four systematic reviews aiming to investigate the effectiveness of interventions offered to women with FOC [6,41–43], only two systematic reviews [42,43] aimed to include qualitative data representing the views of women. One systematic review [43] did not locate any studies in the systematic search and, the other [42] located three qualitative studies, but details of the qualitative findings lacked detail in the narrative of the systematic review. According to Hennessy et al. [44], performing qualitative research as part of clinical trials can provide in-depth data on the experiences of participants, thereby addressing questions which quantitative research methods could not, such as the acceptability of the intervention. In addition, qualitative data could inform future trial design and explain trial outcomes [44]. Thus, this is a key component which is missing for future trial design.

While there is no specific systematic review or meta-synthesis in relation to women's experiences of interventions for FOC, there is a systematic review and narrative synthesis of women's views on the acceptability of and satisfaction with non-pharmacological interventions for mild to moderate anxiety in pregnant women [35]. This review [35] included 14 studies (both quantitative and qualitative) of women from the general antenatal population or with antenatal anxiety or depression symptoms or risk factors of anxiety or depression. The interventions aimed to equip women with coping strategies and reduce or prevent the development of

symptoms of anxiety or depression. A total of 204 participants provided their views of the interventions offered. Many of these views were extremely positive. Despite initial concerns about feeling uncomfortable attending a group or peer support due to perceived stigma, the women reported the group interventions were of benefit to them. Groups allowed women to make friends and feel less isolated in a supportive environment. Women who previously experienced anxiety or depression had a desire to learn new ways of managing their symptoms with the aim of achieving a positive birth experience. However, some women did become upset when faced with their emotions [35]. Thus, facilitating time for women to discuss their fears was an important component of interventions in the studies included.

According to Evans et al., CBT interventions for mild to moderate anxiety in pregnancy had the highest attrition rates and yoga interventions and interventions without a psychological assessment as part of the inclusion criteria had the lowest attrition rates [35]. Some women did not manage to complete some of the homework aspect of the CBT interventions and felt it may be better to have a variety of techniques so that they could choose which would be beneficial to them. Women reported various benefits from the different interventions such as improved sleep, feeling more confident and positive about the future. The women felt that the availability of the interventions was important, the location and timing as well as the commitment required. While there may be some overlap with the experiences of women with mild to moderate anxiety in pregnancy, women's experiences of interventions specifically for FOC are still not known.

The aim of this meta-synthesis is to address this knowledge gap by aggregating the individual findings of qualitative studies related to women's experiences of interventions for FOC in the perinatal period, in order to develop new meaningful interpretations. Developing a new way of framing the experience may advance a profound understanding of the practice of engaging with interventions for FOC for women and health care professionals.

2. Methods

2.1. Design

Meta-synthesis involves a rigorous search of qualitative studies on a certain topic allowing the researcher to extend beyond the original data in primary qualitative research studies by interpreting analogies between the accounts and developing analytical themes using key metaphors and organisers [45]. Williams and Shaw outlined the following five consecutive stages of the meta-synthesis process [46,47].

1. Developing a research question.
2. Identifying relevant articles.
3. Quality appraisal of the research studies.

Synthesizing the studies/thematic synthesis.

4. Developing descriptive themes (by extracting data, coding text and developing descriptive themes and applying an *a priori* framework developed through familiarization with the data).
5. Interpretation and conceptual synthesis.

Thematic synthesis is useful when conducting meta-synthesis involving qualitative studies about interventions [48]. Since few of the studies deal with the phenomenon of interest directly, familiarization with the data ensured that all the relevant concepts in the individual studies would be considered in the meta-synthesis [45].

There are various definitions of the perinatal period in the literature [49]. We considered the study population to be women

in the perinatal period, which was defined as in pregnancy, and up to two years post birth, since, according to empirical evidence FOC can occur at any time during the antenatal or postnatal period, or exist along a continuum of this period [33,49].

This meta-synthesis had three specific objectives;

- 1) to systematically search and appraise the qualitative evidence on women's experiences of interventions for FOC in the perinatal period
- 2) to synthesise women's experiences of interventions for FOC collectively by interrogating data and going beyond the individual relevant qualitative study findings to a higher level of analysis, by developing descriptive themes, interpretation and conceptual synthesis
- 3) to interpret and discuss the findings of the meta-synthesis which has the potential to generate new understandings which may inform the development of future interventions.

Ethical approval was not required for this research as it used secondary data that is in the public domain. However, ethical principles were adhered to in conducting this study.

After reading the papers which met the inclusion criteria and gaining a better understanding of the topic, and data extraction, the following sub-questions were developed to be used as an *a priori* framework in the final stage of analysis, for the thematic synthesis:

1. How did women feel before experiencing the intervention for fear of childbirth?
2. How did the women feel after experiencing the intervention for fear of childbirth?
3. What interventions are perceived as helpful by pregnant women with fear of childbirth?
4. How did women feel about the interventions offered to them for fear of childbirth?
5. Was the intervention acceptable to women?
6. Were women satisfied with the intervention for fear of childbirth?
7. Who supported women to cope with fear of childbirth?
8. What was good about the intervention?
9. How could the intervention be improved?

2.2. Epistemology and reflexive note

In line with the 'critical realist' approach, which means that knowledge of our reality is mediated by individual perceptions and beliefs [50], at the outset of this review, any existing beliefs were documented to limit their influence on the findings. A central tenet of this belief is the inquiry into the nature of things. However, much of reality endures despite inquiry, as reality exists independently of our knowledge or awareness of it. The main researcher is a midwife who believes that continuity of midwifery carer benefits all women and benefits women with FOC. In addition, in order to limit the effects of these beliefs, there was a conscious effort to seek any disconfirming data in this area during the analysis. Field notes were kept during the process of the synthesis and the researcher consulted the other authors as 'critical friends' during the meta-synthesis process.

2.3. The search of the literature

This review was undertaken using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA Guidelines) [51] and was registered on the International prospective register of systematic reviews (PROSPERO ID: CRD42017068202), however, due to the iterative nature of meta-synthesis, this

protocol acted as an initial guide for the authors and was refined during the process of the review.

