

Antenatal care

[C] Involving partners

NICE guideline <number>

Evidence reviews underpinning recommendations 1.1.11 to 1.1.13, 1.3.6 and 1.3.8

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Draft for consultation

These evidence reviews were developed by the National Guideline Alliance which is a part of the Royal College of Obstetricians and Gynaecologists

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1 Involving partners

2 Review question

3 What are the barriers to, and facilitators of, involving partners in the woman's antenatal care?

4 Introduction

5 Recently, antenatal care services have focused on delivering information and support to the
6 whole family rather than solely to the woman, as highlighted by the World Health
7 Organisation's declaration in 2016 that engaging fathers is a global priority. This review aims
8 to determine the barriers to, and facilitators of, involving partners in the woman's antenatal
9 care.

10 Summary of the protocol

11 Please see Table 1 for a summary of the Population, phenomenon of Interest, and Context
12 (PICO) characteristics of this review.

13 **Table 1: Summary of the protocol (PICO table)**

Population	Women who received routine antenatal care and the associated father, birth partner, or current partner(s).
Phenomenon of interest	Views and experiences of the way in which partners (such as, father, birth or current partner) were involved in the women's routine antenatal care. Themes will be identified from the available literature, but expected themes are: <ul style="list-style-type: none">• Women and partners feeling empowered• Partners feeling side-lined by professionals involved in providing antenatal care• Partners feeling unprepared to provide support to woman• Partners lack of access to professionals involved in providing antenatal care
Context	Only studies conducted in high income countries, as defined by the World Bank, with centrally-funded healthcare systems will be included.

14 For further details see the review protocol in appendix A.

15 Methods and process

16 This evidence review was developed using the methods and process described in
17 [Developing NICE guidelines: the manual 2014](#). Methods specific to this review question are
18 described in the review protocol in appendix A.

19 Declarations of interest were recorded according to [NICE's conflicts of interest policy](#).

20 Qualitative evidence

21 Included studies

22 Fourteen articles reporting 13 qualitative studies (Atkin 2015, Bäckstrom 2016, Dheensa
23 2015, Huusko 2018, Jeffery 2015, Locock 2006, Miller 2017, Nash 2018, Palsson 2017,
24 Reed 2009 & 2011 (reporting on the same study), Solberg 2018, Williams 1999, and Williams
25 2011, with Reed 2011 reporting on an additional outcome from the same study as) were
26 included in this review. All included studies focused on barriers and facilitators to involving
27 partners in the woman's antenatal care, with the majority of the studies highlighting the male

- 1 partner's views of antenatal care and 3 studies presenting the woman's views of antenatal
2 care (Bäckstrom 2016, Reed 2009, and Williams 1999).
- 3 The included studies are summarised in Table 2.
- 4 Two studies were conducted in Australia (Jeffery 2015 and Nash 2018), 1 in Norway
5 (Solberg 2018), 3 in Sweden (Bäckstrom 2016, Huusko 2018, and Palsson 2017), 5 in the
6 UK (Atkin 2015, Dheensa 2015, Locock 2006, Reed 2009 & 2011, and Williams 2011), and 1
7 in US (Williams 1999). In addition, 1 study reported data from both the UK and Australia
8 (Miller 2017).
- 9 One study examined the involvement of partners in antenatal sickle cell screening (Atkin
10 2015), 1 in fetal screening (Locock 2006); 1 focused on both the man and the woman's
11 experience of screening (Reed 2009 & 2011); and 1 in genetic testing (Williams 2011). Five
12 studies explored first-time father's views on their engagement with antenatal services
13 (Huusko 2018, Miller 2017, Nash 2016, Palsson 2017, Solberg 2018); 1 study assessed the
14 levels of engagement in fathers (Jeffery 2015); 1 study examined male partner's experiences
15 of attending antenatal appointments (Dheensa 2015); 1 study explored pregnant women's
16 perceptions of professional support in midwifery care (Backstrom 2016); and 1 study
17 explored men and women's experiences with medical technology during pregnancy (Williams
18 1999).
- 19 Five studies used semi-structured interviews for data collection (Atkin 2015, Bäckstrom 2016,
20 Dheensa 2015, Reed 2009 & 2011, and Solberg 2018), 2 of which were by telephone
21 (Bäckstrom 2016, Dheensa 2015) and 3 of which were face-to-face at home or at another
22 convenient location (Atkin 2015, Reed 2009 & 2011, Solberg 2018); 6 studies used
23 unstructured interviews (Huusko 2018, Locock 2006, Miller 2017, Nash 2018, Palsson 2017,
24 and Williams 1999) all of which were face-to-face at home or at another convenient location;
25 1 study used email interviews (Williams 2011); and 1 study used a questionnaire (Jeffery
26 2015) but did not specify the setting in which it was conducted.
- 27 In all studies, but 1 (Bäckstrom 2016), the partner was defined as a male father. Bäckstrom
28 2016 included both heterosexual and same-sex couples, but did not specify which data came
29 from heterosexual or same-sex couples. In 6 studies, it was not specified whether the male
30 partners were married to the pregnant woman (Atkin 2015, Huusko 2018, Miller 2017,
31 Palsson 2017, Reed 2009 & 2001, and Williams 2011). In 3 studies male partners were either
32 married or cohabiting with the pregnant woman (Dheensa 2015, Nash 2018, and Williams
33 1999). One study mentioned whether or not male partners lived with their partner (Jeffery
34 2015) and 1 study specified that on average male partners had had a relationship with the
35 child's mother for 5 years prior to the birth (Solberg 2018).
- 36 See the literature search strategy in appendix B and study selection flow chart in appendix C.
- 37 **Excluded studies**
- 38 Studies not included in this review are listed, and reasons for their exclusion are provided in
39 appendix K.
- 40 **Summary of included studies**
- 41 Summaries of the studies that were included in this review are presented in Table 2.

1 **Table 2: Summary of included studies**

Study	Aim of the study	Population	Data collection methods	Themes identified
Atkin 2015 General qualitative inquiry UK	To understand fathers' experiences and expectations of sickle cell antenatal screening.	N=24 men Over the age of 18 years	Semi-structured interviews	<ul style="list-style-type: none"> • Being present • Choice and decision making
Bäckstrom 2016 Qualitative (Phenomenological study) Sweden	To explore pregnant women's perceptions of professional support in midwifery care.	N=15 women First time mothers with singleton pregnancies, who intended to give birth at the county hospital, and could understand and speak Swedish.	Semi-structured interviews	<ul style="list-style-type: none"> • Impact of staff behaviour
Dheensa 2015 Qualitative (Grounded theory) UK	To explore what men who attend antenatal appointments want from screening and from midwives, whether facing pregnancy anomalies or not.	N=12 men aged at least 18 years. They were partners of women who were prenatal or up to three years postpartum	Semi-structured interviews	<ul style="list-style-type: none"> • Learning over time • Taking the lead
Huusko 2018 General qualitative inquiry Sweden	To illustrate first-time fathers' experiences of support from midwives in maternity clinics as a step in the validation of 'The Father Perceived-Professional-Support' (The FaPPS) scale.	N=7 men who ranged from 21 to 42 years of age.	Unstructured interview & FaPPS scale	<ul style="list-style-type: none"> • Availability of information • Impact of staff behaviour
Jeffery 2015 Mixed methods Australia	To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.	N=100 men N=59 men who completed qualitative section of questionnaire	Questionnaire	<ul style="list-style-type: none"> • Being present • Choice and decision making • Impact of staff behaviour • Involvement affected by time • Partner's rights • Range of emotions
Locock 2006 Qualitative (Grounded theory)	To identify conflicting male roles in screening, diagnosis, and subsequent decision-making	N=33 women, 2 men, and 6 couples	Semi-structured interview	<ul style="list-style-type: none"> • Availability of information • Choice and decision making

Study	Aim of the study	Population	Data collection methods	Themes identified
UK	during pregnancy and fatherhood.			<ul style="list-style-type: none"> Impact of staff behaviour Range of emotions Responsibility
Miller 2017 General qualitative inquiry UK & Australia	To examine how men engage in/narrate experiences of preparation for first-time fatherhood and more specifically, on topics including antenatal care experiences and support and information sources they'd sought out/used.	UK: N=17 men Australia: N=25 men In both countries, men were first time fathers	Unstructured interview	<ul style="list-style-type: none"> Availability of information Learning over time Range of emotions
Nash 2018 General qualitative inquiry Australia	To examine how first-time fathers in rural Tasmania experienced father-only antenatal support/education groups.	N=25 men who were greater than or equal to 18 years of age, and were first time fathers	Unstructured interview	<ul style="list-style-type: none"> Directed support for partners
Palsson 2017 Qualitative (Phenomenological study) Sweden	To describe first-time fathers' experiences of their prenatal preparation in relation to challenges met in the early parenthood period.	N=15 men	Unstructured interview	<ul style="list-style-type: none"> Availability of information Directed support for partners
Reed 2009 Qualitative (Grounded theory) UK	To explore the gendered nature of genetic responsibility in prenatal blood screening.	N=22 women and 16 men	Semi-structured interview	<ul style="list-style-type: none"> Responsibility
Reed 2011 (same cohort as Reed 2009) Qualitative (Grounded theory) UK	To explore women's and men's roles in screening, with a particular focus on exploring the gendered nature of responsibility for the health of the fetus during screening.	N=22 women and 16 men	Semi-structured interview	<ul style="list-style-type: none"> Availability of information Impact of staff behaviour Partner's rights
Solberg 2018	To describe how first time fathers experience their encounter with the	N=9 men who were first time fathers with children around 3	Semi-structured interviews	<ul style="list-style-type: none"> Impact of staff behaviour

Study	Aim of the study	Population	Data collection methods	Themes identified
General qualitative inquiry Norway	healthcare services during pregnancy, childbirth, and the child's first three months of life.	months at the time of interview		
Williams 1999 General qualitative inquiry USA	To examine the impact of medical technology on expectant mothers' and fathers' experiences during pregnancy and childbirth.	N=15 couples	Unstructured interview	<ul style="list-style-type: none"> • Availability of information
Williams 2011 General qualitative inquiry UK	To explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.	N=8 men	Semi-structured interviews	<ul style="list-style-type: none"> • Choice and decision making • Impact of staff behaviour • Range of emotions

1 *FaPPs: The Father Perceived-Professional-Support scale*

2 See the full evidence tables in appendix D. No meta-analysis was conducted (and so there
3 are no forest plots in appendix E). See appendix M for a full table of quotes supporting the
4 themes identified in this review.

5 **Quality assessment of studies included in the evidence review**

6 See the evidence profiles in appendix F for GRADE-CERQual tables.

7 **Theme map**

8 The barriers and facilitators were categorised into 5 levels using Brofenbrenner's
9 socioecological model (Brofenbrenner 1979). Framework analysis was used to identify
10 themes, presented as a theme map in Figure 1. For further details about the methods, see
11 Supplement 1: methods.



1

2 **Figure 1: Theme map**

3 **Economic evidence**

4 **Included studies**

5 A systematic review of the economic literature was conducted but no economic studies were
6 identified which were applicable to this review question.

7 A single economic search was undertaken for all topics included in the scope of this
8 guideline. See supplementary material 2 for details.

9 **Excluded studies**

10 There was no economic evidence identified for this review question and therefore there is no
11 excluded studies list in appendix K.

12 **Summary of included economic evidence**

13 No economic studies were identified which were applicable to this review question.

1 **Economic model**

2 No economic modelling was undertaken for this review because the committee agreed that
3 other topics were higher priorities for economic evaluation.

4 **Qualitative evidence statements**

5 See appendix M for a full table of quotes supporting the themes identified in this review.

6 **Level 1. Individual level**

7 Theme 1a. Being present

8 Low quality evidence from 2 studies reported on this theme. The evidence shows that male
9 partners appreciated being involved at antenatal screening appointments as it made them
10 feel present and responsible in the pregnancy. However, despite being present at
11 appointments, male partners were aware that this experience did not necessarily guarantee
12 them a role throughout the whole pregnancy and this was a perceived barrier. This
13 awareness was reinforced if they experienced ambivalence from healthcare professionals,
14 which most male partners reported. Sometimes, this experience caused male partners to
15 suppress their feelings and emotions, and keep their opinions to themselves, leading them to
16 feeling like an observer.

17 Theme 1b. Choice and decision making

18 Low quality evidence from four studies reported on this theme. Male partners wanted to be
19 involved in decision making, wanted to voice their opinions, and be given a choice about
20 decisions that needed to be made during the pregnancy. This was not determined by
21 whether the pregnancy was complicated or not. However, male partners were aware that
22 their role was undefined, which restricted their ability to make choices in the screening
23 process. Male partners also recognised that ultimately the woman would make the final
24 decision, since it was her body and the tests would be happening to her.

25 However, feelings of being ignored by healthcare practitioners strengthened feelings of being
26 excluded and powerlessness in decision-making. When male partners did feel comfortable
27 sharing their opinions, they were concerned that they may be portrayed as ‘controlling’ and
28 may be negatively noted by the healthcare professional. In some cases, male partners
29 struggled to form an emotional connection with their unborn child, which negatively
30 influenced involvement and decision making. This was a perceived as a barrier.

31 In most scenarios, male partners reported receiving little or no encouragement from
32 healthcare professionals. However, in one case, a father reported a positive experience with
33 a healthcare professional, highlighting the importance of positive relationships to empower
34 partners to be involved in decision making, and as a facilitator for being involved in antenatal
35 care. From a woman’s perspective, they mostly found their male partners’ decisiveness
36 supportive.

37 Theme 1c. Taking the lead

38 High quality evidence from 1 study reported on this theme. The research shows that the way
39 male partners viewed control of the situation in the pregnancy depended on whether the
40 pregnancy was normal or complicated.

41 Male partners with normal pregnancies wanted the experts to take the lead, where in 1 study,
42 male partners reported trusting the midwives so were content to remain bystanders.
43 Otherwise, in a normal pregnancy, male partners rarely asked questions because they felt
44 that healthcare professionals failed to address or include them in discussions.

1 This behaviour caused male partners to feel excluded and was a perceived barrier. In
2 complicated pregnancies, male partners wanted more information and also wanted to
3 actively participate in decision-making. However, male partners still felt excluded by
4 healthcare professionals, which was a universal observation, regardless of the whether the
5 pregnancy was normal or complicated.

6 Theme 1d. Range of emotions

7 Low quality evidence from 4 studies reported on this theme. The research shows that male
8 partners experience many different emotions during pregnancy that arise from different
9 situations and stimuli. In complicated pregnancies, male partners felt pressure to set aside
10 any grief and anxiety to support their partners, since they felt they needed to support their
11 partner and remove focus from their own feelings. In these situations, male partners can
12 become the main channel of communication with healthcare professionals, acting as a shield
13 for their partner, which could be perceived as a facilitator to partner involvement in antenatal
14 care.

15 One study highlighted the difference between engaged and disengaged fathers. In situations
16 where the male partner is disengaged from the pregnancy, they report feeling more anxious
17 and unprepared for the arrival of their child than engaged male partners. Although attending
18 antenatal care classes are considered helpful preparation for pregnancy and parenthood, the
19 evidence showed that they can also make male partners feel uncomfortable and out of place.
20 In male-only antenatal classes, some male partners felt anxiety about how they were
21 expected to behave. In some situations, male partners felt annoyed with healthcare
22 professionals perpetuating gender stereotypes and assuming all male partners were going to
23 be 'drinking beer and watching football', which was a perceived barrier. In the context of
24 antenatal genetic screening, male partners felt ambivalence, doubt, and uncertainty in
25 relation to their perceived worth and their role in helping maintain or improve the health of
26 their partners and babies.

27 Theme 1e. Responsibility

28 High quality evidence from 2 studies reported on this theme. The research shows that a
29 sense of responsibility improved or facilitated involvement in antenatal care. The majority of
30 male partners took responsibility by gathering information, being involved in decision making,
31 and actively engaging with midwives. This made male partners feel more engaged and
32 involved with the unborn baby and their health.

33 Additionally, when male partners attended screening appointments, it positively affected the
34 way women perceived responsibility since the testing was no longer solely directed at them.
35 From a different perspective, one study found that in situations where screening showed
36 unfavourable results, male partners felt their role as a parent was pushed aside, therefore
37 diminishing responsibility. This due to both the attitudes of the healthcare professionals but
38 also men and women's own perception of what male partners should be doing.

39 **Level 2. Family level**

40 Theme 2a. Learning over time.

41 High quality evidence from 2 studies reported on this theme. The research showed that time
42 affected male partner involvement in antenatal care but could be interpreted differently, either
43 as a facilitator or a barrier, depending on the context. Male partners reported that learning
44 how to be more involved in antenatal screening was a skill that had to be learnt over time,
45 especially learning how to communicate appropriately and effectively with healthcare
46 professionals. Some participants discussed becoming a father was occurring at the 'right
47 time' for them in their lives, which was considered an important factor in feeling involved
48 during pregnancy.

49 Theme 2b. Involvement affected by time.

1 Very low quality evidence from 1 study reported on this theme. This research showed that
2 attending antenatal care classes was the first step towards improving male partners'
3 engagement in antenatal care. Male partners reported being unable to leave work to attend
4 antenatal appointments/classes and consequently experienced dissatisfaction. As such, time
5 and other work-related issues were considered barriers to attendance and therefore
6 engagement.

7 **Level 3. Community level**

8 Theme 3a. Directed support for partners

9 High quality evidence from 2 studies reported on this theme. To encourage involvement in
10 antenatal care men-only antenatal groups have been considered. The research shows that
11 male partners have conflicting opinions regarding the benefit of gender specific sessions,
12 where some viewed them as a facilitator and others viewed them as a barrier. However, for
13 most, these sessions were a way of sharing information and an opportunity to meet other
14 expectant parents.

15 Some male partners thought that men-only classes would provide them a safe environment
16 in which they could talk about their thoughts and feelings without fear of offending, or the risk
17 of appearing incompetent in front of their partner and other women.

18 When the group size was small this helped encourage open discussion and when there were
19 enough sessions, partners also got to know one another. In 1 study, male partners
20 appreciated the class being facilitated by another male, since insights about fatherhood and
21 emotions from a male perspective could be discussed.

22 Although some male partners considered these groups a good idea, others expressed the
23 view that fatherhood is very personal and felt it could be uncomfortable to share such
24 intimate feelings in front of other men.

25 Furthermore, the atmosphere of the classes could sometimes be competitive between
26 parents, making open conversation difficult. In one study, male partners were offered classes
27 in a pub.

28 Although some felt comfortable in this setting, others – in particular, those who believed in
29 gender equality in parenting – expressed the view that this setting allowed class facilitators to
30 invoke outdated stereotypes of men, which annoyed them.

