National Institute for Health and Care Excellence

Draft for consultation

Postnatal care

[Q] Breastfeeding facilitators and barriers

NICE guideline <TBC>

Evidence reviews

October 2020

Draft for consultation

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

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ISBN:

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Breastfeeding facilitators and barriers

This evidence review supports recommendations 1.5.3, 1.5.4, 1.5.6, 1.5.7, 1.5.9, 1.5.12 and 1.5.13.

Review question

What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Introduction

The health benefits of breastfeeding are generally accepted but the rate of breastfeeding in the UK has been relatively low. In 2018-19, 46% of women in England were breastfeeding at 6-8 weeks after birth (Public Health England 2019). In order to support women who want to breastfeed it is important to explore their subjective views. The aim of this evidence review is to explore the facilitators and barriers for starting and maintaining breastfeeding from the point of view of the women themselves.

Summary of the protocol

Please see Table 1 for a summary of the Population, (Phenomenon of) Interest, Context (PICo) characteristics of this review.

Table 1: Summary of the protocol (PICo table)

Population	Pregnant women and women who have given birth to a healthy baby at term (or healthy multiples) and their partners
Phenomenon of Interest	Factors that facilitate or impede the starting and maintenance of breastfeeding within the first 8 weeks (including expressed breast milk), and that relate to: (i) women's personal experience of breastfeeding and beliefs about breastfeeding; and (ii) women's family and social support networks. Themes will be identified from the available literature. The committee identified the following potential themes (however, they are aware that not all of these themes may be found in the literature and that additional themes may be identified): • level of support from family and friends • breast-related health (for example, women may have mastitis, breast engorgement, cracked nipples, breast augmentation) • accuracy of information • emotional wellbeing • amount of sleep • time available • pain. These factors can act as either facilitators or barriers. The committee agreed that information and support was an expected theme in the literature. However information and support from health care professionals, professional peer supporters, voluntary-led community support groups or information from internet resources are covered by separate review questions and therefore will be excluded from this review.

	Factors relating to employment conditions will be excluded.
Context	Studies from the UK only.

For full details see the review protocol in appendix A

Methods and processes

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual 2014. Methods specific to this review question are described in the review protocol in appendix A.

Declarations of interest were recorded according to NICE's 2014 conflicts of interest policy until March 2018. From April 2018 until June 2019, declarations of interest were recorded according to NICE's 2018 conflicts of interest policy. From July 2019 onwards, the declarations of interest were recorded according to NICE's 2019 conflicts of interest policy. Those interests declared before July 2019 were reclassified according to NICE's 2019 conflicts of interest policy (see Register of Interests).

Clinical evidence

Included studies

Eighteen qualitative studies that collected data from interviews or focus groups were included. Four studies (Johnson 2009, Johnson 2013, Leeming 2013, Williamson 2012) were based on the same data collection however focused on different issues and reported different themes. In 3 studies (Dyson 2010, Stewart-Knox 2003, Olander 2011), women were interviewed when pregnant. In 9 studies (Dykes 2003, Dykes 2005, Hinsliff-Smith 2014, Johnson 2009, Johnson 2013, Keely 2015, Leeming 2013, Tully 2014, Williamson 2012) women were interviewed (or they recorded audio or written diaries) within the first few weeks postpartum. In most of these studies, they were interviewed within the first 8 weeks postpartum, but in 2 studies (Keely 2015 and Dykes 2003) they were interviewed up to 10 weeks postpartum. It was agreed with the committee that these thresholds were close enough to 8 weeks and that the views of the women were similar enough to those during the first 8 weeks postpartum to be applicable, therefore these studies were included. In 1 study (Bailey 2004), women were interviewed both when pregnant and then again at 3 to 9 weeks postpartum. In 2 studies (Brown 2011, Hunter 2015), women were interviewed considerably later in the postpartum period (at 6 to 12 months in Brown 2011, at 2 weeks to 21 months in Hunter 2015) but all women in these studies breastfed for fewer than 8 weeks, so it was inferred that discussion of influences on breastfeeding initiation or duration would refer to the first 8 weeks postpartum. In 1 study (Condon 2003), women had breastfed a baby within the previous year and the duration of breastfeeding was not reported, so only information relating to women's views of colostrum was extracted. In 1 study (Murphy 1999) women were interviewed from late pregnancy until their babies' second birthdays, so only data specific to the antenatal period or the early days after birth were extracted.

Three studies (Dykes 2003, Dyson 2010, Hunter 2015) were about young women (19 years or under). One study (Murphy 1999) was not age-range-specific but reported a theme specific to young women. Fourteen studies (Bailey 2004, Brown 2011, Condon 2003, Dykes 2005, Hinsliff-Smith 2014, Hughes 1997, Johnson 2009, Johnson 2013, Keely 2015, Leeming 2013, Olander 2011, Stewart-Knox 2003, Tully 2014, Williamson 2012) were not age-range-specific. As per the protocol, findings about young women (19 years or under) were reported separately.

Most studies did not report whether women had singleton or multiple births. Five studies (Keely 2015, Johnson 2009, Johnson 2013, Leeming 2013, Williamson 2012) reported that

all women had a singleton birth. Two studies reported that one or more women had twins (Bailey 2004, Tully 2014). In another study (Hughes 1997) there was at least one woman with twins and the only theme specific to twins was extracted from this study. As per the protocol, findings about twins were reported separately.

Nine studies recruited primiparous women (Bailey 2004, Dyson 2010, Hinsliff-Smith 2014, Hughes 1997, Johnson 2009, Johnson 2013, Leeming 2013, Murphy 1999, Williamson 2012), 6 studies recruited a mix of primiparous and multiparous women (Brown 2011, Dykes 2003, Dykes 2005, Hunter 2015, Stewart-Knox 2003, Tully 2014), 3 studies did not report whether women were primiparous or multiparous (Condon 2003, Keely 2015, Olander 2011).

Four studies recruited participants from socially deprived areas or recruited only women with low income (Bailey 2004, Dyson 2010, Hughes 1997, Hunter 2015). Eleven studies (Brown 2011, Dykes 2005, Johnson 2009, Johnson 2013, Keely 2015, Leeming 2013, Murphy 1999, Olander 2011, Stewart-Knox 2003, Tully 2014, Williamson 2012) either reported that participants came from a mixed socio-economic background or reported the participants' education level and/or their employment level, from which we have assumed participants came from a mixed socio-economic background. The 3 remaining studies did not report on socio-economic, employment or education status of participants (Condon 2003, Dykes 2003, Hinsliff-Smith 2014).

Three studies recruited white participants only (Dykes 2003, Dyson 2010, Williamson 2012), 8 studies recruited a population that was majority white with a small proportion of other ethnicities (Dykes 2005, Hunter 2015, Johnson 2009, Johnson 2013, Keely 2015, Leeming 2013, Olander 2011, Tully 2014). In 6 studies, ethnicity was not reported (Bailey 2004, Brown 2011, Hinsliff-Smith 2014, Hughes 1997, Murphy 1999, Stewart-Knox 2003). One study was among women from Pakistani, Bangladeshi, Somali and Afro-Caribbean backgrounds (Condon 2003).

The type and duration of feeding (breastfeeding, mixed feeding or formula feeding) at the time of data collection varied between the studies. Most studies required participants to have intended to breastfeed or to have initiated breastfeeding.

As shown in the list of themes below, these concepts have been explored in a number of central themes and subthemes:

General population (not-age-range-specific studies)

Overarching theme 1. Mother and baby

Theme 1.1. Benefits of breastfeeding for infant health

- Sub-theme 1.1.1. Benefits of breastfeeding for infant health motivate women to breastfeed
- Sub-theme 1.1.2. 'Breast is best' depends on whether breastfeeding is right for the woman.

Theme 1.2. Breastfeeding is natural

Theme 1.3. Maternal identity

- Sub-theme 1.3.1. Maternal identity: pride and obligation
- Sub-theme 1.3.2. Expressing as a way of deflecting accusations of poor mothering

Theme 1.4. Bonding, intimacy, closeness, nurture

- Sub-theme 1.4.1. Breastfeeding promoting bonding, intimacy, closeness, nurture

Theme 2.3. Paternal and family bonding

Sub-theme 2.3.1. Paternal and family bonding through bottle feeding

Sub-theme 2.3.2. Paternal and family bonding through breastfeeding

Theme 2.4. Managing tensions between looking after their relationship with their partner and breastfeeding

Overarching theme 3. Dimensions of public feeding

Theme 3.1. Lack of privacy during postnatal hospital stay

Theme 3.2. Breastfeeding in front of others: women's concerns, views and experiences

Sub-theme 3.2.1. Reluctance, embarrassment and lack of privacy

Sub-theme 3.2.2. Worries specific to obese women

Sub-theme 3.2.3. Growing confidence in breastfeeding in front of others

Sub-theme 3.2.4. Ambivalence and the public breast

Sub-theme 3.2.5. Observing the etiquette of breastfeeding

Theme 3.3. Use of private facilities in public spaces

Theme 3.4. Social isolation

Twins

Theme 1. Difficulties with breastfeeding specific to twins

Young women (19 years or under)

Theme 1. Mother identity and breastfeeding as something special

Theme 2. Pain, immobility, helplessness after birth

Theme 3. The postnatal ward: alone and exposed in an alien environment

Theme 4. Baby content or unsettled

Theme 5. Carrying on with life

Theme 6. Support from partner and family

Sub-theme 6.1. Emotional support and guidance

Sub-theme 6.2. Practical support

Theme 7. Friends, peers, other breastfeeding mothers and moral norms

Sub-theme 7.1. Friends, peers and other breastfeeding mothers

Sub-theme 7.2. Formula feeding culture

Theme 8. Feeding in front of others, sexualisation of the breasts and privacy

Sub-theme 8.1. Feeding in front of others and sexualisation of the breasts

Sub-theme 8.2. Need for private facilities at school and in public areas

The included studies are summarised in Table 2.

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of clinical studies included in the evidence review

A summary of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included studies

Study	Participants	Methods	Themes
Bailey 2004 **Aim of the study** • To examine cultural expectations and experiences of breast-feeding.	N=16 primipara who expressed an intention to breastfeed, interviewed at 37 weeks in their pregnancy and again at 3-9 weeks postpartum Women lived in an area with low rates of breastfeeding initiation	Two semi-structured face-to-face interviews	• Benefits of breastfeeding for infant health • Breastfeeding is natural • Bonding, intimacy, closeness, nurture • Breastfeeding is difficult • Concerns about adequacy of milk supply • Pain • The impact of feeding on the woman's tiredness, independence, and everyday tasks • Influence of others' experiences and opinions on feeding decisions • Paternal and family bonding
Brown 2011 **Aim of the study:** • To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant.	N=23 women with an infant aged 6 to 12 months who had either formula fed from birth or breastfed for 6 weeks or less n=17 primipara n=7 multipara Areas with varying degrees of social deprivation	Semi-structured interviews	• Effects on mother's body image • Breastfeeding is difficult • Concerns about adequacy of milk supply • The impact of feeding on the woman's tiredness, independence, and everyday tasks • Influence of others' experiences and opinions on feeding decisions • Practical support from partner and family: bottle feeding as a means of sharing the "load" with others
Condon 2003 **Aim of the study:**	N=26 women from Pakistani, Bangladeshi, Somali and Afro-	Five monoculture focus groups. Two Pakistani	• Concerns about adequacy of milk supply

Study	Participants	Methods	Themes
• To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant.	Caribbean background who had breastfed a baby within the previous year	groups took place, one comprising women who had first come to live in the UK within the last 10 years, the other with those who had been born in the UK or had been resident for over 20 years.	
Dykes 2003 **Aim of the study:** • To investigate the support needs and the experiences of adolescent mothers who start breastfeeding.	N=13 White young women from 14 to 19 years old, with an infant aged 6 to 10 weeks who had breastfed at least once n=12 primipara n=1 multipara	Semi-structured interviews	• Mothers' identity and breastfeeding as something special • The postnatal ward: alone and exposed in an alien environment • Baby contented or unsettled • Support from partners and family • Friends, peers, other breastfeeding mothers • Feeding in front of others, sexualisation of the breasts and privacy
Dykes 2005 **Aim of the study:** • To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting.	N=61 women on the postnatal ward for 2 to 5 days postpartum who had initiated breastfeeding n=40 primipara n=21 multipara n=5 English-speaking South Asian n=56 English-speaking white Range of higher to lower socio-economic occupational status	Focused one-to-one interviews	• Benefits of breastfeeding for infant health • Breastfeeding is natural. • Bonding, intimacy, closeness, nurture • Concerns about adequacy of milk supply • Irregular demands causing concern • Pain
Dyson 2010 **Aim of the study:** • To examine the psychosocial factors influencing	N=17 White young women from 16 to 19 years old, expecting their first baby	Focus groups	• Friends, peers, other breastfeeding mother and moral norms • Feeding in front of others, sexualisation of the breasts and privacy

Study	Participants	Methods	Themes
infant feeding intention among pregnant teenagers expecting their first baby and living in deprived urban areas in England.	Living in a deprived urban area in the north of England		
Hinsliff-Smith 2014 **Aim of the study:** • To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks).	N=26 primipara who indicated that they wanted to breastfeed and initiated breastfeeding Living in the East Midlands	Written diary for 6 weeks or interviews. 9 completed a diary and were also interviewed, 13 completed a diary only, 4 had an interview only	• Concerns about adequacy of milk supply • Irregular demands causing concerns • The impact of feeding on the woman's tiredness, independence, and everyday task • Influence of others' experience and opinions on feeding decisions • Dimensions of public feeding • Breastfeeding in front of other: women's concerns, views and experiences
Hughes 1997 **Aim of the study:** • To examine what influences women to bottle feed.	N=20 primipara who had started to formula feed n=13 were <20 years of age At least one woman had twins in this study, and a theme specific to twins was extracted	One-to-one interviews	• Benefits of breastfeeding for infant health • Cost • Difficulties with breastfeeding specific to twins • Futility of starting breastfeeding when it could not be continued
Hunter 2015 **Aim of the study:** • To explore how the inpatient experiences of a group of young women who gave birth as teenagers influenced their feeding decisions and experiences and ascertain their ideals for breastfeeding support.	N=15 young women aged 16 to 19 who had intended to breastfeed or breastfed n=14 primipara n=1 multipara n=12 White British n=2 Mixed White British/Black African n=1 Portuguese	Focus groups and interviews (2 interviews were carried out when only one woman attended the focus group).	• Pain, immobility, helplessness after birth • The postnatal ward: alone and exposed in an alien environment • Friends, peers, other breastfeeding mothers and moral norms

Study	Participants	Methods	Themes
Johnson 2009* **Aim of the study:** • To explore the embodied practice of expressing breastmilk.	N=16 primipara who intended to breastfeed their baby n=15 White British n=1 Eurasian British	Two phases of interviews and audio-diaries: Phase 1: audio-diaries for 7 days, beginning within 1-3 days of the birth; on completion of diaries they were interviewed. Phase 2 was the same and occurred 3-4 weeks later.	• Benefits of breastfeeding for infant health • Bonding, intimacy, closeness, nurture • Concerns about adequacy of milk supply • Pain • The impact of feeding on the woman's tiredness, independence, and everyday tasks • Practical support from partner and family: bottle feeding as a means of sharing the "load" with others • Paternal and family bonding • Breastfeeding in front of others: women's concerns, views and experiences
Johnson 2013* **Aim of the study:** • To explore the embodied practice of expressing breastmilk.	N=7 primipara who expressed extensively (for half or more of infants' feeds for at least a few days) n=6 White British n=1 Black Caribbean	Two phases of interviews and audio-diaries: Phase 1: audio-diaries for 7 days, beginning within 1-3 days of the birth; on completion of diaries they were interviewed. Phase 2 was the same and occurred 3-4 weeks later.	• Benefits of breastfeeding for infant health • Maternal identity • Practical difficulties in establishing breastfeeding • Concerns about adequacy of milk supply • Pain • The impact of feeding on the woman's tiredness, independence, and everyday tasks • Practical support from partner and family: bottle feeding as a means of sharing the "load" with others • Paternal and family bonding • Breastfeeding in front of others: women's concerns, views and experiences
Keely 2015 **Aim of the study:** • To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services.	N=28 obese primipara who had either stopped breastfeeding or were no longer exclusively breastfeeding 6 to 10 weeks postpartum, despite an original intention to do so for 16 weeks or longer	Semi-structured interviews	• Women's and babies' physical condition after a caesarean section • Concerns about adequacy of milk supply • Influence of others' experience and opinions on feeding decisions • Dimensions of public feeding • Breastfeeding in front of others: women's concerns, views and experiences

Study	Participants	Methods	Themes
	n= 27 White British n=1 Indian British Participants were selected purposively in order to achieve a sample that was broadly representative of childbearing women in Scotland in terms of age and social class		
Leeming 2013* **Aim of the study:** • To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum.	N= 22 primipara who had intended to breastfeed; n=2 teenagers within the sample n=19 White n=1 Eurasian n=2 Black-Caribbean	Two phases of interviews and audio-diaries: Phase 1: audio-diaries for 7 days, beginning within 1-3 days of the birth; on completion of diaries they were interviewed. Phase 2 was the same and occurred 3-4 weeks later.	• Practical support from partner and family: bottle feeding as a means of sharing the "load" with others • Paternal and family bonding • Managing tensions between looking after their relationship with their partner and breastfeeding • Breastfeeding in front of others: women's concerns, views and experiences
Murphy 1999 **Aim of the study:** • To consider the ways in which women account for their infant feeding decisions.	N=36 primipara Mix of occupational classes This study was not specific to young women but the only theme that was extracted from this study was specific to young women	One-to-one Interviews	• Carrying on with life
Olander 2011 **Aim of the study:** • To explore the views of pre- and postnatal women and health professionals regarding gestational weight gain.	N=9 pregnant women The wider population involved in the study was mostly white and with weight ranging from healthy to obese	2 focus groups	• Effects on mother's body image

Study	Participants	Methods	Themes
Stewart-Knox 2003 Aim of the study: • To define and explore factors determining infant feeding decisions in Northern Ireland.	N=12 pregnant women from Northern Ireland at various stages of pregnancy. Focus groups included both primipara and multipara and equal numbers of women intending to breast and formula feed	2 focus groups (7 and 5 participants each). Health promotion materials were presented as cues and prompts	• The impact of feeding on the woman's tiredness, independence, and everyday tasks • Influence of others' experience and opinions on feeding decisions • Practical support from partner and family: bottle feeding as a means of sharing the "load" with others • Paternal and family bonding • Breastfeeding in front of others: women's concerns, views and experiences
Tully 2014 **Aim of the study:** • To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'.	N=115 women on a postnatal unit interviewed between 1 and 6 days after an unscheduled or scheduled caesarean section Participants were mostly white, primipara and the majority intended to breastfeed	Semi-structured open-ended face-to-face interviews	• Benefits for breastfeeding for infant health • Breastfeeding is natural • Bonding, intimacy, closeness, nurture • Cost • Women's and babies' physical condition after caesarean section • Breastfeeding is difficult • Practical difficulties in establishing breastfeeding • Concerns about adequacy of milk supply • Irregular demands causing concern • Impact of feeding on the woman's tiredness, independence, and everyday tasks • Influence of others' experience and opinions on feeding discussions
Williamson 2012* **Aim of the study:** • To explore the experiences of first-time mothers who struggled with breastfeeding in the early post-partum period.	N=8 primipara who reported experiencing significant difficulties with feeding in the first week post-partum. All women were White British	Audio-diaries for 7 days, beginning 3-4 weeks after the birth; on completion of diaries they were interviewed	• Maternal identity • Practical issues in establishing breastfeeding • Pain

1 *NA: not applicable*

*1 of 4 publications based on data originally collected from 32 women. 4 publications look at 4 different (but partly overlapping) samples of women.

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there are no forest plots in appendix E).

Quality assessment of themes included in the evidence review

See the evidence profiles in appendix F.

Economic evidence

Included studies

A single economic search was undertaken for all topics included in the scope of this guideline but no economic studies were identified which were applicable to this review question. See the literature search strategy in appendix B and economic study selection flow chart in appendix G.

Excluded studies

No economic studies were reviewed at full text and excluded from this review.

Economic model

No economic modelling was conducted for this review question because the committee agreed that other topics were higher priorities for economic evaluation.

Evidence statements

Clinical evidence statements

General population (not-age-range-specific studies)

Overarching theme 1. Mother and baby

Theme 1.1. Benefits of breastfeeding for infant health

Sub theme 1.1.1. Benefits of breastfeeding for infant health motivate women to breastfeed

- High quality evidence from 5 studies (n=215) reported on this sub-theme. Women reported that infant health benefits motivated them to breastfeed. Breastfeeding intent was dominated by the ‘breast is best’ mantra of broad infant health benefits. Multipara who had not previously breastfed but planned to do so during their latest pregnancy cited infant health among the reasons for their changed approach to infant feeding. Some women’s accounts indicated that expressing was a way to make the healthiest choice for their baby in difficult circumstances.

Sub-theme 1.1.2. ‘Breast is best’ depends on whether breastfeeding is right for the woman

- Moderate quality evidence from 1 study (n=20) reported on this sub-theme. Women who had decided to formula feed said that they knew that breastfeeding was best for the baby. However they considered it ‘not right for me’, and what was right for them was ultimately seen as best for their baby. The same study reported that many women were unaware that their baby would not receive the antibodies found in breast milk which provide immunity from infections.

Theme 1.2. Breastfeeding is natural

- Moderate quality evidence from 3 studies (n=192) reported on this theme. Many women spoke of breastfeeding as a 'natural act' when explaining their decision to breastfeed.

Theme 1.3. Maternal identity

Sub-theme 1.3.1. Maternal identity: pride and obligation

- Low quality evidence from 1 study (n=8) reported on this sub-theme. Several women talked about a sense of pride in being able to nourish their baby with their own body and saw it as an essential part of motherhood. On the other hand, difficulties with breastfeeding were seen as a threat to maternal identity and this meant that women felt obliged to persist in trying to overcome obstacles to successful breastfeeding. Women struggled every day to make breastfeeding work, even if this meant forgoing their own needs.

Sub-theme 1.3.2. Expressing as a way of deflecting accusations of poor mothering

- Moderate quality evidence from 1 study (n=7) reported on this sub-theme. Expressing was seen as a way to deflect potential accusations of poor mothering.

Theme 1.4. Bonding, intimacy, closeness, nurture

Sub-theme 1.4.1. Breastfeeding promoting bonding, intimacy, closeness and nurture

- Moderate quality evidence from 3 studies (n=192) reported on this sub-theme. Some women reported closeness with their babies as a positive aspect of breastfeeding. However in one of these three studies it was noted that only 1 out of 61 women, referred to this aspect of breastfeeding.

Sub-theme 1.4.2. Expressing seen as less intimate than breastfeeding

- Low quality evidence from 1 study (n=16) reported on this sub-theme. Some women mentioned that expressing felt less intimate than breastfeeding and therefore did not promote bonding.

Theme 1.5. Cost

- Low quality evidence from 2 studies (n=135) reported on this theme. Some women reported cost-effectiveness among the range of advantages that influenced their decision to breastfeed. Other women reported that the cost of formula milk was not an issue.

Theme 1.6. Effects on mother's body image

- Moderate quality evidence from 2 studies (n=32) reported on this theme. In one study (n=9) with pregnant women, expectations of losing weight after birth through breastfeeding were mentioned, even if women acknowledged that not all women lost weight this way and that this weight loss would end when breastfeeding ended. The other study (n=23), with women who had either formula fed from birth or breastfed for 6 weeks or less, reported concerns that breastfeeding had a negative impact on maternal weight and body image. The fear that breastfeeding would leave women misshapen and unattractive was a reason for using formula from birth. There was the idea amongst mothers that breasts should remain sexual and be for the mothers' partner rather than their babies.

Theme 1.7. Women's and babies' physical condition after a caesarean section

Sub-theme 1.7.1. Women's physical condition after a caesarean section

- Moderate quality evidence from 2 studies (n=143) reported on this sub-theme. Women felt that a caesarean section led to a delay in skin-to-skin contact. Moreover, the immediate post-caesarean period, including the first time they breastfed, was difficult to remember. Among the main breastfeeding problems after a caesarean section were limited maternal mobility, maternal incision pain and maternal tiredness. It was hard to breastfeed due to

difficulties with manoeuvring the women's own bodies and with picking up their babies. Night-time was specifically mentioned as being more difficult for breastfeeding due to the absence of visitors to assist them.

Sub-theme 1.7.2. Infant mucus after a caesarean section

- Low quality evidence from 1 study (n=115) reported on this sub-theme. Among the main breastfeeding problems after a caesarean section, women mentioned infant mucus.

Theme 1.8. Breastfeeding is difficult

Sub-theme 1.8.1. Women's low confidence in their ability to breastfeed

- Moderate quality evidence from two studies (n=77) reported on this sub-theme. Some women spoke of an expectation of failure almost contradictory to the view of breastfeeding as natural. Others expressed that they would try to breastfeed, but would just have to wait and see whether it worked for them or not. Some expectations involved common misperceptions, such as the fear of not producing enough milk. Failure was seen as a realistic possibility, which in turn influenced how women prepared for and reacted to difficulties. Women saw gaining confidence in the skill of breastfeeding as a primary goal.

Sub-theme 1.8.2. Breastfeeding is difficult due to intertwined obstacles

- Moderate quality evidence from 2 studies (n=138) reported on this sub-theme. The belief that breastfeeding was difficult was commonly discussed, particularly among women who initiated but then stopped breastfeeding. Formula feeding, on the other hand, was viewed as simple and free of difficulties. Participant discussions of breastfeeding difficulties revealed that obstacles were intertwined, for example difficulties with latching and irregular and excessive frequency of feeds.

Theme 1.9. Difficulties in establishing breastfeeding

- Moderate quality evidence from 3 studies (n=130) reported on this theme. Although some women found breastfeeding relatively unproblematic, some women experienced establishing breastfeeding in the early days as difficult. For several of them, it was a daily, painful struggle to synchronise two bodies in the act of breastfeeding – with sore nipples, difficulties finding a feeding position that worked, latching difficulties and a baby either disinterested in feeding or distressed and seemingly unable to feed. This was at odds with their expectation that breastfeeding would be 'natural'. The issue of not latching properly was cited as a reason for expressing breast milk.

Theme 1.10. Concerns about adequacy of milk supply

Sub-theme 1.10.1. Colostrum and 'proper milk'

- Moderate quality evidence from 2 studies (n=87) reported on this sub-theme. In one study (n=61) with mostly white women, women anxiously awaited the 'milk coming in', meaning the colostrum being replaced by what they saw as 'proper' milk. In another study (n=26) with ethnic minorities, all 3 monoculture focus groups showed that women believed colostrum to be good for the baby and that it should be given to the baby. This same finding was true for the focus group with Pakistani women who had been born in the UK or had been resident for over 20 years. The group of Pakistani women who had migrated to the UK within the last 10 years was divided on whether colostrum should be given to the baby. One woman expressed concern over colostrum blocking breast ducts. She then initiated exclusive breastfeeding.

Sub-theme 1.10.2. Limited milk volume

- Low quality evidence from 1 study (n=22) reported on this sub-theme. Breast milk volume was assumed to be directly comparable to the amount of formula milk being offered in the pre-prepared bottles on the postnatal ward. Women who were encouraged to hand express their colostrum were surprised by the small amount expressed. Misunderstandings and unrealistic expectations relating to milk volume led women to consider that there was something wrong with their breast milk.

Sub-theme 1.10.3. A hungry and unsettled versus a content baby

- High quality evidence from 5 studies (n=243) reported on this sub-theme. Among the main breastfeeding problems was a perceived lack of satiation by the baby. Formula milk was used to top up breastfeeds within the first few days after the birth. The main reasons for introducing formula milk included a very unsettled baby, which caused exhaustion and anxiety. A discontented and unhappy baby made women doubt their ability to breastfeed effectively. Women held the idea that formula-fed babies fed less frequently, slept for longer and were generally more settled and content. On the other hand, breastfeeding women felt confident about producing and delivering enough milk when their baby was settling between feeds.

Sub-theme 1.10.4. The baby's weight

- Moderate quality evidence from 2 studies (n=39) reported on this sub-theme. A common fear among women was that their babies were not growing fast enough. Women grew anxious about how much weight their babies gained. The women noted that everyone around them put a lot of emphasis on child weight gain. Formula feeding allowed women to coax their babies to feed more. The consequence of this was increased weight gain, which made women feel confident that their babies were growing well. Among the main reasons for introducing formula milk, was that the baby was losing weight.

Sub-theme 1.10.5. Inability to measure and visualise how much the baby was getting

- Moderate quality evidence from 4 studies (n=107) reported on this sub-theme. Women were concerned that they were unable to measure and visualise how much the baby was getting. Women tended to contrast the uncertainty of breastfeeding with the certainty of bottle feeding. Women who had successfully breastfed previously were less anxious but still had some concerns. Expressing breast milk was a way to being more certain about how much milk the baby was getting.

Sub-theme 1.10.6. Concerns about delivery to the baby

- Low quality evidence from 1 study (n=61) reported on this sub-theme. Women were not only concerned about production but also had concerns related to the actual flow of breastmilk from their bodies or relating to the milk actually reaching the baby. Women endeavoured to assess their milk transfer to the baby through various means, for example watching for the baby's bowel movements.

Theme 1.11. Irregular demands causing concerns

- Moderate quality evidence from 3 studies (n=198) reported on this theme. Women were confused and concerned about the irregularity of feed frequencies, particularly at night. Women talked about 'relentless feeding'. Breastfeeding mothers were aware of looking for feeding cues. However, the baby not settling was seen as the baby needing to be fed which resulted in them offering the breast and therefore perpetuating the feeling of constantly feeding. Women wanted to produce a 'good baby' with good habits and part of this involved limiting his other demands. Women described concerns relating to the baby playing at the breast or using the breasts as 'dummies', for comfort, or for falling asleep. Formula milk was seen as a solution to promote 'normal' newborn behaviour.

Theme 1.12. Pain

Sub-theme 1.12.1. Experiencing pain

- High quality evidence from 3 studies (n=85) reported on this sub-theme. Although some women had expected a degree of initial discomfort associated with breastfeeding, all were surprised by the intensity and duration of the pain. Pain was often described as severe. References were also made to bleeding, cracked and blistered nipples. This left several of them confused about the amount of pain they ought to experience and whether or not their discomfort signalled a problem or was to be expected. This pain was not always apparent from the first few feeds in hospital. Most women felt the need to endure the pain and continue breastfeeding. Some indicated that there were times when they dreaded the

next feed, and two participants in 1 study (n=8) spoke about the negative effect of pain on their relationship with their baby. Although the experience of pain sometimes led to useful advice about changing position and latching the baby on, experiencing pain also undermined confidence in breastfeeding, and a reason for turning to formula was nipple pain.

Sub-theme 1.12.2. Expressing to manage pain

- Moderate quality evidence from 2 studies (n=23) reported on this sub-theme. Expressing was seen as a way of managing the pain and feeling more in control, even though not all women found expressing successful.

Theme 1.13. The impact of feeding on the woman's tiredness, independence, and every day's tasks

Sub-theme 1.13.1. Impact on woman's tiredness, independence and every day's tasks

- Moderate quality evidence from 5 studies (n=188) reported on this sub-theme. Women mentioned an unexpected level of tiredness and exhaustion in relation to their breastfeeding experiences. In particular, they mentioned the frequency of feeding, the demands of night feeding and effect on sleep patterns. Breastfeeding was associated with difficulty in establishing a routine and some women mentioned their inability to continue with their everyday tasks. Other children were perceived as a barrier to breastfeeding, even for those who had breastfed previously. Formula feeding was regarded as less time-consuming and more regular, therefore women viewed formula as less demanding on maternal lifestyle than breastfeeding. For experienced mothers, combination feeding of breast and formula milk 'worked last time' which they would rather do than have the newborns 'crying all night'. Some women used formula in an effort to settle their babies so that they could obtain more rest. Despite also reporting these kinds of findings, one study (n=115) reported convenience as an aspect associated with both breastfeeding and not breastfeeding. In another study (n=16), only 1 woman mentioned convenience of breastfeeding over preparing bottles.