A comprehensive systematic search of relevant electronic databases and a hand-search of the bibliographies of the relevant studies was performed, limited to qualitative articles in all languages from 1978 to 2019. Databases searched were: CINAHL Plus, MEDLINE, PsycINFO, MIDIRS, Pubmed, EMBASE, ProQuest (including ProQuest Central, ProQuest Dissertations & Theses, Australian Education Index, Social Science Premium Collection), The Cochrane Library, and the International Clinical Trials Registry. This robust search is integral to the meta-synthesis quality and ensured that all relevant published evidence was included.

Search terms included: "Tocophobia", "Pregnancy-specific anxiety", "high childbirth-related fear", "intense fear", "high childbirth fear", "high levels of childbirth fear", "severe childbirth fear" and "severe FOC", "fear of childbirth", "fear of birth", "childbirth anxiety", "birth anxiety", "morbid fear", and keywords related to qualitative research. Boolean operators and truncation were used with the keywords in the search.

Inclusion criteria:

- All published original studies using qualitative methods that describe women's experiences of interventions for FOC in the perinatal period published in peer-reviewed journals.
- Studies presenting qualitative data assessing interventions to improve FOC.
- Study participants were women with FOC.
- Dissertations or theses presenting qualitative data assessing interventions to improve FOC.

Exclusion criteria:

- No intervention present.
- Opinions of partners, midwives or health care professionals.
- Women with physical co-morbid health issues, i.e. Assisted Reproductive Therapy, previous pregnancy loss, high-risk pregnancy or known pregnancy complications or perivable pregnancy.
- Women with co-morbid mental health issues were not excluded.

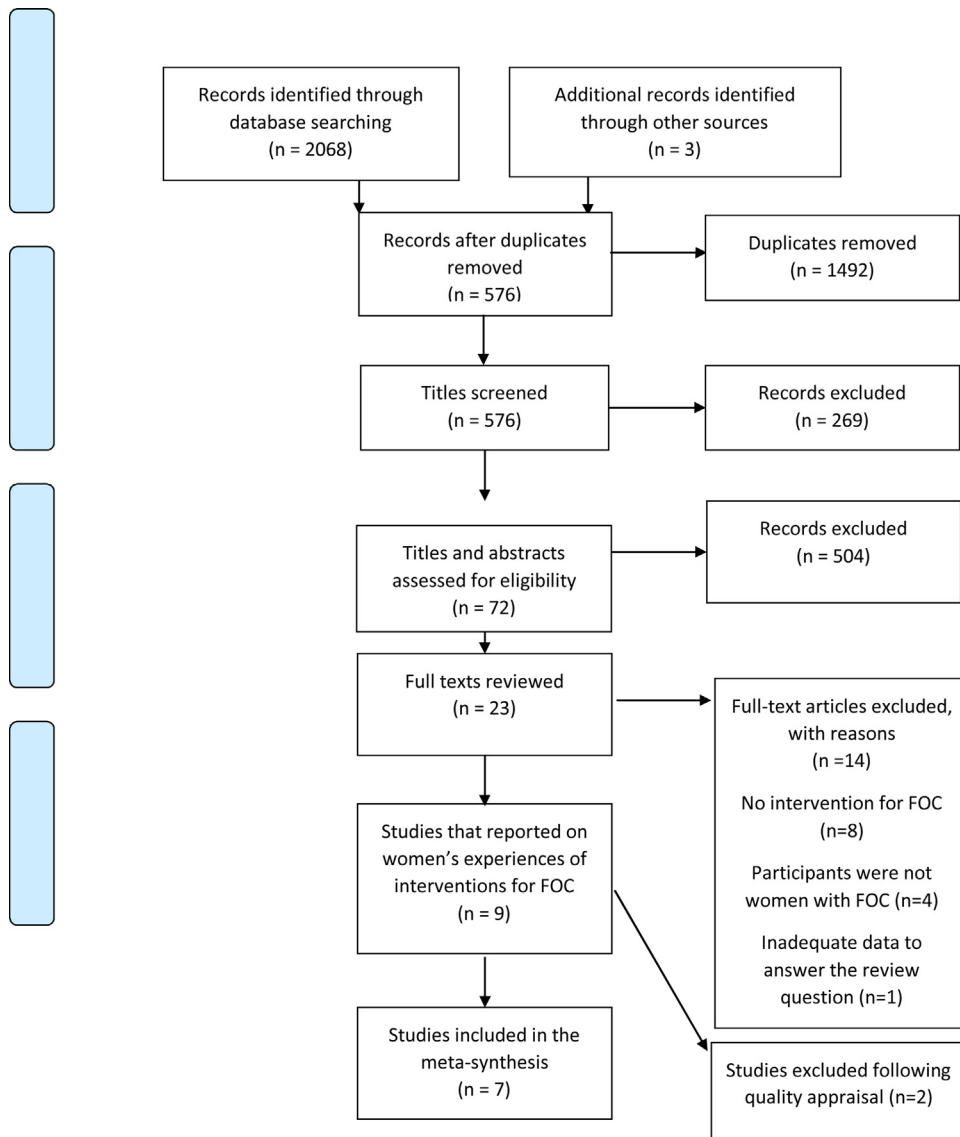


Fig. 1. PRISMA flowchart of search strategy results.

2.4. Search outcome

The results of the primary search revealed 2068 studies and 3 further studies identified through other sources (Fig. 1). Duplicates were removed (1492), leaving 576 studies to be screened. Initially, 576 titles were screened for relevance, and 269 studies were excluded at this stage. A further five hundred and four studies were excluded after reviewing both title and abstract since they were not related to the subject of interest. The full text of 23 papers were screened, and 14 of these were then excluded (reasons for exclusion are in Fig. 1), thus there were seven papers that reported women's experiences of interventions for FOC in the perinatal period [13,52–58].

2.5. Appraisal of studies for research quality

A quality appraisal was performed independently by two authors (MOC and PL-W), using the CASP criteria for qualitative research [59]. Using this tool involves two initial screening questions which identify the aims of the research and subsequent suitability of qualitative methods for the purpose of the research [59]. The original eight studies met this screening criterion (Table 1). Following this initial screening, rather than rigidly applying criteria to evaluate the research, [60], the studies were further appraised using a list of questions related to the trustworthiness, theoretical considerations and practical considerations or technical factors [59].