31 **Level 4. Society level**

32 Theme 4a. Impact of staff behaviour

33 Moderate quality evidence from 7 studies reported on this theme. The research shows that
34 the way healthcare professionals interact with the mother and their partner can positively or
35 negatively affect partner involvement in antenatal care.

36 In one study, male partners were not offered a chair in the screening appointment and were
37 literally made 'bystanders', which they associated with loss of parent status, loss of control,
38 and losing the ability to support his wife. Male partners felt that healthcare professionals
39 pushed them out of screening experiences, making it only about the woman. At times, male
40 partners felt that midwives' views reflected a traditionally gendered approach to antenatal
41 care.

42 From a woman's perspective, professional support was viewed as a positive way to facilitate
43 partner involvement. Women considered it was vital that support was available at a time
44 when the partner could participate, highlighting the importance of attendance to improve
45 partner involvement. Male partners wanted greater involvement during pregnancy, to be
46 treated as a couple by healthcare professionals, and to be given opportunities that would
47 allow them to support the woman.

1 Furthermore, male partners wished to establish rapport and trust with healthcare
2 professionals, in order to discuss information and make decisions more fully. Research
3 showed that male partners valued continuity of care, since it allowed the formation of
4 stronger relationships and promoted involvement. One study reported that respectful and
5 healthy relationships with healthcare professionals led to positive and improved involvement.
6 In some cases, male partners described that feelings of exclusion could be a result of their
7 own choice, as well as by other people. They felt as though they were supposed to support
8 and help women during the birth, but not be involved in the birth or the first months of the
9 child's life. Male partners described how their only role was to offer practical support causing
10 them to exclude themselves, leading to feelings of resentment. In this scenario, male
11 partners wanted healthcare professional to actively involve them more so that they could feel
12 as equally involved as the woman.

13 Theme 4b. Availability of information

14 Moderate quality evidence from 6 studies reported on this theme. There was a lot of variation
15 in how partners and women perceived the importance of information, and how they accessed
16 it.

17 Women found that ultrasound scans provided information for male partners and thought this
18 was a good way of facilitating and increasing male partners' involvement in antenatal care.
19 Male partners regarded receiving appropriate information as an important part of their
20 experience during the antenatal period, whilst a lack of knowledge led to feeling disengaged.
21 For men, finding information allowed them to interact with the healthcare professional with a
22 sense of control over the situation and empowerment.

23 First-time male partners, who lacked previous experience, were unsure about what type of
24 support they needed so they had no specific questions. In this case, male partners felt that
25 healthcare professionals should be proactive in signposting them to the best available
26 resources. In one study, fathers found healthcare professionals warm and welcoming, but
27 found that receiving information and support from them was not spontaneous. Male partners
28 had to show an interest themselves and ask questions to get involved during clinical visits,
29 which was a perceived barrier.

30 Male partners often turned to the internet for information but found that information was
31 scarce for expectant male partners. Although information was available quickly online, there
32 was also concern on the reliability of the content. The evidence showed that male partners
33 had individual preferences for how the information should be presented and therefore
34 different methods of communication should be used.

35 One study showed that male partners preferred written information to be succinct and simple,
36 with footnotes for further information resources. One study showed that male partners
37 preferred to have another person, an 'expert' for example, provide them with information
38 rather than having to seek it out themselves.

39 **Level 5. Policy level**

40 Theme 5a. Partner rights

41 Low quality evidence from 2 studies reported on this theme. Research for this theme
42 demonstrated that partner rights required further consideration as pressures from employers
43 prevent male partners from attending antenatal care appointments. Employers are obligated
44 to accept medical certificates for women attending antenatal care, but most male partners
45 have difficulty accessing medical certificates for leave to attend an antenatal clinic
46 appointment.

47 However, when male partners were able to access antenatal care and had a positive
48 experience with healthcare professionals, engagement levels significantly improved.

1 Research shows that both men and women perceive work as a barrier to male partners'
2 involvement in antenatal care appointments.

3 Furthermore, the ability to take time off work is strongly determined by socioeconomic factors
4 and workplace norms, which can discourage male partners from taking time off work or
5 requesting flexible working hours. This suggests a policy change is required to make it easier
6 for partners to obtain the appropriate paperwork to allow them to take time off work so that
7 they can be involved in antenatal appointments

8 **The committee's discussion and interpretation of the evidence**

9 **The outcomes that matter most**

10 This review focused on establishing the barriers are to, and facilitators of, partner
11 involvement in antenatal care. In particular, the review focused on ways of improving
12 participation by under-served partners in the woman's antenatal care experience.

13 To address these issues, the review was designed to include qualitative data and as a result
14 the committee could not specify in advance the data that would be located. Instead they
15 identified the main themes which they expected to emerge from the data. Suggested themes
16 included:

- 17 • Women and partners feeling empowered
- 18 • Partners feeling side-lined by professionals involved in providing antenatal care
- 19 • Partners feeling unprepared to provide support to woman
- 20 • Partners lack of access to professionals involved in providing antenatal care

21 The evidence review identified data relating to women and partners feeling empowered and
22 partners feeling side-lined by professionals involved in providing antenatal care. The
23 evidence review did not identify data relating to the remaining themes set out in the protocol.
24 Additional themes identified in this review were being present, choice and decision making,
25 range of emotions, learning over time, involvement affected by time, directed support for
26 partners, availability of information, and partner's rights. The committee considered the
27 evidence from all identified themes and with their own knowledge and experience, were able
28 to draft the recommendations.

29 **The quality of the evidence**

30 The quality of the evidence was assessed using GRADE-CERQual. The overall confidence
31 in the review findings ranged from very low to high quality, with the majority of them being
32 moderate or high.

33 Concerns about methodological limitations of the primary studies were assessed using the
34 CASP Qualitative checklist and ranged from no or very minor to serious concerns. The most
35 common issues were: inadequate or no consideration of the researcher-participant
36 relationship; insufficient justification of the research design; and partial or no consideration
37 about the value of the research, in terms of further research and transferability.

38 Concerns about relevance for the context and population of interest to this guideline ranged
39 from no or very minor to minor concerns. The most common concern was the recruitment of
40 specific populations of male partners, for example, first-time fathers, or specific parts of
41 antenatal care, for example, screening for sickle cell anaemia, meaning the findings were
42 difficult generalise to the wider population.

43 Concerns about coherence were of no or very minor concern for all findings.

44 Concerns about adequacy ranged from no or very minor to serious concerns. There were
45 serious concerns for one finding, involvement affected by time. This is because there was

1 only one study contributing to this theme, providing thin data. The study provided insufficient
2 details to gain an understanding of the phenomenon described in the review finding and
3 there was inadequate discussion of the results by the study authors. However, the committee
4 were aware from their knowledge and experience that time posed as a barrier to involvement
5 in antenatal care in the context of male partners not being able to leave work to attend
6 appointments and classes, and therefore agreed to include the data from this study.

7 The overall quality of the evidence was moderate to high so the committee had confidence in
8 the certainty of the evidence which they noted whilst making their recommendations.

9 **Discussion of findings**

10 **Involving the partner in antenatal care**

11 Evidence from the themes 'being present' and 'responsibility' showed that although male
12 partners want to be involved, they understand that it is for the woman to make the final
13 decision since it is her body. Evidence from the theme 'impact of staff behaviour' showed that
14 partners' experience of interacting with healthcare professionals varies widely. Evidence from
15 the theme 'taking the lead' suggested that male partners felt healthcare professionals failed
16 to address or include them in discussions, which they perceived as a barrier. The committee
17 discussed why this might be and suggested that this may be due to the fact that the role of
18 the midwife in relation to involving the partner is often not defined and that there may be
19 different preferences on the appropriate level of involvement.

20 Some evidence from the theme 'range of emotions' suggested that some male partners felt
21 uncomfortable and out of place in antenatal appointments. Evidence from the theme 'directed
22 support for partners' suggested that some male partners perceived male-only classes as a
23 facilitator to involvement, whilst some male partners felt anxiety about how they were
24 expected to behave. From their knowledge and experience, the committee were aware that
25 often male-only groups work better when the male partners are already connected in some
26 other way, for example, through their workplace. Four studies from the theme 'choice and
27 decision making' showed that male partners want to be involved in shared decision-making
28 with their partner throughout pregnancy. Findings from the same theme found that women
29 find their partner's involvement in decision making supportive. Therefore, the committee
30 agreed, using their knowledge and experience, that teamwork between woman and partner
31 during pregnancy, labour and parenthood was important and therefore agreed that
32 healthcare professionals should have discussions during antenatal appointments how the
33 woman and her partner could support each other throughout pregnancy and in preparation
34 for parenthood.

35 The committee discussed that it is important to be aware of the different situations that
36 women are in and the different support structures they have when they are expecting a baby.
37 The people supporting the woman might be the father of the baby, a partner, a friend, or a
38 member of the family and it is important that the woman's wishes define who is involved in
39 supporting her during the antenatal period. The committee agreed that antenatal care
40 services could be improved by engaging actively with those whom women have chosen for
41 support. Therefore, the committee recommended explaining to the woman that she is
42 welcome to bring anyone she feels supported by to the antenatal care appointments.

43 **Arranging antenatal classes at convenient times for partners to attend**

44 Evidence from the themes 'learning over time', 'involvement affected by time', and 'partner
45 rights' highlighted that attendance at antenatal appointments and classes is the first step to
46 supporting partner involvement. The evidence showed that male partners can find it difficult
47 to take time off work due to pressures from employers or colleagues, or secure flexible
48 working hours to attend classes or appointments. The committee agreed that appointments
49 and classes are often offered during regular working hours on weekdays, which may prevent
50 partners from attending. Arranging all appointments to be outside the regular working hours

1 would be a huge reconfiguration of services and without robust cost-effectiveness evaluation
2 is not warranted. However, the committee agreed that antenatal services should consider
3 being flexible in the timing of antenatal classes to facilitate attendance of the partner. In
4 addition, the committee were aware of the increase in use of virtual platforms in antenatal
5 appointments which could facilitate partner involvement. For example, the woman might
6 attend in person but the partner might join virtually if not in person.

7 **Providing a welcoming environment for antenatal appointments**

8 Evidence from the theme 'availability of information' showed that women and their partners
9 valued timely and accessible information and considered it a good way to support partner
10 involvement. Three studies from the same theme showed that partners feel there is not
11 enough information specifically aimed at them. In 1 study from the same theme, male
12 partners reported there is little or no information available online for them. The committee
13 were aware of online resources about the role of partners and how a woman and her partner
14 can support each other. The committee agreed that health services should provide
15 information to partners how they can be involved in supporting the pregnancy. Furthermore,
16 the committee agreed that resources of general pregnancy information should be provided to
17 women as well as their partners.

18 In 1 study, from the theme 'choice and decision making' a male partner felt hesitant to share
19 his opinions for fear of being perceived as 'controlling', a fear that was exacerbated by
20 external stimuli in the antenatal setting. For example, a male partner felt that posters about
21 domestic abuse influenced the consultation style, where he felt it was assumed that he
22 conformed to a stereotype. The committee agreed that domestic abuse is a prevalent public
23 health issue and that the woman's safety is paramount. The committee agreed that it is
24 important to have those messages in antenatal clinics in order to raise awareness about
25 domestic abuse and possibly lower the threshold for women or male partners to discuss it in
26 antenatal appointments. However, the committee agreed that it is also important to have
27 positive messages and imagery about caring partners in these spaces in order to avoid
28 stereotypes and facilitate involvement of partners who are men.

29 Evidence from the theme 'impact of staff behaviour' highlighted the effects of the physical
30 environment of antenatal services on partners. In 1 study from the same theme, a woman
31 reported her husband being unable to see the ultrasound scan as there was nowhere from
32 him to sit to see the monitor. Therefore, the committee agreed it is important to adapt the
33 physical environment to suit the woman and her partner's needs, for example by providing
34 enough chairs in consultation rooms so women and partners can sit together.

35 **Cost effectiveness and resource use**

36 No economic studies were identified which were applicable to this review question.

37 It is not anticipated that there will be significant resource impact from implementing these
38 recommendations. There may need to be some organisational changes such as scheduling
39 classes at times convenient for both women and their partners and providing additional
40 seating at appointments. There may also be a need to develop and provide tailored
41 information in a form suitable for partners. It would be possible though to use resources
42 developed by other organisations minimising any resource impact.

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1 Appendices

2 Appendix A – Review protocols

3 Review protocol for review question: What are the barriers to, and facilitators of, involving partners in the woman’s 4 antenatal care?

5 **Table 3: Review protocol**

Field (based on <u>PRISMA-P</u>)	Content
Review question	What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?
Type of review question	Qualitative
Objective of the review	The aim of this review is to establish what the barriers are to, and facilitators of, partner involvement in antenatal care. In particular, the review will focus on ways of improving participation by under-served partners in the woman’s antenatal care experience.
Eligibility criteria – population	Women who received routine antenatal care and the associated father, birth partner or current partner(s) Note: the partner may or may not have been involved in the women’s antenatal care.
Eligibility criteria – Phenomenon of interest	Views and experiences of the way in which partners (such as, father, birth or current partner) were involved in the women’s routine antenatal care. Themes will be identified from the available literature, but expected themes are: <ul style="list-style-type: none"> • Women and partners feeling empowered • Partners feeling side-lined by professionals involved in providing antenatal care • Partners feeling unprepared to provide support to woman • Partners lack of access to professionals involved in providing antenatal care Note: synonyms for involvement include: ‘engagement’; ‘empowerment’; ‘attendance’; ‘participation’.
Eligibility criteria – comparator	Not applicable

Field (based on <u>PRISMA-P</u>)	Content
Outcomes and prioritisation	Not applicable
Eligibility criteria – study design	<ul style="list-style-type: none"> • Systematic reviews of qualitative studies that specifically address women and partner's views/experiences of partner's involvement of routine ANC services (for example, scans, classes) • Qualitative studies (for example, studies that use interviews, focus groups, or observations) that specifically address women and partner's views/experiences of partner's involvement of routine ANC services (for example, scans, classes) <p>Note: Identified studies will be reviewed in chronological order with most recent first.</p>
Other inclusion exclusion criteria	<p>Exclusion</p> <p>STUDY DESIGN:</p> <ul style="list-style-type: none"> • Purely quantitative studies (including surveys that report only quantitative data) <p>Note: Qualitative studies may be excluded based on data saturation if more comprehensive evidence is available from other studies</p> <p>PUBLICATION STATUS:</p> <ul style="list-style-type: none"> • Conference abstract <p>LANGUAGE:</p> <ul style="list-style-type: none"> • Non-English <p>Inclusion</p> <p>COUNTRY:</p> <ul style="list-style-type: none"> • Only studies conducted in high income countries, as defined by the World Bank, with centrally-funded healthcare systems will be included. For a list of these countries, see https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups <p>Note: The use of the World Bank definitions of low-, middle- and high-income countries in this guideline is consistent with its use in the Postnatal care up to 8 weeks after birth (update) NICE guideline CG37.</p>
Proposed sensitivity/sub-group analysis, or meta-regression	Stratification by age, ethnicity (for example, BME) and LGBT+ status will be considered if there is available data.
Selection process – duplicate	Review questions selected as high priorities for health economic analysis (and those selected as medium priorities and where health economic analysis could influence recommendations) will be subject to dual weeding and study selection; any

Field (based on PRISMA-P)	Content
screening/selection/analyses	discrepancies above 10% of the dual weeded resources will be resolved through discussion between the first and second reviewers or by reference to a third person. All data extraction will quality assured by a senior reviewer. Draft excluded studies and evidence tables will be circulated to the Topic Group for their comments. Resolution of disputes will be by discussion between the senior reviewer, Topic Advisor and Chair.
Data management (software)	NGA STAR software will be used to generate bibliographies/citations, and to conduct study sifting and data extraction. For the qualitative review, GRADE-CERQual will be used to assess the confidence in the findings from a thematic analysis.
Information sources – databases and dates	Sources to be searched: Embase, Medline, Medline In-Process, PsycINFO, CINAHL Limits (for example, date, study design): <ul style="list-style-type: none"> • Qualitative, patient concerns • Date: No restriction • Apply standard animal/non-English language exclusion
Identify if an update	This is a new area in the guideline.
Author contacts	Developer: National Guideline Alliance.
Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual .
Search strategy – for one database	For details please see appendix B.
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables).
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) or H (economic evidence tables).
Methods for assessing bias at outcome/study level	Quality assessment of individual studies will be performed using the following checklists: <ul style="list-style-type: none"> • CASP checklist for qualitative studies For details please see section 6.2 of Developing NICE guidelines: the manual . Methodological limitations across all available evidence will be evaluated for each theme using the GRADE-CERQual approach: https://www.cerqual.org
Criteria for quantitative synthesis (where suitable)	For details please see section 6.4 of Developing NICE guidelines: the manual

Field (based on PRISMA-P)	Content
Methods for analysis – combining studies and exploring (in)consistency	For details please see supplement 1: Methods.
Meta-bias assessment – publication bias, selective reporting bias	Not applicable.
Assessment of confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual .
Rationale/context – Current management	For details please see the introduction to the evidence review.
Describe contributions of authors and guarantor	A multidisciplinary committee developed the guideline. The committee was convened by the National Guideline Alliance and chaired by Kate Harding in line with section 3 of Developing NICE guidelines: the manual . Staff from the National Guideline Alliance undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost-effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details please see Supplement 1: Methods.
Sources of funding/support	The National Guideline Alliance is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Name of sponsor	The National Guideline Alliance is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Roles of sponsor	NICE funds the National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England.
PROSPERO registration number	This protocol is not registered with PROSPERO.

- 1 CASP: Critical appraisal skills programme; CCTR: Cochrane Controlled Trials Register; CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central
2 Register of Controlled Trials; CERQual: Confidence in the Evidence from Reviews of Qualitative Research; CG: clinical guideline; DARE: Database of Abstracts of Reviews of
3 Effects; GRADE-CERQual: Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative Research; HTA:
4 Health Technology Assessment; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; NIHR: National Institute for Health Research

Appendix B – Literature search strategies

Literature search strategies for review question: What are the barriers to, and facilitators of, involving partners in the women’s antenatal care?