Sub-theme 1.13.2. Expressing as a solution to the inefficiencies of the maternal body: less time consuming

- Moderate quality evidence from 2 studies (n=23) reported on this sub-theme. Women said that expressing was a faster way to feed than breastfeeding, especially when using a breast pump. However, authors suggested that women's accounts seemed to indicate something problematic about being perceived to value increased freedom in the context of the moral message that 'breast is best'.

Theme 1.14. Futility of starting breastfeeding when it could not be continued

- Low quality evidence from one study (n=20) reported on this theme. Some women planned to return to work within 4 months after the birth. It was their perception that starting breastfeeding in the first place was therefore futile as they would be unable to continue with it once back at work.

Overarching theme 2. Partners, family and friends

Theme 2.1. Influence of others' experiences and opinions on feeding decisions

Sub-theme 2.1.1. Influence of views or past experiences of family and friends

- Moderate quality evidence from 3 studies (n=143) reported on this sub-theme. Women reported that family and friends had an influence on their feeding decisions. Some women reported fulfilling expectations of family and friends, and some women referred to difficulties that friends and relatives had experienced. Some women considered guidance from other family members who experienced breastfeeding as important. Most women perceived others as supportive, but a few women felt pressurised to breastfeed by family members. Despite reporting strong influence from family and friends, one study (n=12) found that some women reported little influence from partners upon feeding decisions.

Sub-theme 2.1.2. Cultural norms

- Moderate quality evidence from 2 studies (n=39) reported on this sub-theme. Women said that formula feeding has become the normal way to feed a baby in the UK today. Women who initiated breastfeeding said that they were in the minority, and that the majority of friends and family used formula milk. This was often cited as an important trigger in stopping breastfeeding, because women had little support from others. On the other hand, some women felt that they were within a more supportive culture of breastfeeding and it helped them to know there was someone who would give them guidance.

Sub-theme 2.1.3. 'I felt like I was failing…' – the role of others when difficulties arise

- Moderate quality evidence from 3 studies (n=165) reported on this sub-theme. Maternal tiredness was specifically mentioned as a reason that family members did not support breastfeeding plans. Some women described their partners as key to their decision to introduce formula milk when breastfeeding difficulties were encountered. Other women described their partners being worried that their baby was not getting an adequate supply of breastmilk. For some women the support of a friend, who provided practical tips and companionship, was very important in enabling them to continue breastfeeding.

Theme 2.2. Practical support from partner and family - bottle feeding as a means of sharing the 'load' with others

- High quality evidence from 5 studies (n=80) reported on this theme. Some women mentioned that formula allowed other people to feed the baby. Other women mentioned that expressing allowed others to feed the baby. In contrast, when support is available, breastfeeding means that others can only provide minimal help. Other people wanted to share in the care of the baby so bottle feeding was not just beneficial to the woman. Several participants viewed others' offers to feed the baby via a bottle as an expression of care, although this sort of perception appeared to depend on prior relationships with others. Some accounts suggested that participants viewed the allocation of feeding responsibilities as part of on-going negotiations with their partner about the fair distribution of workloads. At the same time, some women were concerned to ensure that breastfeeding did not mean they were taking less than their fair share of the domestic workload.

Theme 2.3. Paternal and family bonding

Sub-theme 2.3.1. Paternal and family bonding through bottle feeding

- High quality evidence from 5 studies (n=73) reported on this sub-theme. Women described bottle feeding as allowing others the opportunity to bond with the baby. Some women referred to formula feeding and other women to expressing. Women were concerned that fathers and other family members felt excluded from feeding. Women felt an obligation to facilitate some kind of bond between others and the baby by enabling bottle feeding. Women implied that they should not be selfish and should let others have access to intimacy with the baby. A partner willing to be more active was among the reasons for introducing formula milk.

Sub-theme 2.3.2. Paternal and family bonding through breastfeeding

- Low quality evidence from 1 study (n=22) reported on this sub-theme. Breastfeeding could enable a sense of connection with partners. Some participants talked about practising breastfeeding in the first few days as a triad, with fathers active in problem-solving and helping with attaching the baby to the breast.

Theme 2.4. Managing tensions between looking after their relationship with their partner and breastfeeding

- Moderate quality evidence from 1 study (n=22) reported on this theme. Women talked about some tension between their relationship with their partner and breastfeeding. Some women talked about domestic obligations. Moreover, some women talked about

spending time together and ensuring the continuation of a sexual relationship. Many of the participants seemed to see the integration of breastfeeding into their relationships as something that required active emotional work rather than something to take for granted. Managing conflict relating to feeding tensions was also mentioned.

Overarching theme 3. Dimensions of public feeding

Theme 3.1. Lack of privacy during postnatal hospital stay

- Moderate quality evidence from 2 studies (n=34) reported on this theme. Privacy was difficult to achieve during the postnatal hospital stay, which lasted several days after a caesarean section. Women mentioned that curtains were left open and due to their limited mobility they had to keep asking someone to shut them. Some women, trying to manually express breast milk due to difficulties with latching their babies on, had additional difficulties. Women also talked about the difficulty of greeting visitors in the hospital setting while attempting to establish feeding.

Theme 3.2. Breastfeeding in front of others: women's concerns, views and experiences

Sub-theme 3.2.1. Reluctance, embarrassment and lack of privacy

- High quality evidence from 5 studies (n=85) reported on this sub-theme. Women were embarrassed to breastfeed in front of family and friends. Embarrassment was perceived not only by the women themselves but also in others. Women struggled to achieve privacy at home due to visitors and relatives. Women were also embarrassed when breastfeeding in public and saw it as a breach of a cultural taboo. Some women reported that expressing was a way of dealing with feeling uncomfortable about feeding in front of others.

Sub-theme 3.2.2. Worries specific to obese women

- Moderate quality evidence from one study (n=28) on obese women reported on this sub-theme. Obese women had worries relating to their body shape, which led to a dislike of feeding in public.

Sub-theme 3.2.3. Growing confidence in breastfeeding in front of others

- Low quality evidence from 1 study (n=22) reported on this sub-theme. As time progressed, growing confidence in breastfeeding away from home was noted in some women's accounts, but for other women, this was not the case.

Sub-theme 3.2.4. Ambivalence and the public breast

- Low quality evidence from 1 study (n=22) reported on this sub-theme. Although most thought that there was nothing wrong per se in feeding in front of others, some felt that social sensitivities required them to try and avoid this in certain situations. Some women referred to the problem as their own lack of confidence but at the same time conveyed the sense that there were external rules to be followed regarding the appropriateness of breastfeeding in public. Many of the women were not only concerned with others' reactions but also had a desire not to cause discomfort to others, which led to further ambivalence, because breastfeeding could be seen not only as socially inappropriate but also as insensitive to others' feelings.

Sub-theme 3.2.5. Observing the etiquette of breastfeeding

- Low quality evidence from 1 study (n=22) reported on this sub-theme. Some participants adopted a discreet method of feeding and suggested that there is a 'correct' way to breastfeed that is discreet and that most reasonable people would accept. However, discretion was often difficult to achieve in the first few weeks when women and their babies were still learning effective attachment. Several of the women chose to postpone breastfeeding away from home until they felt more confident about being able to perform feeding in a socially accepted manner. This was not just a matter of keeping the nipple hidden but also, for example, a matter of avoiding milk stains. Some women also did not

want others to see them struggling with breastfeeding and question their motherhood skills.

Theme 3.3. Use of private facilities in public spaces

- Moderate quality evidence from 2 studies (n=34) reported on this theme. Women agreed that there is a lack of private facilities in public spaces. Where facilities existed, they were often crowded and inadequate. Placing the feeding and changing areas together was considered inappropriate.

Theme 3.4. Social isolation

- Moderate quality evidence from 1 study (n=12) reported on this theme. The inadequacy of public facilities and perceived embarrassment in others could lead to women feeling socially isolated.

Twins

Theme 1. Difficulties with breastfeeding specific to twins

- Moderate quality evidence from one study (n=20) reported on this theme. One woman reported that she had been undecided about whether to breastfeed until finding out at 18 weeks gestation that she was expecting twins. She felt that breastfeeding twins was more than she could cope with, because she was unmarried and had many things to worry about, so she decided not to breastfeed.

Young women (19 years or under)

Theme 1. Mother's identity and breastfeeding as something special

- Low quality evidence from 1 study (n=13) reported on this theme. The sense of breastfeeding being a unique role of the mother and that it involved doing something special was a strong motivating factor for the young women.

Theme 2. Pain, immobility, helplessness after birth

- Moderate quality evidence from 1 study (n=15) reported on this theme. Many of the young women felt incapacitated by tiredness and pain after giving birth. Immobility and helplessness were also described. Pain featured strongly in the participants' recollections of this time, and appeared to prevent the new mothers from relating to their newborns.

Theme 3. The postnatal ward: alone and exposed in an alien environment

- Moderate quality evidence from 2 studies (n=28) reported on this theme. The young women's' experience of being away from family while in hospital was often one of isolation and distress. The young women saw themselves as outsiders on the postnatal ward, viewing it as an alien environment, in which they didn't always feel comfortable. They felt exposed and reported a lack of privacy on the ward, which led to young women feeling unable to perform intimate mothering tasks such as holding their babies skin to skin, or expressing breast milk. Sometimes, this was mitigated by young women being given a single room.

Theme 4. Baby content or unsettled

- Moderate quality evidence from 1 study (n=13) reported on this theme. The baby's behaviour was a crucial factor linked with esteem. If she or he responded positively to breastfeeding and seemed content, the young woman felt strongly reinforced and tended to describe breastfeeding as coming naturally. In contrast, an unsettled baby undermined confidence in her ability to breastfeed.

Theme 5. Carrying on with life

- Low quality evidence from 1 study (n=36) reported on this theme. One young woman explained her decision to formula feed as something that could be reasonably expected from someone of her age who wanted to carry on with her own life as well as having a baby.

Theme 6. Support from partner and family

Sub-theme 6.1. Emotional support and guidance

- Low quality evidence from 1 study (n=13) reported on this sub-theme. The young women needed to feel cared for particularly by their mother and partner. Their strongest source of support came from their own mothers and families, especially when the young woman's mother had breastfed. Information about breastfeeding was highly valued when given by significant others with experience of breastfeeding. Guidance by the mother's mother was felt to be particularly important. Most of the adolescents' mothers had breastfed and most had observed breastfeeding within their immediate or extended family during their childhood, so within the microculture of their family, there was a degree of normalization of breastfeeding.

Sub-theme 6.2. Practical support

- Moderate quality evidence from 1 study (n=13) reported on this sub-theme. The sense of sharing the load with a partner or mother was important, although in some cases, this involved the partner giving breast milk substitutes.

Theme 7. Friends, peers, other breastfeeding mothers and moral norms

Sub-theme 7.1. Friends, peers and other breastfeeding mothers

- Moderate quality evidence from 3 studies (n=45) reported on this sub-theme. Some connections with other breastfeeding mothers were made during hospital, but these were transient. Existing friends were not seen very much at this stage, but new friendships with other breastfeeding young women were generated through teenage pregnancy groups. Participants looked to their peers for emotional support and encouragement. They could only relate to the idea of peer support, however, if the peers were their own age and going through similar experiences. Influence from other young women could have positive effects such as increasing self-confidence relating to breastfeeding difficulties such as lack of privacy. The ability to access peers in a similar situation, even online, was considered an important part of coping with motherhood. Conversely, peer pressure could also be negative, for example through mockery, which could affect the ability to describe positive feelings about breastfeeding.

Sub-theme 7.2. Formula feeding culture

- Moderate quality evidence from 2 studies (n=30) reported on this sub-theme. Strong moral norms were apparent in defence or legitimisation of formula feeding as the acceptable feeding method among young women. Breastfeeding was described as an unacceptable activity. Those young women who wished to breastfeed were overtly criticised and judged. For example, a woman who chooses to breastfeed at night rather than preparing a bottle was referred to as 'lazy'.

Theme 8. Feeding in front of others, sexualisation of the breasts and privacy

Sub-theme 8.1. Feeding in front of others and sexualisation of the breasts

- Low quality evidence from 1 study (n=17) reported on this sub-theme. Breastfeeding in public dominated discussions in this study. Breastfeeding in public was perceived as an inappropriate behaviour and there were clear links to sexuality of the breast. Another concern from those who did not consider breastfeeding in public as embarrassing or immoral, was the potential unwanted sexual interest that they may attract from strangers.

Breastfeeding in public was not only a concern for some young women in public places and on public transport but also at home where privacy may be difficult to achieve, for example due to the partner's friends. There was a belief that there were natural and therefore inevitable male behaviours such as gazing at a breast if this was visible. The need for high levels of self-confidence to breastfeed in public was mentioned, regardless of personal feeding intention.

Sub-theme 8.2. Need for private facilities at school and in public areas

- Moderate quality evidence from 1 study (n=13) reported on this sub-theme. For those who were continuing their education, appropriate facilities for feeding were important. The young women also expressed a need for private facilities in other public places.

Economic evidence statements

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

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

This review focused on parents' perceptions of the barriers and facilitators to breastfeeding. To address this issue the review was designed to include qualitative data and as a result the committee could not specify in advance the data that would be located. Instead they identified the following main themes to guide the review although the list was not exhaustive and the committee were aware that additional themes may be identified. Suggested themes included:

- level of support from family and friends
- breast-related health (for example, women may have mastitis, breast engorgement, cracked nipples, breast augmentation)
- accuracy of information
- emotional wellbeing
- amount of sleep
- time available
- pain.

The evidence review provided data relating to all 7 themes set out in the protocol and additional themes that were not set out in the protocol were also identified. The committee were able to draft a number of recommendations in relation to the themes identified, however some of the studies were limited in terms of the level of detail reported.

The quality of the evidence

The evidence was assessed using GRADE-CERQual methodology and the overall confidence in the findings ranged from high to low. The review findings were generally downgraded because of methodological limitations of the included studies, including, for example, that data saturation was not discussed, that the authors did not discuss the potential influence of the researchers, there was no discussion of contradictory data and the authors did not specify what steps, if any, they took to check credibility of the findings.

The evidence was further downgraded because of concerns about relevance for the context and population of interest to this guideline. Concerns ranged from serious to minor, although the majority of review findings were rated as 'minor'. The most common reason for minor concern was related to the transferability of findings to ethnic minorities; in 11 studies the population was either all or mostly white (these include the 3 studies on young women); 6

studies did not report ethnicity data; only 1 study focussed specifically on ethnic minorities. The only themes for which there were serious concerns relating to relevance were those based solely on Hinsliff-Smith 2014, as the inclusion criteria in this study was gestation over 34 weeks, and gestational age of included participants was unclear. This is potentially in conflict with the review protocol, which states that the relevant population is babies at term.

Concerns about coherence ranged from moderate to 'no or very minor', with the majority of the review findings being 'no or very minor' as there were no contradictory or ambiguous data.

Concerns about adequacy ranged from serious to 'no or very minor'. The only evidence that was downgraded related to the perceived cost-effectiveness of breastfeeding as there were serious concerns on its adequacy given the finding was based on 2 studies offering thin data. All other review findings were based on studies that offered moderately rich data. The number of studies used for each theme or sub-theme ranged from 1 to 5.

Benefits and harms

Role of the healthcare professional

The committee discussed the varying expertise in breastfeeding among different healthcare professionals caring for women and babies. The committee noted that lactation specialists could play a very important role in supporting women with breastfeeding challenges but their numbers are often limited due to funding issues. Baby Friendly Initiative (BFI) standards are for all staff employed by an accredited organisation to receive training appropriate to their role; this includes medical staff employed by the organisation including obstetricians and paediatricians and any other staff in contact with pregnant women and new parents. Staff in maternity and health visiting services often receive breastfeeding training, however, other healthcare professionals involved in women's care before and after birth, such as obstetricians and paediatricians often do not currently receive sufficient training relating to breastfeeding. Furthermore, GP surgeries are not generally inspected as part of community BFI accreditation and do not routinely receive specific training about lactation physiology or the pathophysiology of common breastfeeding problems affecting the woman or the baby. In view of this, the committee made a recommendation that healthcare professionals caring for breastfeeding women and babies should have an understanding of breast milk production (lactogenesis), signs of good attachment at the breast, effective milk transfer, and how to encourage and support women with common breastfeeding problems.

The evidence showed that after birth, women valued privacy on the labour ward or postnatal ward. Lack of privacy could act as a barrier to performing tasks such as breastfeeding or expressing breast milk. The committee noted that nowadays it is common to have partners on the postnatal ward, and the presence of other women's partners may impact on the woman's feelings of lack of privacy. However, the committee noted that healthcare professionals need to keep women under clinical observation after birth for safety considerations, especially after a caesarean section or certain complications or risks, therefore it recommended that the need for privacy and for clinical observation should be balanced against each other. The committee agreed that the recommendation about breastfeeding support should be combined with evidence from review S on breastfeeding support and information, where the committee discussed women's personal space, cultural influences and preferences; consent to provide physical guidance to help the baby latch on to the breast; recognising the emotional impact of breastfeeding; and giving women the time, reassurance and encouragement needed to become confident in breastfeeding their baby.

Giving information about breastfeeding

The committee recommended discussions with women that would address potential facilitators or barriers to breastfeeding, the benefit of which would be to support the initiation and continuation of breastfeeding and in turn benefit women's and babies' health. The

objective of this review was not to identify the benefits of breastfeeding but on the basis of their expertise the committee agreed that since these are well established it is crucial to explain them to parents as a means of improving their understanding. Having discussed them at length the committee agreed to reflect the following key benefits in the recommendation: nutritional benefit to the baby since breastmilk is a nutritionally complete substance for the healthy baby and is unique to that mother and baby dyad (breastmilk substitutes are unable to replicate this); health benefits for the baby, for example fewer respiratory and gastrointestinal illnesses, and lower risk of sudden unexpected death of an infant; health benefits for the woman, for example lower risk of ovarian and breast cancer in later life; and soothing and comforting the baby. The evidence showed that some women had the perception that starting breastfeeding was futile as they would be unable to continue with it once back at work. Therefore, the committee recommended to discuss the benefits of breastfeeding, even if breastfeeding for short periods.

The evidence showed that partner and family members had an important influence on breastfeeding, through their own views and experiences, guidance, and practical support. The committee noted that the involvement of partner and family members could facilitate but also hinder breastfeeding. The evidence showed that bottle feeding was seen as a way to share feeding responsibilities with others, and in some cases this could lead to the use of formula. Moreover, the evidence showed that bottle feeding was perceived as allowing partners and family members the opportunity to bond with the baby. Although they acknowledged these views the committee noted that there were alternative ways for the partner and family members to comfort and bond with the baby, such as helping to settle the baby and skin-to-skin contact; and they could support the mother in other important ways, for example by taking on other tasks and activities that allow her time to breastfeed, and to value the time that she is spending breastfeeding. They also noted a theme from the evidence that paternal and family bonding was possible through breastfeeding, for example with fathers helping with attaching the baby to the breast. The committee therefore felt that on balance the benefits of encouraging bonding in a range of ways outweighed the potential harms of having partners believe that bottle feeding is their only means of bonding. The committee therefore recommended that partners or the woman's chosen supporter(s) should be given information about how they can support the mother with breastfeeding, the importance of their support and involvement and how they can bond with the baby. The committee agreed this should be combined with evidence from review O on promoting emotional attachment to support a recommendation about providing partners with information about ways of comforting and bonding with the baby.

The evidence showed that breastfeeding in public was perceived by some women as a behaviour that was either inappropriate or insensitive to other people's feelings, which could act as a barrier to breastfeeding or could lead to feelings of social isolation. Therefore, the committee recommended to ensure that women are aware of their rights to breastfeed in 'any public space', as per the Equality Act 2010.

Supporting women to breastfeed

The committee agreed that a first step towards promoting the woman's wellbeing was to discuss with women not only the benefits of breastfeeding but also some of the common features of breastfeeding such as frequency of feeding, responsive feeding, emotional adjustments, tiredness, and possible pain and how to address this through improving positioning and attachment. This would allow women, partners and their families to have a clearer understanding of what to expect and what was normal or abnormal. Moreover, the evidence showed that there were concerns around irregular, frequent and long feeds. The committee noted that the frequency and duration of feeds would usually decrease over time due to an increased milk supply and more effective feeding. This kind of information could not only motivate women to maintain breastfeeding but could also provide reassurance and contribute to their psychological wellbeing.

Similarly, the committee agreed that discussing signs of effective feeding (such as: good urine and stool output; the number of feeds in a 24-hour period [at least 8 feeds after 24 hours of age]; the number of wet and dirty nappies; observation of sucking and swallowing during feeds and settling after feeds) would have the benefit of making women feel more confident and could not only facilitate maintenance of breastfeeding but also reduce worries and anxiety.

The evidence showed that expressing breast milk could act as a facilitator for continuing to breastfeed as it could be a way to deal with some breastfeeding challenges such as encouraging a baby to latch at the breast, engorgement and mastitis. The committee discussed whether to recommend expressing breast milk and were concerned that this could be potentially harmful, leading to a diminished emphasis on latching at the breast by busy midwives of the postnatal ward. However, on balance they agreed the benefits of this recommendation outweighed the potential harm since hand expressing is an important skill which is often useful for maternal comfort and helping to stimulate milk production as well as providing expressed breast milk for the baby. Teaching hand expressing is already part of established recommendations, and (BFI) standards are that all breastfeeding women are given information on how to hand express their breastmilk. The committee were also concerned about the potential impact on breastfeeding of introducing a teat to feed the baby in the early days of breastfeeding. However, they noted that in many maternity units, expressed breastmilk is offered to babies with a small syringe (less than 5ml) or a feeding cup, this is due to the small volume of expressed breastmilk in the first few days after birth. In light of all the considerations, the committee agreed that expressing should be discussed with women.

The evidence showed that some women had concerns relating to the frequency of feeds, pain, tiredness, duration of feeds, signs of effective feeding and the impact on their body. The committee noted that there could be tension between supporting the baby's health through breastfeeding and supporting the woman's emotional and psychological wellbeing in the postnatal period. Worries about maternal tiredness was mentioned as a reason that family members did not support breastfeeding plans. On the other hand, a few women felt pressured to breastfeed by family members. The committee, therefore agreed that fatigue and pain should be discussed with women as something they may experience through breastfeeding.

The evidence showed that difficulties with breastfeeding were perceived as a threat to maternal identity and women felt obliged to persist with breastfeeding, even if this meant forgoing their own needs. The committee noted that some cultural perceptions about the role of women could put considerable pressure on women, for example they may view themselves as the main responsible person for household chores and overburden themselves with tasks additional to breastfeeding and caring for the baby. Moreover, the evidence suggested that some women and their partners may feel uncomfortable about breastfeeding due to breasts being perceived as primarily for sexual pleasure. The committee therefore felt that discussing and acknowledging the impact of breastfeeding on women's body image and identity would benefit women and their partners, reassuring them and validating these feelings. The committee agreed that this should be combined with evidence from review S on breastfeeding support and information to underpin further items to be discussed with women, including normal breast changes during pregnancy and after birth, the advantages and disadvantages of supplementary feeding with formula milk and the information which is given may change as the baby grows.

Evidence pertaining to young women highlighted additional barriers to breastfeeding including feeling alone and exposed in an alien environment, the need to carry on with life, and lack of peer support. Based on this and on qualitative evidence from evidence review S, the committee agreed that young women would benefit from additional encouragement and support to initiate and continue breastfeeding. They decided this should be combined with evidence from review P on breastfeeding interventions which had led to discussions about

the needs of women from low income or disadvantaged backgrounds. They therefore recommended that practitioners be aware that younger women and women from a low-income or disadvantaged background may need more support and encouragement to start and continue breastfeeding.

Cost effectiveness and resource use

No economic evidence is available for this review question. The committee agreed that providing information to women, their partners and families on breastfeeding entails small costs (additional health professional time), although some information is already provided in current practice. These recommendations are expected to increase breastfeeding rates, which has the potential for clinical benefits and cost-savings in the future, as evidence suggests that breastfeeding is associated with a wide range of benefits such as lower mortality and lower rates of gastrointestinal and respiratory tract infections for the baby and lower rates of breast cancer for the woman, all of which are costly to manage. Some benefits for babies and related cost-savings (those associated with prevention of infections) are anticipated to be realised in the shorter term, but, overall, clinical benefits and cost-savings associated with breastfeeding are realised over the lifetime of women and their babies. Therefore, the committee agreed that the recommendations ensure efficient use of healthcare resources.

Other factors the committee took into account

Based on their clinical experience and expertise, the committee agreed that information should be provided both in the antenatal and postnatal period. In the antenatal period, information provision is important so that women know what to expect. However, the committee noted that women are more receptive of information once they are actually attempting to breastfeed or face any difficulties in person, so information provision in the postnatal period is also crucial.

The committee noted during protocol development that certain subgroups of women may require special consideration due to their potential vulnerability:

- twins
- young women (19 years or under)
- women with physical or cognitive disabilities
- women with severe mental health illness
- women who have difficulty accessing postnatal care services.

A stratified analysis was therefore predefined in the protocol based on these subgroups. However, considering the lack of evidence for these sub-groups, the committee agreed not to make separate recommendations and that the recommendations they did make should apply universally.

The committee also noted that women with a traumatic birth usually face additional physical and emotional challenges with breastfeeding, but agreed that the same recommendations would apply to them. The committee noted that there was one sub-theme about the specific worries of obese women but agreed that the same recommendations would apply to this population.

There was some evidence specific to women after a caesarean section. The committee noted that these women would need additional support, however also noted that the NICE guideline on caesarean section (CG132) already recommends that women who have had a caesarean section should be offered additional support to help them to start breastfeeding as soon as possible after the birth of their baby.

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Appendices

Appendix A – Review protocol

Review protocol for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Table 3: Review protocol

Field	Content
Review question	What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?
Type of review question	Qualitative
Objective of the review	This review aims to determine facilitators and barriers for starting and maintaining breastfeeding.
Eligibility criteria – population/disease/condition/issue/domain	Pregnant women and women who have given birth to a healthy baby at term
Eligibility criteria – Phenomenon of interest	Factors that facilitate or impede the starting and maintenance of breastfeeding within the first 8 weeks (including expressed breast milk), and that relate to: (i) women's personal experience of breastfeeding and beliefs about breastfeeding; and (ii) women's family and social support networks. Themes will be identified from the available literature. The committee identified the following potential themes (however, they are aware that not all of these themes may be found in the literature and that additional themes may be identified): • level of support from family and friends • breast-related health (for example, women may have mastitis, breast engorgement, cracked nipples, breast augmentation) • accuracy of information • emotional wellbeing

Field	Content
	• amount of sleep • time available • pain. These factors can act as either facilitators or barriers. The committee agreed that information and support was an expected theme in the literature. However information and support from health care professionals, professional peer supporters, voluntary-led community support groups or information from internet resources is covered by separate review questions and therefore will be excluded from this review. Factors relating to employment conditions will be excluded, as the statutory maternity leave in the UK is 52 weeks (made up of 26 weeks of ordinary maternity leave and 26 weeks of additional maternity leave) and this guideline focuses on the first 8 weeks after birth.
Outcomes and prioritisation	Non applicable, qualitative review
Eligibility criteria – study design	Published full-text papers only Qualitative studies (for example, studies that use interviews, focus groups, or observations) Exclusions: • purely quantitative studies (including surveys reporting only quantitative data) • surveys reporting qualitative data • conference abstracts will not be considered. Studies will be prioritised for inclusion if they: • provide comprehensive data, for example covering a wide section of the review population or cover a wide range of themes • were published more recently.

Field	Content
	During data extraction of full texts, data saturation will be monitored and if reached, then exclusions will be made. This means that less comprehensive studies and older studies may be excluded due to data saturation.
Other inclusion exclusion criteria	Studies from the UK only. Cut-off dates: everything post-1995. If data saturation isn't reached, post-1980s. Reason: In 1995 BFI was implemented in the UK and in 1980s the pattern of breastfeeding changed (recognition of its importance).
Proposed sensitivity/sub-group analysis, or meta-regression	Groups that will be reviewed and analysed separately: • singletons versus twins • young women (19 years or under) • women with physical and cognitive disabilities • women with severe mental health illness • women who have difficulty accessing postnatal care services. In the presence of incoherence of findings, the following sub-groups will be considered: • local breastfeeding rates • breastfeeding experiences with previous children.
Selection process – duplicate screening/selection/analysis	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 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. This review question was not prioritised for health economic analysis and so no formal dual weeding, study selection (inclusion/exclusion) or data extraction into evidence tables will be undertaken. (However, internal (NGA) quality assurance processes will include consideration of the outcomes of weeding, study selection and data extraction and the committee will review the results of study selection and data extraction).
Data management (software)	GRADE-CERQual will be used to assess the confidence in the findings from a thematic analysis
Information sources – databases and dates	The following databases will be searched: • CINAHL • Embase

Field	Content
	• EMCare • MEDLINE and MEDLINE IN-PROCESS • PsycINFO Searches will be restricted by: • Date limitations: 1980 to 27th March 2018 • English language • Qualitative/patient concerns • UK geographic studies
Identify if an update	Not an update
Author contacts	National Guideline Alliance https://www.nice.org.uk/guidance/indevelopment/gid-ng10070
Highlight if amendment to previous protocol	Not applicable
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). An economic review will not be undertaken, as this is a qualitative systematic review question.
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables). Economic evidence is not available as this is a qualitative systematic review.
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) Confidence in the Evidence from Reviews of Qualitative Research' developed by the international GRADE working group https://www.cerqual.org/
Criteria for quantitative synthesis (where suitable)	Not applicable as this is a qualitative review

Field	Content
Methods for analysis – combining studies and exploring (in)consistency	For a full description of methods see Supplement 1
Meta-bias assessment – publication bias, selective reporting bias	Not applicable as this is a qualitative review
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 Dr David Jewell 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 the methods chapter of the full guideline.
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 has not been registered in PROSPERO

BFI: Baby Friendly Initiative; GRADE: Grading of Recommendations Assessment, Development and Evaluation; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; PROSPERO: Prospective Register of Systematic Reviews

Appendix B – Literature search strategies

Literature search strategies for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Clinical search

The search for this topic was last run on 27th March 2018.

Database: Emcare, Embase, Medline, Medline Ahead of Print and In-Process & Other Non-Indexed Citations, PsycINFO – OVID [Multifile]

#	Search
1	breast feeding/ or breast feeding education/ or lactation/
2	1 use emczd, emcr
3	exp breast feeding/ or lactation/
4	3 use ppez
5	breast feeding/ or lactation/
6	5 use psyh
7	(breastfeed* or breast feed* or breastfed* or breast fed or breastmilk or breast milk or expressed milk* or lactat* or (nursing adj (baby or infant* or mother* or neonate* or newborn*))).ti,ab.
8	or/2,4,6-7
9	breast feeding education/ or community care/ or counseling/ or e-counseling/ or group therapy/ or health disparity/ or health education/ or health program/ or health promotion/ or exp health care utilization/ or help seeking behavior/ or home visit/ or mobile phone/ or nutritional counseling/ or parent counseling/ or patient counseling/ or patient education/ or peer counseling/ or peer group/ or social support/ or support group/ or telehealth/ or telemedicine/ or text messaging/
10	9 use emczd, emcr
11	cell phone/ or community health services/ or community networks/ or counseling/ or health education/ or health promotion/ or exp health services accessibility/ or healthcare disparities/ or exp home care services/ or house calls/ or exp patient education as topic/ or peer group/ or self help groups/ or exp social support/ or telemedicine/ or telemetry/ or telephone/ or text messaging/
12	11 use ppez
13	community services/ or counseling/ or peer counseling/ or educational counseling/ or group counseling/ or group psychotherapy/ or exp health care seeking behavior/ or exp health care utilization/ or health disparities/ or health education/ or health promotion/ or health knowledge/ or home visiting programs/ or client education/ or mobile phones/ or social support/ or exp social interaction/ or exp social networks/ or exp support groups/ or telemedicine/ or text messaging/ or treatment barriers/
14	13 use psyh
15	(((access* or barrier* or disparit* or challeng* or facilitat* or imped* or utilis* or utiliz*) adj10 (care or service*)) or ((access* or barrier* or challeng* or disparit* or facilitat* or utilis* or utiliz*) adj3 (breastfeed* or breast feed* or breastfed* or breast fed or expressed milk or lactat*))).ti,ab.
16	((cessat* or continu* or difficult* or discontinue* or encourag* or promot* or support*) adj3 (breastfeed* or breast feed* or breastfed* of breast fed or expressed milk or lactat*)).ti,ab.