Seven full-text papers were deemed to be of sufficient quality (Table 1) and two studies were carefully considered but excluded at this stage, due to methodological limitations of the study and inadequate data useful to the review question [13,54] (Fig. 1). In the studies which were excluded, there was a lack of rigorous data analysis or a lack of reflexivity identified; this may be explained by the strict word limit imposed by journals (table available on request).

2.6. Final selection of studies

At the outset, all the potentially relevant studies were read and reviewed in full. These studies revealed various experiences of women who had attended different interventions for FOC in the perinatal period. The seven papers which met the inclusion criteria after quality appraisal [52,53,55–57,61,62], were published between 2010 and 2019 and included four different interventions for women with FOC in the perinatal period. However, the details of the intervention were not clear in every study. Three Norwegian studies [53,56,57] were eligible for inclusion. On scrutinising these studies for details of the intervention used, it became apparent that the women all participated in the same continuity of care team midwifery intervention which is described in another paper [63] but, the five women in the Ramvi study [53] are separate to the

thirteen women included in Lyberg (a) and (b) [48,53]. The other four papers were Swedish and included various interventions with combinations of approaches as follows [52,55,61,62]. Two studies reported on an intervention which consisted of Internet-based CBT (iCBT) [61,62], in one of these the women were self-selecting (Niemenen et al.), whereas the other was a randomised control trial (Baylis et al.). One paper reported on an intervention which comprised five weeks of art therapy (individual, group or both) in combination with a specialist midwifery team, which involved a visit to the birth environment and review of past notes as relevant [52]. One study reported on midwife-led counselling which involved information giving on the birth process, learning techniques to cope with labour, visits to the labour ward and review of the birth notes as necessary for women who had a negative previous birth experience [55]. Four of the studies included continuity of midwifery care as part of the intervention [52,53,56,57] (Table 2).

2.7. Generating themes within and across studies

All text labelled findings and all text within the findings sections of the studies was considered data and extracted for the initial descriptive coding by the first author [45,46,48]. Codes were generated by combining similar ideas across texts. Initially, the inductive coding of women's experiences of interventions for FOC in the perinatal period was not restricted to an *a priori* framework which allowed the researcher to recognise new ideas from the data [45]. Based on the data, the coding categories were sorted into the following *a priori* framework: (1) before the intervention; (2) during the intervention; (3) after the intervention; (4) elements of interventions perceived as helpful; (5) external factors and (6) women's suggestions for the improvement of interventions for FOC.

Descriptive themes were generated by hand and then input to a new file using NVIVO PRO 11 software. The authors examined all the text they coded to check consistency of the interpretation of the themes at this stage to assess if additional interpretations or other themes were needed. Subsequently, the descriptive themes were examined for similarities and differences and grouped across the studies [45]. The authors continued to participate in the iterative process of the generation of descriptive themes using NVIVO, with the second author (PL-W) acting as a 'critical friend'.

2.8. Synthesis of themes to refine meaning and new analytical themes

An external *a priori* framework consisting of research question and sub-questions, to interrogate the descriptive synthesis was applied to create analytical themes, a crucial step in thematic synthesis which ensures that findings 'go beyond' the original research findings [45,46] (Table 4). The second author (PL-W) continued to act as a 'critical friend' in the process of developing

Table 1
Appraisal of studies.

First author (year of publication)	Clear statement	Qualitative appropriate	Research design	Sampling	Data collection	Reflexivity	Ethics	Data analysis	Discussion of findings	Value	Overall assessment of methodological quality
Ryding (2003)	✓	X	?	?	✓	?	✓	X	X	?	Low
Lyberg (2010a)	✓	✓	✓	✓	✓	?	✓	✓	✓	✓	High
Lyberg (2010b)	✓	✓	✓	✓	✓	?	✓	✓	✓	✓	High
Ramvi (2011)	✓	✓	✓	✓	✓	✓	✓	?	✓	✓	High
Niemenen (2015)	✓	✓	✓	✓	✓	?	✓	✓	✓	✓	High
Wahlbeck (2017)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	High
Larsson (2018)	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	High
Airo-Toivanen (2018)	✓	X	X	✓	?	X	✓	X	X	?	Low
Baylis (2019)	✓	✓	✓	✓	✓	?	✓	✓	✓	✓	High

Table 2
Characteristics of included studies.