Database(s): Medline & Embase & PsycINFO (Multifile)

Last searched on **Embase Classic+Embase** 1947 to 2019 January 11, **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily** 1946 to January 11, 2019, **PsycINFO** 1806 to January Week 1 2019

Date of last search: 14th January 2019

Multifile database codes: emczd = Embase Classic+Embase; ppez= MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily; psych = PsycINFO

#	Searches
1	(Pregnancy/ or Pregnant Women/) use ppez
2	(pregnancy/ or pregnant woman/) use emczd
3	[pregnancy/ use psych]
4	Prenatal Care/ use ppez
5	prenatal care/ use emczd
6	[prenatal care/ use psych]
7	(antenatal\$ or ante-natal\$ or ante natal\$ or prenatal\$ or pre-natal\$ or pre natal\$ or pregnan\$).tw.
8	1 or 2 or 3 or 4 or 5 or 6 or 7
9	*Fathers/ use ppez
10	(*father/ or expectant father/) use emczd
11	[(exp *fathers/ or expectant fathers/) use psych]
12	*Spouses/ use ppez
13	(*husband/ or *spouse/) use emczd
14	[(*husbands/ or *spouses/) use psych]
15	Paternal Behavior/ use ppez
16	paternal behavior/ use emczd
17	((paternal or father\$ or co-parent\$ or coparent\$ or partner\$ or dad\$ or husband\$ or spouse\$) adj3 (involv\$ or participat\$ or support\$ or includ\$ or accompan\$ or engage\$ or empower\$ or attend\$)).tw.
18	9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
19	8 and 18
20	((first-time\$ or first time\$ or firsttime\$) adj father\$).ti.
21	19 or 20
22	letter/
23	editorial/
24	news/
25	exp historical article/
26	Anecdotes as Topic/
27	comment/
28	case report/
29	(letter or comment*).ti.
30	22 or 23 or 24 or 25 or 26 or 27 or 28 or 29
31	randomized controlled trial/ or random*.ti,ab.
32	30 not 31
33	animals/ not humans/
34	exp Animals, Laboratory/
35	exp Animal Experimentation/
36	exp Models, Animal/
37	exp Rodentia/
38	(rat or rats or mouse or mice).ti.
39	32 or 33 or 34 or 35 or 36 or 37 or 38
40	letter.pt. or letter/
41	note.pt.
42	editorial.pt.
43	case report/ or case study/
44	(letter or comment*).ti.
45	40 or 41 or 42 or 43 or 44
46	randomized controlled trial/ or random*.ti,ab.
47	45 not 46
48	animal/ not human/
49	nonhuman/
50	exp Animal Experiment/

#	Searches
51	exp Experimental Animal/
52	animal model/
53	exp Rodent/
54	(rat or rats or mouse or mice).ti.
55	47 or 48 or 49 or 50 or 51 or 52 or 53 or 54
56	39 use ppez
57	55 use emczd
58	56 or 57
59	21 and 58
60	21 not 59
61	limit 60 to english language

Database(s): Cochrane Library

Last searched on **Cochrane Database of Systematic Reviews**, Issue 1 of 12, January 2019, **Cochrane Central Register of Controlled Trials**, Issue 1 of 12, January 2019
Date of last search: 14th January 2019

#	Searches
#1	MeSH descriptor: [Pregnancy] this term only
#2	MeSH descriptor: [Pregnant Women] this term only
#3	MeSH descriptor: [Prenatal Care] this term only
#4	((antenatal* or ante-natal* or ante natal* or prenatal* or pre-natal* or pre natal* or pregnan*)):ti,ab,kw (Word variations have been searched)
#5	#1 OR #2 OR #3 OR #4
#6	MeSH descriptor: [Fathers] this term only
#7	MeSH descriptor: [Spouses] this term only
#8	MeSH descriptor: [Paternal Behavior] this term only
#9	((paternal or father* or co-parent* or coparent* or partner* or dad* or husband* or spouse*) NEAR/3 (involv* or participat* or support* or includ* or accompan* or engage* or empower* or attend*)):ti,ab,kw
#10	#6 OR #7 OR #8 OR #9
#11	#5 AND #10
#12	((first-time* or first time* or firsttime*) NEXT father*):ti
#13	#11 OR #12

Database(s): Cinahl Plus

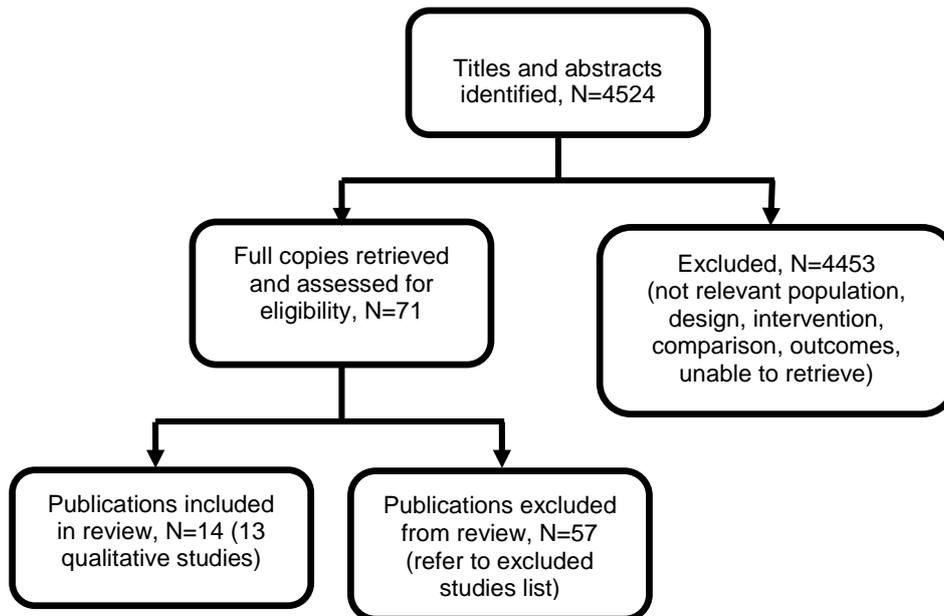
Date of last search: 14th January 2019

#	Searches
S15	S13 OR S14 Limiters - English Language; Exclude MEDLINE records;
S14	TI ((first-time* or first time* or firsttime*) N1 father*)
S13	S5 AND S12
S12	S7 OR S9 OR S10 OR S11
S11	TI ((paternal or father* or co-parent* or coparent* or partner* or dad* or husband* or spouse*) N3 (involv* or participat* or support* or includ* or accompan* or engage* or empower* or attend*)) OR AB ((paternal or father* or co-parent* or coparent* or partner* or dad* or husband* or spouse*) N3 (involv* or participat* or support* or includ* or accompan* or engage* or empower* or attend*))
S10	(MH "Paternal Behavior")
S9	(MM "Spouses")
S8	(MH "Spouses")
S7	(MM "Fathers") OR (MM "Expectant Fathers")
S6	(MH "Fathers") OR (MH "Expectant Fathers")
S5	S1 OR S2 OR S3 OR S4
S4	TI (antenatal* or ante-natal* or ante natal* or prenatal* or pre-natal* or pre natal* or pregnan*) OR AB (antenatal* or ante-natal* or ante natal* or prenatal* or pre-natal* or pre natal* or pregnan*)
S3	(MH "Prenatal Care")
S2	(MH "Expectant Mothers")
S1	(MH "Pregnancy")

Appendix C – Qualitative evidence study selection

Study selection for: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

Figure 2: Study selection flow chart



Appendix D – Evidence tables

Evidence tables for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

Table 4: Evidence tables

Study Details	Participants and methods	Themes, limitations and other comments
<p>Full citation Atkin, K., Berghs, M., Dyson, S., 'Who's the guy in the room?' Involving fathers in antenatal care screening for sickle cell disorders, Social Science and Medicine, 128, 212-219, 2015</p> <p>Ref Id 966110</p> <p>Study type General qualitative inquiry</p> <p>Aim of the study To understand fathers' experiences and expectations of sickle cell antenatal screening.</p> <p>Country/ies where the study was carried out UK</p> <p>Study dates 2013 to 2014</p> <p>Source of funding NIHR</p>	<p>Sample size N=24 men</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> Any father over the age of 18 years Has received a request to be tested after his partner was found to be a carrier of sickle cell <p>Exclusion criteria Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> 21 fathers knew their carrier status A range of ages between 20 and 50-year-old fathers 9 fathers had experience of being offered a more invasive prenatal diagnosis 17 fathers were carriers of sickle cell 4 fathers were no longer with their partner, but still had contact <p>Setting The interviews took place either in the respondents own home or in a mutually agreed community setting.</p> <p>Sample selection</p>	<p>Themes from study</p> <ul style="list-style-type: none"> The importance of presence Finding a role Exercising choice <p>CASP - Clear statement of aims? Yes</p> <p>CASP - Qualitative methodology appropriate? Yes</p> <p>CASP - Research design appropriate? Can't tell</p> <p>CASP - Recruitment strategy appropriate? Yes</p> <p>CASP - Data collection appropriate? Yes</p> <p>CASP - Researcher-participant relationship adequately considered?</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>Selection of sample made by 8 sickle cell NGOs from their existing records or at community events, in which the fathers were taking part. Fathers were contacted either face-to-face or over the telephone.</p> <p>Data collection</p> <p>Semi-structured, face-to-face interviews lasting between 30 and 90 minutes. 21 fathers were interviewed in the absence of their partner.</p> <p>Data analysis</p> <p>Interviews, with permission, were audio-recorded and transcribed. Analysis was aided by Atlas-ti and undertaken by the research team, who engaged in iterative debate at various key stages when negotiating different analytical themes. Themes were identified using a combination of opening coding and line-by-line analysis.</p>	<p>Yes</p> <p>CASP - Ethical issues considered?</p> <p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>Yes</p> <p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p> <p>The authors have considered their findings in the context of existing literature, however there is no mention of new areas of research, nor of the transferability of their results.</p> <p>CASP - Overall quality</p> <p>High</p>
<p>Full citation</p> <p>Backstrom, C. A., Martensson, L. B., Golsater, M. H., Thorstensson, S. A., "It's like a puzzle": Pregnant women's perceptions of professional support in midwifery care, <i>Women and Birth</i>, 29, e110-e118, 2016</p> <p>Ref Id</p> <p>966316</p>	<p>Sample size</p> <p>N= 15</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> • Women must be first-time mothers • Singleton pregnancies • Women had to intend to give birth at the county hospital • Women had to be able to understand and speak Swedish. <p>Exclusion criteria</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Professional support facilitates partner involvement • Professional support with a focus on the partner was perceived to facilitate partner involvement • Professional support that was received together was perceived to contribute to the couple's unity

Study Details	Participants and methods	Themes, limitations and other comments
<p>Study type Qualitative (Phenomenological study)</p> <p>Aim of the study To explore pregnant women's perceptions of professional support in midwifery care.</p> <p>Country/ies where the study was carried out Sweden</p> <p>Study dates Not mentioned.</p> <p>Source of funding Department of Health and Education, University of Skovde; and the School of Health and Welfare, Jonkoping University</p>	<p>Not mentioned.</p> <p>Characteristics Women were between gestational weeks 36-38</p> <p>Setting The interviews took place over the phone at the participant's home.</p> <p>Sample selection Strategic sampling was used. The selection for the study was done purposefully with maximum-variation sampling in order to ensure variation among the women in terms of age, place of residence, educational status, and professional support received in midwifery care.</p> <p>The included women were contacted by the first author via telephone.</p> <p>Data collection The semi-structured interviews lasted 39-70 minutes and were conducted in Swedish via telephone. The participants' quotes were translated making sure there was no change in the meaning. All interviews were conducted by the first author and then audio-taped and transcribed verbatim. The interview guide consisted of open-ended questions that aimed to allow the women to describe their experiences of professional support in childbirth and parenting.</p> <p>Data analysis</p>	<ul style="list-style-type: none"> Professional support that was received together was perceived to contribute to the women's relaxation <p>CASP - Clear statement of aims? Yes</p> <p>CASP - Qualitative methodology appropriate? Yes</p> <p>CASP - Research design appropriate? Yes</p> <p>CASP - Recruitment strategy appropriate? Yes</p> <p>CASP - Data collection appropriate? Yes</p> <p>CASP - Researcher-participant relationship adequately considered? Yes</p> <p>CASP - Ethical issues considered? Yes</p> <p>CASP - Data analysis rigorous? Can't tell</p> <p>CASP - Clear statement of findings?</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>The first author conducted the primary analysis; thereafter the analysis was discussed between the co-authors.</p> <p>All of the authors were “reflective”, in accordance with their preconceptions from earlier experiences of working with professional support.</p> <p>The analysis was conducted according to the phenomenographic tradition (phenomenographic data analysis).</p>	<p>Can't tell</p> <p>CASP - Value of research</p> <p>The results have been discussed within the wider context of literature and policy. There is no mention of future research, however transferability is mentioned but not discussed.</p> <p>CASP - Overall quality</p> <p>Moderate</p>
<p>Full citation</p> <p>Dheensa, S., Metcalfe, P. A., Williams, R., What do men want from antenatal screening? Findings from an interview study in England, Midwifery, 31, 208-14, 2015</p> <p>Ref Id</p> <p>966137</p> <p>Study type</p> <p>(Qualitative) Grounded theory</p> <p>Aim of the study</p> <p>To explore what men who attend antenatal appointments want from screening and from midwives, whether facing pregnancy anomalies or not.</p> <p>Country/ies where the study was carried out</p>	<p>Sample size</p> <p>N= 12</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> Men aged at least 18 years of age, whose partners had been offered a minimum of one screening test Women were prenatal or up to three years post partum <p>Exclusion criteria</p> <p>Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> All men were white British and most were educated to at least degree level. The men ranged from age 29 to 42 years. <p>Setting</p> <p>To encourage men to speak openly and comfortably about potentially sensitive matters, men were given a choice of being interviewed in person or by telephone, email or online chat.</p>	<p>Themes from study</p> <ul style="list-style-type: none"> Normal pregnancies: men want experts to take control Complicated pregnancies: men want to be actively involved Effect of time: men learn or disengage <p>CASP - Clear statement of aims?</p> <p>Yes</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p> <p>Yes</p> <p>CASP - Recruitment strategy appropriate?</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>United Kingdom</p> <p>Study dates 2011</p> <p>Source of funding Nursing and Physiotherapy, University of Birmingham</p>	<p>Sample selection Recruitment was through an inner-city NHS antenatal department and antenatal class in the same location, and online parenting forums and mailing lists. To ensure potential participants knew that the study was about antenatal screening, information sheets on what the screening involved were provided. The information was sent out by midwives and posted online.</p> <p>Data collection Cross-sectional and semi-structured interviews conducted mostly over the telephone.</p> <p>Data analysis Grounded theory was used to analyse the data at first since it elicits rich analyses that closely reflect subjective meanings in participants' talk. The analytical procedure involved coding transcripts for concepts and processes and grouping similar concepts to create arguments.</p>	<p>Yes</p> <p>CASP - Data collection appropriate? Yes</p> <p>CASP - Researcher-participant relationship adequately considered? No</p> <p>CASP - Ethical issues considered? Yes</p> <p>CASP - Data analysis rigorous? Yes</p> <p>CASP - Clear statement of findings? Yes</p> <p>CASP - Value of research The results from this study are discussed within the wider context of the literature. Future suggestions for research are made with consideration for transferability.</p> <p>CASP - Overall quality High</p>
<p>Full citation Huusko, L., Sjoberg, S., Ekstrom, A., Hertfelt Wahn, E., Thorstensson, S., First-Time Fathers'</p>	<p>Sample size N= 7</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Experience of not knowing what support they needed

Study Details	Participants and methods	Themes, limitations and other comments
<p>Experience of Support from Midwives in Maternity Clinics: An Interview Study, Nursing Research and Practice Nurs Res Pract, 2018, 9618036, 2018</p> <p>Ref Id 966904</p> <p>Study type General qualitative inquiry</p> <p>Aim of the study To illustrate first-time fathers' experiences of support from midwives in maternity clinics as a step in the validation of "The Father Perceived-Professional-Support" (The FaPPS) scale.</p> <p>Country/ies where the study was carried out Sweden</p> <p>Study dates Not mentioned.</p> <p>Source of funding Not mentioned.</p>	<p>Inclusion criteria Not mentioned.</p> <p>Exclusion criteria Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> • Age ranged from 21 to 42 years • Education level varied from ground school to university • All men had participated in parental education and clinical meetings with the midwife <p>Setting The interviews were performed at the maternity clinic or at the fathers' home by choice of the individual father.</p> <p>Sample selection Midwives recruited men at the maternity clinic. A purposive sampling strategy was used, aiming for variation in age and education level.</p> <p>Data collection The interview started with the inductive part, using an open questions. The questions aimed to get the fathers own words of the professional support they had received from the midwives.</p> <p>During the interviews, the fathers were encouraged to reflect on their experiences and probing questions were used. The probing questions were used to encourage the interviewees to describe how they perceived the professional support.</p>	<ul style="list-style-type: none"> • Informative support from midwives • Support from other first-time-fathers in parental education groups • Experience of being excluded <p>CASP - Clear statement of aims? Yes</p> <p>CASP - Qualitative methodology appropriate? Yes</p> <p>CASP - Research design appropriate? Can't tell</p> <p>CASP - Recruitment strategy appropriate? Yes</p> <p>CASP - Data collection appropriate? Yes</p> <p>CASP - Researcher-participant relationship adequately considered? No</p> <p>CASP - Ethical issues considered? Yes</p> <p>CASP - Data analysis rigorous? Yes</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>Thereafter, in the deductive part, the fathers were asked to write their answers in the FaPPS scale, in order to receive their thoughts and understanding of the scale.</p> <p>The fathers were also asked to reflect on each item and explain why they answered the way they did.</p> <p>Data analysis</p> <p>For the open questions, an inductive qualitative content analysis was used to explore the direct experience of the fathers.</p> <p>For the deductive part, answers to the FaPPS scale items, a deductive qualitative content analysis was used.</p>	<p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p> <p>The results are discussed within the context of the wider literature. Future work is considered and transferability of results is also considered.</p> <p>CASP - Overall quality</p> <p>High</p>
<p>Full citation</p> <p>Jeffery, T., Luo, K. Y., Kueh, B., Petersen, R. W., Quinlivan, J. A., Australian Fathers' Study: What Influences Paternal Engagement With Antenatal Care?, Journal of Perinatal Education, 24, 181-7, 2015</p> <p>Ref Id</p> <p>966180</p> <p>Study type</p> <p>Mixed methods</p> <p>Aim of the study</p> <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable</p>	<p>Sample size</p> <p>For qualitative, N= 59 *Note overall N= 100</p> <p>Inclusion criteria</p> <p>Not mentioned.</p> <p>Exclusion criteria</p> <ul style="list-style-type: none"> • Men who were not fluent in English • Men who knew their unborn child had fetal anomalies <p>Characteristics</p> <ul style="list-style-type: none"> • Men had a mean age of 30.1 years • Majority were born in Australia • Majority were first-time fathers. <p>Setting</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Engaged fathers • Values role in decision making • Staff behaviour • Not engaged fathers • No role in decision making • Time pressures • The observer effect • Lack of knowledge • Barriers to attendance • Feeling unprepared and anxiety <p>CASP - Clear statement of aims?</p> <p>Yes</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>factor of consultation by antenatal care providers influenced paternal engagement.</p> <p>Country/ies where the study was carried out</p> <p>Australia</p> <p>Study dates</p> <p>Not mentioned.</p> <p>Source of funding</p> <p>Not mentioned.</p>	<p>Not mentioned.</p> <p>Sample selection</p> <p>Fathers were recruited by research staff from the North Metropolitan Health Service of Western Australia. They were partners of women in their third trimester of pregnancy.</p> <p>The sample size was calculated using Minitab Version 16.</p> <p>Data collection</p> <p>Data was collected from an antenatal questionnaire that had both qualitative and quantitative components.</p> <p>Data analysis</p> <p>For the qualitative data, an inductive content analysis was performed.</p> <p>Comments were independently read by the principal researchers, and an abstraction process was used to summarise and conceptualise the overall meaning and implications of the comments.</p> <p>Open coding was performed to maximise the number of headings to describe all aspects of the content.</p>	<p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p> <p>Can't tell</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Can't tell</p> <p>CASP - Data collection appropriate?</p> <p>Yes</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No</p> <p>CASP - Ethical issues considered?</p> <p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>No</p> <p>CASP - Clear statement of findings?</p> <p>Can't tell</p> <p>CASP - Value of research</p> <p>The results are discussed within the wider context of the literature and policy.</p>