#	Search
17	(((intervention* or program*) adj5 (breastfeed* or breast feed* or breastfed* of breast fed or expressed milk or lactat*)) or ((counsel* or educat* or knowledge or information or support*) adj3 (breastfeed* or breast feed* or breastfed* of breast fed or exclusive breastfeed* or expressed milk or lactat*))).ti,ab.
18	(best start program* or centering pregnan*).ti,ab.
19	((intervention* or program*) adj10 (breastfeed* or breast feed* or breastfed* of breast fed or exclusive breastfeed* or expressed milk or lactat*) adj2 (incidence* or duration or influenc* or initiat* or maintain* or rate* or start*)).ti,ab.
20	((improv* or lower* or increas* or decreas*) adj2 (breastfeed* or breast feed* or breastfed* of breast fed or exclusive breastfeed* or expressed milk or lactat*) adj2 (incidence* or duration* or influenc* or initiat* or maintain* or rate* or start*)).ti,ab.
21	or/10,12,14-20
22	exp breast disease/ or breast implant/ or exhaustion/ or lactation disorder/ or exp mastitis/ or sleep deprivation/ or anxiety/ or exp depression/ or pain.hw.
23	22 use emczd, emcr
24	anxiety/ or breast diseases/ or exp lactation disorders/ or exp mastitis/ or breast implants/ or physical exertion/ or sleep deprivation/ or depression, postpartum/ or depression/ or pain.hw.
25	24 use ppez
26	fatigue/ or sleep deprivation/ or postpartum depression/ or major depression/ or anxiety/ or pain*.hw.
27	26 use psyh
28	(((breast* or nipple*) adj2 (cracked or engorge* or injury or infection or inflam* or lesion)) or (breast adj (augment* or implant*)) or mastitis or exhaustion or fatigue or physical exhertion or tiredness or (sleep* adj2 (lack of*1 or insufficient or deprive* or reduced)) or (time adj2 (lack of*1 or insufficient or reduced)) or (inaccurate adj2 information) or depres* or pain).ti,ab.
29	or/23,25,27-28
30	cluster analysis/ or content analysis/ or discourse analysis/ or ethnography/ or grounded theory/ or health care survey/ or exp interviews/ or narrative/ or nursing methodology research/ or observation/ or personal experience/ or phenomenology/ or qualitative research/ or questionnaire/ or exp recording/
31	30 use emczd, emcr
32	anthropology, cultural/ or cluster analysis/ or focus groups/ or grounded theory/ or health care surveys/ or interview.pt. or interviews as topic/ or narration/ or nursing methodology research/ or observation/ or personal narratives as topic/ or personal narrative/ or qualitative research/ or “surveys and questionnaires”/ or sampling studies/ or tape recording/ or videodisc recording/
33	32 use ppez
34	"experiences (events)"/ or cluster analysis/ or content analysis/ or discourse analysis/ or ethnography/ or grounded theory/ or interviewers/ or interviewing/ or interviews/ or narratives/ or observation methods/ or phenomenology/ or qualitative methods/ or questionnaires/ or questioning/ or exp surveys/ or tape recorders/
35	34 use psyh
36	(qualitative* or interview* or focus or group* or questionnaire* or narrative* or narration* or survey*).ti,ab.
37	(ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic adj4 analys*) or theoretical sampl* or purposive sampl*).tw.

#	Search
38	(hermeneutic* or heidegger* or husser* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).tw.
39	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them*).tw.
40	(critical interpretive synthes* or (realist adj (review* or synthes*)) or (noblit and hare) or (meta adj (method or triangulation)) or (cerqual or conqual) or ((thematic or framework) adj synthes*)).tw.
41	or/31,33,35-40
42	((brother* or famil* or father* or husband* or mother* or partner* or relative* or sibling* or sister* or spous*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)).ti,ab.
43	((consumer* or inpatient* or in-patient* or mother* or parent* or patient* or wife* or wive* or women* or woman*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)).ti,ab.
44	((clinician* or counselor* or counsellor* or health worker* or health visitor* or midwi* or nurs* or personnel* or physician* or professional*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)).ti,ab.
45	or/42-44
46	or/41,45
48	united kingdom/
49	(national health service* or nhs*).ti,ab,in,ad.
50	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
51	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jw,in,ad.
52	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or

#	Search
	(york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in,ad.
53	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in,ad.
54	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in,ad.
55	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in,ad.
56	or/48-55
57	(exp "arctic and antarctic"/ or exp oceanic regions/ or exp western hemisphere/ or exp africa/ or exp asia/ or exp "australia and new zealand"/) not (united kingdom/ or europe/)
58	56 not 57
59	58 use emczd, emcr
60	exp united kingdom/
61	(national health service* or nhs*).ti,ab,in.
62	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
63	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jw,in.
64	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in.
65	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in.
66	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in.
67	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in.

#	Search
68	or/60-67
69	(exp africa/ or exp americas/ or exp antarctic regions/ or exp arctic regions/ or exp asia/ or exp oceania/) not (exp great britain/ or europe/)
70	68 not 69
71	70 use ppez
72	(national health service* or nhs*).ti,ab,in,cq.
73	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
74	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jx,in,cq.
75	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in,cq.
76	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in,cq.
77	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in,cq.
78	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in,cq.
79	or/72-78
80	79 use psyh
81	or/59,71,80
82	8 and or/21,29 and 46 and 81
83	limit 82 to yr="1980 - current"
84	limit 83 to english language

1 **Database:** CINAHL Plus [Proquest]

#	Searches
S58	S4 AND S42 AND S56 AND S57
S57	S5 OR S6 OR S7 OR S8
S56	S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55
S55	TI (((clinician* or counselor* or counsellor* or "health worker*" or "health visitor*" or midwi* or nurs* or personnel* or physician* or professional*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*))) OR AB (((clinician* or counselor* or counsellor* or "health worker*" or "health visitor*" or midwi* or nurs* or personnel* or physician* or professional*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)))
S54	TI (((consumer* or inpatient* or "in-patient*" or mother* or parent* or patient* or wife* or wive* or women* or woman*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*))) OR AB (((consumer* or inpatient* or "in-patient*" or mother* or parent* or patient* or wife* or wive* or women* or woman*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)))
S53	TI (((brother* or famil* or father* or husband* or mother* or partner* or relative* or sibling* or sister* or spous*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*))) OR AB (((brother* or famil* or father* or husband* or mother* or partner* or relative* or sibling* or sister* or spous*) n6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)))
S52	TI (("critical interpretive synthes*" or (realist n1 (review* or synthes*)) or (noblit and hare) or (meta n1 (method or triangulation)) or (cerqual or conqual) or ((thematic or framework) n1 synthes*))) OR AB (("critical interpretive synthes*" or (realist n1 (review* or synthes*)) or (noblit and hare) or (meta n1 (method or triangulation)) or (cerqual or conqual) or ((thematic or framework) n1 synthes*)))
S51	TI ((metasynthes* or "meta-synthes*" or metasummar* or "meta-summar*" or metastud* or "meta-stud*" or metathem* or "meta-them*")) OR AB ((metasynthes* or "meta-synthes*" or metasummar* or "meta-summar*" or metastud* or "meta-stud*" or metathem* or "meta-them*"))
S50	TI ((hermeneutic* or heidegger* or husser* or colaizzi* or "van kaam*" or "van manen*" or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*)) OR AB ((hermeneutic* or heidegger* or husser* or colaizzi* or "van kaam*" or "van manen*" or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*))
S49	TI ((ethno* or emic or etic or phenomenolog* or "grounded theory" or "constant compar*" or (thematic n4 analys*) or "theoretical sampl*" or "purposive sampl*")) OR AB ((ethno* or emic or etic or phenomenolog* or "grounded theory" or "constant compar*" or (thematic n4 analys*) or "theoretical sampl*" or "purposive sampl*"))
S48	TI ((qualitative* or interview* or focus or group* or questionnaire* or narrative* or narration* or survey*)) OR AB ((qualitative* or interview* or focus or group* or questionnaire* or narrative* or narration* or survey*))
S47	(MH "Questionnaires") OR (MH "Open-Ended Questionnaires")
S46	(MH "Qualitative Studies")
S45	(MH "Narratives")

#	Searches
S44	PT interview*
S43	(MH "Surveys")
S42	S30 OR S40 OR S41
S41	TI ((breastfeed* or breast feed*) adj2 (duration or initiation or support* or promot*))
S40	S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39
S39	TI ((((breast* or nipple*) n2 (cracked or engorge* or injur* or infection or inflam* or lesion)) or (breast n1 (augment* or implant*)) or mastitis or exhaustion or fatigue or “physical exhertion” or tiredness or (sleep* n2 (lack of*1 or insufficient or deprive* or reduced)) or (time n2 (lack of*1 or insufficient or reduced)) or (inaccurate n2 information) or depres* or pain)) OR AB ((((breast* or nipple*) n2 (cracked or engorge* or injury or infection or inflam* or lesion)) or (breast n1 (augment* or implant*)) or mastitis or exhaustion or fatigue or “physical exhertion” or tiredness or (sleep* n2 (lack of*1 or insufficient or deprive* or reduced)) or (time n2 (lack of*1 or insufficient or reduced)) or (inaccurate n2 information) or depres* or pain))
S38	MW pain*
S37	(MH "Depression")
S36	(MH "Depression, Postpartum")
S35	(MH "Sleep Deprivation") OR (MH "Sleep Deprivation (Saba CCC)")
S34	(MH "Exertion")
S33	(MH "Breast Implants")
S32	(MH "Mastitis")
S31	(MH "Lactation Disorders+")
S30	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29
S29	TI (((improv* or lower* or increas* or decreas*) n2 (breastfeed* or breast feed* or breastfed* of “breast fed” or “exclusive breastfeed*” or “expressed milk” or lactat*) n2 (incidence* or duration* or influenc* or initiat* or maintain* or rate* or start*))) OR AB (((improv* or lower* or increas* or decreas*) n2 (breastfeed* or breast feed* or breastfed* of “breast fed” or “exclusive breastfeed*” or “expressed milk” or lactat*) n2 (incidence* or duration* or influenc* or initiat* or maintain* or rate* or start*)))
S28	TI (((intervention* or program*) n10 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or exclusive breastfeed* or “expressed milk” or lactat*) n2 (incidence* or duration or influenc* or initiat* or maintain* or rate* or start*))) OR AB (((intervention* or program*) n10 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or exclusive breastfeed* or “expressed milk” or lactat*) n2 (incidence* or duration or influenc* or initiat* or maintain* or rate* or start*)))
S27	TI ((“best start program*” or “centering pregnan*”)) OR AB ((“best start program*” or “centering pregnan*”))
S26	TI (((intervention* or program*) n5 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or “expressed milk” or lactat*))) OR AB (((intervention* or program*) n5 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or “expressed milk” or lactat*)))
S25	TI (((counsel* or educat* or knowledge or information or support*) n3 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or “exclusive breastfeed*” or “expressed milk” or lactat*))) OR AB (((counsel* or educat* or knowledge or information or support*) n3 (breastfeed* or “breast feed*” or breastfed* of “breast fed” or “exclusive breastfeed*” or “expressed milk” or lactat*)))
S24	TI (((barrier* or cessation* or challeng* or continu* or difficult* or discontinue* or encourag* or facilit* or imped* or promot* or support*) n3 (breastfeed* or “breast feed*” or breastfed* or “breast fed” or “expressed milk” or lactat*))) OR AB (((barrier* or cessation*

#	Searches
	or challeng* or continu* or difficult* or discontinue* or encourag* or facilit* or imped* or promot* or support*) n3 (breastfeed* or “breast feed*” or breastfed* or “breast fed” or “expressed milk” or lactat*)))
S23	(MH "Text Messaging")
S22	(MH "Support Groups")
S21	(MH "Telehealth")
S20	(MH "Support Group (Iowa NIC)")
S19	(MH "Social Support (Iowa NOC)")
S18	(MH "Peer Group")
S17	(MH "Peer Counseling")
S16	(MH "Patient Education") OR (MH "Patient Education (Iowa NIC)")
S15	(MH "Nutritional Counseling") OR (MH "Nutritional Counseling (Iowa NIC)")
S14	(MH "Cellular Phone")
S13	(MH "Home Visits")
S12	(MH "Health Promotion")
S11	(MH "Health Education")
S10	(MH "Therapy Group (Iowa NIC)")
S9	(MH "Counseling")
S8	TI ((breastfeed* or breast feed* or breastfed* or “breast fed” or breastmilk or “breast milk” or “expressed millk*” or lactat* or (nursing n1 (baby or infant* or mother* or neonate* or newborn*)))) OR AB ((breastfeed* or breast feed* or breastfed* or “breast fed” or breastmilk or “breast milk” or “expressed millk*” or lactat* or (nursing n1 (baby or infant* or mother* or neonate* or newborn*))))
S7	(MH "Lactation")
S6	(MH "Breast Feeding+")
S5	(MH "Infant Food")
S4	S1 OR S2 OR S3
S3	TI ((nullipara* or “peri natal*” or perinatal* or postbirth or “post birth” or postdelivery or “post delivery” or postnatal* or “post natal*” or postpartum or “post partum*” or primipara* or puerpera* or puerperal* or puerperium or puerperium*)) OR AB ((nullipara* or “peri natal*” or perinatal* or postbirth or “post birth” or postdelivery or “post delivery” or postnatal* or “post natal*” or postpartum or “post partum*” or primipara* or puerpera* or puerperal* or puerperium*))
S2	(MH "Postnatal Care")
S1	(MH "Postnatal Period")

Health economic search

The search for this topic was last run on 5th December 2019.

Database: Emcare, Embase, Medline, Medline Ahead of Print and In-Process & Other Non-Indexed Citations – OVID [Multifile]

#	Search
1	puerperium/ or perinatal period/ or postnatal care/
2	1 use emczd, emcr
3	postpartum period/ or peripartum period/ or postnatal care/
4	3 use ppez

#	Search
5	(nullipara* or peri natal* or perinatal* or postbirth or post birth or postdelivery or post delivery or postnatal* or post natal* or postpartum* or post partum* or primipara* or puerpera* or puerperium* or ((after or follow*) adj2 birth*)).ti,ab.
6	or/2,4-5
7	breast feeding/ or breast feeding education/ or lactation/
8	7 use emczd, emcr
9	exp breast feeding/ or lactation/
10	9 use ppez
11	(breastfeed* or breast feed* or breastfed* or breastfeed* or breast fed or breastmilk or breast milk or expressed milk* or lactat* or (nursing adj (baby or infant* or mother* or neonate* or newborn*))).ti,ab.
12	or/8,10-11
13	artificial food/ or bottle feeding/ or infant feeding/
14	13 use emczd, emcr
15	bottle feeding/ or infant formula/
16	15 use ppez
17	(((bottle or formula or synthetic) adj2 (artificial or fed or feed* or infant* or milk*)) or (artificial adj (formula or milk)) or bottlefed or bottlefeed or cup feeding or (milk adj2 (substitut* or supplement*)) or ((infant or milk or water or glucose or dextrose or formula) adj supplement) or formula supplement* or supplement feed or milk feed or ((baby or babies or infant* or neonate* or newborn*) adj (formula* or milk)) or formulafeed or formulated or (milk adj2 powder*) or hydrolyzed formula* or (((feeding or baby or infant) adj bottle*) or infant feeding or bottle nipple* or milk pump*)).ti,ab.
18	or/14,16-17
19	or/6,12,18
20	budget/ or exp economic evaluation/ or exp fee/ or funding/ or exp health care cost/ or health economics/
21	20 use emczd, emcr
22	exp budgets/ or exp "costs and cost analysis"/ or economics/ or exp economics, hospital/ or exp economics, medical/ or economics, nursing/ or economics, pharmaceutical/ or exp "fees and charges"/ or value of life/
23	22 use ppez
24	budget*.ti,ab. or cost*.ti. or (economic* or pharmaco?economic*).ti. or (price* or pricing*).ti,ab. or (cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab. or (financ* or fee or fees).ti,ab. or (value adj2 (money or monetary)).ti,ab.
25	or/21,23-24
26	economic model/ or quality adjusted life year/ or "quality of life index"/
27	(cost-benefit analysis.sh. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.)
28	((quality of life or qol).tw. and cost benefit analysis.sh.)
29	or/26-28 use emczd, emcr
30	models, economic/ or quality-adjusted life years/
31	(cost-benefit analysis.sh. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.)
32	((quality of life or qol).tw. and cost-benefit analysis.sh.)
33	or/30-32 use ppez

#	Search
34	(eq-5d* or eq5d* or eq-5* or eq5* or euroqual* or euro qual* or euroqual 5d* or euro qual 5d* or euro qol* or euroqol*or euro quol* or euroquol* or euro quol5d* or euroquol5d* or eur qol* or eurqol* or eur qol5d* or eurqol5d* or eur?qul* or eur?qul5d* or euro* quality of life or european qol).tw.
35	(euro* adj3 (5 d* or 5d* or 5 dimension* or 5dimension* or 5 domain* or 5domain*)).tw.
36	(hui or hui2 or hui3).tw.
37	(illness state* or health state*).tw.
38	(multiattibute* or multi attribute*).tw.
39	(qaly* or qal or qald* or qale* or qtime* or qwb* or daly).tw.
40	(quality adjusted or quality adjusted life year*).tw.
41	(sf36 or sf 36 or sf thirty six or sf thirtysix).tw.
42	sickness impact profile.sh.
43	(time trade off*1 or time tradeoff*1 or tto or timetradeoff*1).tw.
44	(utilit* adj3 (score*1 or valu* or health* or cost* or measur* or disease* or mean or gain or gains or index*)).tw.
45	utilities.tw.
46	((qol or hrqol or quality of life).tw. or *quality of life/) and ((qol or hrqol* or quality of life) adj2 (change*1 or declin* or decreas* or deteriorat* or effect or effects or high* or impact*1 or impacted or improve* or increas* or low* or reduc* or score or scores or worse)).ab.
47	quality of life.sh. and ((health-related quality of life or (health adj3 status) or ((quality of life or qol) adj3 (chang* or improv*)) or ((quality of life or qol) adj (measure*1 or score*1))).tw. or (quality of life or qol).ti. or ec.fs.)
48	or/29,33-47
49	or/25,48
50	19 and 50
51	limit 50 to english language
52	(animals/ not humans/) or exp animals, laboratory/ or exp animal experimentation/ or exp models, animal/ or exp rodentia/
53	52 use ppez
54	(animal/ not human/) or nonhuman/ or exp animal experiment/ or exp experimental animal/ or animal model/ or exp rodent/
55	54 use emczd, emcr
56	(rat or rats or mouse or mice).ti.
57	or/53,55-56
58	51 not 57

1 **Database:** HTA, NHS EED (global) [CRD Web]

#	Search
1	mesh descriptor postpartum period in hta, nhs eed
2	mesh descriptor peripartum period in hta, nhs eed
3	mesh descriptor postnatal care hta, nhs eed
4	(nullipara* or peri natal* or perinatal* or postbirth or post birth or postdelivery or post delivery or postnatal* or post natal* or postpartum* or post partum* or primipara* or puerpera* or puerperium* or ((after or follow*) near2 birth*)) hta, nhs eed
5	#1 or #2 or #3 or #4

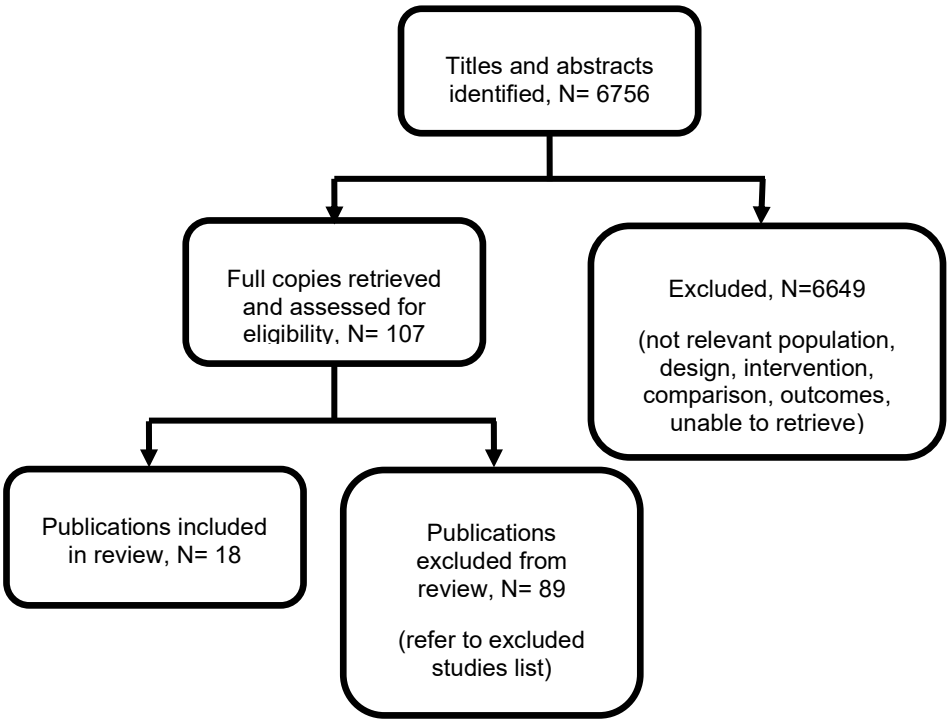
#	Search
6	mesh descriptor breast feeding explode all trees hta, nhs eed
7	mesh descriptor lactation hta, nhs eed
8	(breastfeed* or breast feed* or breastfed* or breastfeed* or breast fed or breastmilk or breast milk or expressed milk* or lactat* or (nursing next (baby or infant* or mother* or neonate* or newborn*))) hta, nhs eed
9	#6 or #7 or #8
10	mesh descriptor bottle feeding hta, nhs eed
11	mesh descriptor infant formula hta, nhs eed
12	(((bottle or formula or synthetic) near2 (artificial or fed or feed* or infant* or milk*)) or (artificial next (formula or milk)) or bottlefed or bottlefeed or cup feeding or (milk near2 (substitut* or supplement*)) or ((infant or milk or water or glucose or dextrose or formula) next supplement) or formula supplement* or supplement feed or milk feed or ((baby or babies or infant* or neonate* or newborn*) next (formula* or milk)) or formulafeed or formulated or (milk near2 powder*) or hydrolyzed formula* or (((feeding or baby or infant) next bottle*) or infant feeding or bottle nipple* or milk pump*)) hta, nhs eed
13	#10 or #11 or #12
14	#5 or #9 or #13

1

Appendix C – Clinical evidence study selection

Study selection for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Figure 1: Study selection flow chart



Appendix D – Clinical evidence tables

Evidence tables for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Table 4: Evidence tables

Study details	Participants	Methods	Findings	Comments
Full citation: Bailey, C., Pain, R. H., Aarvold, J. E., A 'give it a go' breast-feeding culture and early cessation among low-income mothers, Midwifery, 20, 240-250, 2004 Ref Id 693922 **Study type**: Qualitative **Aim of the study:** To 'examine cultural expectations and experiences of breast feeding amongst first time mothers from low-income areas, in order to improve understanding of why many cease breast feeding in the early days of their babies' lives'.	**Sample size** N=16 women **Characteristics** Fifteen women out of 16 had been in employment before becoming pregnant. All were living with the baby's father at the time of the research. One pregnancy was the result of IVF treatment. All women delivered healthy babies at a local hospital. One woman gave birth to twins. Four women had emergency caesarean sections. **Inclusion criteria** Women expecting their first baby, who lived in low-income areas and who had expressed an intention to breast feed.	**Setting** Low-income areas of North Tyneside, north-east England, with low rates of breastfeeding initiation (54% in the borough of North Tyneside, with wide variations between postcode areas). "Practice in supporting women in the study area is as follows. With healthy deliveries, most women are discharged from hospital within two to five days. They are then handed over to a community midwife who visits for 10 days, the first visit taking place within a day or two of hospital discharge. After 10 days, the midwives hand over care to the local health visitor who visits a few days later, again at six to eight weeks and finally at three months post-delivery". **Sample selection** 'Sampling for the research study was purposive. With the	**Findings reported in the study** A 'give it a go' breastfeeding culture A pervasive bottle-feeding culture The transfer from hospital to home The first few weeks: negotiating a successful breast-feeding trajectory.	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design**: The authors justify the methods they used because they mention that a 'qualitative approach in a home setting generally puts respondents more at ease, and provides for greater elaboration and explanation of their attitudes than surveys'. The authors also mention that with grounded theory, 'data analysis takes place concurrently with data

Study details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out: UK **Study dates:** Not reported **Source of funding**: Northern and Yorkshire NHS Regional Office provided funding for the research	**Exclusion criteria** Not reported	agreement of the midwifery service, participants were accessed through midwives working in a range of local initiatives including Community Midwifery Services, Sure Start, parentcraft classes and a special education unit for teenage mothers. The fieldworker made an introductory telephone call to each potential participant to arrange the first interview. [...] Details of 21 women were passed on to the fieldworker, of whom 16 were interviewed'. **Data collection** 'Two semi-structured face-to-face interviews were carried out with the 16 women, at approximately 37 weeks in pregnancy and again when their babies were three to nine weeks old'. Interviews were carried out in participants' homes. The two interviews were guided by two different agendas. In both interviews, women were also encouraged to discuss other issues that they felt had relevance to their experiences of breast feeding. Interviews were tape recorded. **Data analysis**		collection and in this way a more specific focus emerges as analysis proceeds'. **Recruitment strategy:** Sample selection was clearly reported. However, the authors do not explain why, after arranging the first interview and seeking written consent with 21 women, only 16 women were interviewed. **Data collection:** Data collection relied on interviews. There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researcher and participants:** The authors discussed the potential influences of the interviewers, because they mention that women may have felt judged as mothers on the sensitive issue of feeding and this may have affected their responses. **Ethical issues:** Ethical approval was obtained and

Study details	Participants	Methods	Findings	Comments
		The theoretical underpinning for the data analysis was grounded theory (Strauss and Corbin, 1997; Bailey et al., 1999). Field notes and interview synopses were written up shortly after each interview. Full transcription of interview tapes then took place. The data were subject to qualitative analysis, which began with initial indexing by the fieldworker using categories derived from the interviews and the group discussion. These initial categories were subject to validation and/or challenge after field-work was completed. A sample of interviews were subject to cross-researcher checking by all members of the research team. Key findings were then drawn out, and interpretation and implications were developed with members of the research team. The findings were presented at a group meeting of the local community midwife team, and their feedback and evaluation have been taken into account in drawing out findings and conclusions'.		written consent was sought from participants. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were highlighted by the authors, for example they point out the contradiction between seeing breastfeeding as natural and an expectation of failure. **Findings**: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, a sample of the data was subject to checking by other researchers. Moreover, respondent validation was carried out. **Value of research:** The authors discussed transferability of the findings to other populations as they

Study details	Participants	Methods	Findings	Comments
				mentioned that findings 'are likely to have transferability to women in similar contexts (i.e., living in low-income areas, without many relatives or friends who have successfully breast fed their babies)'..The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concern**s: Minor **Other information** In this paper, 'bottle-feeding' describes the feeding of artificial milk. 'Mixed feeding' is used where mothers give a combination of breast and artificial milk.
Full citation Brown, A., Raynor, P., Lee, M., Healthcare professionals' and mothers' perceptions of factors that influence decisions to breastfeed or	**Sample size** N=23 women **Characteristics** Mothers' age ranged between 17 and 36 years.	**Setting** Areas with varying degrees of social deprivation as measured by the Welsh Index of Multiple Deprivation (WIMD 2008).	**Findings reported in the study** Formula feeding as the norm Body image	**Limitations** Limitations (assessed using the CASP qualitative checklist.)

Study details	Participants	Methods	Findings	Comments
formula feed infants: a comparative study, Journal of Advanced Nursing, 67, 1993-2003, 2011 Ref Id 805380 **Study type** Descriptive qualitative design. **Aim of the study** To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant **Country/ies where the study was carried out** UK **Study dates** Data was collected during 2007-2008. **Source of funding** Amy Brown was funded by an ESRC doctoral fellowship.	17 women were first-time mothers. Each had an infant aged between 6 and 12 months. All mothers formula fed from birth or breastfed for 6 weeks or less. 15 mothers had initiated breastfeeding at birth, and breastfeeding duration ranged from 3 days to 6 weeks. Eight had formula fed. Those who had had more than one child discussed their experiences of feeding all children, but focused primarily on their youngest. **Inclusion criteria** Not reported. **Exclusion criteria** Infants with low birth weight (< 2500 g), born prematurely (< 37 weeks) or had serious health or developmental problems which would have severely affected on breastfeeding.	**Sample selection** Mothers were recruited through posters placed in local nurseries and community centres hosting mother and baby groups. **Data collection** Semi-structured interviews. An interview schedule was used. Mothers were interviewed at a suitable location of their choice, e.g. own home, university premises or a quiet area at a community centre. Interviews were varied in time, but typically lasted around 1.5–2 hours. Interviews were tape-recorded and additional written notes were taken. All data was transcribed by the interviewer. **Data analysis** For each set, content analysis was performed on each script. Each script was read through from start to finish and emerging themes were identified and coded. Overarching themes were identified and categories grouped into these.	Formula feeding is viewed as more convenient Other people can give a formula feed to the infant Breastfeeding as difficult Lack of confidence Increasing breastfeeding duration	**Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design**: The authors do not justify the methods they used. **Recruitment strategy:** Sample selection was clearly reported. **Data collection:** Data collection relied on interviews. There is a clear description of how interviews were conducted. Saturation of data was discussed; the authors mention that data collection continued until saturation had been achieved and no new themes were emerging once approximately 70% of participants had been interviewed. Relationship between researcher and participants: The authors did not discuss the potential

Study details	Participants	Methods	Findings	Comments
				influences of the researchers. **Ethical issues:** The study received ethical approval. **Data analysis:** The analytical process was described but use of predefined methods from the literature was not mentioned. It is clear how themes and categories were identified. Contradictory data was not discussed. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not specify what steps, if any, they took to check credibility of the findings. **Value of research:** In relation to transferability of the findings to other populations, the authors mention that although mothers 'came from a range of socio-economic backgrounds, they were self-

Study details	Participants	Methods	Findings	Comments
				selected; those with an interest in discussing breastfeeding, potentially because of negative experiences, may have chosen to take part. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concerns**: minor **Other information** This study also reported the views of health professionals. These were not extracted. The study was included because the findings for mothers and health professionals are separated in the publication. The authors also specify that in the analysis process, professionals' and mothers' responses were considered separately.
Full citation	**Sample size** N=61 women	**Setting** Two hospitals in the North of England, UK. 'The maternity units within the hospitals were fairly	**Findings reported in the study**	**Limitations**

Study details	Participants	Methods	Findings	Comments
Dykes,F., 'Supply' and 'demand': breastfeeding as labour, Social Science and Medicine, 60, 2283-2293, 2005 Ref Id 174945 **Study type** Qualitative **Aim of the study** To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. **Country/ies where the study was carried out** UK **Study dates** 2000 and 2001 **Source of funding** This study was supported by the University of Central Lancashire, Faculty of Health infrastructure funding.	**Characteristics** Age range: 17-42 Mode of birth: vaginal birth: n=48 (11 instrumentally assisted); caesarean section: n=13. Primiparous: n=40; multiparous: n=121 Ethnicity: English-speaking, South Asian: n=5; English-speaking whites: n=56 The women represented a range from higher to lower socio-economic occupation status. **Inclusion criteria** The study included women who were admitted to the postnatal wards who had initiated breastfeeding and were able to communicate in written and verbal English. **Exclusion criteria** The study excluded women whose babies were being cared for on the neonatal unit and women with serious	typical of those in the UK, with women being placed under the 'supervision' of a consultant obstetrician, but largely attended to by midwives, unless medical intervention was required. Women came to the hospitals to labour and birth and then spent 2–5 days on a postnatal ward before going home'. **Sample selection** The postnatal women who fulfilled the inclusion criteria and were available for observation/interview were approached to participate. Seven declined to participate. **Data collection** 'Focused' interviews. A tape recorder was utilised where appropriate. **Data analysis** Ethnographic approach. Interviews were 'transcribed and developed into basic, organising and global themes utilising thematic networks analysis (Attride-Stirling, 2001). To support a critical analysis, further readings of the transcripts were conducted to identify issues related to	Breast milk beneficial to the baby's health The "breast milk is natural" Breastfeeding as the "correct" behaviour Intimacy, closeness and nurture Supplying: women's lack of confidence and trust in their ability to produce enough milk or milk of the right quality Inability to measure and visualise how much the baby is getting concerns about delivery to the baby Colostrum and "proper" milk Confidence in the skill of breastfeeding Preoccupation with feed frequencies and concerns regarding erratic disruptions Producing a "good baby" and limiting his/her demands Breasts as "dummies" Nipple pain	Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that an ethnographic approach was used that 'focused upon a specific aspect of activity within a given community (Hammersley & Atkinson, 1995), in this case women's experiences of breastfeeding on postnatal wards'. **Recruitment strategy:** Sample selection was clearly reported. **Data collection**: Unclear if a guide was used during interviews. Saturation of data was not discussed. Relationship between researcher and participants:

Study details	Participants	Methods	Findings	Comments
	obstetric, medical or emotional complications following childbirth.	ideology, power and control' (Thomas 1993)'.		The authors did not discuss the potential influences of the researchers. **Ethical issues:** Ethical approval was obtained. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were identified. There was some discussion of contradictory data, although this was not extracted because it related to the role of health professionals in reinforcing or weakening the mechanistic notions of supplying. **Findings**: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not specify what steps, if any, were undertaken to check the credibility of the findings.