Authors and country	Study aims	Participants (n)	Study design	Description of intervention	Study definition of FOC	Data collection	Data analysis	Main findings
Lyberg et al. (a) 2010 Norway	To gain a deeper understanding of women's experience of FOC. To describe participant experiences of a midwifery continuity of care intervention for women with FOC.	N = 13 women ^a 1–1.5 years after the birth Aged 25–37 years	Hermenesutic	Intervention: Team midwifery continuity of care, a feeling of security, identify individual needs and offer practical, informational and emotional support throughout pregnancy, childbirth and the perinatal period for women with FOC. One of the midwives was also a mental health nurse. All 4 midwives on the team were dual qualified nurse-midwives with minimum 2 years maternity experience and familiar with working with women with FOC. The midwives attended 30 hours group supervision. Mothers & fathers invited to a brief training programme prior to the birth.	Self-reported FOC	Semi-structured individual interviews conducted face to face using a dialogue approach	Interpretive content analysis	<i>One main theme:</i> The woman's right to ownership of the pregnancy, childbirth and postnatal care as a means of maintaining dignity. Theme 1) Being aware of barriers and reasons for fear <i>Subthemes in Theme 1:</i> Fear due to traumatic memories Being trapped–no other alternative Lack of professional competence Not being included in the decision- making and not having ownership of the birth Spiritual and emotional experiences of the birth Lack of emotional capacity Fear for the unborn child Relationship with the midwife and others Theme 2) Being prepared for childbirth <i>Subthemes in Theme 2:</i> The need to be involved and supervised The need to know the midwife- versus the feeling of being intruded upon The Body-in-labour Individual care and birth plan Theme 3) Being confirmed and treated with dignity by the midwife. <i>Subthemes in Theme 3:</i> Guided by the team midwife The meaning of the presence of a familiar midwife during childbirth Increased self-esteem and professional development Theme 1) Creating a trusting and caring relationship; <i>Subthemes:</i> being sensitive to individual needs & wishes, acting in accordance with & responding to individual desires & needs, ability to provide hope & confirmation; Theme 2) Demonstrating problem-solving capacity; <i>Subtheme:</i> being understanding and explaining the reasons for a fear of childbirth Theme 3) Showing willingness, preparedness & courage to provide support, which reflected the midwives long & multi-faceted clinical experience as health care professionals. <i>Subtheme:</i> showing involvement and demonstrating courage to handle acute situations beyond normal routines. <i>3 key conclusions:</i> 1 Health professionals must accept the fear of birth, without demanding to understand what is "behind" the fear. 2 Obstetricians and midwives have to listen to women and help to contain their strong emotions regarding their forthcoming experience of giving birth. 3 Health professionals should help to contribute to a safe relationship, allowing for a real dialogue about how the pregnancy, birth, and postnatal period should be conducted in
Lyberg et al. (b) 2010 Norway	To describe midwives supervisory styles and leadership role as experienced by women with a severe fear of childbirth.	N = 13 women ^a 1–1.5 years after the birth Aged 25–37 years	Explorative	Intervention: Team midwifery continuity of care, a feeling of security, identify individual needs and offer practical, informational and emotional support throughout pregnancy, childbirth and the perinatal period for women with FOC. One of the midwives was also a mental health nurse. All 4 midwives on the team were dual qualified nurse-midwives with minimum 2 years maternity experience and familiar with working with women with FOC. The midwives attended 30 hours group supervision. Mothers & fathers invited to a brief training programme prior to the birth.	Self-reported FOC	Semi-structured individual interviews conducted face to face using a dialogue approach	Interpretive content analysis	
Ramvi et al. 2011 Norway	To investigate the experience of women who requested a caesarean section due to fear, but who gave birth vaginally despite this fear.	N = 5 women Women who attended the intervention and an individual consultation with 1 of 4 midwives on at least 3 occasions before birth.	Narrative	Intervention: Team midwifery continuity of care, a feeling of security, illuminate individual needs and offer practical, informational and emotional support throughout pregnancy, childbirth and the perinatal period for women with FOC. One of the midwives was also a mental health nurse. All 4 midwives on the team were dual qualified nurse-midwives with minimum 2 years maternity experience and familiar with working with women	Self-reported FOC	Narrative individual face to face interviews in two sessions.	Biographical, narrative, interpretive method (BNIM)	

Nieminen et al. 2015 Sweden	To describe the expectations concerning imminent childbirth before and after 8 weeks of Internet-based cognitive behavioural therapy (ICBT) among nulliparous women with severe FOC	N = 15 women Nulliparous women who completed the whole programme. Mean age 29.5 years. Exclusion: parous women, women who did not meet the criteria for the intervention (W-DEQ A < 85)	Thematic analysis	with FOC. The midwives attended 30 hours group supervision. Mothers & fathers invited to a brief training programme prior to the birth. Intervention: ICBT for severe FOC weekly for 8 weeks (started 18 to 30 weeks gestation). The module consisted of psycho-education, cognitive restructuring, exposure both imaginary and <i>in vivo</i> , & relapse prevention. Participants got homework and feedback weekly.	W-DEQ A ≥ 85 (Majority had W-DEQ A ≥ 100)	Open-ended questions over the internet (written text)	Thematic analysis	the best possible way for both the mother and the baby. <i>My own role</i> Theme 1 – Fear: from hopelessness with anxiety, uncertainty and loneliness to simultaneous doubt and hope Theme 2 – Self-confidence: from lacking self-confidence to being an active subject Theme 3 – Coping: from avoidance of, to active coping with labour <i>The role of others</i> Theme 4 – Partner: from being uncertain to being an active, supportive person Theme 5 – Staff: from being unavailable to being supportive and helping <i>Attitudes towards the baby</i> Theme 6 – The baby: from only focusing on the baby after the nightmare is over to focusing on the baby during all stages of labour and delivery <i>Overarching Main theme: Gaining hope and self-confidence</i> 3 main themes: Theme 1: Carrying heavy baggage describes women's fear Subthemes: Fear of hospital and physical damage to self and the baby Being unable to identify oneself as a mother Theme 2: Creating images as a catalyst for healing Subthemes: Uncovering and verbalising hidden feelings Sharing the burden with others Images became treasured article Theme 3: Acquiring new insights and abilities Subthemes: Depositing the heavy baggage Facilitating attachment to the baby
Wahlbeck et al. 2017 Sweden	Women's experience of treatment by art therapy for severe FOC.	N = 19 women Women who took part in the intervention; 3 months after the birth (2011–13). Aged 27–41 (mean age 32) 10 nulliparous 9 parous women 2 single mothers Excluded: women with a psychiatric diagnosis, non-Swedish speaking, history of substance abuse, or had physical obstacles for normal birth	Phenomenology Hermeneutic	Intervention: Art therapy for FOC (28 to 36 weeks gestation) for 5 weeks. Individual, group & both group & individual. Support from a specialist midwifery team- discuss fears, counselling, information about birth, visit to the birth environment & review of past case notes if relevant	W-DEQ A ≥ 85	Semi-structured face to face interviews. 18 at home, 1 in the hospital, 1 in the art therapy room		
Larsson et al. 2018 Sweden	To describe women's experiences of midwife-led counselling for childbirth fear	N = 27 women Women who participated in the intervention Aged 24–38 18 nulliparous women 9 parous women (second or third baby)	Descriptive	Intervention: Midwife-led counselling	FOBS ≥ 60	Telephone interviews at least two months after the birth	Thematic analysis	Overarching main theme: "Midwife-led counselling brought positive feelings and improved confidence in birth". Theme 1: The importance of the midwife Theme 2: A mutual and strengthening dialogue Theme 3: Coping strategies and support enabled a positive birth Theme 4: Being prepared for a future birth
Baylis et al. 2019	To describe women's experiences of guided internet-delivered Cognitive Behavioural Therapy for Fear of Birth	N = 19 Women who participated in the U-CARE pregnancy trial (RCT for fear of birth). Aged 25–38	Descriptive	Intervention: internet delivered CBT. 8 week self-help guided by a psychologist.	FOBS ≥ 60	Semi-structured interviews by telephone	Thematic analysis	Women would have preferred face-to-face meetings. CBT did not pinpoint their fears, working in solitude was challenging and difficult to maintain motivation. Some women found its flexibility of use positive.