Study Details	Participants and methods	Themes, limitations and other comments
		<p>No mention of future work or transferability.</p> <p>CASP - Overall quality</p> <p>Low</p>
<p>Full citation</p> <p>Locock, L., Alexander, J., 'Just a bystander'? Men's place in the process of fetal screening and diagnosis, <i>Social Science and Medicine</i>, 62, 1349-1359, 2006</p> <p>Ref Id</p> <p>830556</p> <p>Study type</p> <p>Qualitative (Grounded theory)</p> <p>Aim of the study</p> <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <p>Country/ies where the study was carried out</p> <p>United Kingdom</p> <p>Study dates</p> <p>October 2003 and March 2004</p> <p>Source of funding</p> <p>NHS National Screening Committee</p>	<p>Sample size</p> <p>N=33 women, 6 couples, and 2 male partners alone</p> <p>Inclusion criteria</p> <p>Not reported.</p> <p>Exclusion criteria</p> <p>Not reported.</p> <p>Characteristics</p> <p>Not reported.</p> <p>Setting</p> <p>Interviews were conducted in the participant's home. 3 participants interviewed elsewhere (not reported where).</p> <p>Sample selection</p> <p>Recruitment was conducted through the DIPEX national network of general practitioners, antenatal clinics and classes in several areas, national voluntary associations and support groups, such as the National Childbirth Trust, Antenatal Results and Choices (a charity providing information specifically on screening and diagnosis) and support groups for conditions such as spina bifida, Down's syndrome and congenital heart defects.</p> <p>Data collection</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Men as parents • Men as bystanders • Men as protectors/supporters • Men as gatherers and guardians of fact • Men as deciders or enforcers • Men as grieving parents <p>CASP - Clear statement of aims?</p> <p>Yes</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p> <p>Can't tell</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Yes</p> <p>CASP - Data collection appropriate?</p> <p>Yes</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>41 in-depth narrative interviews (33 women, 6 couples, and 2 male partners alone) took place for data collection.</p> <p>Interviews were digital video- or audio-recorded and transcribed verbatim by a professional transcriber.</p> <p>Data analysis</p> <p>Data were coded systematically using N6 software (QSR International Pty Ltd., 2002), and analysed thematically using a modified grounded theory approach, incorporating constant comparison and exploration of deviant cases (Pope, Ziebland, & Mays, 2000).</p>	<p>CASP - Researcher-participant relationship adequately considered?</p> <p>No</p> <p>CASP - Ethical issues considered?</p> <p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>Yes</p> <p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p> <p>The results are discussed within the wider context of the literature and policy. No mention of future work or transferability.</p> <p>CASP - Overall quality</p> <p>Moderate</p>
<p>Full citation</p> <p>Miller, Tina, Nash, Meredith, I just think something like the "Bubs and Pubs" class is what men should be having': Paternal subjectivities and preparing for first-time fatherhood in Australia and the United Kingdom, <i>Journal of Sociology</i>, 53, 541-556, 2017</p> <p>Ref Id</p>	<p>Sample size</p> <p>UK: N=17 Australia: N=25</p> <p>Inclusion criteria</p> <p>Men who were first-time fathers</p> <p>Exclusion criteria</p> <p>Not mentioned.</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Temporality • Demonstrating appropriate preparation while anticipating the birth • Envisaging being a father <p>CASP - Clear statement of aims?</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>966673</p> <p>Study type</p> <p>General qualitative inquiry</p> <p>Aim of the study</p> <p>UK study: To examine how men engage in/narrate experiences of preparation for first-time fatherhood and more specifically, on topics including antenatal care experiences and support and information sources they'd sought out/used.</p> <p>Australia study: To explore how Tasmanian men experienced the transition to fatherhood and to identify their educational and care needs.</p> <p>Country/ies where the study was carried out</p> <p>United Kingdom and Australia</p> <p>Study dates</p> <p>Not mentioned</p> <p>Source of funding</p> <p>Australia: Tasmanian Early Years Foundation</p>	<p>Characteristics</p> <p>UK Study</p> <ul style="list-style-type: none"> The men were all white, employed, heterosexual and living in (some ethnically mixed) dual-earner households in the southern half of the UK. They were employed in a wide range of semi-skilled and skilled jobs, positioning the majority of them (according to occupational classifications) as middle class. The mean age of participants was 33.7 years at the time of the first interview; ages ranged from 24 to 39 years. <p>Australia Study</p> <ul style="list-style-type: none"> Participants were aged between 24 and 43 years, with a mean age of 32.8 years. Most men described themselves as Anglo-Celtic and 50% were tertiary educated. All participants lived with a wife or female partner. The majority of men worked in full-time, paid employment in skilled and semi-skilled roles (positioning them as mainly middle class). <p>Setting</p> <p>UK Study</p> <p>All participants were interviewed by Tina Miller (author) and most interviews occurred in participants' homes or workplaces. All interviews (approximately one hour) were recorded with consent.</p> <p>Australia Study</p> <p>All participants were interviewed by two research assistants. Each interview lasted approximately one hour and took place in a mutually convenient public location or via a telephone.</p>	<p>Yes</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p> <p>Can't tell</p> <p>CASP - Recruitment strategy appropriate?</p> <p>No</p> <p>CASP - Data collection appropriate?</p> <p>Yes</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No</p> <p>CASP - Ethical issues considered?</p> <p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>Yes</p> <p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>Demographic information was collected and interviews were audio recorded with consent.</p> <p>Sample selection</p> <p>UK Study</p> <p>These participants were recruited via posters and leaflets posted in workplaces, leisure centres and shops in southern England and participants were required to opt into the study.</p> <p>Australia Study</p> <p>Purposive sampling was used to recruit 25 men. Participants were primarily recruited through two local partner organisations (the Department of Health and Human Services; Child Health and Parenting Service; and Good Beginnings Australia Dads Connect programme. Several participants were also recruited from Bubs and Pubs, a one-night session about childbirth taught by a male midwife at the pub.</p> <p>Data collection</p> <p>Qualitative longitudinal research design using exploratory, in-depth interviews.</p> <p>Data analysis</p> <p>UK Studies</p> <p>All interviews were transcribed verbatim. Interview transcripts were sent to participants, as a token of thanks rather than for data checking.</p> <p>Data analysis was initially thematic, focusing on individual transcripts and themes, temporal ordering of events and language used. This involved examining how and when men drew on</p>	<p>Results are discussed within the context of wider literature. No mention of future research or transferability.</p> <p>CASP - Overall quality</p> <p>Moderate</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>different discourses (e.g. associated with masculinities, emotions, maternal assumptions) to narrate their intentions and experiences. Individual stories were compared and patterns identified across the data set.</p> <p>Australia Study</p> <p>Data analysis was undertaken by Meredith Nash and two research assistants. Analysis involved a thematic analysis, focusing on the men's constructions of masculinities and fatherhood. Each interview transcript was reviewed for meaningfulness in relation to the key research questions. Data was then clustered into categories based on shared ideas. Once categories were created, the data was re-read to refocus the analysis on themes instead of codes.</p>	
<p>Full citation</p> <p>Nash, M., Addressing the needs of first-time fathers in Tasmania: A qualitative study of father-only antenatal groups, The Australian journal of rural health, 26, 106-111, 2018</p> <p>Ref Id</p> <p>966969</p> <p>Study type</p> <p>General qualitative inquiry</p> <p>Aim of the study</p> <p>To examine how first-time fathers in rural Tasmania experienced father-only antenatal support/education groups.</p>	<p>Sample size</p> <p>N=25</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> • Men who were ≥18 years old • First time fathers with a partner who was at least 20 weeks pregnant <p>Exclusion criteria</p> <p>Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> • Participants were between 24 and 43 years old, with a mean age of 32.8 years • Most men lived in inner/outer rural areas and described themselves as Anglo-Australian 	<p>Themes from study</p> <ul style="list-style-type: none"> • Motivations for attending antenatal groups • The impact of the antenatal group's setting on men's experiences • Masculine stereotypes in antenatal groups • Strategies to support fathers <p>CASP - Clear statement of aims?</p> <p>Yes</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>Country/ies where the study was carried out Australia</p> <p>Study dates 2014</p> <p>Source of funding The Tasmanian Early Years Foundation</p>	<ul style="list-style-type: none"> 50% of the participants were tertiary educated <p>Setting Interviews were conducted in convenient public location or via telephone.</p> <p>Sample selection Purposive sampling was used to recruit fathers. The sample size was based on a consideration of the study design, nature/context of the topic under investigation, and quality of data.</p> <p>Participants were recruited face-to-face and via email through two local partner organisations (a government health services and a not-for-profit organisation that runs a statewide fatherhood program).</p> <p>Several participants were recruited through a private company that offers men's antenatal education classes in a pub.</p> <p>Data collection Interviews lasted approximately one hour and were conducted using interview guides based on relevant literature and discussions between the researcher and partner organisation.</p> <p>Demographic information was collected at the first interview with consent in a questionnaire.</p> <p>All interviews were audio-recorded with consent and transcribed.</p> <p>Data analysis Data were analysed thematically. Each transcript was reviewed for meaningfulness in relation to key research questions by the author and two research assistants.</p>	<p>Can't tell</p> <p>CASP - Recruitment strategy appropriate? Yes</p> <p>CASP - Data collection appropriate? Yes</p> <p>CASP - Researcher-participant relationship adequately considered? No</p> <p>CASP - Ethical issues considered? Yes</p> <p>CASP - Data analysis rigorous? Yes</p> <p>CASP - Clear statement of findings? Yes</p> <p>CASP - Value of research The results are discussed within the wider context of the literature. Future research is not mentioned, although there is brief mention of transferability.</p> <p>CASP - Overall quality Moderate</p>

Study Details	Participants and methods	Themes, limitations and other comments
	Data were clustered into themes based on commonalities across the data.	
<p>Full citation</p> <p>Palsson, P., Persson, E. K., Ekelin, M., Kristensson Hallstrom, I., Kvist, L. J., First-time fathers experiences of their prenatal preparation in relation to challenges met in the early parenthood period: Implications for early parenthood preparation, <i>Midwifery</i>, 50, 86-92, 2017</p> <p>Ref Id</p> <p>966698</p> <p>Study type</p> <p>Qualitative (Phenomenological study)</p> <p>Aim of the study</p> <p>To describe first-time fathers experiences of their prenatal preparation in relation to challenges met in the early parenthood period.</p> <p>Country/ies where the study was carried out</p> <p>Sweden</p> <p>Study dates</p> <p>2015</p> <p>Source of funding</p>	<p>Sample size</p> <p>N=15</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> • First-time fathers or co-mothers whose infant had been cared for on the postnatal unit; • To understand and speak Swedish or English to the extent that it was possible to have a conversation. <p>Exclusion criteria</p> <p>Those whose infant was cared for on the Neonatal Intensive Care Unit (NICU).</p> <p>Characteristics</p> <ul style="list-style-type: none"> • 15 first-time fathers were interviewed approximately one month after becoming fathers; • Age ranged from 19–37 years; • 8 fathers had tertiary education, 6 had sixth-form college education and one had basic schooling; • Fathers were born in: Sweden (n=9), Denmark (n=1), Greece (n=1), Iran (n=1), Macedonia (n=1), Romania (n=1), Sri Lanka (n=1); • 14 fathers had attended at least one parental group session during pregnancy and one father did not participate at all in parental group. <p>Setting</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Parental groups: the good and the bad; • Internet as an asset or a worrier; • The need for guidance. <p>CASP - Clear statement of aims?</p> <p>Yes.</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes.</p> <p>CASP - Research design appropriate?</p> <p>Yes.</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Yes.</p> <p>CASP - Data collection appropriate?</p> <p>Yes.</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No.</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>FORTE (Swedish Research Council for Health, Working Life and Welfare).</p>	<p>The place and the time of the interview was chosen by the respondents. Fourteen interviews were carried out at respondents' homes and one in a room at the university.</p> <p>Sample selection</p> <p>Participants were recruited from three postnatal units in southern Sweden. They were identified with the help of midwives from postnatal units.</p> <p>Data collection</p> <p>An interview guide with open questions about how first-time fathers experienced their preparation for early parenthood was used. The interviews, lasting between 21 and 90 minutes, were recorded and transcribed verbatim by the first author and an external transcriber.</p> <p>Data analysis</p> <p>The transcribed interviews were analysed using a phenomenographical approach with seven steps in the analysis process. From the individual participants' statements, conceptions could be identified and formed into categories and presented in an outcome space. The analysis was also discussed in two research seminar groups, one of them a research seminar group for phenomenographical studies.</p>	<p>CASP - Ethical issues considered? Yes.</p> <p>CASP - Data analysis rigorous? Yes.</p> <p>CASP - Clear statement of findings? Yes.</p> <p>CASP - Value of research The results have been presented within the wider context of the literature. The authors discuss future research and the transferability of the results.</p> <p>CASP - Overall quality High</p>
<p>Full citation</p> <p>Reed, K., 'It's them faulty genes again': Women, men and the gendered nature of genetic responsibility in prenatal blood screening, <i>Sociology of Health and Illness</i>, 31, 343-359, 2009</p> <p>Ref Id</p>	<p>Sample size</p> <p>N=38 (22 women and 16 male partners).</p> <p>Inclusion criteria</p> <p>Women in the study were all at the point of at least 17 weeks' gestation.</p> <p>Exclusion criteria</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Women and embodied responsibility • Women and accountability • Men, genetics and fetal responsibility <p>CASP - Clear statement of aims? Yes.</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>1003153</p> <p>Study type</p> <p>Qualitative (Grounded theory)</p> <p>Aim of the study</p> <p>To explore the gendered nature of genetic responsibility in prenatal blood screening.</p> <p>Country/ies where the study was carried out</p> <p>UK</p> <p>Study dates</p> <p>2007</p> <p>Source of funding</p> <p>Wellcome Trust.</p>	<p>Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> • Age range between 20 to 40 years; • All participants were either married or cohabiting; • Majority of the participants were White, with 1 Mauritian, 3 South Asian, and 2 African ethnicities; • Occupation ranged from unemployed to managerial/professional; • Most women were in their 2nd trimester of pregnancy; • For most women, this was their first pregnancy. <p>Setting</p> <p>The semi-structured interviews were conducted in prenatal clinics and in people's homes or in a location suitable to them.</p> <p>Two men were interviewed over the phone.</p> <p>Sample selection</p> <p>Female respondents were recruited through local NHS community and hospital midwives in a northern city in the UK.</p> <p>Where possible, men were recruited during their attendance with partners at screening appointments. Where not possible, they were recruited through pregnant partners.</p> <p>Data collection</p> <p>Data were collected by the primary investigator and one researcher through the use of an agreed interview schedule.</p> <p>Twelve respondents were interviewed as couples and the rest were interviewed separately.</p>	<p>CASP - Qualitative methodology appropriate?</p> <p>Yes.</p> <p>CASP - Research design appropriate?</p> <p>Yes.</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Yes.</p> <p>CASP - Data collection appropriate?</p> <p>Yes.</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No.</p> <p>CASP - Ethical issues considered?</p> <p>Yes.</p> <p>CASP - Data analysis rigorous?</p> <p>Yes.</p> <p>CASP - Clear statement of findings?</p> <p>Yes.</p> <p>CASP - Value of research</p> <p>The results have been discussed within the wider context of the literature. The</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>All interviews lasted approximately one hour and were tape-recorded.</p> <p>Data analysis</p> <p>The data were transcribed and analysed according to the principles of grounded theory (Glaser and Strauss 1967).</p> <p>The process of data analysis took several stages. Initially, transcripts were coded and organised into themes and categories.</p> <p>Social theories about the gendered nature of screening were developed from identified themes: reproductive choice, reproductive gate-keeping, decision making, diagnostic testing, genetic responsibility, gender roles in pregnancy and screening, male involvement, interactions with health professionals, family and peer groups.</p>	<p>authors have discussed future research and the transferability of the results.</p> <p>CASP - Overall quality</p> <p>High.</p>
<p>Full citation</p> <p>Reed, K., Making men matter: Exploring gender roles in prenatal blood screening, <i>Journal of Gender Studies</i>, 20, 55-66, 2011</p> <p>Ref Id</p> <p>1000500</p> <p>Study type</p> <p>Qualitative (Grounded theory)</p> <p>Aim of the study</p> <p>To explore women's and men's roles in screening, with a particular focus on exploring the gendered</p>	<p>Sample size</p> <p>N=38 (22 women and 16 male partners)</p> <p>Inclusion criteria</p> <p>See Reed 2009.</p> <p>Exclusion criteria</p> <p>See Reed 2009.</p> <p>Characteristics</p> <p>See Reed 2009.</p> <p>Setting</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • The importance of men • The role of health professionals • Men's participation and workplace norms <p>CASP - Clear statement of aims?</p> <p>Yes.</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes.</p> <p>CASP - Research design appropriate?</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>nature of responsibility for the health of the fetus during screening.</p> <p>Country/ies where the study was carried out</p> <p>UK</p> <p>Study dates</p> <p>2007</p> <p>Source of funding</p> <p>Wellcome Trust</p>	<p>See Reed 2009.</p> <p>Sample selection</p> <p>See Reed 2009.</p> <p>Data collection</p> <p>See Reed 2009.</p> <p>Data analysis</p> <p>See Reed 2009.</p>	<p>Yes.</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Yes.</p> <p>CASP - Data collection appropriate?</p> <p>Yes.</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No.</p> <p>CASP - Ethical issues considered?</p> <p>Yes.</p> <p>CASP - Data analysis rigorous?</p> <p>Yes.</p> <p>CASP - Clear statement of findings?</p> <p>Yes.</p> <p>CASP - Value of research</p> <p>The results have been discussed within the wider context of the literature. Future research and the transferability of the results have been discussed.</p> <p>CASP - Overall quality</p> <p>High.</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>Full citation</p> <p>Solberg, Beate, Glavin, Kari, Fathers want to play a more active role in pregnancy and maternity care and at the child health centre, Norwegian Journal of Clinical Nursing / Sykepleien Forskning (Only English version of the articles needs to be processed), 72006-e-72006, 2018</p> <p>Ref Id</p> <p>967030</p> <p>Study type</p> <p>General qualitative inquiry</p> <p>Aim of the study</p> <p>To describe how first time fathers experience their encounter with the healthcare services throughout pregnancy, childbirth, and the child's first three months of life.</p> <p>Country/ies where the study was carried out</p> <p>Norway</p> <p>Study dates</p> <p>2016</p> <p>Source of funding</p> <p>Not mentioned.</p>	<p>Sample size</p> <p>N= 9</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> Fathers had to be first time fathers Fathers had to have a satisfactory command of Norwegian The child's age had to be around three months at the time of the interview <p>Exclusion criteria</p> <p>Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> The participants had a mean age of 30.7 years They were all ethnic Norwegians with married or cohabiting civil status Most fathers had a university or university college education <p>Setting</p> <p>Interviews were conducted on the premises of the child health centre, and one interview took place at the participant's workplace.</p> <p>Sample selection</p> <p>A strategic sampling technique was used. Public health nurses recruited participants from 4 child health centres in Norway.</p> <p>Data collection</p> <p>The first author conducted the interviews which were based on a semi-structured interview guide consisting of 6 open-ended main questions.</p>	<p>Themes from study</p> <ul style="list-style-type: none"> Being on the outside <ul style="list-style-type: none"> Exclusion Being overridden Inclusion <ul style="list-style-type: none"> Participation Adaptation <p>CASP - Clear statement of aims?</p> <p>Yes</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes</p> <p>CASP - Research design appropriate?</p> <p>Yes</p> <p>CASP - Recruitment strategy appropriate?</p> <p>Yes</p> <p>CASP - Data collection appropriate?</p> <p>Yes</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>Can't tell</p> <p>CASP - Ethical issues considered?</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>The interviews were transcribed on an ongoing basis. After transcription, the audiotapes were reviewed and compared again, with the transcribed text, to ensure quality.</p> <p>Data analysis</p> <p>Qualitative content analysis was used. The analysis method encompasses the data material's manifest and latent content, and employs an inductive approach. The analysis is a five step process: read interviews, identify meaning-bearing units, condense and code units, assemble codes into sub-categories, assemble codes into categories.</p>	<p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>Yes</p> <p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p> <p>The results are discussed within the wider context of the literature. Future research is considered and transferability is also discussed</p> <p>CASP - Overall quality</p> <p>High</p>
<p>Full citation</p> <p>Williams, Kristi, Umberson, Debra, Medical technology and childbirth: Experiences of expectant mothers and fathers, <i>Sex Roles: A Journal of Research</i>, 41, 147-168, 1999</p> <p>Ref Id</p> <p>964748</p> <p>Study type</p> <p>General qualitative inquiry</p> <p>Aim of the study</p>	<p>Sample size</p> <p>N=30 (15 married couples)</p> <p>Inclusion criteria</p> <ul style="list-style-type: none"> Married and expecting their first child; Both partners willing to participate; Both partners childless at the time of recruitment. <p>Exclusion criteria</p> <p>Not mentioned.</p> <p>Characteristics</p> <ul style="list-style-type: none"> The ages of the women in the sample range from 26 to 36 years- mean age 29.6 years; 	<p>Themes from study</p> <ul style="list-style-type: none"> Experiences of expectant fathers Experiences of expectant mothers <p>CASP - Clear statement of aims?</p> <p>Yes.</p> <p>CASP - Qualitative methodology appropriate?</p> <p>Yes.</p> <p>CASP - Research design appropriate?</p> <p>Yes.</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>To examine the impact of medical technology on expectant mothers' and fathers' experiences during pregnancy and childbirth.</p> <p>Country/ies where the study was carried out</p> <p>USA</p> <p>Study dates</p> <p>1997</p> <p>Source of funding</p> <p>Not mentioned.</p>	<ul style="list-style-type: none"> • Women's mean length of education is 16.6 years; • With the exception of one Hispanic and one Asian woman, all the women in the sample are White; • The ages of the men in the sample range from 24 to 53 years-mean age 32.5 years; • Men's average length of education is 16 years; • All the men in the sample are White; • The average annual house hold income ranges from \$28,000 to \$180,000, with the mean being \$88,724; • Couples have been married an average of 4 years. <p>Setting</p> <p>In-depth interviews were conducted in the couples home. Men and women were interviewed separately, but simultaneously.</p> <p>Sample selection</p> <p>Respondents were recruited from childbirth education classes in a Texas metropolitan area that is primarily an urban/suburban community.</p> <p>Data collection</p> <p>A qualitative design consisting of in-depth interviews was conducted at two time points: (a) during the third trimester of pregnancy (time 1), and (b) 2 to 4 months after the birth of the first child.</p> <p>Data analysis</p> <p>Data were coded following the principles described by Strauss (1987) and Marshall & Rossman (1989). Transcripts were organised into conceptual categories after reading them several times. Some conceptual themes emerged during the process of analysis and other themes were drawn from the literature.</p>	<p>CASP - Recruitment strategy appropriate?</p> <p>Yes.</p> <p>CASP - Data collection appropriate?</p> <p>Yes.</p> <p>CASP - Researcher-participant relationship adequately considered?</p> <p>No.</p> <p>CASP - Ethical issues considered?</p> <p>No.</p> <p>CASP - Data analysis rigorous?</p> <p>Can't tell.</p> <p>CASP - Clear statement of findings?</p> <p>Yes.</p> <p>CASP - Value of research</p> <p>The results are discussed within the wider context of the literature. The authors consider the transferability of the results and also consider future research within the field.</p> <p>CASP - Overall quality</p> <p>Moderate.</p>