Study details	Participants	Methods	Findings	Comments
				Value of research: The authors did not discuss the transferability of the findings to other populations. Overall, the authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice. **Overall methodological concerns**: Moderate **Other information** Please note, this study also focused on interactions between health professionals and women. However, information relating to this topic was not extracted for this review because it was outside the scope of the question.
Full citation Dykes, F., Moran, V. H., Burt, S., Edwards, J., Adolescent mothers and breastfeeding: experiences and support needs--an exploratory study, Journal of Human Lactation, 19, 391-401, 2003 Ref Id 805781	**Sample size** N= 13 Characteristics Participants who took part in the interview phase: White, age range 14-19 years. Babies aged 6-10 weeks old.	**Setting** North West of England **Sample selection** To identify potential candidates, the hospital staff would inform the researchers when an adolescent mother who had breastfed at least once entered the ward. 26 adolescents were approached, 24	**Findings reported in the study** Emotional support Esteem support Instrumental support Informational support Network support	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was

Study details	Participants	Methods	Findings	Comments
Study type Qualitative **Aim of the study** To explore the experiences and support needs of adolescent mothers who start breastfeeding. **Country/ies where the study was carried out** UK **Study dates** From September 2001 to October 2002 **Source of funding** Received from the UK government Department of Health. Additional funds also sourced from the University of Central Lancashire, Preston.	Twelve were primiparous, one had 2 children. Eight participants had ceased breastfeeding within 2 weeks, one at 3 weeks, and four were still breastfeeding at 6 weeks. **Inclusion criteria** Participants were required to be between 13-19 years old, able to communicate in English, have a term healthy baby, and have breastfed at least once. **Exclusion criteria** Known learning difficulties, mental health difficulties, and those who had a baby who was unwell or who had required admission to the neonatal unit.	consented to participate. 13 of the 24 adolescents were interviewed (6 decided no longer wanted to participate, 5 were not contactable). Those who declined participation had characteristics that were similar to those who were interviewed in terms of age, and whether they were primiparous or not. **Data collection** Semi-structured interviews carried out in adolescents own homes. Interviews were taped and transcribed. **Data analysis** Thematic network analysis was used to extract themes. This involved extracting basic themes from the text by analysing each transcript line by line. This process was applied across all transcripts. The basic themes were then grouped to form organizing themes and finally central global themes. Concurrent analysis occurred of field notes, memos, and reflections to enable the elaboration and refinement of the thematic network analysis. The data was coded by two separate researchers, one who was involved in the data collection		appropriate for answering the research question. **Research design:** The authors justify the methods they used **Recruitment strategy:** Sample selection was clearly reported. The authors also give some details on those that consented but were not interviewed (6 no longer wanted to participate and 5 were not contactable; their age range and parity was similar to the ones that were interviewed). **Data collection:** There is a clear description of how interviews were conducted. Saturation of data was discussed; the authors mention that by the 10th interview no new themes were emerging; the saturation was confirmed by conducting 3 further interviews. **Ethical issues:** Ethical approval was obtained.

Study details	Participants	Methods	Findings	Comments
		and the other who was not involved in the data collection but had experience in qualitative data analysis. Discussion and consensus was reached related to the themes.		Informed written consent was obtained. **Relationship between researcher and participants:** The authors do not discuss the potential influences of the interviewers. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were identified. Contradictory data was discussed, because the authors mention that the cultural paradox between the sexual versus the maternal breast appeared to be accentuated in the adolescents. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors mention that to enhance the credibility of the data, 2

Study details	Participants	Methods	Findings	Comments
				researchers coded the research independently. **Value of research:** The authors discuss transferability of the findings to other populations as they mention that it needs to be recognized that the cohort of consenting participants represented a specific unique subgroup of adolescents, that is, those who had commenced breastfeeding it would appear that the themes were particularly relevant to adolescents. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concerns:** Minor **Other information** Data from the focus group phase was not extracted because it was not specific to the first 8 weeks postpartum, given that infants were aged between 2 weeks and 6

Study details	Participants	Methods	Findings	Comments
				months and breastfeeding ranged from 4 days to 5 months.
Full citation Dyson, L., Green, J. M., Renfrew, M. J., McMillan, B., Woolridge, M., Factors influencing the infant feeding decision for socioeconomically deprived pregnant teenagers: the moral dimension, Birth, 37, 141-9, 2010 Ref Id 805782 **Study type** Qualitative **Aim of the study** To examine the psychosocial factors influencing infant feeding intention among pregnant teenagers expecting their first baby and living in deprived urban areas in England. **Country/ies where the study was carried out** UK	**Sample size** N=17 Characteristics Age range: 16-19. Low income (declared by the recruiting health professional). 2 teenagers were single, 15 had a partner. Intended to formula feed: n=9. Intended to breastfeed: n=6. Undecided: n=2. **Inclusion criteria** Pregnant teenagers living in deprived urban areas in the North of England. **Exclusion criteria** Not reported	**Setting** Deprived areas in Leeds, Bradford, Birmingham, and London. **Sample selection** Women were identified and recruited through groups such as parent education programs and antenatal health education programs. Transportation, lunch, and an honorarium of £10 per participant were provided. **Data collection** 4 focus groups. A facilitator and co-facilitator employed the same method for each focus group using a set of open-ended questions to initiate discussion on participants' views of formula feeding or breastfeeding. The protocol detailed introductory and ethical procedures, initial open-ended questions, use of prompts if required, strategies to overcome literacy difficulties, and mechanisms to encourage discourse among members and participation from each individual.	**Findings reported in the study** Moral norms Sexuality of the breast Self-esteem	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that 'An anthropological orientation was adopted to achieve a contextual understanding, which recognizes that ''human meanings and intentions are worked out within the frameworks of social structures''. Authors also mention: 'This analytical orientation enabled the generation of themes for both individual and social processes that appear to underpin these teenagers' beliefs about factors

Study details	Participants	Methods	Findings	Comments
Study dates Not reported **Source of funding** Not reported		Poster materials for small group discussions were standard for all groups. Participants were encouraged to explore issues of importance to them, in their own vocabulary and familiar terminologies. Each focus group was tape-recorded and transcribed in full by the facilitator or co-facilitator, including interpretation of group interaction. Each transcription was checked against the tape by a third party. **Data analysis** A framework method of analysis was used to generate descriptive data of factors influencing infant feeding intention for white pregnant teenagers expecting their first baby and experiencing deprivation. The original accounts and observations of the participants were then revisited to achieve more in-depth analysis of the meaning of the data, according to Ritchie and Spencer. Data were coded, categorized, and revisited generating three overarching themes from 11 original topic areas.		influencing their infant feeding intentions'. The 'recognized methodologies employed for the collection and analysis of focus group data aimed to increase confidence that the emerging themes were a genuine reflection of the diversity of participants' beliefs'. **Sample selection**: Sample selection was clearly reported. **Data collection:** Data collection relied on interviews. There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researcher and participants**: The authors did not discuss the potential influences of the researchers. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were

Study details	Participants	Methods	Findings	Comments
				identified. Contradictory data was discussed, for example in relation to the effect of peer pressure, which could have both a positive and negative effect on intention to breastfeed. The authors comment that 'sexuality of the breast defined the moral limits beyond which constructive peer support did not appear to be possible'. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not specify what they did to check credibility of findings. **Value of research**: The authors discuss transferability of the findings to other populations as they mention that 'Focus group findings were based on the views of white teenagers only' and the views expressed in focus groups are limited to 'white, pregnant teenagers expecting their

Study details	Participants	Methods	Findings	Comments
				first baby and experiencing deprivation in one urban area of northern England'. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns:** moderate
Full citation Hinsliff-Smith, K., Spencer, R., Walsh, D., Realities, difficulties, and outcomes for mothers choosing to breastfeed: primigravid mothers experiences in the early postpartum period (6-8 weeks), Midwifery, 30, e14-e19, 2014 Ref Id 447841 **Study type** Qualitative **Aim of the study** To understand the experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) for primiparous women.	**Sample size** N=26 Characteristics Demographic characteristics not reported. 26 participants initiated breastfeeding. On discharge from hospital 7 were providing artificial milk, one combination feeding (artificial milk and solely expressing breast milk), 18 were exclusively breastfeeding. By the end of the 6-8 weeks period, only 10 mothers were still exclusively breastfeeding. **Inclusion criteria** Antenatal participants over 34 week gestation	**Setting** Participants were recruited from two maternity units (one acute hospital and one community health service maternity unit) of two BFI accredited hospitals in the East Midlands who have a lower rate of breast feeding at 6-8 weeks than the rest of the East Midlands region and lower than the national picture. The authors mention that breastfeeding prevalence was 42% in East Midlands. **Sample selection** The study was advertised in local GP surgeries and antenatal clinics. **Data collection** Two methods used: written diary and interviews. 9 women	**Findings reported in the study** Unpreparedness for breast feeding Unrealistic expectations Dimensions of public feeding Feeding in front of family and relatives Using private facilities in public spaces Mothers breastfeeding "wherever and whenever" Please note, themes relating to information or support from health professionals were not extracted for this review.	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, qualitative research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that phenomenology is 'an approach that seeks to understand human experiences from the perspective of individuals' experiences of life events,

Study details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out UK **Study dates** Interviews were conducted between July and September 2012 **Source of funding** Not reported	who indicated that they intended to breastfeed, and who receive their antenatal and postnatal care in the region **Exclusion criteria** Not reported	completed a diary and were also interviewed, 13 completed a diary only, 4 had an interview only. Diary: mothers recorded something of their choosing regarding their infant feeding experiences daily for six weeks. Interviews lasted 30-55 minutes, took place in the mother's own home, and were recorded and transcribed. **Data analysis** Interpretive phenomenology was used. Common themes were identified across participants to form a pattern of understanding. This involved immersion in the data by reading and re-reading each diary and interview in a search for emerging themes. Individual segments of texts were considered in relation to the overall text, and each sentence was assessed for meaning of the phenomena'. The three researchers carried out simultaneous analysis, and collaborative reflective discussion took place between the researchers to generate deeper insights and understanding.		and the meanings these events have for them'. **Recruitment strategy**: Sample selection was clearly reported. **Data collection:** There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researcher and participants:** The authors did not discuss the potential influences of the interviewers. **Ethical issues**: This study obtained ethical approval. Written consent was obtained from participants and confidentiality and data protection principles were strictly observed. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were

Study details	Participants	Methods	Findings	Comments
				identified. Contradictory data was highlighted. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, the authors mention that they carried out interviews in order to triangulate data from the diaries. Moreover, there was collaborative reflective discussion between three researchers during the analysis process. **Value of research:** In relation to transferability of the findings, the authors provide a description of the study setting and mention that the results are likely to resonate with women's experiences in other similar settings. However the authors do not provide data on the characteristics of the participants except for breastfeeding duration, which limits assessment from the reader of whether findings

Study details	Participants	Methods	Findings	Comments
				are transferrable to other populations. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns**: Minor
Full citation Hunter, L., Magill-Cuerden, J., McCourt, C., Disempowered, passive and isolated: How teenage mothers' postnatal inpatient experiences in the UK impact on the initiation and continuation of breastfeeding, Maternal and Child Nutrition, 11, 47-58, 2015 Ref Id 806258 **Study type** Qualitative **Aim of the study** To explore how the inpatient experiences of a group of young women who gave birth	**Sample size** N=15 **Characteristics** N=15 women aged 16 to 20 who had intended to breastfeed or breastfed. 14/15 women were first-time mothers. Women reflected on their inpatient experience after birth and participated in focus groups when their babies were aged 2 weeks to 21 months. No woman in the sample had breastfed for more than 8 weeks at the time of the focus group. 7/15 had breastfed 'once, twice or not at all'. 12 were White British, 2 were of mixed White	**Setting** The young parent groups from which the participants were drawn were in deprived areas in different rural and urban locations in Oxfordshire. 3 women resided in the city, 1 in a village and 11 in rural towns. **Sample selection** A visit was made by the researcher to the parent groups to fully explain and discuss the study and provide information leaflets. Potential participants were invited to attend a focus group on a subsequent date. **Data collection** The authors planned to have focus groups. Twice, only one woman attended the focus groups, so she was interviewed.	**Findings reported in the study** Pain, immobility, helplessness after birth preventing mothers from relating to their newborns The postnatal ward: alien, alone and exposed Peer relationships and support	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that A qualitative approach using constructivism was utilised to explore the reality that young women constructed in order to make sense of their inpatient experiences and explain their infant feeding

Study details	Participants	Methods	Findings	Comments
as teenagers influenced their feeding decisions and experiences and ascertain their ideals for breastfeeding support. **Country/ies where the study was carried out** UK **Study dates** Not reported **Source of funding** This study was undertaken as part of a PhD funded by the University of West London.	British/Black African heritage and 1 was Portuguese. **Inclusion criteria** Women who had considered breastfeeding, were aged 16 or over, had given birth at age 19 or under and had a good command of spoken English. **Exclusion criteria** If the young parent group leader indicated that a teenager would be distressed by taking part, she was not invited to participate.	Moreover, there were 4 focus groups ranging from 2 to 5 participants. The parent group leader was present as the teenagers indicated that they were used to this person's presence and the data were not concerned with the role of the young parent group. The interviews and focus groups lasted approximately 2 hours. **Data analysis** 'The data were recorded, transcribed verbatim, coded inductively and analysed thematically, as described elsewhere (Hunter & Magill-Cuerden 2014). To confirm the validity of the emerging codes and themes emerging transcripts were analysed by a third person (Lincoln & Guba 1985). Six months following the data collection it was difficult to reconvene the original focus groups to confirm the data as the teenagers had progressed in their lives and left the young parent groups. As it was not possible to undertake retrospective member checking with the original groups, the new members of a young parent group were asked to review the data analysis. They		decisions (Schwandt 2000). Focus groups were selected as an optimum vehicle for enabling the discussion and formation of views in a non-threatening environment (Kitzinger 1995). Open questions were used in a semi-structured format to promote discussion and gain data. **Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how interviews and focus groups were conducted. Saturation of data was not discussed. **Ethical issues:** Ethical approval was obtained. **Relationship between researcher and participants:** The authors discussed the potential influences of the interviewers, because they mention that constructivism recognises that the findings of qualitative research can be influenced by the world view

Study details	Participants	Methods	Findings	Comments
		were able to confirm that the codes and themes resonated with their experiences in hospital'. Findings were separated into time spent on labour ward and time spent on the postnatal ward.		of the researcher, who is intimately bound up in the process of data generation (Charmaz 2000). Reflexive strategies were therefore employed in the current study to ensure the young women's meanings were captured as accurately as possible. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. There was no discussion of contradictory data. In relation to the credibility of the findings emerging concepts were reported back to participants during the course of focus groups; moreover, an inductive approach for data analysis was used, with a second researcher independently reading the transcripts and identifying themes, and findings were validated with young mothers.

Study details	Participants	Methods	Findings	Comments
				Findings: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, authors used multiple strategies, described above, to limit the influence of the researchers. They mention that while the transcripts were reviewed by a third person to agree coding and development of the themes the focus groups and data collection with initial coding were undertaken by one researcher. This could cause bias of the internal validity of the study. However, confirmability of the data was audited through member checking'. **Value of research:** The authors discussed transferability of the findings to other populations as they mentioned that the study 'was limited to one geographical area of the UK though the research gained a view of teenage parents from

Study details	Participants	Methods	Findings	Comments
				differing deprived locations. The findings in this study may not be transferable to a wider population of teenage mothers as the number of participants was small and self-selecting from young parent groups. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for clinical practice. **Overall methodological concerns:** Minor
Full citation Johnson, S., Leeming, D., Williamson, I., Lyttle, S., Maintaining the 'good maternal body': Expressing milk as a way of negotiating the demands and dilemmas of early infant feeding, Journal of Advanced Nursing, 69, 590-599, 2013 Ref Id 806339 **Study type** Qualitative **Aim of the study**	**Sample size** N=7 women **Characteristics** Ethnicity: n=6 White British, n=1 Black Caribbean (paper states 7 were white British but this is assumed to be an error as total number of participants was 7) Mode of birth: Caesarean: n=2, vaginal birth: n=4 (one home birth, one water birth). Any relevant details about the birth: 1 born at 36 weeks and reported to	**Setting** Women were recruited from maternity services connected to a hospital in central England. **Sample selection** Thirty-two women who intended to breastfeed were recruited to the larger study. Seven who extensively expressed were recruited for this study. **Data collection** Audio-diary and semi-structured interview data were drawn from a larger study of the lived experience of breastfeeding (please see Williamson 2012).	**Findings reported in the study** A 'desperate' solution in difficult times A way of deflecting accusations of poor mothering A way of monitoring and improving the efficiency of the provision of human milk A door to freedom?	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that they used two data collection methods (audio-diaries and semi-

Study details	Participants	Methods	Findings	Comments
'To report a descriptive study of early infant feeding experiences focusing on accounts of women who expressed milk extensively in the first few weeks postpartum'. **Country/ies where the study was carried out** UK **Study dates** Data were drawn from a larger study which took place in 2006-2007. The larger study took place over a 10-month period in 2006–2007, with data collection for this sample occurring over 4 months in 2006. **Source of funding** This study was supported by a British Academy Large Grant (Grant # 37524).	be small (3050 g, 6 lbs 11 1/2 oz) - please note, themes or quotes relating to being pre-term or small were not extracted for this review, which focuses on healthy babies. 1 swallowed amniotic fluid during birth. Reported feeding method at the end of phase 1 (9-17 days postpartum): exclusively expressing: n=1; mainly expressed milk with some formula (approx. 2 bottles of formula per day): n=1; almost exclusively expressing with some attempts at breastfeeding: n=1; half expressed and half formula: n=1; mixed expressing and breastfeeding with occasional formula (about 20%): n=1; exclusively breastfeeding: n=1. Reported feeding method at the end of phase 2: almost exclusively expressing with some breastfeeding: n=1; exclusively breastfeeding: n=2; half	Participants were provided with guidelines for completing the diary. They were asked to make recordings about a minimum of two feeding sessions per day over each of the 7-day periods, as they happened, or as soon as possible afterwards. They were given a number of open-ended prompts, but were informed that they were not restricted to these. **Data analysis** 'A thematic discourse analysis (Braun & Clarke 2006) was initially used to identify patterns in the data. This form of discourse analysis is situated in a social constructionist epistemology in that it is assumed that the patterns identified are socially produced. Analysis was further informed by a feminist poststructuralist perspective (Gavey 1989, Weedon 1997). This involved identifying different discursive constructions surrounding infant feeding, links between these constructions and wider discourses, the subject positions that these constructions and discourses made available and their implications for action and subjectivity (Willig 2008)'.		structured interviews) to add to the confirmability of interpretations. Sample selection: Sample selection was clearly reported. **Data collection:** There is a clear description of how audio-diaries were recorded and how interviews were conducted. Saturation of data was discussed; the authors mention that 'although the sample size was appropriate for the analysis undertaken, we cannot be certain that data saturation was achieved'. Relationship between researcher and participants: The authors did not discuss the potential influences of the researchers. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were identified. Contradictory data were discussed by the authors, for example they

Study details	Participants	Methods	Findings	Comments
	expressed and half formula: n=1; breastfeeding and formula: n=1; exclusively formula: n=1; unknown: n=1. **Inclusion criteria** First-time mothers intending to breastfeed their baby; they had a singleton delivery at, or close to, term; were at least 16 years of age; and were free from significant child or maternal illness and medical complications. Women who reported expressive extensively (which was defined as 'expressing milk for half or more of infants' feeds, although this may only have continued for a few days as part of a temporary feeding strategy'). **Exclusion criteria** Not reported			highlight that on the one hand women described expressing as giving them flexibility and more freedom, but on the other hand they made some remarks which suggest that there might be something problematic about being perceived to value increased freedom and convenience. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). With regards to credibility of findings, the authors mention that they used the research team to confirm the analysis to ensure rigour and they used two data collection methods to add to the confirmability of interpretations. **Value of research:** With regards to transferability, the authors provide a detailed description of participants and the context. They did not discuss transferability of the findings. Overall the authors

Study details	Participants	Methods	Findings	Comments
				provided adequate discussion of the findings. They discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concerns:** Minor
Full citation Johnson, S., Williamson, I., Lyttle, S., Leeming, D., Expressing yourself: A feminist analysis of talk around expressing breast milk, Social Science & MedicineSoc Sci Med, 69, 900-907, 2009 Ref Id 695057 **Study type** Qualitative **Aim of the study** To explore the embodied practice of expressing breast milk **Country/ies where the study was carried out**	**Sample size** N=16 women (8 took part in both the diary and interview and 8 in the interview only). **Characteristics** Average age: 30 years (range 19–36 years). Ethnicity: White British: n=15. Eurasian British: n=1. Experiences with expressing: engaged in expressing breast milk: n=12. Regularly expressing: n=7. Tried expressing but abandoned the process: n=5. Referred to an intention to express in the future: n=4. Most of those who had expressed breast milk	**Setting** Women were recruited from a hospital in the South Midlands of England. Sample selection Data from 20 participants who took part in phase one of the study were examined for any occurrence of spontaneous talk around the practice of expressing breast milk. The data of 16 participants who spoke about expressing breast milk are considered in this analysis. **Data collection** The study was conducted in two phases. In phase one, participants were asked to keep an audio diary of their experiences of feeding their baby twice daily for a 7-day period following discharge from hospital.	**Findings reported in the study** Managing pain whilst still feeding breast milk A solution to the inefficiencies of the maternal body Enhancing or disrupting the “bonding process” Managing feeding in front of others A route to freedom and a way of coping with the demands of breastfeeding	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention 'The contribution of relatively recent and burgeoning feminist analyses of infant feeding has been particularly valuable in understanding infant feeding experiences and practices. A feminist approach to analysis involves going beyond the

Study details	Participants	Methods	Findings	Comments
UK **Study dates** This study draws on data from a larger study conducted between February and September 2006. **Source of funding** This study was supported by a British Academy Large Grant (Grant # 37524).	spoke of using a manual or electric pump. 'The women were married or co-habiting and were in a long-term heterosexual relationship with the baby's father, except for one participant, 'Samantha', who was co-habiting with a male partner who was not the father of her infant'. 'The mothers reported a range of occupational backgrounds, though the majority described these as professional or managerial'. Educated to degree level or above: n=10. **Inclusion criteria** First-time mothers who intended to breastfeed their baby. Singleton birth at, or close to, term, and had to be at least 16 years of age and free from significant illness and/or medical complications during the postnatal period. **Exclusion criteria**	Once the diary stage was complete, they were then interviewed at home with a semi-structured interview schedule. In the second phase, this process was repeated approximately three weeks after discharge from hospital. Participants could choose to be involved in both forms of data collection or, if they preferred, just to take part in the interview. **Data analysis** Data were analysed from a feminist poststructuralist perspective (Gavey, 1989; Weedon, 1997). 'A number of authors have outlined methods for conducting an FDA (e.g. Parker, 1992; Willig, 2008) which informed our analytic strategy. Initially both the diary and interview data from the 16 participants who spoke about expressing were thematically analysed. This gave rise to the identification of a number of different reasons given for expressing breast milk. Each of these reasons was then explored more fully in order to identify particular features. Firstly, this involved the identification of discursive constructions		surface content of women's accounts and explicitly exploring the social processes which can make breastfeeding oppressive (Carter, 1995; McCarter-Spaulding, 2008). Generally feminist approaches highlight the problematic nature of focusing on infant feeding 'decisions' as if they are individual, autonomous choices; instead, they suggest that practices adopted are about balancing different sets of demands and finding solutions which help women to assert some control (Bartlett, 2003; Carter, 1995; Murphy, 2000). **Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how audio-diaries were recorded and how interviews were conducted. Saturation of data was not discussed. Relationship between researchers and participants: The authors did

Study details	Participants	Methods	Findings	Comments
	Not reported	surrounding expressing breast milk and infant feeding and the links between these and wider discourses. Secondly, the subject positions that these made available and their implications for subjectivity were explored. Finally, the ways in which the discursive constructions and positioning were managed in relation to the embodied experience of breastfeeding were interrogated'.		not discuss the potential influences of the researchers. **Ethical issues:** Ethical approval was obtained. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were identified. Contradictory data were discussed by the authors, for example they mention 'Women are positioned as damaging the psychological development of their child if they do not breastfeed, whilst at the same time being selfish if they do not allow others to bond with the baby'. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not give details on how they ensured credibility of the findings.

Study details	Participants	Methods	Findings	Comments
				Value of research: The authors discuss transferability of the findings to other populations as they mention that 'In line with the approach taken, we need to exercise a degree of caution in terms of what we can claim about our analysis. Within poststructuralist research and theorising, knowledge is seen as contingent and context-dependent (Stainton Rogers, 1996). One explanation for the sense of agency and control expressed by our participants could be related to the nature of our sample who were predominantly white, well-educated and relatively affluent. It could be argued that for these women individual choice is particularly pertinent'. The authors provided adequate discussion of the findings. They did not discuss the implications of their findings for policy and practice and did not identify areas where future research is needed.