FOBS = Fear of Birth Scale; FOC = Fear of Childbirth; W-DEQ A = Wijma Delivery Expectancy Questionnaire Part A; ICBT = Internet-based Cognitive Behavioural Therapy.

^a Same study population.

Table 3
Developing themes and subthemes.

Theme 1: Facing the fear?		Theme 2: Feeling empowered		Theme 3: Managing the fear with a sense of safety	
Subtheme	Subtheme	Subtheme	Subtheme	Subtheme	Subtheme
<i>Acknowledging the fear</i>	<i>Identifying the fear</i>	<i>Internal Agency</i>	<i>External factors</i>	<i>Coping in times uncertainty</i>	<i>Reframing the emotions about childbirth</i>
Communicating the fear was difficult	Fear of injury of infant	Developing self-confidence and self-efficacy	A real dialogue between clinician & woman	Viewing labour pain an having a purpose	Helped women to open up
Birth process viewed with uncertainty	Fear of loss of control	Gaining control over decisions and choices during birth	Birth discussion was opportunity to reconcile	Belief in the staffs competence and skills	Helped to feel calm, safe
Unable to picture parenthood	Feeling trapped during the birth	Gaining insight into reasons for the fear	Developing a trusting relationship	Able to gain a sense of control using techniques learned	Gained hops
Not being treated with dignity	Feeling vulnerable	Gaining more certainty	Felt listened to	Willingness of staff to provide support	Developing a trusting relationship led to a feeling of security
Lack of Agency	Being Left alone in labour	Thought process between sessions-getting feelings in order	Midwife was understanding	Emotional preparation	No worries or fears after the intervention
Negative self-image	Lacking emotional capacity	Turning negative thoughts around	Take fear seriously (is this midwives/clinicians?)	Feel safe in the uncertainty	Turning negative thoughts around
Midwife in control	Feeling unheard	Understanding the previous birth	Treated as an individual		Visualising supportive staff
Competency and availability of the midwife	Not being treated with dignity	Learned techniques to cope	Working with other women helped to process the fear, sharing feelings, share problem		
Previous Traumatic experiences left deep emotional impressions		Visualising the baby	Supportive partner		
Feeling trapped during the birth		Painting promoted inner healing processes	Sensitivity to individual needs		
		Normalising the emotions of the fear	Visiting the labour ward		
		Managing the fear is emotional process	Taking an active role in decision-making		
		Developing power, pride			
		Learning to trust in others and self			
		Taking an active role in decision-making			

Questions asked of the data

1. How did women feel before experiencing the intervention for fear of childbirth?
2. How did the women feel after experiencing the intervention for fear of childbirth?
3. What interventions are perceived as helpful in maternity care by pregnant women with fear of childbirth?
4. How did women feel about the interventions offered to them for fear of childbirth?
5. Was the intervention acceptable to women?
6. Were women satisfied with the intervention for fear of childbirth?
7. Who supported women to cope with fear of childbirth?
8. What was good about the intervention?

analytical themes by scrutinising the analysis and promoting reflection and a deeper exploration of alternate interpretations of the synthesis [46]. This process involved numerous face to face meetings and discussions about possible interpretations of the data. Finally, for the second and third order interpretation, the authors discussed the themes and subthemes which were generated through the synthesis, considering the results to ensure they were grounded in the original data [45,46].

3. Findings

The characteristics and key information from studies included in the meta-synthesis are presented in Table 2.

From the included studies, 137 women of mixed parity participated, 103 of these participated in face to face interviews, 19 in telephone interviews and 15 women documented statements online. The studies used different definitions of FOC; two studies

Table 4
Thematic synthesis: concepts, themes and articles in which they were identified.

Theme	Subtheme	Article
Facing the fear	Acknowledging the fear	2, 4, 5, 6
	Identifying the fear	1, 2, 3, 4, 5, 6, 7
Feeling empowered	Internal Agency	1, 2, 3, 4, 5, 6, 7
	External Factors	1, 2, 3, 4, 5, 6, 7
Managing the fear with a sense of security	Coping in times of uncertainty	1, 2, 3, 4, 5, 6
	Re-framing the emotions about childbirth	2, 3, 4, 5, 6

Key: Articles numbered, 1 = Lyberg (a) (2010), 2 = Lyberg (b) (2010), 3 = Ramvi (2011), 4 = Nieminen (2015), 5 = Wahlbeck (2017), 6 = Larsson (2018), 7 = Baylis (2019).

used W-DEQA ≥ 85 [52,61], two used FOBS ≥ 60 [55,62] and in the other three studies women self-reported FOC [53,56,57]. In two studies [52,61] the experiences of women before and after the intervention were ascertained, the other studies interviewed women in the postnatal period between two months and 1.5 years postnatal.

There was one final overarching theme in this meta-synthesis, which was dominant in the data: "Ownership of Childbirth" (See Table 3 and Table 4). This overarching theme is comprised of three analytical themes: (1) Facing the fear, (2) Feeling empowered, and (3) Managing the fear with a sense of security. Each of these three analytical themes is made up of subthemes as portrayed in Table 3.

3.1. Ownership of childbirth

A sense of 'ownership' can be defined as the pre-reflective experience [64] (in this case, 'I am the one giving birth'). Women needed to gain control in order to gain a sense of ownership of childbirth and "birth on her own terms" by ensuring that caregivers were aware of their individual needs during labour and birth.

For example, this woman said:

"The only way I could gain control was to be clear about what I wanted them to be in control of. (R9, first baby)" (Participant in Midwifery counselling) [55]

In this way, the women took ownership by deciding their needs during the birth and communicating them. Once women felt they were listened to and were empowered to take an active role in decision-making during the birth process, this led to a sense of "Ownership of childbirth" as can be seen in the following quote:

"The midwives were open to the idea of a caesarean if I wanted one. They never forced us to go through a vaginal birth if we did not want to. The midwife said: caesarean can be one birth alternative. I was very afraid, and that helped me to sleep at nights." (Participant in Team Midwifery intervention) [53]

When this woman felt she had a sense of "Ownership of childbirth", it gave a feeling of security, calm and reassurance. This overarching theme was dominant in the experiences of the women and this suggests the significance of gaining a sense of "Ownership of childbirth" for women with FOC.