Study Details	Participants and methods	Themes, limitations and other comments
<p>Full citation Williams, R. A., Dheensa, S., Metcalfe, A., Men's involvement in antenatal screening: A qualitative pilot study using e-mail, Midwifery, 27, 861-866, 2011</p> <p>Ref Id 965659</p> <p>Study type General qualitative inquiry</p> <p>Aim of the study The study aimed to explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p> <p>Country/ies where the study was carried out United Kingdom</p> <p>Study dates Not mentioned.</p> <p>Source of funding Not mentioned.</p>	<p>Sample size N=8</p> <p>Inclusion criteria Not mentioned.</p> <p>Exclusion criteria Not mentioned.</p> <p>Characteristics We did not ask for clinical or demographic information as this was not a priority for a pilot study and as we also wished to ensure the anonymity of participants.</p> <p>Setting Email interviews from men's personal computer. Participants were requested to identify a personal email address that only they had access to.</p> <p>Sample selection Purposive sampling was undertaken to enable the researchers to answer their research questions. A sample of eight men, whose partners were in the first trimester of their pregnancy, was recruited using an advertisement via the National Childbirth Trust (NCT) network throughout the United Kingdom (UK).</p>	<p>Themes from study</p> <ul style="list-style-type: none"> • Ambivalence, doubt and uncertainty regarding medically identified risk • The 'emotional rollercoaster'. • Men and their partners: mediation and shared decision making • Limited engagement with midwives and other health professionals. <p>CASP - Clear statement of aims? Yes</p> <p>CASP - Qualitative methodology appropriate? Yes</p> <p>CASP - Research design appropriate? Yes</p> <p>CASP - Recruitment strategy appropriate? Yes</p> <p>CASP - Data collection appropriate? Can't tell</p> <p>CASP - Researcher-participant relationship adequately considered? No</p>

Study Details	Participants and methods	Themes, limitations and other comments
	<p>Data collection</p> <p>Data was collected from the email responses from participants.</p> <p>Depending on the replies, specific points raised by the men were explored in more detail by up to two further emails in the proceeding month following their initial reply.</p> <p>The participants were requested to spend no longer than 30 minutes on their replies to prevent the research becoming viewed as too onerous.</p> <p>Data analysis</p> <p>Data were analysed at each stage of the pregnancy, longitudinally, to ascertain how experiences impacted upon later views or perceptions.</p> <p>Data recorded by participants were read and developed into codes, themes and concepts, which were dialectically and dynamically related, rather than being built in a linear fashion one from the other in order to test theory.</p> <p>The data analysis generated categories and patterns, which were organised into coherent themes. Furthermore, the diversity of participants' views and experiences are also noted, as are 'outliers' (the small number of views or experiences that contrast with the main patterns in the data).</p>	<p>CASP - Ethical issues considered?</p> <p>Yes</p> <p>CASP - Data analysis rigorous?</p> <p>Yes</p> <p>CASP - Clear statement of findings?</p> <p>Yes</p> <p>CASP - Value of research</p> <p>Results discussed within the wider context of literature and also brief mention of impact on current practice and policy. There is mention of future work, but no mention of transferability.</p> <p>CASP - Overall quality</p> <p>High</p>

CASP: critical appraisal skills programme; DIPEX: Database of Individual Patient Experiences; FaPPS: Father Perceived Professional Support scale; NGOs: non-governmental organisations.

Appendix E Appendix E – Forest plots

Forest plots for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

No meta-analysis was conducted as this is a qualitative review so no forest plots have been included.