Study details	Participants	Methods	Findings	Comments
				Overall methodological concerns: moderate **Other information** The women used the term 'expressing' to refer to any method of stimulating the production of breast milk other than via the baby sucking (i.e. by hand or a manual or electric pump).
Full citation Keely, A., Lawton, J., Swanson, V., Denison, F. C., Barriers to breast-feeding in obese women: A qualitative exploration, Midwifery, 31, 532-9, 2015 Ref Id 577628 **Study type** Qualitative **Aim of the study** To 'explore the factors that influence breast-feeding practices in obese women who had either stopped breast-feeding or were no longer exclusively breast-feeding 6–10 weeks following the birth of their babies,	**Sample size** N=28 **Characteristics** The women's babies were 6-10 weeks old at the time of the interviews. Participants were selected purposively in order to achieve a sample that was broadly representative of childbearing women in Scotland in terms of age and social class. Only one study participant, an Indian woman, was from an ethnic minority background. All of the	**Setting** Women were recruited from the postnatal ward of a large maternity unit in Scotland. **Sample selection** 'Maternal demographic information was checked via electronic maternity notes prior to approaching participants. […] Women were approached on the postnatal ward and provided with a participant information sheet and, if they agreed, completed a screening questionnaire. They were asked if they would be willing to be contacted via telephone at a later date to discuss taking part in the study. Those who agreed were then telephoned 4–6 weeks later to discuss their current infant feeding method and whether or	**Findings reported in the study** Impact of birth complications: caesarean section, skin-to-skin contact and early feeding: 'I couldn't just pop up and shut the curtains…' Lack of privacy: breast-feeding in front of others: '…I'll not be able to do it when I'm out.' Breastfeeding support: 'I felt like I was failing.' Please also note that some themes were related to information and support from healthcare professionals and were excluded as this is	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because they mention that 'The data analysis process was iterative, taking place alongside data collection. This allowed for the exploration of themes which emerged during data collection (Mason, 2002)

Study details	Participants	Methods	Findings	Comments
despite an original intention to do so for 16 weeks or longer'. **Country/ies where the study was carried out** UK **Study dates** Interviews took place between March 2011 and April 2013. Recruitment to the project commenced on 5th January 2011 and was completed on 20th March 2013. **Source of funding** Not reported	other women were Caucasian, 24 from the UK, one from the Republic of Ireland, one from Australia and one from America. All the women in this study had a BMI between 30 and 46 kg/m2 at the start of pregnancy. All the women confirmed that, at the time their babies were born, they intended to exclusively breast feed for at least 16 weeks (and many for up to six months). However, all had stopped breast-feeding or had introduced formula feeding alongside breast-feeding by 6–10 weeks following the birth of their babies, and for several this had occurred within just a few days. **Inclusion criteria** Any woman who had given birth to a single baby at >37 weeks gestation, breast-feeding at first feed but no longer exclusively breast-feeding at 6–8 weeks'	not they would be willing to take part in an interview. In all, 55 women were successfully followed up via telephone during the initial phase of qualitative data collection. Women were recruited to the qualitative study in two phases. During the initial phase of qualitative data collection, 17 obese women were recruited to participate in one-to-one semi-structured interviews. Of the 38 women who did not participate at this stage, 23 were still exclusively breast-feeding at the time they were contacted and therefore ineligible, two had moved away from the area and a further 13 declined to participate. During phase two, 30 women were followed up via telephone; of these 11 were exclusively breast-feeding when contacted, five declined to participate and one further woman agreed to participate but was not in when the interviewer called at her home and did not answer follow-up phone calls. A further 11 participants were recruited at this stage'. **Data collection**	covered by a separate review.	enabling interview questions and sampling to be revised as the study progressed. […] Semi-structured interviews were chosen for this study as these afforded the flexibility needed to gain an in-depth understanding of women's personal experiences and decision-making (Brett-Davies, 2007), including issues which might be unforeseen at the study's outset. In addition, one-to-one interviews afforded privacy, to encourage the women to discuss sensitive issues'. The authors also mention that the main strength of their study was 'the use of an open-ended exploratory design, which allowed new and unanticipated issues to arise from the data'. **Sample selection**: Sample selection was clearly reported. **Ethics:** Ethical approval was obtained. **Data collection:** There is a clear description of how

Study details	Participants	Methods	Findings	Comments
	postnatal, and BMI at the start of pregnancy of >30 kg/m2 (defined as obese). **Exclusion criteria** Any woman whose baby had been admitted to the neonatal unit, any woman not being discharged home with her baby (as separation from the baby presents challenges in establishing breast-feeding which were beyond the focus of this study), age <18 years old, multiple pregnancy or inability to give informed consent.	Interviews took place in the participants' homes. The interviews were informed by a topic guide. Following the initial 17 interviews, the topic guide was expanded to include further questions and prompts. Interviews lasted between 45 minutes and 2 hours and 30 minutes. Interviews were digitally recorded and transcribed in full. Brief notes were made during the interview and expanded upon as soon as possible following the interview. **Data analysis** 'Thematic analysis was used to formally analyse and unearth patterns in the data. Audio recordings were transcribed using a professional transcription service. Thematic content analysis was carried out. Using an interpretive approach, themes were developed in an iterative and inductive way, involving the breaking down and reassembling of data in a coding process (Braun and Clarke, 2006). This involved multiple readings of the transcripts, in order to become immersed in the data. This was followed by preliminary coding of		interviews were conducted. Saturation of data was discussed; the authors mention that 'No new findings or themes emerged during the later interviews. Consequently, after 28 interviews had been conducted it was concluded that data saturation had been reached'. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. There was no discussion of contradictory data. In relation to the potential influence of the researchers, the study authors mentioned that 'as they used semi-structured interviews, 'this may have led to participants retrospectively re-interpreting and re-telling their stories, in order to reposition and present themselves as ‘good mothers’'. **Findings:** Results were presented clearly with the

Study details	Participants	Methods	Findings	Comments
		the data and the development of themes from these codes (e.g. breast-feeding in public). Once all of the interviews had taken place the coding frame was more fully developed. Coded datasets were subjected to further in-depth analyses to identify sub-themes (e.g. breast-feeding in hospital; breast-feeding at home; breast-feeding in public) and illustrative quotations. The final step was the identification of links between, and overlapping of, themes (Rubin and Rubin, 1995) and the development of three major themes (e.g. seeking privacy). Regular team meetings took place to discuss our interpretations and to reach agreement on key findings. The final category system was agreed by three researchers and accepted as being representative of the data'.		generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, the authors mention that 'Regular team meetings took place to discuss our interpretations and to reach agreement on key findings. The final category system was agreed by three researchers and accepted as being representative of the data'. **Value of research:** The authors discussed transferability of the findings to other populations as they mention that a key limitation of their study is that they 'only recruited from one maternity unit, which limits the potential generalisability of the findings, in particular potentially with regard to women from ethnic minority groups'. The authors also mention that participants were selected purposively in order to achieve a sample that was broadly representative of childbearing women in

Study details	Participants	Methods	Findings	Comments
				Scotland in terms of age and social class. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concerns:** no or minor
Full citation Leeming, D., Williamson, I., Lyttle, S., Johnson, S., Socially sensitive lactation: Exploring the social context of breastfeeding, Psychology & Health, 28, 450-468, 2013 Ref Id 695283 **Study type** Qualitative **Aim of the study** To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum.	**Sample size** N=22 women in phase 1 (all completed an audio-diary and were interviewed). N=13 in phase 2 (N=11 kept an audio-diary and were interviewed, N=2 were only interviewed) **Characteristics** First-time mothers All infants were singleton and born at or close to term, without significant illness or medical complications for either the mother or the baby. Age: ranging from 18 to 38. 2 teenagers in the sample (aged 18 and 19).	**Setting** Participants were recruited from the maternity unit of a hospital in the Midlands of England. **Sample selection** The study was advertised in local GP surgeries and antenatal clinics. Women were invited to register an interest, and then they were approached shortly after the birth and invited to join the study. **Data collection** In phase 1 of the study, women were given a portable mini-disk player and asked to make audio-diary recordings twice daily for seven days if possible, either during feeding or shortly after, beginning within 1-3 days after the birth. They were asked to talk	**Findings reported in the study** Family bonding through breastfeeding Others bonding with the infant through the bottle Caring for mothers via the bottle Managing tensions between caring and breastfeeding Ambivalence and the public breast Observing the etiquette of breastfeeding	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used because in relation to the use of audio-diaries and interviews, the authors mention that 'This enabled the capture of data close to the occurrence of events over the first 5–6 weeks and in a way which directly

Study details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out UK **Study dates** The study took place in 2006-2007 **Source of funding** Not reported	All participants described those living with them as largely supportive of breastfeeding. There was 'a range of occupational backgrounds, with two-thirds of these professional or managerial and 13 of the 22 women being educated to degree level or beyond. Ethnicity: White British: m=19; Black-Caribbean: n=2; Eurasian: n=1 Mode of birth: Vaginal birth: n=18 (5 ventouse, 1 water birth); caesarean section: n=4 Feeding status at the end of phase 2: exclusive breastfeeding: n=14; mixed feeding of breast milk and formula: n=6; bottle feeding of formula milk: n=2 **Inclusion criteria** Women over 16 years of age and intending to breastfeed.	about whatever they wanted related to feeding experiences, though were provided with prompts to use if they preferred. The semi-structured interviews were conducted within 3–4 days of diary completion, after the interviewer had listened to the diary entries to enable probing of issues which had emerged. In phase 2, 3-4 weeks later, all participants were asked to complete another seven-day audio-diary followed by an interview. **Data analysis** 'Our approach to the present analysis drew on Braun and Clarke's (2006) thematic analysis. The participants' accounts were transcribed and, using NVivo software, coded for key points of interest regarding the participants' meaning making about the impact of their social worlds on their feeding experiences and vice versa. Analysis proceeded in a largely inductive manner as codes were developed through detailed engagement with both the diary and interview data and then refined and developed to form a hierarchy of themes and overarching themes which were		encouraged exploration of the social context of feeding within the interview, but also enabled participants to reflect relatively privately on their experiences using the audio-diary, employing their own frames of reference at a time of their convenience'. **Sample selection:** Sample selection was clearly reported. The authors also mention that an additional 10 women were recruited to the study but completed brief interviews only, at one or both phases. The data obtained from these participants regarding social contexts were not judged to be of sufficient depth to warrant inclusion in the present analysis. **Data collection:** There is a clear description of how audio-diaries were recorded and how interviews were conducted. Saturation of data was discussed, because the authors mention that 'Although data saturation appeared close to achievement before the final

Study details	Participants	Methods	Findings	Comments
	Exclusion criteria Not reported	able to capture theoretically significant aspects of the data. This involved repeated reviewing of themes – moving back and forth between coded data extracts, individual participants' accounts and the developing themes. Interpretation was facilitated by methods drawn from grounded theory such as memo writing, focused coding and constant comparison (Henwood & Pidgeon, 2006). Written summaries of each participant's experiences were also produced, based on diaries and interviews across both phases where available, which aided the contextualisation of themes and minimised the fragmentation that can sometimes occur with thematic analysis (Joffe & Yardley, 2004). Once an initial list of themes and sub-themes had been produced for the 11 women with full data sets by DL, this was audited and refined by IW. The analysis was then extended by DL to include all 22 women, revising themes and adding new themes where appropriate, and this was then audited by the other authors'.		handful of participants' accounts were analysed, these accounts were still examined closely for possible novel material because of the tendency for normalising discourses in relation to breastfeeding (Wall, 2001), which can obscure and marginalise less common experiences'. **Relationship between researchers and participants:** The authors discussed the potential influences of the researchers, because they mention 'Reflexivity was fostered by discussion of differing perspectives on the data. Besides having varying professional backgrounds and views about breastfeeding advocacy, some of our research team are parents with differing experiences of breastfeeding and some are not parents. Therefore, the team comprised a combination of 'insiders' and 'outsiders' regarding the topic being investigated (Langdridge, 2007), facilitating an analysis informed both by a

Study details	Participants	Methods	Findings	Comments
				hermeneutics of empathy and of suspicion (Ricoeur, 1976)'. **Ethical issues:** This study had ethical approval. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were discussed by the authors, for example in relation to the ambivalence of women's accounts in relation to accommodate others' views on breastfeeding in public. Findings: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, an initial list of themes and sub-themes produced by one researcher was audited and refined by another researcher; once the analysis was extended to include all

Study details	Participants	Methods	Findings	Comments
				22 women, revising themes and adding new themes as appropriate, all this was then audited by the other authors. **Value of research:** The authors discussed transferability of the findings to other populations as they mentioned that 'it is worth noting that the participants in this study all expressed a desire to breastfeed, did not have other children to care for and indicated their partners were generally supportive of breastfeeding. Despite our aim to recruit a broad sample from a general hospital setting, many (though not all) who took part reported belonging to socio-economic groups associated with higher rates of breastfeeding. Therefore, our data offer only a limited perspective on the ways in which social or structural factors may pose challenges for breastfeeding women'. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice and identify areas

Study details	Participants	Methods	Findings	Comments
				where future research is needed. **Overall methodological concerns:** minor
Full citation Olander, E. K., Atkinson, L., Edmunds, J. K., French, D. P., The views of pre- and post-natal women and health professionals regarding gestational weight gain: An exploratory study, Sexual and Reproductive Healthcare, 2, 43-48, 2011 Ref Id 807013 **Study type** Qualitative **Aim of the study** To explore the views of pre- and post-natal women and health professionals regarding gestational weight gain. **Country/ies where the study was carried out** UK	**Sample size** N=9 pregnant women **Characteristics** Due to the decision of the funders regarding complete anonymity, characteristics specific to pregnant women are reported. The larger group of women were mostly white, varied in age between 18 and 30 years and the women differed in parity and weight status (healthy weight to obese). **Inclusion criteria** Pregnant women (and other populations, not relevant to the current review - as it is unclear if postnatal women refer to the first 8 weeks postpartum)	**Setting** Moderately deprived borough in the Midlands, England **Sample selection** The women were recruited by their midwives or through contacting the research team after seeing posters at three children's centres where they attended pre- or post-natal classes, respectively. **Data collection** Two focus groups with pregnant women. An experienced researcher moderated all focus groups (and conducted the interview), with another researcher taking notes and operating the digital recorder. Open-ended questions were used to stimulate discussion and probes were employed. The focus groups lasted between 30 and 60 minutes.	**Findings reported in the study** Assumptions around losing weight after giving birth through breastfeeding.	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative research:** Aim of the study was clearly reported, research design was appropriate for answering the research question. Research design: The authors justify the methods they used because they mention that focus groups were chosen for this study as they provide direct evidence regarding the similarities and differences of participants' views and experiences and were thus a suitable method to answer the research questions. **Sample selection:** Sample selection was clearly reported.

Study details	Participants	Methods	Findings	Comments
Study dates Not reported **Source of funding** Nuneaton and Bedworth Borough Council	**Exclusion criteria** Not reported	**Data analysis** Discussions from focus groups were transcribed verbatim and analysed thematically. Thematic analysis was used to find repeated patterns of meaning across all data sets (see [27]). An inductive approach was adopted where the identified themes were linked to the data rather than the questions asked. The data was analysed using the following steps; firstly, all transcripts were read once to enable the first author to become familiar with the data. Secondly, the transcript were read again and initial themes were identified. Thirdly, these themes were refined by comparing the text included and excluded in each theme, before the essence of each theme was identified [27]. The lead author analysed all transcripts with the second author reading the transcripts and reviewing all themes.		**Data collection:** There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researchers and participants:** The authors did not discuss the potential influences of the researchers but they mentioned that one of the focus groups with pre-natal women included a midwife and it is possible that this may have influenced the women's reports. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data was highlighted. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings,

Study details	Participants	Methods	Findings	Comments
				the authors mention that the lead author analysed all transcripts with the second author reading the transcripts and reviewing all themes. **Value of research:** The authors did not discuss transferability of the findings to other populations and assessment of transferability is difficult because characteristics of participants are not reported. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns:** Minor
Full citation Stewart-Knox, B., Gardiner, K., Wright, M., What is the problem with breast-feeding? A qualitative analysis of infant feeding perceptions, Journal of Human Nutrition and Dietetics, 16, 265-273, 2003 Ref Id 447701	**Sample size** N=12 women **Characteristics** Focus groups included both primiparous and multiparous women at various stages of pregnancy and equal numbers of women	**Setting** Northern Ireland. The host teaching hospital served three urban areas (large market towns), the populations of which included a range of socio-economic backgrounds, as well as a large rural area. The study reports these breastfeeding rates in Northern Ireland, relating to the	**Findings reported in the study** Barriers to breastfeeding: Restricted freedom/independence Embarrassment Other children Family/partner support Convenience/routine Lack of public facilities	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was appropriate for answering the research question.

Study details	Participants	Methods	Findings	Comments
Study type Qualitative **Aim of the study** To 'define and explore factors determining infant feeding decisions with a view to the planning of future research and intervention needs'. To 'develop theory and to determine future research and intervention needs in regard to the promotion of breast-feeding in Northern Ireland'. **Country/ies where the study was carried out** UK **Study dates** Not reported **Source of funding** Not reported	intending to breast and artificially feed. Demographic characteristics not reported. **Inclusion criteria** Expectant mothers **Exclusion criteria** Not reported	year 2000: initiation rate: 54%. 6-month continuation rate: 10%. **Sample selection** Expectant mothers were approached in person at convenience within a teaching hospital antenatal clinic and requested to take part in discussions on the topic of infant feeding. Of 14 women approached, only two declined to take part. No incentives were provided. **Data collection** Two focus groups each of seven and five volunteers. Discussions took place within a room adjacent to the antenatal clinic. Both a facilitator and an observer who took field notes were present. Discussion was guided by a topic list. Health promotion materials were presented as cues and prompts. Dialogue was restricted to 45 min in each case and was largely spontaneous and divergent from the topic list. **Data analysis** Dialogue was tape-recorded, transcribed verbatim and	Social isolation Please note that themes relating to perceptions of breastfeeding promotion materials were not extracted because these belong to a separate review (on helpful information on breastfeeding).	**Research design:** The authors justify the methods they used because they mention that survey studies have provided 'very little in-depth knowledge that would assist in understanding the reasons why so many mothers choose to feed their babies artificially. This understanding is necessary […]'. **Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how interviews were conducted. Saturation of data was discussed because the authors state that 'No more than two discussion groups were held because both groups generated similar themes indicating that the data had reached 'saturation''. **Relationship between researchers and participants:** The authors did not discuss the potential

Study details	Participants	Methods	Findings	Comments
		thematically content analysed by two researchers using a 'cut and paste' method (Burnard, 1991). The analysts, who were also present for the discussions (BKS and KG), initially worked independently, later coming together to agree themes.		influences of the researchers. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how themes were identified. Contradictory data were not discussed. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, the analysts initially worked independently to identify themes, and later came together to agree themes. **Value of research:** In relation to transferability of findings, the authors only mention that 'Given that in qualitative research the representativeness of the sample can be regarded as less important than the richness of the data generated (Seale &

Study details	Participants	Methods	Findings	Comments
				Silverman, 1997), no attempt was made to determine participant's individual demographic characteristics'. The authors provide a brief description of the study setting, however, the lack of detailed information on demographic characteristics limits assessment of transferability of findings. Overall, the authors provided adequate discussion of the findings. They also identify areas where future research is needed. **Overall methodological concerns:** moderate
Full citation Tully, K. P., Ball, H. L., Maternal accounts of their breast-feeding intent and early challenges after caesarean childbirth, Midwifery, 30, 712-719, 2014 Ref Id 807623 **Study type** Qualitative **Aim of the study**	**Sample size** N=115 **Characteristics** Participants were mostly White, predominately first time mothers, and aged between 18 to 41 years. Their infants were predominately healthy singletons and about half of them were female. About 71% of Study 1 participants (53 of 75) reported that they had	**Setting** Postnatal unit of a tertiary-level NHS hospital in Northeast England, which hosted approximately 5,400 births per year and was not Baby Friendly accredited. The caesarean section rate was 22%, which is consistent with the rate in England (23%) at the time. Continuous rooming-in is standard on the postpartum unit for all healthy dyads at the study hospital. Infant feeding support was provided by midwives as a part of routine care. Mothers	**Findings reported in the study** Breastfeeding obstacles. Please note that quotes relating to support from healthcare professionals were not extracted as this topic is covered by a separate review.	**Limitations** Limitations (assessed using CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors did not justify the methods they used.

Study details	Participants	Methods	Findings	Comments
To characterise mothers' breastfeeding intentions and their infant feeding experiences after caesarean section. To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth as the experiences were unfolding'. **Country/ies where the study was carried out** UK **Study dates** There were 2 data collection period. Study 1 was conducted from February to April 2006. Study 2 was conducted from January to March 2009. **Source of funding** This research was funded by the Parkes Foundation and the Owen F. Aldis Fund. The funding sources approved of the study design, but were not involved in data collection, analysis, writing, or publication. Kristin Tully is currently supported by the National Institute of Child	intended to breastfeed. Most of these women planned to initially breastfeed exclusively. Intent to breastfeed was an inclusion criterion for Study 2 (40 of 40) Study 1: n=48 had an unscheduled CS and n=27 had a scheduled CS. Study 2: n=40 had a scheduled, non-labour CS. Parity: range 0-6 Age: range 18-41 years Education completed: no GCSEs to Doctorate Gestational age in weeks + days: study 1, median (range): 39+3 (30+3 to 42+6); study 2, median (range): 39+1 (37+4 to 41+1) **Inclusion criteria** At least 18 years of age at the time of enrolment, in good health, fluent in verbal and written English, and have experienced a caesarean.	signalled for midwifery assistance by pushing a call button. Overnight visitors were prohibited, including women's partners. **Sample selection** Seventy-five participants provided interview data in Study 1 and 40 participants provided interview data in Study 2. In Study 1, 101 women were approached on the postnatal ward; 15 declined participation, 5 expressed interest in participating but did not meet inclusion criteria, 5 were not enrolled due to timing conflicts, and 1 woman was withdrawn because she became unwell during the interview. Study 2 was part of an RCT that tested the effects of different types of postnatal unit bassinets on maternal-infant interactions. The main outcome of that study was behavioural observations collected through nocturnal filming on the postnatal unit. In Study 2, 77 of 134 (58%) eligible women approached face-to-face were enrolled into the study, along with 9 of 23 women (39%) who were approached via postal recruitment (Authors, 2012). The overall enrolment rate to those eligible was 86/157 = 55%.		**Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how interviews were conducted. Saturation of data was not discussed however the sample size is high. **Ethical issues:** Ethical approval was obtained. Informed consent was obtained. **Relationship between researchers and participants**: The authors did not discuss the potential influences of the interviewers, however they mention that the first author who conducted face-to-face interviews was not hospital staff, and no medical professionals were present during interviews. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is

Study details	Participants	Methods	Findings	Comments
Health and Human Development Training Grant, 5T32HD007376-22.	Study 1 comprised participants who underwent either an unscheduled or unscheduled CS; study 2 involved women who had a scheduled, non-labour CS. **Exclusion criteria** Not reported	A small gratuity was provided to participants in the form of gift cards. **Data collection** Women were interviewed between 1 and 6 days (average time 1.5 days after childbirth). The interview schedule relevant to this analysis was identical in both study 1 and study 2. Face-to-face interviews were conducted on the postpartum ward with no medical professionals present. Women's partners were permitted to attend the interview. Interview questions were worded in a non-leading manner. Although the principal interest of the study pertained to breastfeeding following CS, it was purposefully not framed as an explicit focus. Interviews lasted approx. 30 minutes. Data analysis 'Participant responses were read in their entirety to appreciate the mother's story as a whole (Tesch, 1990). Data were then entered into a matrix format in response to the interview questions for ease of comparison. Responses were then coded to create thematic categories across all participants (Miles and Huberman, 1994; Wilkinson, 2004), which the		clear how thematic categories were identified. There was no discussion of contradictory data. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors did not specify what steps, if any, they took to check credibility of findings. **Value of research:** The authors discussed transferability of the findings to other populations as they mention that the results of the study may not be generalizable to women who give birth in Baby Friendly accredited hospitals. Moreover, they mention that women in other countries may experience unique breastfeeding challenges. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice.

Study details	Participants	Methods	Findings	Comments
		authors identified and verified through an iterative process (Patton, 2002)'.		**Overall methodological concerns**: moderate
Full citation Williamson, I., Leeming, D., Lyttle, S., Johnson, S., 'It should be the most natural thing in the world': Exploring first-time mothers' breastfeeding difficulties in the UK using audio-diaries and interviews, Maternal and Child Nutrition, 8, 434-447, 2012 Ref Id 807764 **Study type** Qualitative **Aim of the study** To explore the experiences of first-time mothers who struggled with breastfeeding in the early post-partum period. **Country/ies where the study was carried out** UK **Study dates**	**Sample size** N=8 women **Characteristics** First-time mothers with singleton infants born at 38 to 42 weeks of gestational age. All eight were White, aged between 25 and 36 years of age, either married or cohabiting with the father of the infant. Mode of birth: Caesarean section: n=2; Vaginal births: n=6 (ventouse: n=3). **Inclusion criteria** They had to have declared an intention to breastfeed their infant for at least 1 month. **Exclusion criteria** Not reported	**Setting** The UK. The authors mention that 'Until very recently there has been no legal protection for mothers in the UK who wish to breastfeed their infants in public spaces'. **Sample selection** The authors 'purposely limited the analysis to the accounts of the first 8 women in the study who reported experiencing significant difficulties with feeding in the first week post-partum' out of 22 women who completed a diary and interview (the paper does not mention if this was for a larger study - it is assumed that this was done for a larger study, see Leeming 2013 publication included in this review). The study was advertised in general practitioner surgeries and at antenatal classes and clinics. Women were invited to register an interest, and then they were approached shortly after the birth and invited to join the study. Moreover, women who had not previously made aware of the study were approached on the	**Findings reported in the study** Breastfeeding as 'natural' vs. the lived embodied struggle to feed Difficulties with breastfeeding as a threat to maternal identity Interpreting and responding to pain	**Limitations** Limitations (assessed with CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used. They mention that 'It has been argued that hermeneutic phenomenological approaches are particularly well suited to women's descriptions of breastfeeding experiences, especially where interpretations of individual accounts are located within wider sociocultural discourses (Spencer 2008). Interpretative phenomenological analysis represents a flexible method for analysing phenomenological data

Study details	Participants	Methods	Findings	Comments
The study took place in 2006-2007 **Source of funding** The research was funded by the British Academy, London		ward shortly after birth and invited to take part in the study. **Data collection** Women were asked to make audio-diary recordings twice daily for seven days, beginning as soon as possible following the birth of their infant. The semi-structured interviews were conducted within after diary completion, after the interviewer had listened to the diary entries. **Data analysis** Data were transcribed in full and analysed using IPA (Smith et al. 2009). The researchers 'read each of the data sets several times before coding began. Each participant was treated ideographically, and ideas were coded and grouped to identify and label a full set of superordinate themes for each individual. We then compared these across participants through the construction of master themes, and appropriate consideration was given to where participants' accounts converged and how they differed (Smith et al. 2009).We discussed the initial set of master themes within the research team, and a second		drawn from both diary and interview methods (Smith et al. 2009)'. Moreover, in relation to data collection, the authors mention that audio-diaries 'offer a practical 'hands-free' method for participants to provide accounts of experience in real time and context (Bolger et al. 2003). In our study, the use of audio-diaries meant that once participants had received training in how to use the equipment, data entries could be made whenever convenient and in the home environment'. Moreover, the authors mention that the diaries and interviews are a form of methodological triangulation. **Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how audio-diaries were recorded and how interviews were conducted. Saturation of data was not discussed.

Study details	Participants	Methods	Findings	Comments
		wave of interpretative work was applied at this point to produce the final analysis that considered the women's experiences in the context of prior theory and research, particularly with regard to the wider cultural construction of breastfeeding'.		**Ethics:** Ethical approval was obtained **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were discussed by the authors, for example one of the themes identified was 'Breastfeeding as 'natural' vs. the lived embodied struggle to feed'. The authors discussed the potential influences of the researchers, because they have a section of the paper dedicated to reflexivity, where they mention the professional background of the members of the team, and mention that some of the members were parents with experiences of breastfeeding, some of which were problematic. The authors commented that they believed that the diversity within the team in terms of views on issues around breastfeeding 'enriched the ways in which data were

Study details	Participants	Methods	Findings	Comments
				scrutinized and interpreted'. The authors also mention that ' It is perhaps of relevance that the only one of our participants who mentioned experiencing negative feelings towards the baby at length (Gina) did so in the diary component rather than the interview'. Findings: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, the authors mention that the diaries and interviews are a form of methodological triangulation. Moreover, the initial set of master themes was discussed within the research team. **Value of research:** The authors discussed transferability of the findings to other populations as they mention that 'It should be noted that while several other participants within the larger sample reported similar problems, we also had

Study details	Participants	Methods	Findings	Comments
				accounts from women who reported finding breastfeeding enjoyable and rewarding'. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns:** Minor
Full citation Condon, L., Ingram, J., Hamid, N. and Hussein, A., Cultural influences on breastfeeding and weaning, Community Practitioner, 76, 2003 Ref Id 834775 **Study type** Qualitative **Aim of the study** To examine patterns of infant feeding and weaning behaviour among women from ethnic minority groups	**Sample size** N=26 women **Characteristics** Ethnicity: Somali: n=6, Pakistani: n=5, Bangladeshi: n=9, Asian: n=2, Punjabi: n=1, Afro-Caribbean: n=1, Black Caribbean: n=1, mixed race: n=1. Religion: Muslim: n=23, Christian: n=2, no religion: n=1 Marital status: married: n=24; single: n=1, cohabiting: n=1. Median number of children: n=2.	**Setting** Bristol inner city centre **Sample selection** Ethnic groups were chosen to suggest the diversity of views existing within the ethnic minority populations in Bristol. Asian and Somali participants were recruited by employees of a local advocacy and interpreting service for health service users. Recruitment of Afro-Caribbean participants was attempted at the health centre and at local nurseries. **Data collection** Five monoculture focus groups. Two Pakistani groups took place, one comprising women who had	**Findings reported in the study** Colostrum. Other themes were not extracted either because not specific to the first 8 weeks postpartum or because relating to information and support from healthcare professionals, which is a topic covered by a different review.	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they use because they mention that focus groups methodology was chosen for its known effectiveness in promoting free flowing debate.

Study details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out UK **Study dates** October 2001 to September 2002 **Source of funding** This study was funded by Avon Health Authority and the Bristol, Bath & Gloucestershire R&D Bursary Scheme.	**Inclusion criteria** Women from Pakistani, Bangladeshi, Somali and Afro-Caribbean background who had breastfed a baby within the last year. **Exclusion criteria** Not reported	first come to live in the UK within the last 10 years, the other with those who had been born in the UK or had been resident for over 20 years. Local link workers acted as interpreters and group moderators to allow participants who spoke little or no English to be included. Bangladeshi, Somali and Pakistani-migrated-within-10-years groups were held in the first language of participants. A native speaker took notes in addition to concurrent translation into English by the link worker or group moderator. In relation to the accuracy of transcriptions, the authors mention that the process of tape recorded post-session debriefing immediately after the focus group by two native speakers and an English speaking observer provides some immediate validation. Group moderators used an interview guide. **Data analysis** The tapes were transcribed and examined using thematic analysis. Themes emerged from the data which were then tested against all focus groups transcripts.		**Sample selection:** Sample selection was clearly reported. **Data collection:** There is a clear description of how focus groups were conducted. Saturation of data was not discussed but the author refer to small sample size as a limitation. **Data analysis:** The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data was highlighted by the authors. **Relationship between researchers and participants:** The authors discussed the potential influences of the researchers, because they mention that participants knew that one author is a health visitor working in the area and the other authors are link workers well known in the local community, so it

Study details	Participants	Methods	Findings	Comments
				could have been anticipated that women would be more positive when talking about breastfeeding. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). In relation to credibility of findings, the authors mention that the survey was used for validation (although survey data was not extracted for this review). **Value of research:** The authors discussed transferability of the findings because they mention that given the small sample size findings can only be indicative rather than definitive. They also discuss the implications of their findings for policy and practice and identify areas where future research is needed. **Overall methodological concerns:** Minor

Study details	Participants	Methods	Findings	Comments
Full citation Murphy, E, 'Breast is best': Infant feeding decisions and maternal deviance, Sociology of Health & Illness, 21, 187-208, 1999 Ref Id 866471 **Study type** Qualitative **Aim of the study** To consider the ways in which women account for their infant feeding decisions. **Country/ies where the study was carried out** UK **Study dates** Not reported **Source of funding** Economic and Social Research Council, as part of the Nation's Diet Programme	**Sample size** N=36 **Characteristics** Mix of occupational classes based on the Registrar General's classification of the woman's most recent occupation. **Inclusion criteria** Women pregnant with their first child **Exclusion criteria** Not reported	**Setting** 10 general practices within a 10-mile radius of Nottingham **Sample selection** Using 1991 Census data and information from the Family Health Services Authority, 10 general practices with contrasting occupational class profiles were selected. **Data collection** Six qualitative interviews from the antenatal period to when their babies were 2 years old. The authors say they primary draw upon the first interviews. Only data about the time period of interest for the present review was extracted. **Data analysis** Not reported	**Findings reported in the study** Teenage woman defending her antenatal decision to formula feed as something that could be reasonably expected from someone of her age.	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology**: Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used. **Recruitment strategy:** Sample selection was clearly reported. **Data collection:** Data collection relied on interviews. There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researcher and participants:** The authors discussed the potential influences of the interviewers because they mention that there was no assumption on

Study details	Participants	Methods	Findings	Comments
				the part of the interviewers or the analyst that mothers should either breast or formula feed their babies. **Ethical issues:** Ethical approval not reported. **Data analysis:** The analytical approach was mentioned referring to established approaches in the literature. However the analytical process was not described in detail and it is unclear how categories were identified. Contradictory data were highlighted by the authors in relation to some themes not extracted for the present review. **Findings:** Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not specify what steps, if any, they undertook to ensure the credibility of the findings.

Study details	Participants	Methods	Findings	Comments
				Value of research: The authors did not discuss transferability of the findings to other populations. Apart from this, the authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns**: Moderate
Full citation Hughes, P; Rees, C., Artificial feeding: choosing to bottle feed, British Journal of Midwifery, 1997 Ref Id 866906 **Study type** Qualitative **Aim of the study** To establish what influences women to bottle feed **Country/ies where the study was carried out** UK **Study dates**	**Sample size** N=20 **Characteristics** 13 women were below 20 years of age, and 7 were 20 or above. Married: n=3. With partner: n=6. Single parents: n=11. Purely unintentionally, all the women included were working class. **Inclusion criteria** Primiparous mothers on the postnatal ward who had chosen to bottle feed and had done so for at least a day.	**Setting** Postnatal ward of one maternity unit **Sample selection** Sampling method of convenience. The midwife asked women if they would consent to the interview. The researcher then introduced herself explaining the purpose of the study. Only one woman declined to be interviewed, she said this was because her baby needed her attention as he was upset having just had a blood test. **Data collection** A list of 'trigger-questions' was designed to explore relevant topics. Interviews lasting between	**Findings reported in the study** 'Breast is best' if it is right for the mother Cost of formula milk Futility of starting breastfeeding when it could not be continued Challenges of breastfeeding with twins	**Limitations** Limitations (assessed using the CASP qualitative checklist.) **Aims and qualitative methodology:** Aim of the study was clearly reported, research design was appropriate for answering the research question. **Research design:** The authors justify the methods they used; they explain why they used a phenomenological approach and also why they placed their study within a feminist framework.