Theme 1: Facing the fear

The process of moving from experiencing FOC as a burden which women felt unable to express, to facing up to the fear is reflected in this theme. Facing the fear was a crucial step in women's overall journey to "Ownership of Childbirth". Facing the fear was encompassed in the subthemes, "Acknowledging the fear" and "Identifying the fear".

Subtheme: Acknowledging the fear

In the primary studies, many women found it difficult to communicate the emotion of fear with their midwife, doctor, or even their partner with the result that the fear was experienced as a burden. For example:

"You do not talk to everyone about your anxiety. I had a person (midwife) I could phone, and one of them was always on duty. That certainty was good enough for me." (Participant in Team Midwifery) [57]

and

"Before it felt like a lump in my throat because I wasn't able to communicate the difficult feelings" (Participant in Art Therapy) [52]

"Acknowledging the fear" was a major step that helped women to face and process FOC.

For some women, the intervention helped them to communicate or express their fear, as can be seen in this case.

"If you get to put it into words, it exits the body, and you can ground your thoughts in some way and then you can let it go." (Participant in Midwife Counselling) [55]

Pregnancy after birth trauma can resurrect traumatic memories. It was apparent from the data that traumatic experiences left deep emotional impressions on women which led to extreme FOC in the subsequent pregnancy. One woman was reluctant to acknowledge or face up to her fear. Instead, she put up a barrier or 'impenetrable wall' to any discussion about the birth with health care professionals, perceiving a CS as the only solution to her fear, 'not getting a CS' caused her immense anxiety.

"During the third pregnancy . . . : 'Yes, I was really very withdrawn, sad, and cried a lot.' . . . it was "very hard to dig it all up again" with questions about "why and how and can't you give it a try?" . . . "I had built a wall around myself that was impenetrable to any input" . . . all [I] wanted was a Caesarean section... I would have sacrificed the child in order not to give birth. The episode when I was told that I had to give birth was awful. I felt as if I was going to die and the doctor was so tough when he said it. I felt that he was angry." (Participant in Team Midwifery) [53]

This evidence suggests that women find facing their fear and communicating it with others challenging, which can lead to symptoms of withdrawal and severe anxiety. In addition, health care professionals need to "Acknowledge the fear" and take FOC seriously. There were several examples in the studies where women perceived their needs were not met, and health care professionals lacked sensitivity or compassion.

Subtheme: Identifying the fear

Identifying the specific fear was important in the process of facing the fear. For example, many women in the studies feared being left alone in labour. This woman in the iCBT group before the intervention said:

"But what are the others doing? The ones who should help me..." (Woman 13 before treatment iCBT) [59]

The art therapy was described as a visual aid which helped women to identify, articulate or express fear which they were unable to before the intervention.

"It helped me to visualize much more clearly the things which I did not know how to put into words or really express what it was that I felt." (Participant in Art Therapy) [52]

By "Identifying the fear", the woman's needs were identified. Women articulated the wish for non-judgemental attitudes from health care professionals. When women shared the cause of the fear and felt listened to, this helped women in "Facing the fear".

"She (the midwife) knew what I was afraid of. I had an appointment and could talk about it before the birth. The team of midwives had time to focus on the birth and my feelings about it." (Participant in Team Midwifery) [235]

Women in the studies described how openly discussing and articulating specific fears about childbirth with their partner helped them to understand and be taken seriously. As one woman who participated in art therapy articulated:

"It also made it easier to talk to my husband. Before it was difficult to put it into words. He knew that I was scared, but not how I was scared, how it really was for me. Then you could talk about this, and it made it easier even for him to understand" (Participant 17, Art Therapy) [52]

Theme 2: Feeling empowered

The next analytical theme "Feeling empowered" reflected the experience of most women who attended interventions for FOC. The antecedents of empowerment are: an emancipated climate,

supportive alliances, education, birth choices and a philosophy of reverence [65]. These elements were comprised in the subthemes: “Internal agency (the self)” and “External factors”. “Internal agency” refers to the woman’s self-awareness, self-belief, ability to self-advocate and personal sense of control. “External factors” refers to whether health care professionals and partners are engaged and supportive of the woman, as well as other broader external factors such as the environment in which she is birthing in, and the philosophy or ethos of the unit.

Subtheme: Internal Agency

Developing a sense of “Internal agency” moved women to a position of stronger self-confidence overall, facilitating more control and more certainty in the process of birth. Learning techniques to cope in labour and having a better understanding of what to expect, helped women “grow in self-belief”, gain agency and control. Through the interventions, women gained emotional strength which was an important aspect in facilitating women’s sense of self or “Internal agency”. For example, feelings of increased self-confidence and self-awareness were positive outcomes of the art therapy intervention which was evident through the artworks. This woman stated:

“I made a special image that portrayed just how I felt that day. There was a lot of power in that image. I saw that this is ME—in a way. It was a mammoth–gigantic, earthbound and self-confident. I’m quite proud of that. I could almost consider framing it—actually.” (Participant 14, Art Therapy) [52]

Similarly, women who completed iCBT appeared to develop a sense of “Internal agency”. Women described finding emotional strength and newfound power, as well as feeling calm, confident and ready for the birth, which was empowering.

“A complete focus on fear as well as anxiety and hopelessness has been replaced by an expectation that reflects more confidence.” (Participant in iCBT) [59]

Positive emotions related to the baby arising as a result of the interventions contributed to the feeling of “Internal agency”. Women who attended iCBT and art therapy interventions [52,58] said the interventions helped them to develop a bond with their baby, by visualising them. A positive anticipation of the birth was formed. This was evident in the following statements:

“I feel a nervous expectation, a kind of positive thrill that I soon will be able to meet the person I’ve been carrying around for 9 months.” (Woman 6, after treatment, iCBT) [58]

“The image of the child was clarified and positive emotions arose, allowing the bonding process to start.” (Participant in Art Therapy) [52]

Thus, promoting “Internal agency” was an important component of interventions for FOC.