Appendix F – GRADE-CERQual tables

GRADE tables for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

Table 5: Qualitative evidence profile for involving partners

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>Two studies:</p> <ul style="list-style-type: none"> Atkin 2015 <p>To understand fathers' experiences and expectations of sickle cell antenatal screening.</p> <ul style="list-style-type: none"> Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p>	<p>Level 1. Individual level</p> <p><u>Theme 1a. Being present</u> N=2</p> <p>Population: views from partners (all male)</p> <p>The research shows that men appreciated being involved at antenatal screening appointments as it made them feel present and responsible in the pregnancy. They were aware that this did not necessarily guarantee them a role in the pregnancy, especially if they experienced ambivalence from HCPs, which most men reported. Sometimes, this meant that they suppressed their feelings and kept their opinions to themselves, leading them to feeling like an observer.</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p> <p>The quality rating based on CASP checklist was high for Atkin 2015 and low for Jeffery 2015. For both studies, the researchers did not clearly justify the research design, nor did they discuss the value of the research in terms of further work and transferability.</p> <p>In one study, it is unclear how the participants were recruited and there is also no clear statement of findings. Furthermore, there is no mention of whether the researcher critically examined their own bias and role in the study and there is no in-depth description of the data analysis process.</p> <p><u>Relevance</u></p>	<p>Low quality</p> <p>(Moderate concerns with methodological limitations and adequacy, minor concerns with relevance)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>Lewis: "I felt obliged to do it because it's my child. I want to know what is happening."</i></p> <p><i>Isaac: "A woman can feel everything that's going on and as a dad you're just watching her get bigger (...) going to the hospital and being in touch through those screening tests made it more real to me."</i></p> <p><i>James: "If I was about five minutes late I would have missed the first screening. But I made it, and it was interesting, but the first thing I sensed (...) I wouldn't say anti-guy, I think that's too much, it's not anti-male. It was very, OK, mother, person doing the ultrasound, 'Oh who's that guy in the room?'"</i></p>	<p><i>Minor concerns.</i></p> <p>Although both studies included the male/partner's perspective, Atkin 2015 specifically focused on sickle cell antenatal testing, which led to a sample population composed of ethnic minority men, only. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or are ambiguous.</p> <p><u>Adequacy</u></p> <p><i>Moderate concerns.</i></p> <p>Although there is a moderately rich level of data in Atkin 2015, only thin data is available in Jeffery 2015 and the results are not adequately discussed.</p>	
<p>Four studies:</p> <ul style="list-style-type: none"> Atkin 2015 <p>To understand fathers' experiences and expectations</p>	<p>Level 1. Individual level</p> <p><u>Theme 1b. Choice and decision making</u> N=4</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p>	<p>Low quality</p> <p>(Moderate concerns with methodological</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>of sickle cell antenatal screening.</p> <ul style="list-style-type: none"> • Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p> <ul style="list-style-type: none"> • Locock 2006 <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <ul style="list-style-type: none"> • Williams 2011 <p>To explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p>	<p>Population: views from partners (male and female partners)</p> <p>Fathers wanted to be involved in decision-making and wanted to voice their opinions and be given a choice. However, fathers were aware that their role was undefined, which restricted their ability to make choices in the screening process. Feelings of being ignored by HCPs reinforced feelings of removedness and powerless in decision-making. In some cases, fathers struggled to form an emotional connection with their unborn child, which negatively influenced involvement and decision making. These men reported receiving no encouragement from HCPs and also felt concerned that if they did make decisions this may be portrayed as 'controlling'.</p> <p>In one case, a father reported a positive HCP experience, showing the importance of positive relationships for decision making.</p> <p><i>Gordon: "In discussions it is difficult because we are making decision that affect the baby but also my wife's body and I feel she must always have the final say on any decisions made. So even though they are</i></p>	<p>The quality rating based on CASP checklist was high for Atkin 2015 and Williams 2011; moderate for Locock 2006; and low for Jeffery 2015.</p> <p>In all four studies, the value of the research, in terms of further work and transferability, was either unclear or was not stated.</p> <p>In three studies the researchers have not clearly justified the research design.</p> <p>In three studies, whether the researcher has critically examined their own bias and role in the study is either unclear or is not stated. In one study it is unclear whether the recruitment strategy is appropriate and in another study it is unclear whether data collection methods are appropriate.</p> <p>In one study, it is unclear how the participants were recruited and there is also no clear statement of findings. Furthermore, there is no in-depth description of the data analysis process.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although the studies included the male/partner's perspective, Atkin 2015</p>	<p>limitations and adequacy, minor concerns with relevance)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>decisions we both have to make, I feel I am there not to make the decisions but to listen to my wife and help her make the decision she feels most comfortable with. We have been lucky that we have not had to make any difficult decision regarding screening test results, but I would hope if we did, that I would listen and help in the same way."</i></p> <p><i>"The midwife went out of her way to make sure we were a couple making decisions together."</i></p>	<p>specifically focused on sickle cell antenatal testing, which led to a sample population of ethnic minority men, only. Further, Williams 2011 concentrated on men's involvement in antenatal genetic screening. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>Moderate concerns.</i></p> <p>Although there is a moderately rich level of data obtained from the other three studies, there is thin data available in Jeffery 2015. The authors do not adequately discuss their results.</p>	
<p>One study:</p> <ul style="list-style-type: none"> • Dheensa 2015 <p>To explore what men who attend antenatal appointments want from screening and from</p>	<p>Level 1. Individual level</p> <p><u>Theme 1c. Taking the lead</u></p> <p>N=1</p> <p>Population: views from partners (all male)</p>	<p><u>Methodological limitations</u></p> <p><i>No or very minor concerns.</i></p> <p>The quality rating based on CASP checklist was high for Dheensa 2015.</p>	<p>High quality</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>midwives, whether facing pregnancy anomalies or not.</p>	<p>The research shows that the way men viewed control in the pregnancy depended on whether the pregnancy was normal or complicated. Men with normal pregnancies wanted the experts to take control. In this study men reported trusting the midwives so were content to remain bystanders, but otherwise, men rarely asked midwives questions because they felt midwives didn't explain information clearly, and failed to address or include them in discussions. This behaviour caused men to feel excluded.</p> <p>In complicated pregnancies, men wanted more information and also wanted to actively participate in decision-making. However, men still felt excluded by healthcare professionals.</p> <p><i>Complicated pregnancy: Frank: "We had to probe a bit and ask [the consultant] a lot of questions to get the information. She did her best to include me, although, the room she was scanning in, it was slightly more difficult to do that just because of the position of the equipment. I did think at one point her assistant pulled the curtain across and blocked my view of the screen, which, well actually I'd like to see the scan."</i></p>	<p>In this study, there was no mention of whether the researcher has critically examined their own bias and role in the study. There were no other methodological limitations noted for this study.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although the study included the male/partner's perspective, Dheensa 2015 included views of men who may have experienced pregnancy anomalies. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>No or very minor concerns.</i></p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
		<p>The study offers moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>Four studies:</p> <ul style="list-style-type: none"> • Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p> <ul style="list-style-type: none"> • Locock 2006 <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <ul style="list-style-type: none"> • Miller 2017 <p>To examine how men engage in/narrate experiences of preparation for first-time fatherhood and more specifically, on topics including antenatal care experiences and support and information sources they'd sought out/used.</p>	<p>Level 1. Individual level</p> <p><u>Theme 1d. Range of emotions</u> N=4 Population: views from partners (all male)</p> <p>The research shows that men experience many different emotions during pregnancy that arise from different situations and stimuli.</p> <p>In complicated pregnancies, men felt pressure to set aside any grief and anxiety to support their partners. In these situations, men can become the main channel of communication with healthcare professionals, acting as a shield for their partner.</p> <p>In situations where the father feels disengaged, a study reports men feeling anxious and unprepared for the arrival of their child.</p> <p>Although screening and classes are thought to help in the preparation, these form more arenas for men to feel uncomfortable and out of place. In male only classes, some men felt anxiety about</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p> <p>The quality rating based on CASP checklist was high for Williams 2011; moderate for Locock 2006 and Miller 2017; and low for Jeffery 2015.</p> <p>In three studies the justification for the chosen research design was either unclear or was not described. In two studies the recruitment strategy is either partially mentioned or not mentioned at all. In one study it unclear what data collection tools were used.</p> <p>It was either unclear or not mentioned in all four studies, whether the researcher had critically examined their own bias and role in the study.</p> <p>In one study, data analysis methods are not mentioned and the statement of findings is unclear.</p> <p>Furthermore, in one study the researchers did not fully considered the value of the research (in that, the study either considered further</p>	<p>Low quality</p> <p>(Moderate concerns with methodological limitations and adequacy, minor concerns with relevance)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<ul style="list-style-type: none"> Williams 2011 <p>To explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p>	<p>how masculine performances were interpreted.</p> <p>In some situations, men felt annoyed with HCPs perpetuating gender stereotypes and assuming all men were going to be 'drinking beer and watching football'.</p> <p>In the context of antenatal genetic screening men felt ambivalence, doubt, and uncertainty, not least in relationship to their perceived worth to the health of their partners and babies.</p> <p><i>Liam: "The issue of screenings really brings your feelings to the fore. I would advise him to consider his feelings and realise he's taking 'father' decisions before the baby is born. From the moment you find out your partner is expecting you are forming a bond with a tiny person who is growing day to day. As this progresses your emotional attachment grows as well."</i></p> <p><i>"I almost felt as a dad I had to be, I had to be there for [partner], and you know, sometimes I think you put your own emotions to one side because, as I said before, you know, it's the woman who carries the child and, you know, I feel that</i></p>	<p>research or transferability, not both), and it is not discussed in the other three studies.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although the studies included the male/partner's perspective, Miller 2017 studied first-time fathers only, and Williams 2011 concentrated on men's involvement in antenatal genetic screening. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>Moderate concerns.</i></p> <p>Although there is a moderately rich level of data obtained from the other three studies, there is thin data available in Jeffery 2015.</p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>she feels that more than I do, and all I could do was just be there for her, you know...So we still believed, we still had hope." [AN06]</i></p>	<p>The authors do not adequately discuss their results.</p>	
<p>Two studies</p> <ul style="list-style-type: none"> • Locock 2006 <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <ul style="list-style-type: none"> • Reed 2009 <p>To explore the gendered nature of genetic responsibility in prenatal blood screening.</p>	<p>Level 1. Individual level</p> <p><u>Theme 1e. Responsibility</u> N=2 Population: views from partners (all male)</p> <p>The research shows that a sense of responsibility improved involvement in antenatal care. The majority of men took responsibility by gathering information, being involved in decision making, and actively engaging with midwives. This made male partners feel more engaged and involved with the fetus and their health. Additionally, when men attended screening appointments, it positively affected the way women perceived responsibility since the testing was no longer solely directed at them.</p> <p>From a different perspective, one study found that in situations where screening showed negative results, men felt their role as a parent was pushed aside, therefore diminishing responsibility. This is due to both the attitudes of the healthcare professionals but also men and women's own perception of what men should be doing.</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p> <p>The quality rating based on CASP checklist was high for Reed 2009 and moderate for Locock 2006.</p> <p>In both studies, whether the researcher has critically examined their own bias and role in the study is not mentioned. Additionally, the value of the research, in terms of further research and transferability, is not mentioned in one study. Lastly, in one study it is unclear whether the research design is appropriate.</p> <p><u>Relevance</u></p> <p><i>No or very minor concerns.</i></p> <p>The study included the male/partner's perspective, which is relevant to the review question.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p>	<p>High quality</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>William: "I mean, I didn't push her into extra tests. Ultimately it's her body and her decision. However, I wanted to be involved and take responsibility too . . . Men want assurance that everything is alright, just like women."</i></p> <p><i>Tunde: "Yes, I was happy to take the test so that we could have assurance that everything was ok. I had no problems with this but saw it as my duty."</i></p> <p><i>Nick: "Well, I think it was a bit of a novelty really, me being tested. I felt like a bit of a spectacle for the midwives. They kept saying, 'ooh we don't get many men in here' (participating in screening). Anyway, it didn't bother me and I didn't think twice about being tested. My partner was really worried that her test had turned up positive, and what if mine did too, but I wasn't worried, I kept reassuring her that everything would be ok."</i></p>	<p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>No or very minor concerns.</i></p> <p>The study offers moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>Two studies:</p> <ul style="list-style-type: none"> • Dheensa 2015 	<p>Level 2. Family level</p> <p><u>Theme 2a. Learning over time</u></p> <p>N=2</p>	<p><u>Methodological limitations</u></p> <p><i>No or very minor concerns.</i></p>	<p>High quality</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>To explore what men who attend antenatal appointments want from screening and from midwives, whether facing pregnancy anomalies or not.</p> <ul style="list-style-type: none"> • Miller 2017 <p>To examine how men engage in/narrate experiences of preparation for first-time fatherhood and more specifically, on topics including antenatal care experiences and support and information sources they'd sought out/used.</p>	<p>Population: views from partners (all male)</p> <p>The research showed that time affected fathers' involvement in antenatal care. Men reported that learning how to be more involved in antenatal screening was a skill that had to be learnt over time, especially appropriate and effective communication with HCPS.</p> <p>Some participants discussed becoming a father was occurring at the 'right time' for them in their live, which was important for involvement during pregnancy.</p> <p><i>Harry: 'I've learnt over the years to not be ignored. The first time round I didn't really know what was going on, you take a backseat and the emphasis first time round was very much on [wife] and the baby, whereas this time because I've got issues and questions and things about it, I've spoken up and asked. I think they've come round to the idea that actually you can't ignore [the father] because the stress that waiting for an appointment for an amnio, having the amnio, and then waiting for the results is phenomenal.'</i></p>	<p>The quality rating based on CASP checklist was high for Dheensa 2015 and moderate for Miller 2017.</p> <p>In both studies, whether the researcher has critically examined their own bias and role in the study is not mentioned.</p> <p>Miller 2017 also does not explain how the participants were selected, nor does it consider the value of the research, in terms of further work and transferability. Lastly, it is unclear whether the research design is appropriate for this study.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although the studies included the male/partner's perspective, Dheensa 2015 includes views of men who may have experienced pregnancy anomalies, and Miller 2017 studied first-time fathers only. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>James: "But yeah, we planned our lives fairly well. We've been together eight years now and it took us a while and then we decided to get married. Because my wife's 30 now, so obviously the clock was ticking ... but I think we weren't in a financial position to have children earlier." (37 years, AU).</i></p>	<p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>No or very minor concerns.</i></p> <p>The study offers moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>One study:</p> <ul style="list-style-type: none"> • Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p>	<p>Level 2. Family level</p> <p><u>Theme 2b. Involvement affected by time</u> N=1 Population: views from partners (all male)</p> <p>Time posed as a barrier to involvement in antenatal care in the context of men not being able to leave work to attend appointments and classes. Fathers experienced dissatisfaction related to time pressures and work-related barriers to attendance. Attendance is important as the first step for engagement to occur.</p>	<p><u>Methodological limitations</u></p> <p><i>Serious concerns.</i></p> <p>The quality rating based on CASP checklist was low for Jeffery 2015.</p> <p>In this study, it is unclear how the participants were recruited, if the researcher has justified the research design, and there is also no clear statement of findings. Further, there is no mention of whether the researcher has critically examined their own bias and role in the study and there is no in-depth description of the data analysis process. Lastly, Jeffery 2015 does not consider the value of the research, in terms of further work and transferability.</p>	<p>Very low quality</p> <p>(Serious concerns with methodological limitations and adequacy)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>"This is the busiest time of year and making time to get here has been difficult, even though its [sic] a priority for me."</i></p>	<p><u>Relevance</u></p> <p><i>No or very minor concerns.</i></p> <p>The study included the male/partner's perspective, which is relevant to the review question.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>Serious concerns.</i></p> <p>The data is thin for this study since the authors do not adequately discuss their results. There is insufficient depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>Two studies:</p> <ul style="list-style-type: none"> Nash 2018 <p>To examine how first-time fathers in rural Tasmania experienced father-only</p>	<p>Level 3. Community level</p> <p><u>Theme 3a. Directed support for partners</u> N=2 Population: views from partners (all male)</p>	<p><u>Methodological limitations</u></p> <p><i>Minor concerns.</i></p> <p>The quality rating based on CASP checklist was high for Palsson 2017 and moderate for Nash 2018.</p>	<p>High quality</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>antenatal support/education groups.</p> <ul style="list-style-type: none"> • Palsson 2017 <p>To describe first-time fathers' experiences of their prenatal preparation in relation to challenges met in the early parenthood period.</p>	<p>To encourage involvement in antenatal, some men thought father-only antenatal groups would be useful. Although some men expressed that fatherhood is very personal and it could be inappropriate to share such intimate feelings, single sex classes meant that men could be protected from looking incompetent or offending women. In this study, some men were offered classes in a pub and they felt this setting was comfortable for them. Although, this setting sometimes allowed class facilitators to invoke outdated stereotypes of men, which annoyed the men who believed in gender equality in parenting.</p> <p><i>Matthew: "I was able to sort of ask some questions differently to how I'd like in an environment with women who are about to give birth, you know?"</i></p> <p><i>Jason: ". . . It was good to get that bit of man-talk out in the open. . . Just talking about how we felt about being fathers. . ."</i></p>	<p>In one study, it is unclear whether the researchers have justified the research design, and in both studies there is no mention of whether the researchers have critically examined their own bias and role in the study. In one study, the authors have only considered transferability and have not considered further research, in terms of the value of the research.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although the study included the male/partner's perspective, Nash 2018 specifically focuses on fathers in rural Tasmania and Palsson 2017 only studied first-time fathers. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
		<p><i>No or very minor concerns.</i></p> <p>These studies offer moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>Seven studies:</p> <ul style="list-style-type: none"> • Bäckstrom 2016 <p>To explore and analyse men’s involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p> <ul style="list-style-type: none"> • Huusko 2018 <p>To explore and analyse men’s involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p> <ul style="list-style-type: none"> • Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of</p>	<p>Level 4. Society level</p> <p><u>Theme 4a. Impact of staff behaviour</u> N=7</p> <p>Population: views from partners (male and female partners)</p> <p>The way that HCPs interact with the mother and partner can positively or negatively affect partner involvement in antenatal care.</p> <p>From a women’s perspective, professional support was viewed as a positive way to facilitate partner involvement. To facilitate partner involvement, it was vital that the support was available at a time when the partner could participate.</p> <p>Men wanted greater involvement during pregnancy and wanted to be treated as a couple by health professionals and to enable the man to support his partner. Furthermore, men wished to establish a rapport and trust with midwives and other professionals, in order to be able to discuss information and decisions more</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p> <p>The quality rating based on CASP checklist was high for Huusko 2018, Reed 2011, Solberg 2018, and Williams 2011; moderate for Backstrom 2016 and Locock 2006; and low for Jeffery 2015.</p> <p>In six of these studies there was no mention of whether the researchers have critically examined their own bias and role in the study. For two studies, the researchers had not fully considered the value of the research (in that, the study either considered further research or transferability, not both), and for two studies the researchers had not considered either. In three studies it was unclear whether the research design implemented was appropriate.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p>	<p>Moderate quality</p> <p>(Moderate concerns for methodological limitations and minor concerns for relevance)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>consultation by antenatal care providers influenced paternal engagement.</p> <ul style="list-style-type: none"> • Locock 2006 <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <ul style="list-style-type: none"> • Reed 2011 <p>To explore women's and men's roles in screening, with a particular focus on exploring the gendered nature of responsibility for the health of the fetus during screening.</p> <ul style="list-style-type: none"> • Solberg 2018 <p>To describe how first time fathers experience their encounter with the healthcare services throughout pregnancy, childbirth, and the child's first three months of life.</p> <ul style="list-style-type: none"> • Williams 2011 <p>To explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use</p>	<p>fully. Continuity of care allowed formation of stronger relationships and promoted involvement.</p> <p>In one study, male partners were not offered a chair in the screening appointment and were literally made 'bystanders', which they associated with loss of parent status, loss of control, and losing the ability to support his wife. Male partners felt that healthcare professionals pushed them out of screening experiences, making it only about the woman. At times, male partners felt that midwives' views reflected a traditionally gendered approach to antenatal care.</p> <p>Although men felt excluded by HCPS, some reported that they excluded themselves and in this situation they wanted the midwives to actively involve so they could feel as equal parents when the baby was born.</p> <p>One study reported that positive engagement with care providers, either medical or midwifery, improved involvement.</p> <p><i>Steve: "I currently feel there is an obvious disconnect for fathers in the current process. We often have concerns and</i></p>	<p>Although most of the studies included the male/partner's perspective, Bäckstrom 2016 considers women's views on professional support; Huusko 2018 uses father's views to validate a scale; and Williams 2011 studied men's involvement in antenatal genetic screening. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>No or very minor concerns.</i></p> <p>These studies offer moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>of e-mail communication as a method of health research with men.</p>	<p><i>questions that we would like to ask but are rarely given the opportunity. Having the opportunity to express our concerns and have them answered directly would help make the whole experience far more enjoyable and considerably less stressful. I think fathers often have a different set of concerns to the mother. By involving the father more, it would seem we were treated more like a couple."</i></p> <p><i>"The screen was by my head facing him [the sonographer] ...And my husband stood sort of in the corner of the room and I think he could see the screen but I mean there wasn't really any facility for him to sit near me or, you know, be able to—it was almost like he was, it was irrelevant that he was there." [AN36, low risk nuchal scan result, Edwards' syndrome detected at 20-week scan]</i></p> <p><i>"The staff were fantastic and welcoming."</i></p> <p><i>Ben: "The midwife went upstairs, and she never spoke to me about what to do or anything like that. She was in, hello, then</i></p>		

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>out and goodbye, and it was just her and Suzie all the way through."</i></p> <p><i>Liz: "When I had my second midwife appointment, she (midwife) was going through all the screening tests. I was a bit sort of overwhelmed because it was only eight weeks then and I hadn't given it an awful lot of thought. I had to stop her and say look, I need to talk about this with my partner. And she was ticking these boxes, and I was like oh no, I'm not going to make that decision right now I want to talk to my partner . . . But it's almost as if she (midwife) felt his views were of little importance."</i></p>		
<p>Six studies:</p> <ul style="list-style-type: none"> Huusko 2018 <p>To explore and analyse men's involvement in antenatal genetic screening and testing in England, and evaluate the use of e-mail communication as a method of health research with men.</p> <ul style="list-style-type: none"> Jeffery 2015 	<p>Level 4. Society level</p> <p><u>Theme 4b. Availability of information</u> N=7 Population: views from partners (male and female partners)</p> <p>Men regarded receiving appropriate information as an important part during the antenatal period. A lack of knowledge leads to disengagement. For men, finding information allowed them to interact with</p>	<p><u>Methodological limitations</u></p> <p><i>Moderate concerns.</i></p> <p>The quality rating based on CASP checklist was high for Huusko 2018, Palsson 2017, and Reed 2011; moderate for Locock 2006, Miller 2017 and Williams 1999; and low for Jeffery 2015.</p> <p>In all seven studies it was not stated whether the researchers have critically examined their own bias and role in the study.</p>	<p>Moderate quality</p> <p>(Moderate concerns for methodological limitations and minor concerns for relevance)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p> <ul style="list-style-type: none"> • Locock 2006 <p>To identify conflicting male roles in screening, diagnosis, and subsequent decision-making during pregnancy and fatherhood.</p> <ul style="list-style-type: none"> • Miller 2017 <p>To examine how men engage in/narrate experiences of preparation for first-time fatherhood and more specifically, on topics including antenatal care experiences and support and information sources they'd sought out/used.</p> <ul style="list-style-type: none"> • Palsson 2017 <p>To describe first-time fathers' experiences of their prenatal preparation in relation to challenges met in the early parenthood period.</p> <ul style="list-style-type: none"> • Reed 2011 	<p>the healthcare professional with a sense of control and empowerment.</p> <p>First-time fathers were unsure about what type of support they needed so they had no specific questions. In one study, fathers found HCPs warm and welcoming, but found that receiving information and support from the midwives was not spontaneous. Fathers had to show an interest themselves and ask questions to get involved during clinical visits.</p> <p>Men often turned to the internet for information but found that information was scarce for expectant fathers. Further, British and Australian men preferred to have someone else, an 'expert', provide them with information rather than having to seek it out themselves.</p> <p>In one study, women found that sonographies provided information for their male partners and thought this was a good means of increasing their involvement.</p> <p><i>"It was difficult, but you dust yourself off, you go home, you read up your books, you read the Internet, you know... And I think you're able to then make informed choices." [AN06]</i></p>	<p>In four studies, it is unclear whether the authors have justified the research design, and in three studies whether the recruitment strategy was appropriate is either unclear or not mentioned. Two studies do not consider the value of the research in terms of further research and transferability, and one study only considers further research.</p> <p><u>Relevance</u></p> <p><i>Minor concerns.</i></p> <p>Although most of the studies included the male/partner's perspective, Huusko 2018 uses father's views to validate a scale and, Miller 2017 and Polstrom 2017 study first time fathers only. This may therefore restrict the applicability of the results.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>To explore women's and men's roles in screening, with a particular focus on exploring the gendered nature of responsibility for the health of the fetus during screening.</p> <ul style="list-style-type: none"> Williams 1999 <p>To compare expectant father's and mother's experiences with medical technology during pregnancy and childbirth.</p>	<p><i>William: "I wanted to find out as much as possible about screening, about what was available on the NHS and privately. I wanted to do as much as possible to help Lucy and share the burden."</i></p> <p><i>Beth: "I had trouble. When you're getting the sonogram done, you're looking up at the monitor and it's hard to visualize it, where as he was looking directly at it... It took me a while to see it but he was excited from the (first) minute. He was like, "Yeah! Yeah!" That was good because that makes me feel good. And it's a way for him to be involved, really, when he can see it, touch it, feel it."</i></p>	<p><i>No or very minor concerns.</i></p> <p>These studies offer moderately rich data. There is some depth of evidence and quotations or observations provided to underpin the findings.</p>	
<p>Two studies:</p> <ul style="list-style-type: none"> Jeffery 2015 <p>To assess levels of engagement in fathers and to determine whether the potentially modifiable factor of consultation by antenatal care providers influenced paternal engagement.</p> <ul style="list-style-type: none"> Reed 2011 	<p>Level 5. Policy level</p> <p><u>Theme 5a. Partner's rights</u> N=2 Population: views from partners (male and female partners)</p> <p>Partner's rights required further consideration as pressures from employers exist that prevent men from attending antenatal care appointments. Employers</p>	<p><u>Methodological limitations</u></p> <p><i>Serious concerns.</i></p> <p>The quality rating based on CASP checklist was high for Reed 2011 and low for Jeffery 2015.</p> <p>In both studies, there is no mention of whether the researcher has critically examined their own bias and role in the study. Furthermore, one study does not consider the</p>	<p>Low quality</p> <p>(Serious concerns for methodological limitations and moderate concerns for adequacy)</p>

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
<p>To explore women's and men's roles in screening, with a particular focus on exploring the gendered nature of responsibility for the health of the fetus during screening.</p>	<p>are obligated to accept medical certificates for women attending antenatal care, but most fathers have difficulty accessing medical certificates for leave to attend an antenatal clinic appointment. However, when fathers were able to access antenatal care and encountered positive consultation with care providers, engagement levels were significantly improved. This suggests a policy change is required in order to facilitate men in obtaining appropriate paperwork to be involved in these appointments.</p> <p>Both men and women identified work as a major barrier to men's involvement in screening. Men's ability to take time off work for their partners' screening appointments was strongly mediated by socio-economic factors. Men who were in semi or unskilled professions often struggled to get time off in order to attend their partners' appointments.</p> <p>While some men may use work as an excuse not to be involved in their partners' prenatal care, many men continue to feel discouraged by workplace norms and cultures from taking time off work for family, or expressing a wish for flexible work.</p>	<p>value of the research, in terms of further work and transferability.</p> <p>In one study, it is unclear how the participants were recruited, if the researcher has justified the research design, and there is also no clear statement of findings. Further, and there is no in-depth description of the data analysis process.</p> <p><u>Relevance</u></p> <p><i>No or very minor concerns.</i></p> <p>Both studies included the male/partner's perspective, which is relevant to the review question.</p> <p><u>Coherence</u></p> <p><i>No or very minor concerns.</i></p> <p>There are no data that contradict the review finding or ambiguous data.</p> <p><u>Adequacy</u></p> <p><i>Moderate concerns.</i></p>	

Study and study aim	Theme	Assessment of GRADE-CERQual components	Overall confidence (Quality)
	<p><i>"I haven't been able to attend appointments as I work. This is my first time at the hospital and the baby is nearly here."</i></p> <p><i>Ben: "I think a lot of men would like to take a more active role in that side of things, but then you've always got at the back of your mind that work are going to take a bit of a dim view of it."</i></p> <p><i>Bill: "Well, it weren't me being tested was it so work don't see that I need the time off to be with her. They think, well she's pregnant not him. Now if I had to go for tests for something medical myself that would be different."</i></p>	<p>One study offers moderately rich data, however, the data is thin for one study since the authors do not adequately discuss their results.</p>	

CASP: critical appraisal skills programme; HCPs: health care professionals

Appendix G – Economic evidence study selection

Economic evidence study selection for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

A single economic search was undertaken for all topics included in the scope of this guideline. No economic studies were identified which were applicable to this review question. See supplementary material 2 for details.