Study details	Participants	Methods	Findings	Comments
Study dates not reported. The study was carried out over a 2-month period. **Source of funding** Not reported	**Exclusion criteria** Not reported	45 and 90 minutes. The interviews were noted in note form because it was felt that the use of the tape recorder may be intimidating, particularly for younger mothers. **Data analysis** Using content analysis, the results of the guided conversations were summarised. Phenomenological approach within a feminist framework.		**Recruitment strategy:** Sample selection was clearly reported. The authors also explain that only one woman declined to be interviewed and they explain why. **Data collection:** Data collection relied on interviews. There is a clear description of how interviews were conducted. Saturation of data was not discussed. **Relationship between researcher and participants:** The authors discussed the potential influences of the interviewers, because they mention that they took notes during interviews rather than using a tape recorded because they felt that the use of the tape recorded may be intimidating, particularly for younger mothers. **Ethical issues:** Ethical approval was obtained. **Data analysis:** The analytical process was described and the use of

Study details	Participants	Methods	Findings	Comments
				predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not highlighted by the authors. Findings: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The authors do not specific what steps, if any, they took to ensure credibility of the findings. **Value of research:** The authors discussed transferability of the findings to other populations as they mentioned that the group was predominantly working class and located in one hospital unit, the numbers were small and the sample was of convenience. The authors provided adequate discussion of the findings. They also discuss the implications of their findings for policy and practice. **Overall methodological concerns:** Minor

Study details	Participants	Methods	Findings	Comments
				Other information The relationship between the researchers and participants was considered because the interviews were noted in note form because it was felt that the use of the tape recorder may be intimidating, particularly for younger mothers.

CASP: Critical Appraisal Skills Programme; oz: ounce; WIMD: Welsh Index of Multiple Deprivation

Appendix E – Forest plots

Forest plots for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

No meta-analysis was undertaken for this review and so there are no forest plots

Appendix F – GRADE-CERQual tables

GRADE-CERQual tables for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

General population (not-age-range-specific studies)

Overarching theme 1. Mother and baby

Table 5: Clinical evidence profile for theme 1.1: benefits of breastfeeding for infant health

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.1.1. Benefits of breastfeeding for infant health motivate women to breastfeed			
Five studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Johnson 2009	Women reported that infant health benefits motivated them to breastfeed. Breastfeeding intent was dominated by the 'breast is best' mantra of broad infant health benefits. Some participants spontaneously provided a more precise rationale mentioning specific benefits. For example: '*it's better for the baby, more nutrients and it's balanced and there's everything there that they need*'' (Quote: Dykes 2005, p. 2286) '*for her sake really as much as anything, for giving antibodies and things, especially in the first few weeks'* (Quote: Dykes 2005, p. 2286) Multipara who had not previously breastfed but planned to do so during their latest pregnancy cited infant health among the reasons for their changed approach to infant feeding.	Methodological limitations: minor concerns (3 studies with minor rating and 2 studies with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (Bailey 2004 focused on an area with low rates of breastfeeding initiation; Dykes 2005 focused on a range of higher to lower socio-economic occupational status; 2/5 studies (Dykes 2005 and Tully 2014) included both first-time mothers and multiparous women. Concerns about transferability to ethnic minorities (reported non-white British participants: 5/61 were South Asian in Dykes 2005, 1/16 was Eurasian British in Johnson 2009; 1/7 was Black Caribbean in Johnson 2013; Tully 2014 mentions that participants were mostly white;	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	Some women's accounts indicated that expressing was a way to make the healthiest choice for their baby in difficult circumstances.	Bailey 2004 does not report on this); moreover, participants in Tully 2014 were in a non-BFI accredited hospital. Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: no or very minor concerns (5 studies that offered moderately rich data – but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	
Sub-theme 1.1.2. 'Breast is best' depends on whether breastfeeding is right for the woman.			
One study: • Hughes 1997 To examine what influences women to bottle feed	Women who had decided to formula feed said that they knew that breastfeeding was best for the baby. However they considered it '*not right for me'* (Quote: Hughes 1997, p.139), and what was right for them was ultimately seen as best for their baby. The same study reported that many women were unaware that their baby would not receive the antibodies found in breast milk which provide immunity from infections.	Methodological limitations: minor concerns (1 study with moderate quality rating based on CASP qualitative checklist) Relevance: minor concerns (Ethnicity not reported) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: moderate concerns (the study reports awareness that breastfeeding is best	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		for the baby and also reports lack of awareness about the benefits for immunity, but it does not explore how these two findings fit together; the two findings are actually reported in two separate sections of the study)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 6: Clinical evidence profile for theme 1.2: breastfeeding is natural**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Three studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Tully 2014 To 'explore maternal perspectives of mechanisms that	Many women spoke of breastfeeding as a '*natural act'* (Quote: Bailey 2004, p. 244) when explaining their decision to breastfeed. *'it's what these* [pointing to breasts] *are for'* (Quote: Bailey 2004, p. 244) *'It's obviously natural with immunity things and everything else, and… I just think if it wasn't produced (laughs)… there's a reason for everything… so that's the way nature intended'* (Quote: Dykes 2005, p.2286)	Methodological limitations: moderate concerns (1 study with minor rating and 2 studies with moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (Bailey 2004 focused on an area with low rates of breastfeeding initiation; Dykes 2005 focused on a range of higher to lower socio-economic occupational status; 2/5 studies (Dykes 2005 and Tully 2014) included both first-time mothers and multiparous women. Concerns about transferability to ethnic minorities (5/61 were South Asian in Dykes 2005; Tully 2014 mentions that participants were mostly white; Bailey 2004 does not report on this); moreover, participants in Tully 2014 were in a non-BFI accredited hospital.	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
contribute to early breastfeeding difficulty after caesarean childbirth'		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (3 studies that offered moderately rich data)	

1 *BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 7: Clinical evidence profile for theme 1.3: maternal identity**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.3.1. Maternal identity: pride and obligation			
One study: • Williamson 2012 To explore the experiences of first-time mothers who struggled with breastfeeding in the early post-partum period	Several women talked about a sense of pride in being able to nourish their baby with their own body and saw it as an essential part of motherhood. *'I'm doing it, it's from me that I've made this baby and I'm feeding it and she's gonna grow and she's gonna get big and she's gonna get strong because of what I'm giving her and that's a big thing'.* (Diary, day 3) (Quote: Williamson 2012, p. 439) On the other hand, difficulties with breastfeeding were seen as a threat to maternal identity and this meant that women felt obliged to persist in trying to overcome obstacles to successful breastfeeding. Women struggled every day to make breastfeeding work, even if this meant forgoing their own needs. *You want to persevere so you try to carry on and you want to do the right thing and you don't . . . I didn't want to appear . . . oh a failure is a strong word. I didn't really want to appear like a failure and give in to bottles but I had no, I had no choice. . . . As I say I shall give her two ounces of bottle and then stick her*	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist) Relevance: moderate concerns (findings may not be transferrable to women who did not experience significant difficulties with feeding in the first week postpartum) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: moderate concerns (1 study that offered moderately rich data)	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	on breast and . . . grin and bear the pain for a while and hopefully things shall improve tomorrow. (Diary, day 1) (Quote: Williamson 2012, p. 440)		
Sub-theme 1.3.2. Expressing as a way of deflecting accusations of poor mothering			
One study: • Johnson 2013 To explore the embodied practice of expressing breastmilk	Expressing was seen as a way to deflect potential accusations of poor mothering. *That would be a big, big, big issue for me if I couldn't breastfeed him through expressing milk or normal breastfeeding. Cos I think there's such a stigma attached to it. Such as 'you should breastfeed your baby' and if you're seen to be using formula it's… I think I'd feel like I'd let him down.* (Quote: Johnson 2013, p. 594)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (findings may not be transferable to women who do not express extensively or to ethnic minorities - 6/7 were white British)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 8: Clinical evidence profile for theme 1.4: bonding, intimacy, closeness and nurture**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.4.1. Breastfeeding promoting bonding, intimacy, closeness, nurture			
Three studies: • Bailey 2004	Some women reported closeness with their infants as a positive aspect of breastfeeding.	Methodological limitations: moderate concerns (1 study with minor rating and 2 studies with moderate rating based on CASP qualitative checklist)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To examine cultural expectations and experiences of breast-feeding • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	*... I'm still giving her the odd feed [breast] cos she likes it not for the milk not least anyways, for the comfort, when she's tired like it sends her off. It's a nice feeling, a closeness and I'm happy to do that.* (Woman who breastfed for two weeks) (Quote: Bailey 2004, p. 247) However, in one study (Dykes 2005) it was noted that only 1 out 61 women, a woman from Gujarat, referred to this aspect of breastfeeding.	Relevance: minor concerns (Dykes 2005 focused on a range of higher to lower socio-economic occupational status; Bailey 2004 focused on an area with low rates of breastfeeding initiation; 2/5 studies (Dykes 2005 and Tully 2014) included both first-time mothers and multiparous women. Concerns about transferability to ethnic minorities (Bailey 2004 does not report ethnicity data; 56/61 were white and 5/61 were South Asian in Dykes 2005; Tully 2014 mentions that participants were mostly white); moreover, participants in Tully 2014 were in a non-BFI accredited hospital.	
		Coherence: minor concerns (one of the three studies pointed out that this aspect was only reported by one woman from Gujarat)	
		Adequacy: minor concerns (3 studies that offered moderately rich data)	
Sub-theme 1.4.2. Expressing seen as less intimate than breastfeeding			
One study: • Johnson 2009 To explore the embodied practice of expressing breastmilk	Some women mentioned that expressing felt less intimate than breastfeeding and therefore not promoting bonding. *'I am still expressing and getting the goodness into him that way but it isn't the same as having that lovely bond that I did'* (Quote: Johnson 2009, p. 904)	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (findings may not be transferable to ethnic minorities (15/16 were white British)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 9: Clinical evidence profile for theme 1.5: cost**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Hughes 1997 To examine what influences women to bottle feed • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	Some women reported cost-effectiveness among the range of advantages that influenced their decision to breastfeed. Other women reported that the cost of formula milk was not an issue. *No supporting quote was provided*	Methodological limitations: minor concerns (Hughes 1997 was rated as minor quality, Tully 2014 as moderate quality based on CASP qualitative checklist)	Low
		Relevance: minor concerns (in Hughes 1997 all women had decided to formula feed; in Tully 2014 participants were mostly white and were in a non-BFI accredited hospital)	
		Coherence: minor concerns (different findings from different studies but that seems a reflection of the different populations; no ambiguous data)	
		Adequacy: serious concerns (2 studies that offered thin data, although sample size was considerable for one study)	

3 *BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme*

Table 10: Evidence profile for theme 1.6: effects on mother's body image

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Olander 2011 To explore the views of pre- and postnatal women and health professionals regarding.	The evidence for this finding was conflicting. One study (Olander 2011) found that pregnant women mentioned expectations of losing weight after birth through breastfeeding, even if they acknowledged that not all women lost weight this way and that this weight loss would end when breastfeeding ended. The other study (Brown 2011) found that there were concerns that breastfeeding had a negative impact on maternal weight and body image. The fear that breastfeeding would leave women misshapen and unattractive was a reason for using formula from birth. Mothers reported feeling embarrassed by the changes in their bodies at a time when they already felt conscious of their appearance after giving birth. There was the idea amongst mothers that breasts should remain sexual and be for the mothers' partner rather than their babies. *People told me what breastfeeding would do to your boobs (breasts). I was only young and that really scared me. I didn't want my partner seeing me with droopy boobs when I was only 20.* (Formula-fed from birth) (Quote: Brown 2011, p. 1996)	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist).	Moderate
		Relevance: minor concerns (Brown 2011 looked at areas with varying degrees of social deprivation however it does not report on ethnicity; findings might not be transferrable to women who breastfed for longer; Olander 2011 does not report characteristics of pregnant women).	
		Coherence: minor concerns (the findings from the two studies are in contradiction however the negative expectations in Brown 2011 might be due to the characteristics of participants, who either formula fed from birth or breastfed for limited duration).	
		Adequacy: moderate concerns (2 studies that offered moderately rich data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 11: Clinical evidence profile for theme 1.7: women's and babies' physical condition after a caesarean section

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.7.1.Women's physical condition after a caesarean section			
Two studies: • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	Several women felt that a caesarean section led to a delay in skin-to-skin contact. Moreover, the immediate post-caesarean period, including the first time they breast fed, was difficult to remember. Among the main breastfeeding problems after a caesarean section were limited maternal morbidity, maternal incision pain, and maternal tiredness. It was hard to breastfeed due to difficulties with manoeuvring the women's own bodies and with picking up their infants. Night-time was specifically mentioned as being more difficult for breastfeeding due to the absence of visitors to assist them. "*I think that I had forgotten how debilitating it is [after a caesarean section] in the first 24 hours. I expected to be on my feet sooner…just remember things* *differently. Obviously, you're not yourself for a few weeks. You forget how long it takes to get better. Just forget it's major surgery. I will get help tonight with looking after them [twin newborns], 'cause I can't get up…felt bit let down by that [limited mobility]. [...] You feel a bit helpless after caesarean. It's night when you mainly need the help. Breastfeeding is quite tiring*." (Quote: Tully 2014, p. 6)	Methodological limitations: minor concerns (1 study with no or minor and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (in Keely 2015 women were obese and in Tully 2014 participants were in a non-BFI accredited hospital. In both studies participants were mostly white) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (2 studies that offered moderately rich data)	Moderate
Sub-theme 1.7.2. Infant mucus after a caesarean section			
One study: • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early	Among the main breastfeeding problems after a caesarean section, women mentioned infant mucus. *"The first night she [the newborn] was mucusy. She is having to bring all of that up first, so isn't interested in feeding. She had to vomit up the mucus...."* (Quote: Tully 2014, p.6)	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (participants were mostly white and were in a non-BFI accredited hospital)	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
breastfeeding difficulty after caesarean childbirth'			
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

1 *BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 12: Clinical evidence profile for theme 1.8: breastfeeding is difficult**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.8.1. Women's low confidence in their ability to breastfeed			
Two studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting	Some women spoke of an expectation of failure almost contradictory to the view of breastfeeding as natural. Others expressed that they would try to breastfeed, but would just have to wait and see whether it worked for them or not. Some expectations involved common misperceptions, such as the fear of not producing enough milk. *You can always try, at least I'll have tried.* (Young woman, 18, breast fed for two days) (Quote: Bailey 2004, p. 244) *I just wanted to give it a go*. (Woman, 24, breastfeeding at second interview) (Quote: Bailey 2004, p. 244) Failure was seen as a realistic possibility, which in turn influenced how mothers prepared for and reacted to difficulties when they did arise. *I've got some formula at home in case we need it…but I think both my husband and myself, we feel that if we've actually got*	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (Dykes 2005 focused on a range of higher to lower socio-economic occupational status; Dykes 2005 included both first-time mothers and multiparous women. Bailey 2004 focused on an area with low rates of breastfeeding initiation, therefore findings may not be transferable to areas with higher rates of initiation. Concerns about transferability to ethnic minorities (Bailey 2004 does not report on this; 56/61 were white in Dykes 2005)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	something in the house, if we're actually at the stage where the baby's not feeding then we've actually got something to rely on (Quote: Dykes 2005, p. 2290) Women saw gaining confidence in the skill of breastfeeding as a primary goal '*I mean mainly at the moment, I want to be confident that I can do it'* (Quote: Dykes 2005, p. 2287)	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (2 studies that offered moderately rich data)	
Sub-theme 1.8.2. Breastfeeding is difficult due to intertwined obstacles			
Two studies: • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	The belief that breastfeeding was difficult was commonly discussed, particularly among mothers who initiated but stopped breastfeeding. Formula feeding, on the other hand, was viewed as simple and free of difficulties. Participant discussions of breastfeeding difficulties revealed that obstacles were intertwined. *It was absolutely exhausting. It was difficult - I couldn't get him to latch, I didn't know when he would feed. I was feeding all the time, which was just ridiculous. […]* (Quote: Brown 2011, p. 1997)	Methodological limitations: moderate concerns (2 studies with moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (Brown 2011 does not report on ethnicity and participants in Tully 2014 were mostly white and were in a non-BFI accredited hospital)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (2 studies that offered moderately rich data)	

1 *BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

Table 13: Clinical evidence profile for theme 1.9: difficulties in establishing breastfeeding

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Three studies: • Johnson 2013 To explore the embodied practice of expressing breastmilk • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth' • Williamson 2012 To explore the experiences of first-time mothers who struggled with breastfeeding in the early post-partum period	Although some women found breastfeeding relatively unproblematic, some women experienced establishing breastfeeding in the early days as difficult. For several of them, it was a daily, painful struggle to synchronize two bodies in the act of breastfeeding – with sore nipples, difficulties finding a feeding position that worked and a baby either disinterested in feeding or distressed and seemingly unable to feed. This was at odds with their expectation that breastfeeding would be 'natural'. Among the main problems there were infant latching difficulty and perceived lack of infant interest. '*try and get him in the right position, try and get his arms out the way . . . , you're trying to hold and support his head which wobbles, and getting him to open his mouth wide, and it's just so much to do. I know it sounds pathetic, it must be, it should be the most natural thing in the world, but . . . so difficult isn't it, baby boy?* (Diary, day 1) (Quote: Williamson 2012, p. 439) The issue of not latching on properly was cited as a reason for expressing breastmilk. *My husband and I have been discussing, if he [the baby] doesn't go on the breast… maybe to as soon as possible start expressing it and getting that down him rather than formula milk* [Queenie crying]. (Diary Phase 1, day 3) (Quote: Johnson 2013, p. 594)	Methodological limitations: minor concerns (2 studies with minor rating and one study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (participants in Tully 2014 were in a non-BFI accredited hospital; findings may not be transferable to ethnic minorities; in Johnson 2013 6/7 women were white; Tully 2014 mentions that participants were mostly white; in Williamson 2012 all 8 women were white) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (3 studies that offered moderately rich data)	Moderate

BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 14: Clinical evidence profile for theme 1.10: concerns about adequacy of milk supply

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.10.1. Colostrum and 'proper milk'			

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Condon 2003 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant	In one study with mostly white women (Dykes 2005), women anxiously awaited the '*milk coming in'* (p. 2287), i.e. the colostrum being replaced by what they saw as '*proper*' milk (p. 2287). In another study with ethnic minorities (Condon 2003), monoculture focus groups with Bangladeshi, Somali, and Afro-Caribbean women showed that women believed colostrum to be good for the baby and that it should be given to the baby. This same finding was true for the focus group with Pakistani women who had been born in the UK or had been resident for over 20 years. The exception was the group of Pakistani women who had migrated to the UK within the last 10 years. This group was divided on whether colostrum should be given to the baby. One woman described how she expressed the first feed into the bath after delivery to get rid of the 'thick' colostrum, which might block breast ducts. She then initiated exclusive breastfeeding. *No supporting quote provided*	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (Strengths: Dykes 2005 focused on a range of higher to lower socio-economic occupational status and included both first-time mothers and multiparous women. Weaknesses: Condon 2003 mentions that the limited sample size of each ethnic minority limits was a limitation in the study)	
		Coherence: minor concerns (different views were expressed between and within ethnic groups)	
		Adequacy: moderate concerns (2 studies that offered moderately rich data)	
Sub-theme 1.10.2. Limited milk volume			
One study: • Hinsliff-Smith 2014 To understand primiparous women's experiences and challenges of breastfeeding in the early	Breast milk volume was assumed directly comparable to the amount of formula milk being offered in the pre-prepared bottles on the postnatal ward. Mothers who were encouraged to hand express their colostrum were surprised by the small amount expressed. A mother expected her milk to '*be gushing'* (Hinsliff-Smith 2014, p. e16) and was shocked when she was only leaking a	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Low
		Relevance: serious concerns (Gestational age unclear; inclusion criteria was gestation over 34 weeks)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
postpartum period (defined as 6-8 weeks)	small amount of milk. These misunderstandings led mothers to consider that there was something wrong with their breast milk.	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub-theme 1.10.3. A hungry and unsettled versus a content baby			
Five studies: • Bailey 2004 • To examine cultural expectations and experiences of breast-feeding • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Dykes 2005 To explore the influences upon women's experiences of	Among the main breastfeeding problems was a perceived lack of infant satiation. Formula milk was used to top up breastfeeds within the first few days after the birth. The main reasons for introducing formula milk included a very unsettled baby, which caused exhaustion and anxiety. A discontented and unhappy baby made women doubt their ability to breastfeed effectively. *'…nine hours or something like that trying to feed him. He was just crying and I remember… I could hear his belly rumble. He was starving and he obviously wasn't getting anything. I was sitting and I was in tears and I said to [my husband]: 'What am I going to do?' And he says, 'He needs to eat, so you need to give him formula.' So I did. I'm welling up now thinking about it. I was really quite upset about it, but I gave him it'*. [1st baby spontaneous vaginal birth, talking about first night at home from hospital] (Quote: Keely 2015, pp. 535-6) Women expressed the idea that formula-fed babies fed less frequently, slept for longer and were generally more settled and content.	Methodological limitations: minor concerns (1 study with no or minor rating, 1 study with minor rating and 3 studies with moderate rating based on CASP qualitative checklist)	High
		Relevance: minor concerns (Bailey 2004 focused on an area with low rates of breastfeeding initiation; Dykes 2005 focused on a range of higher to lower socio-economic occupational status; Keely 2015 mentions that participants use purposive sampling that took age and social class into account. Most studies included both first-time mothers and multiparous women (the exception was Bailey 2004). Weaknesses: concerns about transferability to ethnic minorities (Bailey 2004 and Brown 2011 do not report ethnicity data; 56/61 were white in Dykes 2005; 27/28 in Keely 2015 were white; Tully 2014 mentions that participants were mostly white); moreover, participants in Tully 2014 were in a non-BFI accredited hospital.	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
breastfeeding within the postnatal ward setting. • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	On the other hand, breastfeeding women felt confident about producing and delivering enough milk when their baby was settling between feeds. '*Up till now, I feel confident, just because she seems content on it and as soon as she's had enough she just goes straight to sleep*'' (Quote: Dykes 2005, p. 2287).		
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: no or very minor concerns (5 studies that offered moderately rich data)	
Sub-theme 1.10.4. The baby's weight			
Two studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Brown 2011	A common fear among mothers was that their infants were not growing fast enough. Women grew anxious about how much weight their infants gained. The women noted that everyone around them put a lot of emphasis on child weight gain. Formula feeding allowed mothers to coax their infants to feed more. The consequence of this was increased weight gain, which made mothers feel confident that their infants were growing well. Among the main reasons for introducing formula milk, there was that the baby was losing weight.	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (Brown 2011 looked at areas with varying degrees of social deprivation and Bailey 2004 focused on an area with low rates of breastfeeding initiation. Concerns about transferability to	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant	*'Like I says I had to start her on bottles at two week cos like she was losing weight. […]'* (Woman who breastfed for two weeks) (Quote: Bailey 2004, p. 247)	ethnic minorities because both studies do not report ethnicity data)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (2 studies that offered moderately rich data)	
Sub-theme 1.10.5. Inability to measure and visualise how much the baby was getting			
Four studies: • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Johnson 2009	Women were concerned that they were unable to measure and visualise how much the baby was getting. Women tended to contrast the uncertainty of breastfeeding with the certainty of bottle feeding. Women who had successfully breastfed previously were less anxious but still expressed some concerns. Expressing breast milk was a way to being more certain about how much milk the baby was getting. *I think the main worry was just that he wasn't getting enough… to eat. And the thing with breastfeeding is you can't see how much they're having…, I can see how much I've expressed.* (Diary Phase 1, day 7) (Quote: Johnson 2013, p. 595)	Methodological limitations: minor concerns (2 study with minor rating and 2 studies with moderate rating based on CASP qualitative checklist)	High
		Relevance: minor concerns (Strengths: Dykes 2005 focused on a range of higher to lower socio-economic occupational status and Brown focused on areas with varying degrees of social deprivation; 2/4 studies (Brown 2011 and Dykes 2005) included both first-time mothers and multiparous women. Weaknesses: concerns about transferability to ethnic minorities (Brown 2011 does not report on ethnicity data; in Dykes 2005 56/61 were white, in Johnson 2009 15/16 were white and in in Johnson 2013 6/7 were white); Johnson 2009 and Johnson 2013 focus on first-time mothers only.	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	**Overall Confidence**
To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: no or very minor concerns (4 studies that offered moderately rich data – but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	
Sub-theme 1.10.6: Concerns about delivery to the baby			
One study • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting.	Women were not only concerned about production but also delivery of the produced milk to the baby. They sometimes had concerns related to the actual flow of breastmilk from their bodies. '*I didn't feel... you know... that there was enough leaving my body, it's a weird sort of feeling...you're not sure'* (Quote: Dykes 2005, p. 2287). Women also tended to be concerned that their milk might not be actually reaching their baby: *It's just knowing what's happening. You know she just gorges herself and then it's like coming out of her nose and everywhere, so you don't know if they're getting enough, like if it's coming out of there how do you know she's getting enough…(*Quote: Dykes 2005, p. 2287). Women endeavoured to assess their milk transfer to the baby through various means, for example watching for the baby's bowel movements.	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (Strengths: Dykes 2005 focused on a range of higher to lower socio-economic occupational status and included both first-time mothers and multiparous women. Weaknesses: concerns about transferability to ethnic minorities (56/61 were white) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: moderate concerns (1 study that offered moderately rich data)	Low

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

Table 15: Clinical evidence profile for theme 1.11: irregular demands causing concerns

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Three studies: • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Hinsliff-Smith 2014 To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) . • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	Women were confused and concerned about the irregularity of feed frequencies, particularly at night. *Basically he wasn't taking a lot and he was just taking little bits and I was winding him and seeing if he was interested, so I put him down and as soon as I put him down he was starting off again, but as soon as I put him back to my breast he was drinking again, so I was like... what's going on!* (Quote: Dykes 2005, p. 2288). *Sometimes she'll go 4 or 5 h but that tends to be in the day and then she'll have a good sleep, but the last couple of nights...like last night she fed about quarter past 8 and then she fed again about 12 and then she slept through till 3... so it was only 3 h but then she was awake again at 4...just after 4 and then she slept through* (Quote: Dykes 2005, p. 2288). Mothers talked about '*relentless feeding*' (Hinsliff-Smith 2014, p. e16). Breast-feeding mothers were aware of looking for feeding cues. However, the infant not settling was seen as the infant needing to be fed which resulted in them offering the breast and therefore perpetuating the feeling of constantly feeding. Women wanted to produce a 'good baby' with good habits and part of this involved limiting his or her demands. Women expressed concern relating to the baby playing at the breast or using the breasts as 'dummies', i.e. for comfort, or for falling asleep. Formula milk was seen as a solution to promote 'normal' newborn behaviour. *I mean feeding is a last resort, but I don't want it to become like a dummy, just a comfort thing...I don't mind, but I'm a bit concerned because once he's on he just falls asleep. He doesn't actually take anything, as I was saying it's just a comfort thing...I don't want him just on me for no reason*	Methodological limitations: moderate concerns (2 studies with moderate rating and 1 study with minor rating based on CASP qualitative checklist) Relevance: minor concerns (Strengths: Dykes 2005 focused on a range of higher to lower socio-economic occupational status; 2/3 studies (Dykes 2005 and Tully 2014) included both first-time mothers and multiparous women. Weaknesses: In Hinsliff-Smith 2014 gestational age is unclear; inclusion criteria was gestation over 34 concerns; there are concerns about transferability to ethnic minorities (in Dykes 2005 56/61 women were white; Hinsliff-Smith does not report ethnicity data; Tully 2014 mentions that participants were mostly white); moreover, participants in Tully 2014 were in a non-BFI accredited hospital) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (3 studies that offered moderately rich data)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	(laughs)...I'm a bit don't know what to do really...I am just concerned that it's going to be a habit, that I don't want to...I really don't want it to be a habit where I'm needed this much. I mean comfort wise I want him to relax in the cot rather than this (Quote: Dykes 2005, p. 2289).		