Subtheme: External Factors

“External factors” influenced women’s experience of the interventions for FOC. These factors included attitudes of health care professionals and partners, and broader social and cultural factors, such as the underpinning philosophy or ethos of the birth unit, which are recognised antecedents of empowerment. The importance of communication was described in all the studies [52,53,55–57]. This was not evident to the same extent in the studies by Nieminen et al. [58] and Baylis et al. [62] which employed iCBT. There was limited real interaction between the woman and the therapist in iCBT, women did homework and received feedback for each session, but contact did not go beyond this. Some women preferred this privacy and anonymity offered by the internet relationship, but some women felt isolated [62].

A woman-centred ethos and a respectful, trusting relationship with the midwife was a crucial aspect of the process of moving

from fear to “Ownership of childbirth”. In the studies, it was obvious that when women felt listened to, understood and taken seriously, this helped a trusting relationship develop. Health care professionals had to be willing to engage in a dialogue about FOC and the woman’s birth preferences for her to achieve “Ownership of Childbirth”. Engaged and supportive health care professionals led to a positive experience.

“It was obvious that they had read my journal and my letter of delivery. They totally knew what I wanted [...] and were very empathetic, great. (Participant 10, second baby).” (Participant in Midwife Counselling) [55]

In contrast, in the art therapy intervention [52], women reported that abusive encounters with health care professionals or neglect could be traumatic, leaving deep emotional scars.

In some cases, a sense of disempowerment was apparent which could be attributed to external factors such as the ethos of the birth environment or the philosophical approach of health care providers. One woman in the Team Midwifery intervention [57] appeared disempowered. She reported that she was “not considered the expert despite giving birth three times before”.

Similarly, the stories of five women who had a vaginal birth despite requesting a CS were described [53], these women described not feeling listened to or being heard, despite being part of the Team Midwifery intervention for FOC. The obstetrician was not willing to engage with women in a dialogue about FOC, resulting in a sense of disempowerment in decision-making about childbirth. Subsequently, some women had traumatic birth experiences.

On the other hand, most women in the same Team Midwifery intervention [56,57] described feeling listened to, understood and reassured. The midwives acted as an advocate for the woman when she was in labour. These midwives were described as giving extra time, going beyond the expectations of women and providing critical emotional as well as practical support, providing respectful, woman-centred care, as can be seen in the following quote.

“I knew the midwife would help me and that I could choose the mode of delivery. I knew that if I requested a caesarean I could have one, but I wanted to give birth in a natural way. The team gave me a sense of security, we worked together, they took great responsibility and were prepared for a traumatic birth.” (Participant in Team Midwifery) [57]

Other “External factors” which could influence feeling empowered, thereby influencing FOC, are supportive partners and peers. When partners took an active role in the labour process, women in three of the studies [52,55,58] found this helpful. Finally, communicating with other women who felt similarly helped women to normalise the fear and process it [52]. Within a group art therapy situation, the women said that being grouped with women at a similar gestation and parity was beneficial [52]. So, while interventions for FOC benefitted women by developing her sense of “Internal agency”, “External factors” had the potential to impede women’s experience by disempowering them.

Theme 3: Managing the fear with a sense of security

This theme portrays how women emerged from the interventions. After most interventions, women described feeling calm, safe and hopeful once they understood and reflected on the cause of the fear [52,55,56,58]. There are two subthemes within this theme: Coping in times of uncertainty and Re-framing the emotions about birth.

Subtheme: Coping in times of uncertainty

Women with FOC viewed birth as a situation where they lacked control and ownership of childbirth because the midwife was viewed as in control of the birth. Thus, women worried about the credibility, competence and availability of the midwife. In addition,

women feared not being treated with dignity during childbirth. Interventions helped women develop confidence in themselves and the staff, which helped them “cope in times of uncertainty”. The value of a trusting relationship in providing a sense of security through emotional support was seen in this quote:

“I’m sure I could have managed it physically but not mentally without the support of the midwife. She was my voice all through the birth. She was totally in control; I could trust her and she guided me carefully through the birth despite the fact that it was unpredictable.” (Team midwifery) [42]

The interventions appeared to help women prepare emotionally for the birth process which also helped them “coping in times of uncertainty” as was seen in the following quote from a participant in the Midwife Counselling intervention:

“You were more prepared that way. And that may have affected that I felt more at ease when things didn’t go as expected. Perhaps a bit more at ease in times of uncertainty.” (R8, second baby, Participant in Midwife Counselling) [55]

Women moved from feeling that they would be unable to cope with labour pain prior to the intervention, to viewing labour pain as having a purpose after the intervention which helped them “cope in times of uncertainty”. For example:

“That I could focus on the pain and that was the reason for me being there, so, yeah, I believe so, absolutely. Then you could relax in a different way.” (R14, first baby, Participant in Midwife Counselling) [55]

In the midwife counselling intervention, the presence of the midwife at the birth was described as calming, and in contrast, if they were left alone, women described feeling insecure and isolated [55]. Some women expressed that midwifery support was crucial when their partner was not so supportive during labour [55]. Thus, interventions helped women to cope with the uncertainty of childbirth by providing a sense of security for women.

Subtheme: Reframing the emotions about childbirth

Prior to interventions for FOC, women tend to avoid talking about birth and birth preparation [66]. A dialogue with the midwife was an important component of interventions as it gave women the opportunity to “re-frame their emotions about childbirth”. The dialogue was an opportunity to have questions answered, get practical information and develop practical tools for childbirth.

“So I think that I have the tools to cope when I’m there. And I have realised that I do not have to study non-stop, I’m still with it. [...] I can focus on other things now.” (Participant 13, first baby, Midwife Counselling) [55]

Learning practical techniques during the intervention helped women to manage the fear, helping to feel calmer and improving the sense of safety and gain hope.

After an iCBT intervention [61] this woman’s emotions about the upcoming birth were re-framed in a more positive way. She viewed herself as active in the birth process, having the confidence, ability and skills to cope with labour and birth.

“prepared and confident, focusing on the present, on her body and her breathing.” (Participant in iCBT intervention) [61]

In some cases, fear still remained after the interventions, but a sense of control over the fear was gained using practical techniques.