Appendix H – Economic evidence tables

Economic evidence tables for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

No economic evidence was identified which was applicable to this review question.

Appendix I – Economic evidence profiles

Economic evidence profiles for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

No economic evidence was identified which was applicable to this review question.

Appendix J – Economic analysis

Economic analysis for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

No economic analysis was conducted for this review question.

Appendix K – Excluded studies

Excluded studies for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

Excluded qualitative studies

Table 6: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
Adamsons, Kari, Possible selves and prenatal father involvement, <i>Fathering: A Journal of Theory, Research, and Practice about Men as Fathers</i> , 11, 245-255, 2013	Survey data presented as quantitative data.
Ahman, A., Lindgren, P., Sarkadi, A., Facts first, then reaction-Expectant fathers' experiences of an ultrasound screening identifying soft markers, <i>Midwifery</i> , 28, e667-e675, 2012	Not about views/experiences of paternal involvement in antenatal care.
Alio, A. P., Lewis, C. A., Scarborough, K., Harris, K., Fiscella, K., A community perspective on the role of fathers during pregnancy: a qualitative study, <i>BMC Pregnancy & Childbirth</i> , 13, 60, 2013	Not about views/experiences of paternal involvement in antenatal care specifically. Considers involvement throughout whole pregnancy.
Andersson, E., Norman, A., Kanlinder, C., Plantin, L., What do expectant fathers expect of antenatal care in Sweden? A cross-sectional study, <i>Sexual and Reproductive Healthcare</i> , 9, 27-34, 2016	Survey data presented as quantitative data.
Andersson, E., Small, R., Fathers' satisfaction with two different models of antenatal care in Sweden - Findings from a quasi-experimental study, <i>Midwifery</i> , 50, 201-207, 2017	Not about views/experiences of paternal involvement in antenatal care.
Andrews, L., Men's place within antenatal care, <i>Practising Midwife</i> , 15, 16-18, 2012	Not about views/experiences of paternal involvement in antenatal care.
Barclay, L., Donovan, J., Genovese, A., Men's experiences during their partner's first pregnancy: a grounded theory analysis, <i>The Australian journal of advanced nursing : a quarterly publication of the Royal Australian Nursing Federation</i> , 13, 12-24, 1996	Not about views/experiences of paternal involvement in antenatal care.
Bogren Jungmarker, E., Lindgren, H., Hildingsson, I., Playing second fiddle is Okay-Swedish Fathers' experiences of prenatal care, <i>Journal of Midwifery and Women's Health</i> , 55, 421-429, 2010	Survey data presented as quantitative data.
Brock, E., Charlton, K. E., Yeatman, H., Identification and evaluation of models of antenatal care in Australia - A review of the evidence, <i>Australian and New Zealand Journal of Obstetrics and Gynaecology</i> , 54, 300-311, 2014	Not about views/experiences of paternal involvement in antenatal care.
Browner, C. H., Preloran, H. M., Male partners' role in Latinas' amniocentesis decisions, <i>Journal of Genetic Counseling</i> , 8, 85-108, 1999	Not about partner involvement.

Study	Reason for exclusion
Cramer, Emily M., Health information behavior of expectant and recent fathers, <i>American Journal of Men's Health</i> , 12, 313-325, 2018	Survey data presented as quantitative data.
Davies, J., Involving fathers in maternity care: best practice, <i>Midwives</i> , 12, 32-33, 2009	Not about views/experiences of paternal involvement in antenatal care.
Dayton, Carolyn Joy, Buczkowski, Raelynn, Muzik, Maria, Goletz, Jessica, Hicks, Laurel, Walsh, Tova B., Bocknek, Erika L., Expectant fathers' beliefs and expectations about fathering as they prepare to parent a new, <i>Social Work Research</i> , 40, 225-236, 2016	Not about views/experiences of paternal involvement in antenatal care.
Deibel, M., Zielinski, R. E., Shindler Rising, S., Kane-Low, L., Where Are the Dads? A Pilot Study of a Dads-Only Session in Group Prenatal Care, <i>The Journal of perinatal & neonatal nursing</i> , 32, 324-332, 2018	Not about views/experiences of paternal involvement in antenatal care.
Dheensa, S., Metcalfe, A., Williams, R. A., Men's experiences of antenatal screening: a metasynthesis of the qualitative research, <i>International journal of nursing studies</i> , 50, 121-133, 2013	Systematic review. Studies extracted from review and considered for inclusion.
Draper, J., 'It's the first scientific evidence': men's experience of pregnancy confirmation, <i>Journal of Advanced Nursing</i> , 39, 563-570, 2002	Case series.
Ekelin, M., Crang-Svalenius, E., Dykes, A. K., A qualitative study of mothers' and fathers' experiences of routine ultrasound examination in Sweden, <i>Midwifery</i> , 20, 335-344, 2004	Not about partner involvement.
Ekelin, Maria, Persson, Linda, Välimäki, Adina, Crang Svalenius, Elizabeth, To know or not to know parents attitudes to and preferences for prenatal diagnosis, <i>Journal of Reproductive & Infant Psychology</i> , 34, 356-369, 2016	Not about views/experiences of paternal involvement in antenatal care.
Ekelin, M., Crang-Svalenius, E., Nordstrom, B., Dykes, A. K., Parents' experiences, reactions and needs regarding a nonviable fetus diagnosed at a second trimester routine ultrasound, <i>JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing</i> , 37, 446-454, 2008	Not about partner involvement.
Fletcher, R., Vimpani, G., Russell, G., Keatinge, D., The evaluation of tailored and web-based information for new fathers, <i>Child: Care, Health and Development</i> , 34, 439-446, 2008	Not about views/experiences of paternal involvement in antenatal care.
Friedewald, M., Facilitating discussion among expectant fathers: is anyone interested?, <i>Journal of Perinatal Education</i> 16, 16-20, 2007	Not about views/experiences of paternal involvement in antenatal care.
Gottfredsdottir, H., Bjornsdottir, K., Sandall, J., How do prospective parents who decline prenatal screening account for their decision? A qualitative study, <i>Social Science & Medicine</i> , 69, 274-7, 2009	Not about partner involvement.
Gottfredsdottir, H., Sandall, J., Bjornsdottir, K., 'This is just what you do when you are pregnant': a qualitative study of prospective parents in	Case series.

Study	Reason for exclusion
Iceland who accept nuchal translucency screening, <i>Midwifery</i> , 25, 711-720, 2009	
Hall, J., Women's and men's satisfaction with two models of antenatal education, <i>Practising Midwife</i> , 15, 35-7, 2012	Not about views/experiences of paternal involvement in antenatal care.
Hildingsson, I., Tingvall, M., Rubertsson, C., Partner support in the childbearing period-A follow up study, <i>Women and Birth</i> , 21, 141-148, 2008	Survey data presented as quantitative data.
Hunter, L. J., Da Motta, G., McCourt, C., Wiseman, O., Rayment, J. L., Haora, P., Wiggins, M., Harden, A., Better together: A qualitative exploration of women's perceptions and experiences of group antenatal care, <i>Women and Birth</i> , 2018	Women's views and experiences only. No mention of partners.
Ion, V., Accessible health sessions for first-time fathers, <i>Nursing times</i> , 96, 46, 2000	Not about views/experiences of paternal involvement in antenatal care.
Ivry, T., Teman, E., Expectant Israeli fathers and the medicalized pregnancy: Ambivalent compliance and critical pragmatism, <i>Culture, Medicine and Psychiatry</i> , 32, 358-385, 2008	Not about partner involvement.
Johnsen, H., Stenback, P., Hallden, B. M., Crang Svalenius, E., Persson, E. K., Nordic fathers' willingness to participate during pregnancy, <i>Journal of Reproductive and Infant Psychology</i> , 35, 223-235, 2017	Not about views/experiences of paternal involvement in antenatal care exclusively. Focus on involvement throughout pregnancy.
Kenen, R., Smith, A. C. M., Watkins, C., Zuber-Pittore, C., To use or not to use: Male partners' perspectives on decision making about prenatal diagnosis, <i>Journal of Genetic Counseling</i> , 9, 33-45, 2000	Not about partner involvement.
Lee, J., Schmied, V., <i>Fathercraft</i> . Involving men in antenatal education, <i>British Journal of Midwifery</i> , 9, 559-561, 2001	Not about views/experiences of paternal involvement in antenatal care.
Locock, L., Kai, J., Parents' experiences of universal screening for haemoglobin disorders: Implications for practice in a new genetics era, <i>British Journal of General Practice</i> , 58, 161-168, 2008	Not about partner involvement.
Lynch, E., The 'antenatal' movement, <i>The practising midwife</i> , 13, 26-27, 2010	Narrative report of a woman who started male only antenatal classes in Cambridge.
Markens, Susan, Browner, C., Preloran, H., "I'm not the one they're sticking the needle into": Latino couples, fetal diagnosis, and the discourse of reproductive rights, <i>Gender & Society</i> , 17, 462-481, 2003	Not about partner involvement.
May, C., Fletcher, R., Preparing fathers for the transition to parenthood: Recommendations for the content of antenatal education, <i>Midwifery</i> , 29, 474-478, 2013	This study presents evidence-based recommendations for preparing men for the important challenges of new fatherhood.
McElligott, M., <i>Fathercraft</i> . Antenatal information wanted by first-time fathers, <i>British Journal of Midwifery</i> , 9, 556-558, 2001	Survey data presented as quantitative.

Study	Reason for exclusion
Murphy Tighe, S., An exploration of the attitudes of attenders and non-attenders towards antenatal education, <i>Midwifery</i> , 26, 294-303, 2010	Not about views/experiences of paternal involvement in antenatal care.
Nash, Meredith, "It's just good to get a bit of man-talk out in the open": Men's experiences of father-only antenatal preparation classes in Tasmania, Australia, <i>Psychology of Men & Masculinity</i> , 19, 298-307, 2018	This is a second publication presenting results from one study, but presented in a different way.
Newburn, M., Goal! Making antenatal courses work for men, <i>Practising Midwife</i> , 15, 22-26, 2012	Not about views/experiences of paternal involvement in antenatal care.
Nolan, M., Caring for fathers in antenatal classes, <i>Modern midwife</i> , 4, 25-28, 1994	Not about views/experiences of paternal involvement in antenatal care.
Oscarsson, M. G., Medin, E., Holmstrom, I., Lendahls, L., Using the Internet as source of information during pregnancy - a descriptive cross-sectional study among fathers-to-be in Sweden, <i>Midwifery</i> , 62, 146-150, 2018	Survey data presented as quantitative data.
Oster, R. T., Bruno, G., Mayan, M. J., Toth, E. L., Bell, R. C., Peyakohewamak-Needs of Involved Nehiyaw (Cree) Fathers Supporting Their Partners During Pregnancy: Findings From the ENRICH Study, <i>Qualitative health research</i> , 28, 2208-2219, 2018	Not about views/experiences of paternal involvement in antenatal care.
Pieters, J. J. P. M., Kooper, A. J. A., Eggink, A. J., Verhaak, C. M., Otten, B. J., Braat, D. D. M., Smits, A. P. T., Van Leeuwen, E., Parents' perspectives on the unforeseen finding of a fetal sex chromosomal aneuploidy, <i>Prenatal Diagnosis</i> , 31, 286-292, 2011	Not about partner involvement.
Redman, S., Oak, S., Booth, P., Jensen, J., Saxton, A., Evaluation of an antenatal education programme: characteristics of attenders, changes in knowledge and satisfaction of participants, <i>Australian & New Zealand Journal of Obstetrics & Gynaecology</i> , 31, 310-6, 1991	Quantitative study design.
Robertson, A., Get the fathers involved! The needs of men in pregnancy classes, <i>Practising Midwife</i> , 2, 21-2, 1999	Not about views/experiences of paternal involvement in antenatal care.
Ryan, A., O'Driscoll, D., Murphy, H., Influence of ante-natal classes on primigravid pregnancy and labour, <i>Irish Medical Journal</i> , 74, 87-88, 1981	Quantitative study design
Sandelowski, M., Separate, but less unequal- Fetal ultrasonography and the transformation of expectant mother and fatherhood, <i>Gender & Society</i> , 8, 230-245, 1994	Not about partner involvement.
Shia, N., Alabi, O., An evaluation of male partners' perceptions of antenatal classes in a national health service hospital: implications for service provision in london, <i>Journal of Perinatal Education</i> <i>J Perinat Educ</i> , 22, 30-8, 2013	Survey data presented as quantitative data and not enough qualitative reported.
Singh, D., Newburn, M., What men think of midwives, <i>RCM Midwives</i> , 6, 70-74, 2003	Not about views/experiences of paternal involvement in antenatal care.

Study	Reason for exclusion
Smith, Peggy B., Buzi, Ruth S., Kozinetz, Claudia A., Peskin, Melissa, Wiemann, Constance M., Impact of a group prenatal program for pregnant adolescents on perceived partner support, <i>Child & Adolescent Social Work Journal</i> , 33, 417-428, 2016	Survey data presented as quantitative data.
Sooben, R. D., Antenatal testing and the subsequent birth of a child with Down syndrome: A phenomenological study of parents experiences, <i>Journal of Intellectual Disabilities</i> , 14, 79-94, 2010	Not about partner involvement.
Symon, A., Lee, J., Including men in antenatal education: evaluating innovative practice, <i>Evidence Based Midwifery</i> , 1, 12-19, 2003	Not about views/experiences of paternal involvement in antenatal care.
Wapner, John, The attitudes, feelings, and behaviors of expectant fathers attending Lamaze classes, <i>Birth & the Family Journal</i> , 3, 5-13, 1976	Survey data presented as quantitative data.
Wells, M. B., Literature review shows that fathers are still not receiving the support they want and need from Swedish child health professionals, <i>International Journal of Paediatrics</i> , 105, 1014-1023, 2016	Excluded because all study designs in literature review were considered eligible.

Excluded economic studies

A single economic search was undertaken for all topics included in the scope of this guideline. No economic studies were identified which were applicable to this review question. See supplementary material 2 for details.

Appendix L – Research recommendations

Research recommendations for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

No research recommendations were made for this review question.

Appendix M– Quotes supporting themes

Quotes supporting themes for review question: What are the barriers to, and facilitators of, involving partners in the woman’s antenatal care?

Table 3: Table of quotes for involving partners

Study (author and year)	Theme	Quotes
Atkin 2015	Being present	<p>Lewis: "I felt obliged to do it because it's my child. <i>I want to know what is happening.</i>"</p> <p>Isaac: "A woman can feel everything that's going on and as a dad you're just watching her get bigger (...) going to the hospital and <i>being in touch through those screening tests made it more real to me.</i>"</p> <p>James: "If I was about five minutes late I would have missed the first screening. But I made it, and it was interesting, but the first thing I sensed (...) <i>I wouldn't say anti-guy, I think that's too much, it's not anti-male. It was very, OK, mother, person doing the ultrasound, 'Oh who's that guy in the room?'</i>"</p>
	Being present	<p>Jasinder: "If I'm going to be honest (...) <i>I was a bit in the background</i> and I mean that is partly understandable because, you know, it's her that's having the baby and you know, it's her that's carrying the baby."</p> <p>James: "I got so frustrated but at the time I thought you know what, it's not about me and how I feel. The most important thing is that she's getting the right healthcare and the baby's all right. <i>But there are times where I'd almost want to be like 'Guys, I'm here'.</i>"</p> <p>Malik: Expressed relief that he "<i>wasn't condemned out of the room</i>" when he asked questions about sickle cell early in the pregnancy.</p>

Study (author and year)	Theme	Quotes
	Choice and decision making	<p>James: "There's two of us. All the information's being thrown at her. She'll pass the leaflets to me, I'll hold it. They'll [Health Professional] answer very briefly and then continue talking to her. <i>And that just makes me think, ah (whispering), maybe I just need to shut up.</i>"</p> <p>Chika: "But the thing is you're dealing with professional people that are well educated (...) They know the legal implications and they know how far they can push. <i>It only takes a wrong phrase or a wrong sentence in a letter to ruin your chances, you know what I mean?</i>"</p>
Backstrom 2016	Impact of staff behaviour	<p>W 12: ". . . what I definitely liked best was that they put such a big focus on the partner: because <i>it has bothered me before in this situation that the partner's role sort of disappears</i>. But for me, there is nothing more important than Y [the woman express the name of her partner] in this situation. And they were really good at highlighting that. And <i>to emphasise the partners in that room, and to emphasise their work</i> and what they—how they are needed, and sort of pep them up. So it was almost a bit like you thought that the lecture [Inspirational lecture] was more or less for all of the fathers or partners. And in a really good way, I think. Really good."</p> <p>W 13: "It's easier for us to talk about feelings and, well, experiences and so on, because now, during my pregnancy, it has—well, in some cases, it has been really tough. So I must really try to explain how I feel and why, and he must support me in it in certain situations. I think that it is the greatest effect [of the Inspirational lecture] that <i>we can talk about things that we used to think were difficult to talk about. . .</i> Clearly the relationship has been affected."</p> <p>W 9: "Then I can <i>let go of some of my control</i>, yes, because it's hard to [do that], because you have a need for control, but you can't control this situation at all, and then if you can hand</p>

Study (author and year)	Theme	Quotes
		<p>over [control] . . . <i>you will hand over some parts to your partner</i>, it should help me in this situation, I hope, so that I don't need to feel that. . . I don't need to take more responsibility than controlling myself. . ."</p>
Dheensa 2015	Taking the lead	<p>Eric: 'We were rather confused at the beginning. The way all the screening tests were presented to us by the midwife wasn't very clear. <i>Usually I would go and look up these things but I suppose I thought it's not whether I know about it or not.</i>'</p>
	Taking the lead	<p>Frank: "We had to probe a bit and ask [the consultant] a lot of questions to get the information. She did her best to include me, although, the room she was scanning in, it was slightly more difficult to do that just because of the position of the equipment. <i>I did think at one point her assistant pulled the curtain across and blocked my view of the screen, which, well actually I'd like to see the scan.</i>"</p> <p>Iain: "The discussions were not hostile, <i>but there was the implication that I was being a controlling partner</i> – which perhaps relates to the numerous domestic violence literature that festooned the wards. I am not so naive as to believe that such things do not happen, but equally it is frustrating that for the sake of safety the assumption is that <i>as a man you are conforming to a</i></p>