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 16: Clinical evidence profile for theme 1.12: pain**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.12.1. Experiencing pain			
Three studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Dykes 2005 To explore the influences upon women's experiences of breastfeeding within the postnatal ward setting. • Williamson 2012	Although some women had expected a degree of initial discomfort associated with breastfeeding, all were surprised by the intensity and duration of the pain. Pain was often described as severe. Women used words and phrases such as '*extremely, excruciatingly painful*' (Quote: Williamson 2012, p. 441). References were also made to bleeding, cracked and blistered nipples. This left several of them confused about the amount of pain they ought to experience and whether or not their discomfort signalled a problem or was to be expected. This pain was not always apparent from the first few feeds in hospital. *Yes it was just a couple of days later really when my nipples got really sore, I mean they bled and I was crying and that lasted almost a week, sort of when I first came home.* (Mixed feeding from two days and at second interview) (Quote: Bailey 2004, p. 246)	Methodological limitations: minor concerns (2 studies with minor rating and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (Bailey 2004 focused on an area with low rates of breastfeeding initiation; Dykes 2005 focused on a range of higher to lower socio-economic occupational status; Dykes 2005 included both first-time mothers and multiparous women. Concerns about transferability to ethnic minorities (Bailey 2004 does not report ethnicity data; 56/61 were white in Dykes 2005; in Williamson 2012 all women were white)	High

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To explore the experiences of first-time mothers who struggled with breastfeeding in the early post-partum period	Most women felt the need to endure the pain and continue breastfeeding. Some indicated that there were times when they dreaded the next feed, and two participants in one study spoke about the negative effect of pain on their relationship with their infant. *It absolutely kills still. I'm actually starting to feel nauseous now when I feed him and I'm dreading every feed time now which is every 2 1 / 2 hours which is not a nice feeling because I should be enjoying these moments. I am starting to hate it more and more.* (Diary, day 4) (Quote: Williamson 2012, p. 442) Although the experience of pain sometimes led to useful advice about changing position and latching the baby on, experiencing pain also undermined confidence in breastfeeding, and a reason for turning to formula was nipple pain.	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: no or very minor concerns (5 studies that offered moderately rich data – but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	
Sub-theme 1.12.2. Expressing to manage pain			
Two studies: • Johnson 2009 To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk	Expressing was seen as a way of managing the pain and feeling more in control, even though not all women found expressing successful. *'so he wasn't latching on properly and I've been getting very sore nipples as well, they've been cracked and that's part of the reason why I 've been doing the expressing, cos he's got such a strong suck on him that I've found that at least if I am expressing, I can control how hard the suck is…'* (Quote: Johnson 2009, p.903)	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (concerns about transferability to ethnic minorities – in Johnson 2009 15/16 were white and in Johnson 2013 6/7 were white); both studies focus on first-time mothers only.	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		Adequacy: moderate concerns (2 studies that offered moderately rich data – but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 17: Clinical evidence profile for theme 1.13: the impact of feeding on the woman's tiredness, independence, and every day's tasks

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 1.13.1. Impact on woman's tiredness, independence and every day's tasks			
Five studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Hinsliff-Smith 2014	Women mentioned an unexpected level of tiredness and exhaustion in relation to their breastfeeding experiences. In particular, they mentioned the frequency of feeding, the demands of night feeding and effect on sleep patterns. Breastfeeding was associated with difficulty in establishing a routine and some mothers mentioned their inability to continue with their everyday tasks. *'I cannot do anything else apart from breastfeeding, no time for bath or shower or even clean the house'* (Quote: Hinsliff-Smith 2014, p16) Other children were perceived as a barrier to breast-feeding, even for those who had breast-fed previously. Breastfed babies were perceived as more dependent than the ones that are formula fed and this added to the mothers' perceived lack of freedom. Formula feeding was regarded as less time-consuming and more regular, therefore mothers viewed formula as less demanding on maternal lifestyle than breastfeeding. For experienced mothers, combination feeding	Methodological limitations: minor concerns (3 studies with minor rating and 2 studies with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (Brown 2011 looked at areas with varying degrees of social deprivation and Bailey 2004 focused on an area with low rates of breastfeeding initiation; 3/5 studies (Brown 2011, Stewart-Knox 2003 and Tully 2014) included both first-time mothers and multiparous women. Hinsliff-Smith 2014 and Stewart-Knox 2003 do not report demographic characteristics of participants; in Hinsliff-Smith 2014 gestational age is unclear, and inclusion criteria above 34 gestational weeks; concerns about transferability to ethnic minorities (Tully 2014 mentions that	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	**Overall Confidence**
To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) • Stewart-Knox 2003 To define and explore factors determining infant feeding decisions in Northern Ireland • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	of human and formula milk '*worked last time'* which they would rather do than have the newborns '*crying all night*' (Quotes: Tully 2014, p. 7). Some mothers used formula in an effort to settle their infants so that they could obtain more rest. Despite also reporting these kinds of findings, one study (Tully 2014) reported convenience as an aspect associated with both breastfeeding and not breastfeeding. In another study (Bailey 2004) with 16 women, only 1 woman mentioned convenience of breastfeeding over preparing bottles.	participants were mostly white; Bailey 2004, Brown 2011 and Hinsliff-Smith 2004 and Stewart-Knox 2003 do not report on ethnicity); moreover, participants in Tully 2014 were in a non-BFI accredited hospital) Coherence: moderate concerns (unclear to what extent women perceived convenience of breastfeeding aspects as well as emphasising the convenience of formula feeding) Adequacy: no or very minor concerns (5 studies that offered moderately rich data)	
Sub-theme 1.13.2. Expressing as a solution to the inefficiencies of the maternal body: less time consuming			
2 studies • Johnson 2009 To explore the embodied practice of expressing breastmilk • Johnson 2013	Women said that expressing was a faster way to feed than breastfeeding, especially when using a breast pump. *The only reason that I've been doing that [expressing milk] is because I find that when baby's on the breast, he takes such a long time to feed. He can be on the breast for up to like an hour and a half, two hours.* (Phase 2 Diary, day 1) (Quote: Johnson 2013, p. 595)	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (concerns about transferability to ethnic minorities – in Johnson 2009 15/16 were white and in	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To explore the embodied practice of expressing breastmilk	Authors of the study noted that some comments by the participants such as such as '*not that that was a factor for doing it [expressing*]' (Quote: Johnson 2013, p. 596) indicated that there might be something problematic about being perceived to value increased freedom in the context of the moral message that 'breast is best'.	Johnson 2013 6/7 were white); both studies focus on first-time mothers only.	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (2 studies that offered moderately rich data – but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 18: Clinical evidence profile for theme 1.14: futility of starting breastfeeding when it could not be continued**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Hughes 1997 To examine what influences women to formula feed.	Some women planned to return to work within 4 months after the birth. It was their perception that starting breastfeeding in the first place was therefore futile as they would be unable to continue with it once back at work. *No supporting quote provided*	Methodological limitations: minor concerns (1 study with minor quality rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (Ethnicity not reported)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: serious concerns (one study that offered thin data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Overarching theme 2. Partners, family and friends

Table 19: Clinical evidence profile for theme 2.1: influence of others' experiences and opinions on feeding decisions

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 2.1.1: Influence of views or past experiences of family and friends			
Three studies • Bailey 2004 N=16 first-time mothers who had expressed and intention to breastfeed and lived in an area with low rates of breastfeeding initiation • Stewart-Knox 2003 To define and explore factors determining infant feeding decisions in Northern Ireland • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	Women reported that family and friends had an influence on their feeding decisions. Some women reported fulfilling expectations of family and friends, and some women referred to difficulties that friends and relatives had experienced. Some women considered guidance from other family members who experienced breastfeeding as important. Most women perceived others as supportive, but a few women felt pressurised to breastfeed by family members. Despite reporting strong influence from family and friends, 1 study (Stewart-Knox 2003) found that some women reported little influence from partners upon feeding decisions. *'No, breast or bottle, he just leaves it entirely up to me to make up my own mind. He would encourage, he would support me whatever I decide'.* (Quote: Stewart-Knox 2003, p. 268) *'My partner would be very much for breast feeding, very much, but still no, definitely. I'm going to be, contrary to the pressure from my husband, I'm going to bottle-feed'.* (Quote: Stewart-Knox 2003, p. 268)	Methodological limitations: minor concerns (2 studies with minor rating and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (2/3 studies (Stewart-Knox 2003 and Tully 2014) included both first-time mothers and multiparous women; Bailey 2004 focused on an area with low rates of breastfeeding initiation. Stewart-Knox 2003 does not report demographic characteristics of participants; concerns about transferability to ethnic minorities (Tully 2014 mentions that participants were mostly white; Bailey 2004 and Stewart-Knox 2003 do not report on ethnicity); moreover, participants in Tully 2014 were in a non-BFI accredited hospital) Coherence: moderate concerns (unclear if and why family and friends may have a stronger influence than partners; it could be speculated that past experience makes the difference but this is not explored in the papers)	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		Adequacy: minor concerns (3 studies that offered moderately rich data)	
Sub-theme 2.1.2. Cultural norms			
Two studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant	Mothers said that formula feeding has become the normal way to feed an infant in the UK today. Mother who initiate breastfeeding said that they were in the minority, and that the majority of friends and family used formula milk. This was often cited as an important trigger in stopping breastfeeding, because women had little support from others. *I tried to breastfeed as I had heard that it had lots of benefits for the baby but certainly no one made me feel wrong or different for giving it up…the opposite in fact.* (BF 6 weeks) (Quote: Brown 2011, p. 1996) On the other hand, some women felt that they were within a more supportive culture of breastfeeding and it helped them to know there was someone who would give them guidance.	Methodological limitations: minor concerns (1 study with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (Brown 2011 looked at areas with varying degrees of social deprivation and Bailey 2004 focused on an area with low rates of breastfeeding initiation. Weaknesses: concerns about transferability to ethnic minorities because both studies do not report ethnicity data)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (2 studies that offered moderately rich data)	
Sub-theme 2.1.3. 'I felt like I was failing…' – the role of others when difficulties arise			
Three studies: • Hinsliff-Smith 2014 To understand primiparous women's	Maternal tiredness was specifically mentioned as a reason that family members did not support breastfeeding plans. Some women described their partners as key to their decision to introduce formula milk when breastfeeding difficulties were encountered.	Methodological limitations: minor concerns (1 study with no or minor rating, 1 study with minor rating, and 1 study with moderate rating based on CASP qualitative checklist)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	**Overall Confidence**
experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services • Tully 2014 To 'explore maternal perspectives of mechanisms that contribute to early breastfeeding difficulty after caesarean childbirth'	'*He kept saying, 'Just..if it's that sore.. just stop, because it's not the end of the world'. He was like, 'There's no point torturing yourself for it''* (1st baby, spontaneous vaginal birth) (Quote: Keely 2015, p. 536) Other women described their partners being worried that their baby was not getting an adequate supply of breastmilk. *I don't think [my husband] quite understood about the breast-feeding - that it is normal every half an hour and it is normal for [the baby] to cry for a feed. And he got quite distressed and he was just like 'We will just give him a bottle' and gave him a bottle and then he wouldn't go back on the breast'* (1st baby, emergency caesarean section) (Quote: Keely 2015, p. 536) For some women the support of a friend, who provided practical tips and companionship, was very important in enabling them to continue breastfeeding. *Week 5 – where is the milk? This week has been horrible for me, few attempts at breastfeeding but he is not interested but I was reassured by friends* (Diary) (Quote: Hinsliff-Smith 2014, p. e17)	Relevance: minor concerns (in Hinsliff-Smith 2014 gestational age was unclear; inclusion criteria was gestation over 34 weeks; in Keely 2015 women were obese and in Tully 2014 participants were in a non-BFI accredited hospital. In Keely 2015 and Tully 2014 participants were mostly white; Hinsliff-Smith 2014 did not report ethnicity data) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (3 studies that offered moderately rich data)	

BFI: Baby Friendly Initiative; CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 20: Clinical evidence profile for theme 2.2: practical support from partner and family - bottle feeding as a means of sharing the 'load' with others

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Five studies: • Brown 2011 To compare healthcare professionals' and mothers' perceptions of factors that influence the decision to breastfeed or formula feed an infant • Johnson 2009 To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum. • Stewart-Knox 2003	Some women mentioned that formula allowed other people to feed the infant. Other women mentioned that expressing allowed others to feed the baby. *The experience of having someone else feed her has put my mind at ease a bit that if I were to be resting or anything, I could definitely be OK with someone else feeding her, it would definitely make life that little bit easier for me. I can get on with other things, I can have a rest, I can do something I really desperately need to do or I can go out* (Young woman aged 19, Diary, Day 3) (Quote: Johnson 2009, p. 905) In contrast, when support is available, breastfeeding means that others can only provide minimal help. *…even if I was to go out and leave the baby with my mother say a simple thing like going to get your hair cut, and the baby is due a feed, but you are breast-feeding.* (Quote: Stewart-Knox 2003, p. 267) Other people wanted to share in the care of the infant so bottle feeding was not just beneficial to the mother. *It's hard on me but it's hard on my partner as well because he can't help to do anything. He just has to sit there and look at me absolutely shattered and crying . . . and there's nothing he can do to help. He can't . . . just grab a bottle . . . hopefully . . . I might be able to start expressing milk and then daddy can feed you as well.* (Phase 1 diary) (Quote: Leeming 2013, p. 459) Several participants viewed others' offers to feed the baby via a bottle as an expression of care, although this sort of perception appeared to depend on prior relationships with others.	Methodological limitations: minor concerns (4 studies with minor rating and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (Strengths: Brown focused on areas with varying degrees of social deprivation and Leeming 2013 included a range of occupational backgrounds; 2/5 of studies (Brown 2011 and Stewart-Knox) included both first-time mothers and multiparous women. Weaknesses: concerns about transferability to ethnic minorities (Brown 2011 and Stewart-Knox 2003 do not report on ethnicity data; proportion of white: 15/16 in Johnson 2009, 6/7 in Johnson 2013, 19/22 in Leeming 2013); Johnson 2009, Johnson 2013 and Leeming 2013 focus on first-time mothers only. Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: no or very minor concerns (5 studies that offered moderately rich data – but please note that Johnson 2009, Johnson 2013 and Leeming 2013 are likely to have overlapping populations)	High

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To define and explore factors determining infant feeding decisions in Northern Ireland	*If I was bottle feeding I'd probably get coerced into leaving him with somebody. But because I'm breastfeeding I can't . . . it's nice that I've got that kind of control aspect of it . . . if you've got kind of quite pushy in-laws like I have it's nice that nobody else can take control*. (Phase 2 interview) (Quote: Leeming 2013, p. 459) Some accounts suggested that participants viewed the allocation of feeding responsibilities as part of on-going negotiations with their partner about the fair distribution of workloads. For example, in her second interview, Robin expressed some dissatisfaction with her husband's reluctance to look after the baby while she was still breastfeeding and referred to formula having become '*a bit of a freedom ship for women'* (Quote: Leeming 2013, p. 459) At the same time, some women were concerned to ensure that breastfeeding did not mean they were taking less than their fair share of the domestic workload. *'We [Erica and her mother] were talking about the thing I find most difficult. . . with breastfeeding now is sitting all the time and not being able to get on with jobs and chores and things, and, erm she was talking about my sister in law, who did breast feed her two boys. . . and my mum sort of said in a derogatory fashion, 'Yes, but she's just happy to sit and be sort of Mother Earth', and, erm, and it was true that my brother did come back from work at five o'clock and then cook the meal and set about doing all the household chores'. (*Quote: Leeming 2013, p. 459)		

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

Table 21: Clinical evidence profile for theme 2.3: paternal and family bonding

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 2.3.1. Paternal and family bonding through bottle feeding			
Five studies: • Bailey 2004 To examine cultural expectations and experiences of breast-feeding • Johnson 2009 To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum. • Stewart-Knox 2003	Women described bottle feeding as allowing others the opportunity to bond with the baby. Some women referred to formula feeding and other women to expressing. *I like having the bottles because it gives her a chance to bond with . . . my partner and . . . her grandma and her great granny . . . feeding her is one of the most beneficial ways of bonding with a baby because you are so close.* (Phase 1 diary) (Quote: Leeming 2013, p. 458) Women were concerned that fathers and other family members felt excluded from feeding. Women felt an obligation to facilitate some kind of bond between others and the baby by enabling bottle feeding. Women implied that they should not be selfish and should let others have access to intimacy with the baby. *'my husband was going to bond, have his bonding with her when she is having her bath, but she hates having a bath, so he feels that he is getting a bad deal and also he is nappy changer when he is here so he feels that he is getting a bit of a bad deal um, so we have talked about, perhaps introducing more, when she is older in a month or two, introducing a few more formula feeds or expressed feeds if possible um, so that he can have that bonding process as well, although at the moment he is talking about wanting to do it now'.* (Woman aged 31, Interview) (Quote: Johnson 2009, p. 904) A partner willing to be more active was among the reasons for introducing formula milk. *Chris was feeling left out and he was, he wasn't putting pressure on to us but he was saying when are you putting him on to bottles so I can feed him*	Methodological limitations: minor concerns (2 studies with moderate rating and 3 studies with minor rating based on CASP qualitative checklist) Relevance: minor concerns (Leeming 2013 included a range of occupational backgrounds and Bailey 2004 focused on an area with low rates of breastfeeding initiation; 1/5 of studies (Stewart-Knox 2013) included both first-time mothers and multiparous women. Concerns about transferability to ethnic minorities (Bailey 2004 and Stewart-Knox 2003 do not report on ethnicity data; proportion of white: 15/16 in Johnson 2009, 6/7 in Johnson 2013, 19/22 in Leeming 2013); Bailey 2004, Johnson 2009, Johnson 2013 and Leeming 2013 focus on first-time mothers only. Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: no or very minor concerns (5 studies that offered moderately rich data – but please note that Johnson 2009, Johnson 2013 and Leeming 2013 are likely to have overlapping populations)	High

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To define and explore factors determining infant feeding decisions in Northern Ireland	(Woman aged 25, breast fed for three weeks) (Quote: Bailey 2004, p. 247).		
Sub-theme 2.3.2. Paternal and family bonding through breastfeeding			
One study: • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum.	Breastfeeding could enable a sense of connection with partners. Some participants talked about practising breastfeeding in the first few days as a triad, with fathers active in problem-solving and helping with attaching the baby to the breast. *I really enjoy the opportunity that feeding is giving me baby and my husband time so that we, the three of us, are having time together and that's quite . . . personal . . . it's like our time that we spend together and it's really excellent.* (Phase 1 diary) (Quote: Leeming 2013, p. 458)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (the study included a range of occupational backgrounds however 19/22 women were white and there are concerns about the transferability of findings to ethnic minorities)	
		Coherence: moderate concerns (many studies mention family bonding through the bottle and only this study mentions family bonding through breastfeeding)	
		Adequacy: moderate concerns (one study that offered moderately rich data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 22: Clinical evidence profile for theme 2.4: managing tensions between looking after their relationship with their partner and breastfeeding

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum.	Women talked about some tension between their relationship with their partner and breastfeeding. Some women talked about domestic obligations. Moreover, some women talked about spending time together and ensuring the continuation of a sexual relationship. Many of the participants seemed to see the integration of breastfeeding into their relationships as something that required active emotional work rather than something to take for granted. Nicole explained that this was an important part of her plan to finish breastfeeding after three months: *At some point . . . you have . . . to balance it a bit more between being erm, . . . a partner and a mum as well . . . by then I think it's time that erm we got our life back a little bit and went out together as a couple . . . I want to be able to leave him [baby] and give John [partner] a bit more of my time . . . it's important not to just focus everything on being a mum cos I think that's when you can start to get cracks in your relationship.* (Phase 2 interview) (Quote: Leeming 2013, p. 461) Managing conflict relating to feeding tensions was also mentioned. For example, a woman who described both her and her husband distressed by difficulties with breastfeeding, which she perceived as failing, said: *He's [husband] sort of is really worried and stressed and um, and it's hard not to feel that he's blaming me for not being able to do it, I know he's not, but it's just frustrating for him because he can't help me, and he's trying to help me.* (Phase 1 diary) (Quote: Leeming 2013, p. 460)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist) Relevance: minor concerns (the study included a range of occupational backgrounds however 19/22 women were white and there are concerns about the transferability of findings to ethnic minorities) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: moderate concerns (one study that offered moderately rich data)	Moderate

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

1 ***Overarching theme 3. Dimensions of public feeding***

2 **Table 23: Clinical evidence profile for theme 3.1: lack of privacy during postnatal hospital stay**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Hinsliff-Smith 2014 To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services	Privacy was difficult to achieve during the postnatal hospital stay, which lasted several days after a caesarean section. Women mentioned that curtains were left open and due to their limited mobility they had to keep asking someone to shut them. Some women, trying to manually express breast milk due to difficulties with latching their babies on, had additional difficulties. *'..obviously because.. like, it's… like, a shared ward as well, it's not like your own room. So you've constantly got people coming in and out when you're trying to express into… like a little syringe. So, it wasn't the best. I was fine breast-feeding him, because obviously he's on your breast, but it was a bit different when you're sitting like massaging your breasts and trying to catch milk in a syringe and stuff'* (Woman aged 30, 1st baby, emergency caesarean section) (Quote: Keely 2015, p. 534) Women also talked about the difficulty of greeting visitors in the hospital setting while attempting to establish feeding.	Methodological limitations: no or very minor concerns (1 study with no or very minor rating and 1 study with minor rating based on CASP qualitative checklist) Relevance: moderate concerns (in Hinsliff-Smith 2014 gestational age was unclear; inclusion criteria was gestation over 34 weeks; ethnicity data not reported; in Keely 2015 women were obese and mostly white) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (2 studies that offered moderately rich data)	Moderate

3 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

4 **Table 24: Clinical evidence profile for theme 3.2: breastfeeding in front of others: women's concerns, views and experiences**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 3.2.1. Reluctance, embarrassment and lack of privacy			

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Five studies: • Hinsliff-Smith 2014 To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) • Johnson 2009 To explore the embodied practice of expressing breastmilk • Johnson 2013 To explore the embodied practice of expressing breastmilk • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services . • Stewart-Knox 2003	Women were embarrassed to breastfeed in front of family and friends. Embarrassment was perceived not only by the women themselves but also in others. Women struggled to achieve privacy at home due to visitors and relatives. Women were also embarrassed when breastfeeding in public and saw it as a breach of a cultural taboo. *'…there wasn't much privacy and I had to get up into another room every time, in private, and go and feed her. She wasn't having any of it… and then I would try again… and then I would have to get up again. It was more that privacy part of it that I found that I didn't like.' [Quote Keeley 2015, p. 534]* Some women reported that expressing was a way of dealing with feeling uncomfortable about feeding in front of others. *'Um, it's difficult if you're out, well I find it difficult if I'm out, you know, worrying in case she wakes up and she needs a feed, and you're out in the middle of shopping centre and where do you go, and you know she's gonna be screaming and won't be able to calm her down, so with that in mind I think I'm gonna try expressing some milk soon.' (Quote Johnson 2009, p.904)*	Methodological limitations: minor concerns (1 study with no or very minor rating, 3 studies with minor rating and 1 study with moderate rating based on CASP qualitative checklist)	High
		Relevance: minor concerns (Strengths: Stewart-Knox 2003 included both primiparous and multiparous women, and both women who wanted to breastfeed and formula feed; purposive sampling in Keely 2015 took into account age and social class. Weaknesses: Hinsliff-Smith 2014 and Stewart-Knox 2003 do not report demographic characteristics of participants; in Hinsliff-Smith 2014 gestational age was unclear; inclusion criteria was gestation over 34 weeks; in Keely 2015 women were all obese; in Keely 2015, Johnson 2009 and Johnson 2013, participants were mostly white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: no or very minor concerns (5 studies that offered moderately rich data - but please note that Johnson 2009 and Johnson 2013 are likely to have overlapping populations)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To define and explore factors determining infant feeding decisions in Northern Ireland			
Sub-theme 3.3.2. Worries specific to obese women			
One study: • Keely 2015 To identify the barriers to successful breastfeeding and to explore obese women's views and experiences of current breastfeeding support services	Obese women had worries relating to their body shapes. Melanie described how she had not liked feeding in public because she had '*really big boobs and [they are] very hard to hide'* (Quote: Keely 2015, p. 535). Camille held a similar view, believing small breasts were '*more decent'* when feeding in public. Daisy, similarly, shared her concerns about exposing her stomach when lifting her t-shirt in order to breastfeed. In her interview, she reported that: '*I would never have done that, because obviously my belly would be hanging out then*' (Quote: Keely 2015, p. 535).	Methodological limitations: no or very minor concerns (1 study with no or very minor rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (purposive sampling took into account age and social class but women were mostly white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (one study that offered moderately rich data)	
Sub-theme 3.2.3. Growing confidence in breastfeeding in front of others			
One study • Hinsliff-Smith 2014 To understand primiparous women's experiences and challenges of breastfeeding in the early	As time progressed, growing confidence in breastfeeding away from home was noted in some women's accounts was noted, but this was not the case for other women. *'Having a baby sling is fantastic to carry the baby and for Breastfeeding.' (*Quote: Hinsliff-Smith 2004, p.e17*)*	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist)	Low
		Relevance: serious concerns (demographic characteristics of participants not reported; gestational age was unclear; inclusion criteria was gestation over 34 weeks)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
postpartum period (defined as 6-8 weeks)		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (one study that offered moderately rich data)	
Sub-theme 3.2.4. Ambivalence and the public breast			
One study: • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the first 5 weeks postpartum.	Although most thought that there was nothing wrong per se in feeding in front of others, some felt that social sensitivities required them to try and avoid this in certain situations. Some women referred to the problem as their own lack of confidence but at the same time conveyed the sense that there were external rules to be followed regarding the appropriateness of breastfeeding in public. *I mean I think it's great for women that can do it and have the confidence to do it. But, erm I don't have the confidence to do it, no. With this stigma as well, it's just I keep going into a cafe´ thinking 'Can I? Can I do it in here?', getting someone to go up and ask for me if I can breastfeed.* (Phase 2 interview) (Quote: Leeming 2013, p. 461) The ambivalence was perhaps the most noticeable in women who expressed the strongest views about their right to feed in public. Uma said: *If I'm in a pub, and she needs feeding I'm gonna feed her, and everybody else can just go to hell, because there's too many women that won't do it because of that, don't you think? It's not my problem, you know?* (Phase 1 interview) (Quote: Leeming 2013, p. 461). However, she also acknowledged that things were not quite so straightforward: *I mean, don't get me wrong, I will probably sit there with a red face for the first few seconds, because yeah, you are getting*	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (the study included a range of occupational backgrounds however 19/22 women were white and there are concerns about the transferability of findings to ethnic minorities)	
		Coherence: moderate concerns (many studies mention family bonding through the bottle and only this study mentions family bonding through breastfeeding)	
		Adequacy: moderate concerns (one study that offered moderately rich data)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	your boob out in public, you know, but whose problem is it really? (Quote: Leeming 2013, p. 462) What made public breastfeeding possible for several of the women, after their initial uncertainty, was the acceptance shown by others: *He [father-in-law] was absolutely great and didn't think anything of it [breastfeeding in front of him], even when they were leaving and I was feeding her he gave me a hug while I was there feeding her and it was a really, really positive feeling*. (Louise, Phase 1 interview) (Quote: Leeming 2013, p. 462) Many of the women were not only concerned with others' reactions but also had a desire not to cause discomfort to others, which led to further ambivalence, because breastfeeding could be seen not only as socially inappropriate but also as insensitive to others' feelings. *If I was out to dinner with my in-laws, I wouldn't dream of sitting at the table, and feeding, because . . . I know that it would make, certainly my father-in-law, quite uncomfortable.* (Phase 2 interview) (Quote: Leeming 2013, p. 462)		
Sub-theme 3.2.5. Observing the etiquette of breastfeeding			
One study: • Leeming 2013: To explore first-time mothers' perspectives on their relationships with significant others and the wider social context of breastfeeding in the	Some participants adopted a discreet method of feeding and suggested that there is a 'correct' way to breastfeed that is discreet and that most reasonable people would accept. *I think, so long as you're discreet, nobody's going to have a problem . . . I mean I have known people in the past who've sat there with kind of all their breast out kind of like 'it's my right to feed'*. (Phase 2 interview) (Quote: Leeming 2013, p.463)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist) Relevance: minor concerns (the study included a range of occupational backgrounds however 19/22 women were white and there are concerns about the transferability of findings to ethnic minorities)	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
first 5 weeks postpartum.	However, discretion was often difficult to achieve in the first few weeks when women and their infants were still learning effective attachment. *I think the, the hardest thing is when he's not feeding brilliantly, when he's off and on, erm, and then it's just trying to maintain a bit of dignity with my nipple, sort of exposed to the world.* (Phase 2 diary) (Quote: Leeming 2013, p. 463) Several of the women chose to postpone breastfeeding away from home until they felt more confident about being able to perform feeding in a socially accepted manner. This was not just a matter of keeping the nipple hidden. *I'm managing to spill a lot of milk all over him as well. If he comes off the breast, you'll [talking to baby] have milk all round your face, all on my tops . . . I just have to be careful to check that I haven't got dried milk everywhere, when I'm in public.* (Phase 1 diary) (Quote: Leeming 2013, p. 463) Some women also did not want others to see them struggling with breastfeeding and question their motherhood skills. Hannah said in her second interview: '*You sort of feel more, if people are sitting here watching me struggling, are they thinking that I'm failing him?'* (Quote: Leeming 2013, p. 464)	Coherence: moderate concerns (many studies mention family bonding through the bottle and only this study mentions family bonding through breastfeeding) Adequacy: moderate concerns (one study that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 25: Clinical evidence profile for theme 3.3: use of private facilities in public spaces**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Hinsliff-Smith 2014	Women agreed that there was a lack of private facilities in public spaces. Where facilities existed, they were often	Methodological limitations: minor concerns (1 study with minor rating and 1 study moderate rating based on CASP qualitative checklist)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To understand primiparous women's experiences and challenges of breastfeeding in the early postpartum period (defined as 6-8 weeks) • Stewart-Knox 2003 To define and explore factors determining infant feeding decisions in Northern Ireland	crowded and inadequate. Placing the feeding and changing areas together was considered inappropriate.	Relevance: moderate concerns (Strengths: Stewart-Knox 2003 included both primiparous and multiparous women, and both women who wanted to breastfeed and formula feed; Weaknesses: in Hinsliff-Smith 2014 gestational age was unclear; inclusion criteria was gestation over 34; concerns over transferability to ethnic groups because both studies do not report ethnicity data)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: minor concerns (2 studies that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 26: Clinical evidence profile for theme 3.4: social isolation**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study • Stewart-Knox 2003 To define and explore factors determining infant feeding decisions in Northern Ireland	The inadequacy of public facilities and perceived embarrassment in others could lead to mothers feeling socially isolated. *I think it (breast-feeding) would be restrictive, because as soon as you go out, you've nowhere to go.* (Quote: Stewart-Knox 2003, p. 269) *I think bottle-feeding is more practical…, you don't have to go upstairs in case anyone's embarrassed.* (Quote: Stewart-Knox 2003, p. 269)	Methodological limitations: minor concerns (1 study with moderate rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (the study included both primiparous and multiparous women, and both women who wanted to breastfeed and formula feed; however there are concerns over transferability to ethnic	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	They're dead embarrassed at watching this and you know, and then you can't go to somebody's house and just presume they're going to let you do it, you know, you might have to go upstairs or something and you'd miss it, and you're just a mother and nothing else. (Quote: Stewart-Knox 2003, p. 269)	groups because both studies do not report ethnicity data)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Twins

Table 27: Clinical evidence profile for theme 1: difficulties with breastfeeding specific to twins

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Hughes 1997 To examine what influences women to formula feed.	One woman reported that she had been undecided about whether to breastfeed until finding out at 18 weeks gestation that she was expecting twins. She felt that breastfeeding twins was more than she could cope with, because she was unmarried and had many things to worry about, so she decided not to breastfeed. *No supporting quote provided*	Methodological limitations: minor concerns (1 study with minor quality rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (Ethnicity not reported).	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: serious concerns (1 study that offered thin data based on only one person)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Young women (19 years or under)

Table 28: Clinical evidence profile for theme 1: mother identity and breastfeeding as something special

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding	The sense of breastfeeding being a unique role of the mother and that it involved doing something special was a strong motivating factor for the young women. *I just think it's best for him and he's still getting his goodness and that. I try and do my best for him—that's all I can do really.* (Quote: Dykes 2003, p. 396)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Low
		Relevance: moderate concerns (findings may not be transferrable to young women who decide not to initiate breastfeeding; all participants were white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 29: Clinical evidence profile for theme 2: pain, immobility, helplessness after birth

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Hunter 2015.	Many of the young women felt incapacitated by tiredness and pain after giving birth.	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To explore how the inpatient experiences of a group of young women who gave birth as teenagers influenced their feeding decisions and experiences and ascertain their ideals for breastfeeding support.	Pain featured strongly in the participants' recollections of this time, and appeared to prevent the new mothers from relating to their newborns. *. .'cos they was like 'do you want cuddles with her while you're having your stitches?' And I was like 'No!' 'Cos I didn't know if it was gonna hurt.* (Focus Group 1) (Quote: Hunter 2015, p. 51) Although one young woman described feeling '*instant love'* for her baby (Focus Group 3), the new mothers were more likely to use words like *'tired', 'dazed', 'scared', 'hungry' and 'overwhelmed*' to describe how they felt after giving birth (Quotes: Hunter 2015, pp. 50-51). The young women also spoke of the shock of finding themselves immobile and helpless. *Tanya: I think that's horrible innit, when you can't move. . . . I felt a bit like 'oh my God . . . like, I couldn't even go for a wee on me own – it was just awful.* *Lauren: I know, I was exactly the same.* *Tanya: I felt like a baby or an old lady.* *Lauren: I didn't even dress him, or put a nappy on the first time*. (Focus Group 4) (Quote: Hunter 2015, p. 51)	Relevance: minor concerns (12/15 participants were white British and findings may not be transferrable to ethnic minorities) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: moderate concerns (1 study that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 30: Clinical evidence profile for theme 3: the postnatal ward - alone and exposed in an alien environment**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Two studies: • Dykes 2003	The young women's experience of being away from family while in hospital was often one of isolation and distress. *I just felt so isolated...I felt quite alone. I was on a ward with 3 other ladies but I didn't feel comfortable enough to talk to them.*	Methodological limitations: minor concerns (2 studies with minor rating based on CASP qualitative checklist)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To investigate the support needs and the experiences of adolescent mothers who start breastfeeding • Hunter 2015. To explore how the inpatient experiences of a group of young women who gave birth as teenagers influenced their feeding decisions and experiences and ascertain their ideals for breastfeeding support. .	*. . . I didn't like not having my family around and things. So I would have preferred to go home straight away . . . but that wasn't possible.* (Quote: Dykes 2003, p. 395) The young women saw themselves as outsiders on the postnatal ward, viewing it as an alien environment in which they didn't always feel comfortable. Even those like Lucy (Focus Group 2), who liked being on the ward because '*it was nice. It was always clean'* (Quote: Hunter 2015, p. 52), initially found the set up quite strange. The unfamiliarity of the ward was particularly brought into focus when the young women's families went home. *it was really weird . . . you see all these women walking around!...I've never seen so many babies in my life.* (Focus Group 2) (Quote: Hunter 2015, p. 52) *Tanya: . . . and then like my Mum went home and it was just like 'oh my God I'm here on my own . . . It was just really, like, creepy – I think of hospitals as where you go to, die.*' (Focus Group 4) (Quote: Hunter 2015, p. 52) The young women felt exposed and reported a lack of privacy on the ward, which led to young mothers feeling unable to perform intimate mothering tasks such as holding their babies skin to skin, or expressing breast milk. Sometimes, this was mitigated by young women being given a single room. Jemma: *. . . being in a room where no one can really look at you or anything like that – that's what made me feel a bit more – um, like myself, . . . it wouldn't feel like anyone was peeking round looking at me.* (Focus Group 3) (Quote: Hunter 2015, p. 52) Lottie [re skin to skin]: *I think that when you're downstairs [on Labour Ward] it's better 'cos you're like on your own, but when*	Relevance: minor concerns (all participants in Dykes 2003 and the majority in Hunter 2015 were white) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (2 studies that offered moderately rich data)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	you go upstairs there's like other people, and I wouldn't wanna do it. (Focus Group 3) (Quote: Hunter 2015, p. 53)		