“I didn’t become less afraid but I got some help to actually put my fears aside sometimes” (R18 multigravid) [52]

Helpful skills for coping were relaxation and breathing exercises, visiting the labour ward and listening to your body in

labour [55]. Three of the interventions conveyed that birth preparation was crucial for women with FOC [55,57,58]. Gaining knowledge empowered women to take an active role in the birth process rather than perceiving themselves as passive recipients of care, helping to manage their fear. In some cases, fear didn’t disappear, but rather women learned to manage it, as can be seen in this case:

“The fact that I could listen to my body and that was easier to gain, to stay in control obviously if you listen to what the body wants instead of panicking over the pain and resisting.” (Participant 6, second baby, Midwife Counselling). [55]

Women who had birth trauma had specific individual needs during the intervention to re-frame the emotions about childbirth. Gaining knowledge about the previous birth by reviewing the case notes helped women understand what happened, which was helpful in moving forward and ‘handling’ the upcoming birth.

“I could probably better understand how to handle it, going forward. (Participant in Midwife Counselling) [55]

These experiences demonstrate the numerous benefits and challenges of interventions for women with FOC.

4. Discussion

Findings of this meta-synthesis are framed in the process of women moving from fear, to gaining a sense of “Ownership of Childbirth”, within seven qualitative studies. These three analytical themes and subthemes which we propose are a novel way of describing this process. This meta-synthesis adds to the existing knowledge about how women who engage with interventions for FOC, experience the interventions and navigate birth. Findings suggest that all the interventions were successful for reducing FOC. However, the art therapy seemed to be the most successful intervention judging by the comments from the participants. Women had a positive experience of the art therapy intervention [52] which took a multi-dimensional, individualised psycho-social approach depending on each woman’s wishes, and no negative effects were reported. In contrast, the iCBT interventions were not specific for women with FOC, and they felt isolated. While the women recognised there was some benefit, they felt it was lacking [62]. Findings from one iCBT study [61] were more positive than the other [62]. This may be due to the self-selecting nature of this group of women, whereas women who were randomised to iCBT found that they felt alone, it was hard work and although it was helpful, was ‘not enough’ [62].

The lack of an agreed definition of FOC is one of the main issues when it comes to providing interventions and evaluating them. All the included studies used different methods of defining FOC. Moreover, there is a broad spectrum of fear and fear may be triggered at any point, therefore women’s needs may change. This is a challenge for midwives in deciding when to refer for specialist support.

Midwifery continuity of care was a significant support for women in general. The present meta-synthesis provides evidence that interventions for FOC, and maternity care in general, needs to be designed to meet the specific individual needs of women (physically, psychologically and emotionally). Both doctors and midwives need to be competent in recognising and responding to FOC. Women need compassionate, respectful care and staff to be supportive of them, regardless of how they choose to birth their baby. It is important to realise that FOC didn’t disappear for all women, but rather most women learned to manage the fear.

There is no information about women who chose not to participate in the Team Midwifery and midwife-counselling interventions [55]. Therefore it could be postulated that these

interventions were not acceptable to some women, but data from the previous systematic review suggests that timing, level of commitment required and location of interventions play important roles in the acceptability of interventions for women [35].

Ultimately, most women managed to handle FOC once they had a sense of security, which helped them to cope with the uncertain outcome of childbirth. This finding is consistent with that of Sheen et al. [14] who describe the intolerance of uncertainty as a key characteristic of women with FOC suggesting that this may be a modifiable factor, since enhancing tolerance of uncertainty may reduce FOC.

4.1. Strengths and limitations

This meta-synthesis has several strengths, such as a clear research question, the use of a robust, rigorous search strategy across multiple relevant databases, and reporting the search via the PRISMA flowchart. Quotes from primary research studies were used to generate 'rich description' and ensure that our results were grounded in the original data, remaining true to the source which is an important strength of the study. [67]. Moreover, details of data analysis are transparent, which strengthens the trustworthiness and credibility of our study [67]. Furthermore, the researchers kept a reflexive journal during the synthesis process to document decision-making throughout the analysis to maintain a high standard [67]. However, study limitations must be considered.

The meta-synthesis is limited by the small number of studies available. Studies included were undertaken in high-income countries, therefore generalisability of findings is limited, and evidence suggests that FOC is prevalent in low income countries [8]. However, no quality data outside of Scandinavia was retrieved. Including studies of different types of interventions may lead to the development of different themes.

4.2. Conclusion

A new interpretation of how women experienced interventions for FOC was generated. Our synthesis framed the process of moving from fear, to a sense of "Ownership of childbirth". Women can grow in self-belief in their ability to give birth when they are facilitated to birth on their terms, in a respectful, woman-centred environment. Health care professionals are key messengers who can improve or worsen FOC in women. Thus, improved awareness and understanding of FOC is critical in maternity care. Overall, women were satisfied with the interventions included in the review, but two were inadequate [53,62], some women did not feel listened to or understood, due to a lack of understanding of FOC by their doctor, despite midwifery support or felt isolated and that the intervention 'was not enough'.

In conclusion, this meta-synthesis provides evidence for the design and evaluation of future interventions, policies and practice in this area of maternity care. Future research involving service-users at the outset is imperative to explore developing and investigating interventions which may be tailored to the individual needs of women with FOC. Furthermore, there is a paucity of research as the available evidence was predominantly from Scandinavian countries, thus more qualitative research is warranted.

4.3. Implications for practice

Interventions for FOC need to be designed to meet the needs of women. Ideally, the design of trials should be collaborative and include meaningful patient and public involvement (PPI) at the outset to identify the needs of the population, what is appropriate and acceptable [68]. Thus, examining how women experience the

intervention, what was good about it and what helped is very valuable information. Early involvement of service users in the development of clinical trials of interventions for FOC is a key recommendation.

Women value the support of staff, however, short staffing, stressed staff or staff that lack awareness or knowledge about FOC might negatively impact the experience of women with FOC causing further trauma. Therefore, health care professionals require education to ensure the requisite awareness, knowledge and skills to provide compassionate, sensitive, non-judgemental care for women with FOC.

Ethical statement

None declared.

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Conflict of interest

None declared.

Authors' contribution

Maeve Anne O'Connell: Conceptualization; methodology; validation; writing; *Maeve Anne O'Connell, Patricia Leahy-Warren*: Original Draft – Methodology, Writing and Formal analysis. *Maeve Anne O'Connell, Ali S Khashan, Patricia Leahy-Warren*: Writing, Review & Editing.

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