Study (author and year)	Theme	Quotes
		<p><i>perceived stereotype, rather than attempting to clarify your partners concerns and protecting their interests."</i></p>
	Learning over time	<p>Harry: <i>'I've learnt over the years to not be ignored. The first time round I didn't really know what was going on, you take a backseat and the emphasis first time round was very much on [wife] and the baby, whereas this time because I've got issues and questions and things about it, I've spoken up and asked. I think they've come round to the idea that actually you can't ignore [the father] because the stress that waiting for an appointment for an amnio, having the amnio, and then waiting for the results is phenomenal.'</i></p> <p>Iain: <i>'With the second and third pregnancies I just accepted that I wasn't welcome, and made a point of not asking questions. Indeed with the third pregnancy my partner went to a number of the scans on her own – partly because children are not allowed in the screening room, and I stayed at home to look after [son], but also because she was annoyed by the attitude of the staff towards me.'</i></p>
Husko 2018	Availability of information	<p>Interview 1: "Our midwife always answered all strange questions that we asked".</p> <p>Interview 7: "I got the support I asked for".</p> <p>Interview 7: "Glad to meet those who have been there, the others also would be mothers and fathers for the first time, it feels like you have more to discuss and talk about".</p>

Study (author and year)	Theme	Quotes
	Impact of staff behaviour	Interview 1: "Was the question aimed directly to support me? I could not answer that actually".
Jeffery 2015	Choice and decision making	"The midwife went out of her way to make sure we were a couple making decisions together."
	Impact of staff behaviour	"The staff were fantastic and welcoming."
	Choice and decision making	"I wanted to have a say but they didn't listen to my opinion."
	Involvement affected by time	"This is the busiest time of year and making time to get here has been difficult, even though its [sic] a priority for me." "I haven't had time to think about the baby let alone the prenatal stuff."
	Being present	"Antenatal care is really for her. There's no baby yet." "I feel I'm looking on but its [sic] happening to her and not me."
	Availability of information	"I want to be more involved but don't know enough to ask." "Most of the time I don't understand what they talk about."
	Partner's rights	"I haven't been able to attend appointments as I work. This is my first time at the hospital and the baby is nearly here." "I miss a lot of things due to work."
	Range of emotions	"Maybe I'm too anxious to be involved." "I can't believe the baby's due in a few weeks. Nothings [sic] ready. I'm not."
Locock 2006	Responsibility	"Well, I can understand it in a way, because they ask you questions, for example, if you've been pregnant before, if you've had AIDS, anything like that, and I suppose some women, you know, they may not want their partner to know. But I'm sure they could do that, and then let their husband or partner in the room straight off, because it's a worrying time, and, you know, they don't really talk to you. And, as I said, this woman was very matter-of-fact and talking to her friend so

Study (author and year)	Theme	Quotes
		<p>she wasn't really telling me what she was doing, and I'd never had it done before so I didn't know. [AN31, baby diagnosed with Down's syndrome after nuchal scan and CVS]</p>
	Impact of staff behaviour	<p>"The screen was by my head facing him [the sonographer]...And my husband stood sort of in the corner of the room and I think he could see the screen but I mean there wasn't really any facility for him to sit near me or, you know, be able to—it was almost like he was, it was irrelevant that he was there." [AN36, low risk nuchal scan result, Edwards' syndrome detected at 20-week scan]</p> <p>"He had basically sort of run out of being able to support me at this point. He didn't think that I should have it [amniocentesis]. If I wanted it then he was behind me, that was fine. He wasn't trying to dissuade me from having it, but he couldn't help me any more with that. And when I then got upset about it and carried on talking, he just couldn't help any more...And my husband was like, "Well, you had all the support and you decided not to do it. You can't expect people to take days and days and days off work for you." So I went up—I mean, he knew I was going up [to London for amniocentesis]—but I went up on the train by myself." [AN24]</p> <p>"The Professor of Fetal Medicine came in, introduced himself, actually shook my partner by his hand and called him his name for the first time, which was very, very important, because he hadn't really been acknowledged at the local hospital...And he [another doctor] came up to my partner [after the termination] and, you know, just stroked his back and shook his hand and said, "How are, you know, are you okay?" and he was very, very kind. So much so that I wrote him a card afterwards, because he really stood out." [AN32]</p>

Study (author and year)	Theme	Quotes
	Range of emotions	"I almost felt as a dad I had to be, I had to be there for [partner], and you know, sometimes I think you put your own emotions to one side because, as I said before, you know, it's the woman who carries the child and, you know, I feel that she feels that more than I do, and all I could do was just be there for her, you know...So we still believed, we still had hope." [AN06]
	Availability of information	"It was difficult, but you dust yourself off, you go home, you read up your books, you read the Internet, you know... And I think you're able to then make informed choices." [AN06]
	Choice and decision making	<p>Mother: But you were sort of deferring the decision to me quite a lot really, I think.</p> <p>Father: Yes...It didn't feel I had the right to make a decision, in a way. I felt it's really for [partner] to decide...I just didn't want to be sort of directional, I suppose. And I just felt that, you know, I would support [partner] whichever way she decided. [AN13, high risk nuchal scan result, decided not to have amniocentesis and the baby was normal].</p>
Miller 2017	Learning over time	<p>James: "But yeah, we planned our lives fairly well. We've been together eight years now and it took us a while and then we decided to get married. Because my wife's 30 now, so obviously the clock was ticking ... but I think we weren't in a financial position to have children earlier." (37 years, AU)</p> <p>Dylan: "Yes I did expect to become a father but not quite yet sort of thing, but in retrospect I am very glad that it has come about and it has to happen sometime and I guess there is never the perfect time anyway." (33 years, UK)</p> <p>Stephen: "There was a point sort of <i>halfway through sort of the second trimester where I felt that I wasn't involved at all</i> it was a very personal thing to [wife] and that was quite horrible. Trying to find ways to get in and share it and things like that. But now we've had a</p>

Study (author and year)	Theme	Quotes
		<p>few discussions about ... and I feel totally part of it, it's a shared thing between us. (29 years, UK)</p>
	Availability of information	<p>Ben: "I do a bit of reading here and there but ... <i>the antenatal class is good because it's put right in front of you.</i> I didn't feel like we had to seek anything out really." (32 years, AU)</p>
	Range of emotions	<p>Gus: "Um ... yeah, yeah, I've felt involved.... <i>I mean, sometimes you do sort of ... you do feel a little bit sort of removed from it ... like, the NCT classes,</i> I feel like nodding off in them sometimes, <i>but that's because ... you know ... I've done a 14-hour shift at work, and then I go straight from work to there,</i> I don't really want to be there, erm ... but it's just them talking about either the birth, or things ... a lot of things that don't concern you really, you know, they're about the mum and the things that she can do, the stretches and that ... <i>but yeah, I mean, I've felt involved.</i> (28 years, UK)</p> <p>Nick: "I guess all the practical, tangible aspects I've been involved in. You know we've both been to NCT classes and everything like that we've done together. <i>But I guess it's the emotional responses and the physical feelings that separate us.</i>" (33 years, UK)</p> <p>Jason: "It was good to get that bit of man-talk out in the open.... <i>I found it very useful to hear from a guy [male midwife].</i> We heard all the time from the lady's perspective what to expect in birth, but never from the guy's point of</p>

Study (author and year)	Theme	Quotes
		<p>view. So it was good to get his perspective on it." (29 years, AU, BP)</p> <p>Ivan: "From the vibe I got in the room, <i>everyone's sort of scared to ask questions so they didn't look stupid or anything like that...</i> The class needed more structure. It just sort of feels like you're at an AA meeting. You sit around and talk about your feelings and stuff like that, and blokey blokes, a lot of the time don't want to talk about it. <i>For me, it's about getting information from others and experiences, and being able to share our thoughts ... rather than talking about feelings and emotions and stuff like that ...</i>" (37 years, AU, GBADC)</p> <p>Matt: "<i>The classes [at the public hospital] were horrendous. They were gendered, they were sort of the idea there, yeah guys, you're going to have to put the beer down and now watch the footy for sort of a few days, type of thing, and I thought they were extraordinarily condescending ... towards males, well, towards me. I felt extraordinarily that this was basically a sort of engaging in male stereotype, that you might have to change a nappy, well of course I'm going to have to change – there's this, of course I am, I'm going to be up feeding my child, of course I am, so yeah, I found that, yeah, a bit insulting.... I just knew that I wasn't going to be that type of dad.</i>" (39 years, AU, DHHS)</p>
Nash 2018	Directed support for partners	<p>Joe: "Well, I just guess <i>the experiences from a guy's perspective... it just sort of seemed to hit home a little bit more, stressing that times have changed from previous generations where the dad would've gone off to work and might play with the kid once on a weekend or something like that. Just to try and be more involved.</i>" (NFP)</p>

Study (author and year)	Theme	Quotes
	Directed support for partners	<p>Jason: ". . . <i>It was good to get that bit of man-talk out in the open. . . Just talking about how we felt about being fathers. . .</i>"</p> <p>Matthew: "<i>I was able to sort of ask some questions differently to how I'd like in an environment with women who are about to give birth, you know?</i>"</p> <p>Marc: "He [the midwife who runs the class at the pub] doesn't ask you. . . what are your deepest, darkest fears or anything, [<i>he</i>] just says, '<i>Here's the facts</i>'."</p>
	Directed support for partners	<p>Paul: "<i>The [NFP] class was gendered, they were sort of the idea there, that guys, you're going to have to put the beer down and not watch the footy for sort of a few days, type of thing, and I thought they were condescending..</i>"</p> <p>James: "There was a big emphasis on [women as] primary carers and [men as] secondary carers [in PC class] and. . . you know, things like that. And it was sort of like, '<i>Okay, completely not relevant</i>'."</p>
	Directed support for partners	<p>Rich: "If there was maybe one [NFP class] at the start [of pregnancy] and one towards the end [of pregnancy] instead of just having one at the end. . . that would have. . . probably given me more confidence to share more in those other weeks"</p> <p>Jason: "Maybe a guy's, not so much a helpline, but just somewhere where you go or ring someone to just chat to."</p> <p>Dan: "I just think we should have a father's group. . . I wouldn't mind doing that sort of thing up here."</p>
Palsson 2017	Directed support for partners	<p>"Parents....get them to ask people who have three kids to join in a discussion...because they've already got the gen.(8)"</p> <p>"Parental groups are an excellent way to prepare but they were too short... we hardly spoke of the time after birth. (10)"</p>

Study (author and year)	Theme	Quotes
	Availability of information	<p>"Most of the time on the internet, because ... I'm not a patient person. I want to have everything like that (clicks fingers). (12)"- referring to how quickly one can access information online</p> <p>"I looked at YouTube, but you don't know to a hundred per cent which... what experience those showing the film have...Yes, if you think a bit...is it something good or can it be harmful.... (9)"</p>
	Availability of information	<p>"The midwife was very nice... and she asked: do you have any questions? But you don't have any questions if you don't know what is coming. I would know now (after birth) what to ask.(10)"</p>
	Availability of information	<p>"I learn most when someone tells me things....absolutely. So, I prefer that. But it's probably that you need to have a mixture of things....because some learn by reading and seeing..(5)"</p> <p>"Information needs to be well choreographed, it needs to capture our interest, it needs to be given in a fun way. Use humour: situations can afterwards be looked at as funny or comic but when you are in it, it's like a matter of life or death. (11)"</p>
Reed 2009	Responsibility	<p>Jameela: "No, I didn't feel as bad about it [the positive test] because he had to be tested too. My test was positive and his test was negative, which we sort of knew beforehand. It was no big deal and he was happy to be tested anyway."</p>

Study (author and year)	Theme	Quotes
	Responsibility	<p>William: "I mean, I didn't push her into extra tests. Ultimately it's her body and her decision. However, I wanted to be involved and take responsibility too . . . Men want assurance that everything is alright, just like women."</p> <p>Dave: "Well I wanted to be involved and make the decisions with her. I didn't want her to feel alone. I mean at the end of the day it's our baby isn't it?"</p> <p>Alan: "The screening is all on her, but I would like to know how my genes are passed on, for example will the baby have my blood group or hers? I mean how does that work? It would be nice if men were offered testing too, to see how they might influence the baby's genetic make-up."</p> <p>Tunde: "Yes, I was happy to take the test so that we could have assurance that everything was ok. I had no problems with this but saw it as my duty."</p> <p>Nick: "Well, I think it was a bit of a novelty really, me being tested. I felt like a bit of a spectacle for the midwives. They kept saying, 'ooh we don't get many men in here' (participating in screening). Anyway, it didn't bother me and I didn't think twice about being tested. My partner was really worried that her test had turned up positive, and what if mine did too, but I wasn't worried, I kept reassuring her that everything would be ok."</p>
Reed 2011	Availability of information	<p>William: "I wanted to find out as much as possible about screening, about what was available on the NHS and privately. I wanted to do as much as possible to help Lucy and share the burden."</p> <p>Lucy: "Oh, I am glad he does all this. He knows more about pregnancy than I do anyway. I'm lucky to have someone so involved."</p>

Study (author and year)	Theme	Quotes
	Impact of staff behaviour	<p>Ben: "The midwife went upstairs, and she never spoke to me about what to do or anything like that. She was in, hello, then out and goodbye, and it was just her and Suzie all the way through."</p> <p>Bill: "I wanted to be involved but she (midwife) made it blatantly obvious that she wanted me out of the room."</p> <p>Liz: "When I had my second midwife appointment, she (midwife) was going through all the screening tests. I was a bit sort of overwhelmed because it was only eight weeks then and I hadn't given it an awful lot of thought. I had to stop her and say look, I need to talk about this with my partner. And she was ticking these boxes, and I was like oh no, I'm not going to make that decision right now I want to talk to my partner . . . But it's almost as if she (midwife) felt his views were of little importance."</p> <p>Alan: "It's almost like she felt I was of limited use there (in prenatal clinic), that it wasn't my tackle under the microscope. She sort of made me feel like I should have been doing something more practical like putting up the cot or earning the money to support my wife and baby."</p>
	Partner's rights	<p>Ben: "I think a lot of men would like to take a more active role in that side of things, but then you've always got at the back of your mind that work are going to take a bit of a dim view of it."</p> <p>Bill: "Well, it weren't me being tested was it so work don't see that I need the time off to be with her. They think, well she's pregnant not him. Now if I had to go for tests for something medical myself that would be different."</p> <p>Interviewer: "Would you like to be more involved?"</p> <p>Pete: "Oh yeah, yeah, but we got to pay bills! It's hard with my job to get time off, and we really need the money as things are tight anyway. The only option if I want to be involved in her appointments</p>

Study (author and year)	Theme	Quotes
		<p>is to take holiday but she would rather I saved this time for after the baby is born . . . because of this she takes her mum instead (to prenatal appointments)."</p>
Solberg 2018	Impact of staff behaviour	<p>"It isn't hostile to Dads, but the greatest focus is on mother and baby."</p> <p>"They ask kind of in passing: "How's Daddy doing?" They asked little 'by the way' questions but <i>80 to 90 per cent is devoted to the mother. We get a chair that's placed behind her, and then we sit together.</i>"</p> <p>"<i>The times I was there, they didn't address me. But maybe that's quite natural?</i>"</p> <p>"It would be good if someone asked: "How are things?""</p> <p>"It doesn't matter if they are highly skilled if they don't have the personal qualities to build relationships."</p>
	Impact of staff behaviour	<p>"It's important that I'm not just a third person sitting there, <i>but that they ask a bit about what we think.</i> Otherwise I feel that there's no point in being present."</p> <p>"Call it a father-child session if you like, to get some tips and advice, or simply to 'get it off your chest."</p> <p>"We must maybe become better at making room for ourselves."</p>

Study (author and year)	Theme	Quotes
Williams 1999	Availability of information	<p>Neal: "And that's probably the one thing that I don't like about this is that I can't share . And then it's . . . ``Oh well, that's good ' cause then I don' t have to go through the pain.' ' That's not the point for me . The point is trying to share the experience."</p> <p>Ed: "I was always upset because every time the baby moved she goes, ``Did you fee l it? ' ' because she'd put my hand on it. I said, ``No, I didn't feel it . . . I don' t fee l anything.' ' And then one day she says, ``Why don't you put your hand here ? ' ' So I put my hand there . And I wasn't quite sure . I thought I felt it but I wasn't sure ."</p> <p>James: When asked when the pregnancy first seemed real "I think at the sonogram. Because she wasn't really showing. She wasn't really having a whole lot of symptoms, but when you see that sonogram, when you see that little baby in there , it's neat. So that' s when I really started getting excited and getting involved."</p>
	Availability of information	<p>Beth: "I had trouble. When you' re getting the sonogram done, you' re looking up at the monitor and it's hard to visualize it, where as he was looking directly at it. . . . It took me a while to see it but he was excited from the (first) minute. He was like, ``Yeah! Yeah! ' ' That was good because that makes me feel good. And it's a way for him to be involved, really, when he can see it, touch it, fee l it."</p>
Williams 2011	Range of emotions	<p>Steve and Alan: 'believed that they did not have sufficient information about specific screening and tests to enable their discussions, with their partners, to be well informed.'</p>
	Range of emotions	<p>Liam: "<i>The issue of screenings really brings your feelings to the fore.</i> I would advise him to consider his feelings and realise he's taking 'father' decisions before the baby is born. From the moment you find out your partner is expecting you are forming a bond with a tiny person who is growing day to day.</p>

Study (author and year)	Theme	Quotes
		<i>As this progresses your emotional attachment grows as well."</i>
	Choice and decision making	Gordon: "In discussions it is difficult because we are making decision that affect the baby but also my wife's body and I feel she must always have the final say on any decisions made. So even though they are decisions we both have to make, <i>I feel I am there not to make the decisions but to listen to my wife and help her make the decision she feels most comfortable with.</i> We have been lucky that we have not had to make any difficult decision regarding screening test results, but I would hope if we did, that I would listen and help in the same way."
	Impact of staff behaviour	Steve: "I currently feel there is an obvious disconnect for fathers in the current process. We often have concerns and questions that we would like to ask but are rarely given the opportunity. Having the opportunity to express our concerns and have them answered directly would help make the whole experience far more enjoyable and considerably less stressful. I think fathers often have a different set of concerns to the mother. By involving the father more it would seem we were treated more like a couple."