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

2 **Table 31: Clinical evidence profile for theme 4: baby content or unsettled**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding	The baby's behaviour was a crucial factor linked with esteem. If she or he responded positively to breastfeeding and seemed content, the mother felt strongly reinforced and tended to describe breastfeeding as coming naturally. In contrast, an unsettled baby undermined confidence in her ability to breastfeed.	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (all participants were white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

3 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

Table 32: Clinical evidence profile for theme 5: carrying on with life

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Murphy 1999 To consider the ways in which women account for their infant feeding decisions	One teenage woman explained her decision to formula feed as something that could be reasonably expected from someone of her age who wanted to carry on with her own life as well as having a baby. *I've seen how my auntie's stuck in. You know, when she wants to go out, she has to be back at certain times for the baby to be fed and . . . and I think a lot of it is, well I mean because I'm still young and I'll still be wanting to go out a lot and . . . so that's part of it as well . . . I don't want to just throw my life away because I'm going to have a baby. I want to carry on with my life as well as having a baby . . . People say when you've got kids you're tied down, you can't do this, you can't do that and I think, 'Well you can, it's just that you've got to try'.* (Quote: Murphy 1999, p. 199)	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (ethnicity not reported)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data based on one woman)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 33: Clinical evidence profile for theme 6: support from partner and family

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 6.1. Emotional support and guidance			
One study: • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding	The young women needed to feel cared for particularly by their mother and partner. Their strongest source of support came from their own mothers and families. When the mother's mother had breastfed, this was particularly strong *"I wanted my mum around because she's breast-fed two children herself.... I can remember her feeding my youngest brother"* (Quote: Dykes 2003, p. 397).	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Low
		Relevance: moderate concerns (findings may not be transferrable to young women who decide not to initiate breastfeeding; all participants were white)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	Verbal information about breastfeeding was highly valued when given by significant others with experience of breastfeeding. Guidance by the mother's mother was felt to be particularly important. Most of the adolescents' mothers had breastfed and most had observed breastfeeding within their immediate or extended family during their childhood, so within the microculture of their family, there was a degree of normalization of breastfeeding. "*It was most useful hearing it from people that were doing it themselves, than from midwives"* (Quote: Dykes 200, p. 397). *"My Mum gave me verbal comments and guided me"* (Quote: Dykes 2003, p. 397).		
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub-theme 6.2. Practical support			
One study: • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding	The sense of sharing the load with a partner or mother was important, although in some cases, this involved the partners giving breast milk substitutes. *He's been very helpful really because when I'm breastfeeding it's like I've got to do it all the time and that . . . but with the bottle at night you can swap it over. That's what we do.* (Quote: Dykes 2003, p. 397)	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (all participants were white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

1 *CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research*

Table 34: Clinical evidence profile for theme 7: friends, peers, other breastfeeding mothers and moral norms

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 7.1. Friends, peers and other breastfeeding mothers			
Three studies • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding • Dyson 2010 To examine the psychosocial factors influencing infant feeding intention among pregnant teenagers expecting their first baby and living in deprived urban areas in England • Hunter 2015. To explore how the inpatient experiences of a group of young women who gave birth as teenagers influenced their feeding decisions and experiences and ascertain their ideals for breastfeeding support.	Some connections with other breastfeeding mothers were made during hospital, but these were transient. Existing friends were not seen very much at this stage, but new friendships with other breastfeeding adolescents were generated through teenage pregnancy groups. "*Once I started going to the group it did make things a lot easier. You could talk to people*" (Quote: Dykes 2003, p. 397). Participants looked to their peers for emotional support and encouragement. They could only relate to the idea of peer support, however, if the peers were their own age and going through similar experiences. *I think I'd rather hear I'm doing well from somebody that done it. Quite recently as well . . . than. . . say a midwife that's never had children.* (Focus Group 1) (Quote: Hunter 2015, p. 54) Clare: *or even if that person was maybe like pregnant as well, the same way as you. Then when you like give birth you can both talk about like the experience and everything, and what you both find helpful and how they've done it and stuff like that*. (Focus Group) (Quote: Hunter 2015, p. 54). Influence from other teenagers could have positive effects such as increasing self-confidence relating to breastfeeding difficulties such as lack of privacy. The following excerpt relates to concerns about breastfeeding in public, and shows how participant 3 (who intended to formula feed) gives confidence to participant 1 (who intended to breastfeed): Excerpt 9: Group 1.	Methodological limitations: minor concerns (2 studies with minor rating and 1 study with moderate rating based on CASP qualitative checklist) Relevance: minor concerns (all participants in Dykes 2003 and Dyson 2010, and the majority in Hunter 2015, were white.) Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (3 studies that offered moderately rich data)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	Even if you're at home, you can go into another room or a bathroom or a bedroom or something can't you and do it? (Participant 1). *You've got to do what you want on your own haven't you? You're not bothered* (participant 3). *If they don't like it they can go home, whoever's there*! (Participant 1). (Quote: Dyson 2010, p. 146) The ability to access peers in a similar situation, even online, was considered an important part of coping with motherhood. Conversely, peer pressure could also be negative, for example through mockery, which could affect the ability to express positive feelings about breastfeeding. Excerpt 10: Group 1. *I've always known I was going to breastfeed, though, since I was little. I used to have dolls and stuff, I always* (participant 5). *Don't ask! I won't ask—practised with your dollies* (participant 4). *I wouldn't go that far!* (Participant 5). *I never did!* (Participant 4). [laughter] (Quote: Dyson 2010, p. 147) The sensitive issues with respect to sexuality of the breast defined the moral limits beyond which constructive peer support did not appear to be possible.		
Sub-theme 7.2. Formula feeding culture			
Two studies: • Dyson 2010 To examine the psychosocial factors influencing infant feeding intention among pregnant teenagers expecting their first baby and living in deprived urban areas in England	Strong moral norms in defence or legitimisation of formula feeding as the acceptable infant feeding method among these teenagers emerged as an important theme. Breastfeeding was described as an unacceptable activity. Those mothers who wished to breastfeed were overtly criticised and judged. Excerpt: Group 2 *I mean it was like shock horror when I told everybody I was breastfeeding [gasps]* (participant 1). *Well, like I get that response now* (participant 2). *I get, right, people say "oh you're only doing it because your boyfriend's sister's a midwife," and*	Methodological limitations: minor concerns (1 study had a minor rating and 1 study had a moderate rating based on CASP qualitative checklist) Relevance: minor concerns (findings may not be transferable to richer areas or non-working class. All participants in Hughes 1997 had decided to b feed)	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
• Hughes 1997 To examine what influences women to bottle feed	*I'm like, I'm doing it for my own personal reasons, not because I'm being forced into it ...* (participant 1). *And I'll tell you why a lot of young people, I think a lot of young mothers won't breastfeed, because when you first tell someone that you're thinking about breastfeeding, a lot of people's reaction is, "because you're lazy, you don't want to be getting up and making bottles of a night, you don't want to be getting up and warming the bottles up, it's easier just to grab the baby and put the baby on your breast than to go downstairs and warm the bottle up"* (participant 2). *Well, that's a good point, that's a good reason to be, to be doing it I mean* (participant 1). *It is a good reason but [laughter] if you say that to a lot of young mothers, they're going to think …* (participant 2). *What kind of a mother are you type of thing and … you get insulted for it. But really I think you should get praised for it more than …* (participant 1). *I think you should, yeah* (participant 2). (Excerpt: Dyson 2010, p. 145) The notion that a mother who chooses to breastfeed at night is 'lazy' has to be understood in the context of teenage mothers' genuine fear of authorities (Social Services) and having their baby taken away from them.	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data) Adequacy: minor concerns (2 studies that offered moderately rich data)	

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2 **Table 35: Clinical evidence profile for theme 8: feeding in front of others, sexualisation of the breasts and privacy**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub-theme 8.1: Feeding in front of others and sexualisation of the breasts			
One study: Dyson 2010	'Breastfeeding in public' dominated discussions. There were clear links to complex issues of body image and sexuality of	Methodological limitations: moderate concerns (1 study with moderate rating based on CASP qualitative checklist)	Low

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To examine the psychosocial factors influencing infant feeding intention among pregnant teenagers expecting their first baby and living in deprived urban areas in England	the breast. Breastfeeding in public was perceived as an inappropriate behaviour. *I do [want to bottle feed]. I'm not getting myself out in front of everyone (participant 3). Embarrassing isn't it? Just slapping it out and slapping it out … sat with all your mates and everybody's round, and like, oh, I couldn't do it me (participant 2).* (Excerpt 3: Group 3. Dyson 2010, p. 146) *But what happens if your baby needs feeding and you're on a bus, and you're breastfeeding? (participant 2). Don't do it in public do you? You could if you were sick and twisted, but I'm not (participant 1). [laughter] Why not? I don't see why not? (participant 3). Some people do though, don't they? Just slap it out anywhere, don't they?* (participant 4). (Excerpt 4: Group 1. Dyson 2010, p. 146) Another concern from those who did not consider breastfeeding in public as embarrassing or immoral, was the potential unwanted sexual interest that they may attract from strangers. *I don't think it'd be embarrassing but, there might be some like sick perverts that are getting really turned on by watching a mother feeding her child in the middle of town or something …. that's the only thing that'd stop me doing it (participant 2).* (Excerpt 5: Group 1. Dyson 2010, p. 146) *I just don't care about anyone else as long as my baby gets what she wants, but I think what bothers me most is what other people'd be thinking when they look at me …. I think people'd be more embarrassed than I will be … and I think I'll feel, probably a bit uncomfortable with that, old men walking past and looking, it's like … argh! And young men with their women walking past* (participant 2) (Excerpt 6: Group 2. Dyson 2010, p. 146) Breastfeeding in public was not only a concern for some teenagers in public places and on public transport but also at		
		Relevance: minor concerns (findings may not be transferable to richer areas. All participants were white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	home where privacy may be difficult to achieve, for example due to the partner's friends. There was a belief that there were natural and therefore inevitable male behaviours such as gazing at a breast if this was visible. *The only thing that I'm worried about is breastfeeding in public really, I feel that I'm going to be restricted to going places that I, I won't really be able to go out very far, I'll probably stay in more now, during the time that I'm breastfeeding. … I say, well we're going to have to restrict people coming round, you know, like his [her male partner] friends and things like that because you know what men can be like anyway. ''I like seeing your bird's bits,'' do you know what I mean. So, comments like that, they'll just have to wait until I've stopped breastfeeding. I remember I was with my ex-boyfriend, and this woman just sat there breastfeeding, and I gave him a clip round the back of the head like, you know. It's a natural thing you know, men do look and you're obviously going to get that anyway, it's natural* (participant 1) (Excerpt 7: Group 4. Dyson 2010, p. 146) The need for high levels of self-confidence to breastfeed in public was mentioned, regardless of personal feeding intention. *I still don't feel I'll be 100 percent confident about doing it in public anyway, that's something that I would like to feel confident about, just to be able to do that but think it'll take a bit of time (participant 1). It's like not, not a lot of places cater for it though, do they? (participant 2). No, I don't really think places should have to cater for it, it's something, it's something that, you know that most women do isn't it, but … (participant 1). But then it's not just where you want to do it, you've got to do it, it's wherever you feel comfortable (participant 2). Well, exactly but that's something that I'd like to work toward, you know (participant 1). (*Excerpt 8: Group 4. Dyson 2010, p. 146)		
Sub-theme 8.2. Need for private facilities at school and in public areas			

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: • Dykes 2003 To investigate the support needs and the experiences of adolescent mothers who start breastfeeding	For those who were continuing their education, support to breastfeed and appropriate facilities were important. *I go in for 3 hours in the mornings and while I'm there if she needs feeding there's like a room where I can go in to feed her, so I can stop what I'm doing and go and feed her.* (Quote: Dykes 2003, p. 397) The young women welcomed suggestions as to where feed discreetly 'in town'. One participant described family members forming a 'barricade' around her while she fed in public areas.	Methodological limitations: minor concerns (1 study with minor rating based on CASP qualitative checklist)	Moderate
		Relevance: minor concerns (all participants were white)	
		Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	

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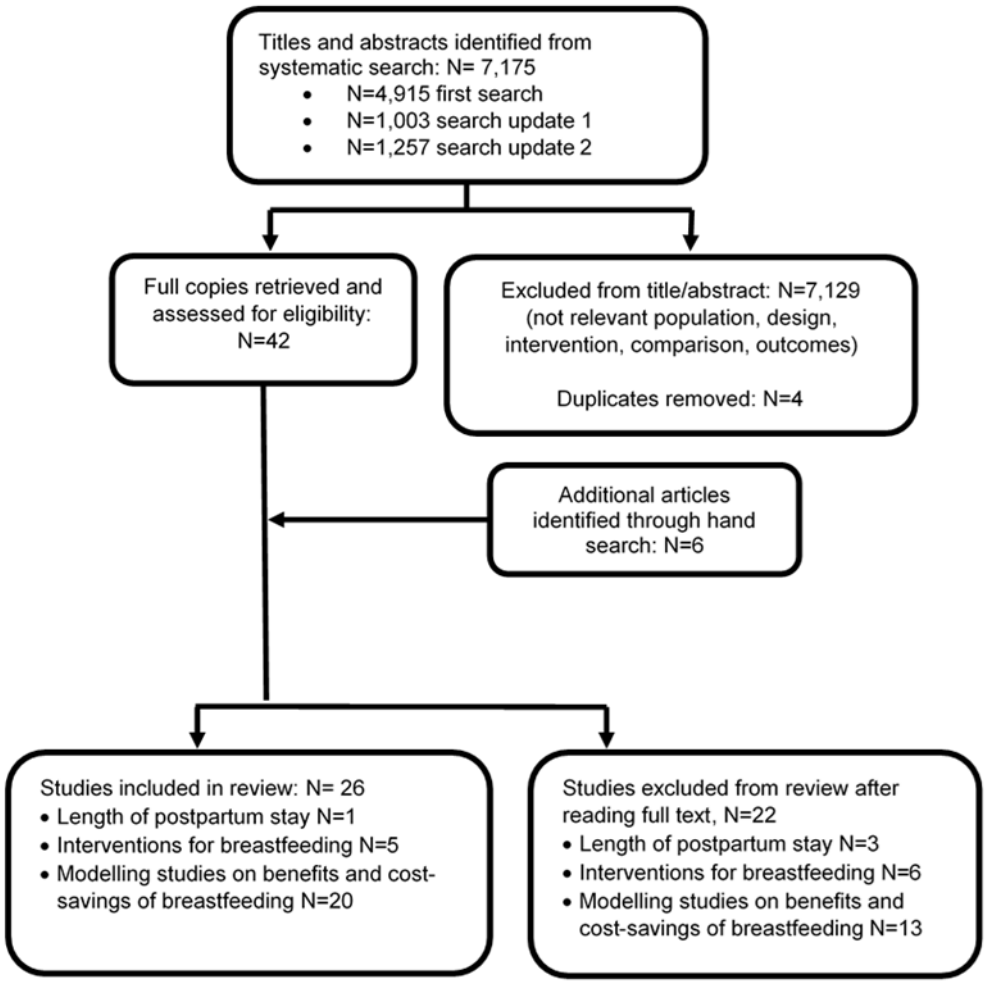
Appendix G – Economic evidence study selection

Economic evidence study selection for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

A global health economics search was undertaken for all areas covered in the guideline. **Figure 2** shows the flow diagram of the selection process for economic evaluations of postnatal care interventions, including modelling studies on the benefits and cost-savings of breastfeeding.

Figure 2. Flow diagram of selection process for economic evaluations of postnatal care interventions and modelling studies on the benefits and cost-savings of breastfeeding



Appendix H – Economic evidence tables

Economic evidence tables for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

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 perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

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

Appendix J – Economic analysis

Economic analysis for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

No economic analysis was conducted for this review question.

Appendix K – Excluded studies

Excluded studies for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

Clinical studies

Table 36: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
Anonymous,, Breastfeeding: new mothers' perspectives, Community Practitioner, 87, 38-40, 2014	This is the transcript of an interview with 5 women.
Bailey, C., Breastfeeding mothers' experiences of bedsharing: A qualitative study, Breastfeeding Review, 24, 33-40, 2016	Study was conducted in Australia.
Bailey, C., Pain, R., Geographies of infant feeding and access to primary health-care, Health & social care in the community, 9, 309-317, 2001	Not specific to the antenatal period or to the first 8 weeks after birth. Participant's breastfed for different durations, ranging from formula feeding from birth to exclusive breastfeeding up to 6 months followed by mixed feeding.
Bailey, J., Modern parents' perspectives on breastfeeding: a small study, British Journal of Midwifery, 15, 148-152, 2007	Not specific to the antenatal period or to the first 8 weeks postpartum. The babies ranged in age from 3 to 9 months. The women were either still breastfeeding, combine-feeding or had weaned recently.
Ball, H. L., Breastfeeding, bed-sharing, and infant sleep, Birth, 30, 181-8, 2003	Most findings are quantitative. Qualitative findings are not specific to the antenatal period or to the first 8 weeks postpartum. Interviews were carried out when infants were aged 1 and 3 months.
Beake,S., Rose,V., Bick,D., Weavers,A., Wray,J., A qualitative study of the experiences and expectations of women receiving in-patient postnatal care in one English maternity unit, BMC Pregnancy and Childbirth, 10, 70-, 2010	This study looks at information and support from healthcare professionals.
Berridge, K., McFadden, K., Abayomi, J., Topping, J., Views of breastfeeding difficulties among drop-in-clinic attendees, Maternal & Child Nutrition, 1, 250-62, 2005	Not relevant study design. Women completed a questionnaire. Moreover, "As a result of the informal nature of the clinic, some of the women also took this opportunity to talk to the researcher about their experiences and their comments were noted after asking permission to do so. Because of the exploratory nature of this research, any comments made were analysed thematically". Moreover, most themes refer to information and support from healthcare professionals, which is covered by a different review.
Boyer, K., "The way to break the taboo is to do the taboo thing" breastfeeding in public and citizen-activism in the UK, Health & Place, 17, 430-7, 2011	Not specific to antenatal period or to first 8 weeks postpartum.
Brown, A., Davies, R., Fathers' experiences of supporting breastfeeding: Challenges for	Not specific to the antenatal period or to the first 8 weeks postpartum.

Study	Reason for exclusion
breastfeeding promotion and education, Maternal and Child Nutrition, 10, 510-526, 2014	
Brown, A., Lee, M., An exploration of the attitudes and experiences of mothers in the united kingdom who chose to breastfeed exclusively for 6 months postpartum, Breastfeeding Medicine, 6, 197-204, 2011	Not specific to the antenatal period or to the first 8 weeks postpartum.
Brown,A., Raynor,P., Lee,M., Young mothers who choose to breast feed: The importance of being part of a supportive breast-feeding community, Midwifery, 27, 53-59, 2011	Not specific to the antenatal period or to the first 8 weeks postpartum. Mothers who completed a semi-structured interview had breastfed for at least 6 months.
Chin, N. P., Cuculick, J., Starr, M., Panko, T., Widanka, H., Dozier, A., Deaf mothers and breastfeeding: do unique features of deaf culture and language support breastfeeding success?, Journal of human lactation : official journal of International Lactation Consultant Association, 29, 564-571, 2013	Study was conducted in the United States.
Choudhry, K., Wallace, L. M., 'Breast is not always best': South Asian women's experiences of infant feeding in the UK within an acculturation framework, Maternal and Child Nutrition, 8, 72-87, 2012	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were either expecting a baby or already with a child under the age of 5. Breastfeeding duration ranged from formula feeding from birth to breastfeeding for 5 months or more.
Cloherty, M., Alexander, J., Holloway, I., Supplementing breast-fed babies in the UK to protect their mothers from tiredness or distress, Midwifery, 20, 194-204, 2004	This study is about information and support from healthcare professionals.
Cloherty,M., Alexander,J., Holloway,I., Galvin,K., Inch,S., The cup-versus-bottle debate: a theme from an ethnographic study of the supplementation of breastfed infants in hospital in the United kingdom, Journal of Human Lactation, 21, 151-162, 2005	Most of the quotes are from healthcare professionals. Some themes and quotes are about information and support from healthcare professionals, which is a topic that is covered by a separate review. There is a sub-theme relating to mothers' views of difficulties with breastfeeding that motivated them to start using the bottle but this was not extracted due to data saturation.
Coates, R., Ayers, S., de Visser, R., Women's experiences of postnatal distress: A qualitative study, BMC Pregnancy and Childbirth, 14 (1) (no pagination), 2014	Not specific to the antenatal period or to the first 8 weeks postpartum.
Coles, J., Qualitative study of breastfeeding after childhood sexual assault, Journal of Human Lactation, 25, 317-24, 2009	Study was conducted in Australia.
Darwent, K. L., McInnes, R. J., Swanson, V., The Infant Feeding Genogram: a tool for exploring family infant feeding history and identifying support needs, 16, 315, 2016	This study focuses on two women only as case examples.
Davies, J., Completing the maternity jigsaw, Practising Midwife, 11, 12-4, 2008	Discussion paper.
Deave, T., Johnson, D., Ingram, J., Transition to parenthood: The needs of parents in pregnancy and early parenthood, BMC Pregnancy	Breastfeeding is one of the themes of the paper, however the content of this theme is related to information and support from healthcare

Study	Reason for exclusion
ChildbirthBMC pregnancy and childbirth, 8 (no pagination), 2008	professionals, which is a topic covered by a separate review.
Dykes, F, Western medicine and marketing: construction of an inadequate milk syndrome in lactating women , Health Care for Women International, 23, 492-502, 2002	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were interviewed at 6, 12 and 18 weeks postpartum. Themes are not presented separately based on interview times. Breastfeeding duration varied and for some women it lasted more than 8 weeks.
Dykes,F., A critical ethnographic study of encounters between midwives and breast-feeding women in postnatal wards in England, Midwifery, 21, 241-252, 2005	This study focuses on information and support by healthcare professionals.
Dykes,F., Williams,C., Falling by the wayside: a phenomenological exploration of perceived breast-milk inadequacy in lactating women, Midwifery, 15, 232-246, 1999	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were interviewed at 6, 12 and 18 weeks postpartum, and the author did not separate findings from different interview times. One theme was specific to the early postpartum period, because it was about women's initial doubts on their ability to produce milk and to breastfeed. However this theme was not extracted due to data saturation.
Earle, S., Factors affecting the initiation of breastfeeding: Implications for breastfeeding promotion, Health promotion international, 17, 205-214, 2002	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were interviewed both in pregnancy and between 6 and 14 weeks postpartum, and the findings for pregnant women are not presented separately from the postnatal findings. The only theme specific to pregnant women is the early decision making on breastfeeding versus formula feeding but this was not extracted as it is not a facilitator or barrier.
Earle, S., Why some women do not breast feed: bottle feeding and fathers' role, Midwifery, 16, 323-330, 2000	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were interviewed both in pregnancy and between 6 and 14 weeks postpartum, and the findings for pregnant women are not presented separately for the postnatal findings. The only theme specific to pregnant women is the early decision making on breastfeeding versus formula feeding but this was not extracted as it is not a facilitator or barrier.
Elliott, H., Gunaratnam, Y., Talking about breastfeeding: Emotion, context and 'good' mothering, Practising Midwife, 12, 40-46, 2009	This study has a section on the early days after birth but this focuses on information and support from healthcare professionals, which is covered by a separate review. Although the authors provide a considerable level of detail on methods and findings, the authors mention that this is a discussion of findings from another study.
Entwistle, F., Kendall, S., Mead, M., Breastfeeding support - the importance of self-efficacy for low-income women, Maternal and Child Nutrition, 6, 228-242, 2010	Not specific to the antenatal period or to the first 8 weeks postpartum. Breastfeeding duration ranged from 4 days to 14 weeks (a mother was interviewed at 14 weeks and was still breastfeeding).

Study	Reason for exclusion
Flacking, R., Dykes, F., Perceptions and experiences of using a nipple shield among parents and staff - an ethnographic study in neonatal units, BMC Pregnancy ChildbirthBMC pregnancy and childbirth, 17 (1) (no pagination), 2017	Preterm babies.
Fox, R., McMullen, S., Newburn, M., UK women's experiences of breastfeeding and additional breastfeeding support: A qualitative study of Baby Cafe services, BMC Pregnancy and Childbirth, 15 (1) (no pagination), 2015	Most of this study is about support groups and support from healthcare professionals, which is a topic covered by a separate review. Some themes are relevant, for example support from friends and family, however these themes are not specific to the antenatal period or to the first 8 weeks postpartum. The age of babies ranged from a few days to more than 6 months. Breastfeeding duration was not reported.
Garcia-Gomez, J. M., de la Torre-Diez, I., Vicente, J., Robles, M., Lopez-Coronado, M., Rodrigues, J. J., Analysis of mobile health applications for a broad spectrum of consumers: a user experience approach, Health informatics journal, 20, 74-84, 2014	Study not conducted in the UK.
Grassley, J. S., Adolescent mothers' breastfeeding social support needs, JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing, 39, 713-722, 2010	Qualitative UK studies included in this review were assessed for inclusion in the present review. The primary publication of Dykes 2003 has been included in the present review. Hall Moran 2006 is not relevant to the present review because it focuses on midwives and qualified breastfeeding supporters. Hall Moran 2007 and Ingram 2008 were excluded from the present review, please see exclusion reason for each study in this table. The abstract for Lavender 2005 was checked but a full text was not requested because the study focuses on support from healthcare professionals.
Hall Moran, V., Edwards, J., Dykes, F., Downe, S., A systematic review of the nature of support for breast-feeding adolescent mothers, Midwifery, 23, 157-171, 2007	Included studies were checked for inclusion in the present review. There were only two studies from the UK (Dykes 2003 and Lavender 2005). The primary publication for Dykes 2003 has been included in the present review. The abstract for Lavender 2005 was checked but a full text was not requested because the study focuses on support from healthcare professionals, which is covered by a separate review.
Higginbottom G., Breastfeeding and Black Women: a UK investigation, Health visitor, 72, 12-15, 1998	Not specific to the antenatal period or to the first 8 weeks postpartum. Participants had breast fed their infants in the previous 5 years or were currently breastfeeding. Duration of breastfeeding was not reported.
Hoddinott, P., Pill, R., Qualitative study of decisions about infant feeding among women in east end of London, British Medical Journal, 318, 30-34, 1999	This study was excluded due to data saturation. Themes included women's confidence (or lack of confidence) in their ability to breastfeed, previous exposure to breastfeeding, and embarrassment about breastfeeding in front of

Study	Reason for exclusion
	others. Moreover, it was unclear if this study was conducted after 1995.
Hoddinott, P; Pill, R., Nobody actually tells you: a study of infant feeding, British Journal of Midwifery, 1999	This study was excluded due to data saturation because other papers that provided more comprehensive information and were more recent covered the same themes covered in this paper in relation to facilitators and barriers for breastfeeding.
Ineichen, B., Pierce, M., Lawrenson, R., Teenage mothers as breastfeeders: attitudes and behaviour, Journal of Adolescence, 20, 505-9, 1997	Survey reporting quantitative data.
Ingram, J., A mixed methods evaluation of peer support in Bristol, UK: Mothers', midwives' and peer supporters' views and the effects on breastfeeding, BMC Pregnancy and Childbirth, 13 (no pagination), 2013	Peer support is not covered by the present review because it is covered by a separate review.
Ingram, J., Cann, K., Peacock, J., Potter, B., Exploring the barriers to exclusive breastfeeding in black and minority ethnic groups and young mothers in the UK, Maternal and Child Nutrition, 4, 171-180, 2008	Not specific to the antenatal period or to the first 8 weeks postpartum. The study aimed to explore the barriers to exclusive breastfeeding to 6 months.
Ingram, J., Johnson, D., A feasibility study of an intervention to enhance family support for breast feeding in a deprived area in Bristol, UK, Midwifery, 20, 367-379, 2004	This study focuses on information and support from healthcare professionals, which is covered by a separate review.
Ingram, J., Johnson, D., Hamid, N., South Asian grandmothers' influence on breast feeding in Bristol, Midwifery, 19, 318-27, 2003	The qualitative part of the study was not specific to the antenatal period or to the first 8 weeks postpartum.
Lakshman, R., Ogilvie, D., Ong, K. K., Mothers' experiences of bottle-feeding: a systematic review of qualitative and quantitative studies, Archives of Disease in Childhood, 94, 596-601, 2009	Included studies were assessed for inclusion in the present review. There were 4 included studies from the UK (Bailey 2004, Cloherty 2004, Earle 2000, Lee 2007). The primary publication of Bailey 2004 was included in the present review. Cloherty 2004, Earle 2000 and Lee 2007 were excluded from the present review, please see exclusion reason for each study in this table.
Larsen, J. S., Hall, E. O. C., Aagaard, H., Shattered expectations: When mothers' confidence in breastfeeding is undermined - A metasynthesis, Scandinavian Journal of Caring Sciences, 22, 653-661, 2008	UK studies were assessed for inclusion in the present review. Bailey 2001 was excluded from the present review, please see exclusion reason in this table. The primary publication of Dykes 2005 was included in the present review. The abstracts of Graffy 2005 and Murphy 2003 were checked but a full text was not requested as these focus on peer support or healthcare professional support, which are topics covered by a separate review.
Lavender, T., McFadden, C., Baker, L., Breastfeeding and family life, Maternal & Child Nutrition, 2, 145-55, 2006	Not specific to the antenatal period or to the first 8 weeks postpartum. Duration of breastfeeding ranged from 1 week to 32 weeks.
Lee, E., Health, morality, and infant feeding: British mothers' experiences of formula milk use	Not specific to the first 8 weeks postpartum. Women in phase 1 had 'used formula wholly or

Study	Reason for exclusion
in the early weeks, Sociology of Health & Illness, 29, 1075-90, 2007	mostly' during months 0-3, but it is unclear if formula use started within the first 8 weeks.
Lutenbacher, M., Karp, S. M., Moore, E. R., Reflections of Black Women Who Choose to Breastfeed: Influences, Challenges and Supports, Maternal and Child Health Journal, 20, 231-239, 2016	Study was conducted in the United States.
MacDonald, T., Noel-Weiss, J., West, D., Walks, M., Biener, M., Kibbe, A., Myler, E., Transmasculine individuals' experiences with lactation, chestfeeding, and gender identity: A qualitative study, BMC Pregnancy and Childbirth, 16 (1) (no pagination), 2016	Not specific to the UK. Participants were recruited mostly through the Internet and were located in North America, Europe, and Australia.
MacGregor, E., Hughes, M., Breastfeeding experiences of mothers from disadvantaged groups: a review, Community Practitioner, 83, 30-3, 2010	Included studies conducted in the UK were assessed for inclusion in the present review. The primary publications of Dykes 2003 and Bailey 2004 were included in the present review. Scott 2003, Hoddinott 1999, Whelan and Lupton 1998 were excluded, please see exclusion reason in this table.
Mahon-Daly, P., Andrews, G. J., Liminality and breastfeeding: women negotiating space and two bodies, Health & Place, 8, 61-76, 2002	It is unclear if the themes in the study refer to the first 8 weeks postpartum. Participant observation of a support group was the data collection method, complemented by interviews with women who wanted to talk further, but it is unclear how long after birth mothers attended the support group and the interviews.
Mattar, C. N., Fok, D., Chong, Y. S., Common concerns regarding breastfeeding in a family practice setting, Singapore Medical Journal, 49, 272-8; quiz 279, 2008	Literature review.
McFadden, A., Atkin, K., Renfrew, M. J., The impact of transnational migration on intergenerational transmission of knowledge and practice related to breast feeding, Midwifery, 30, 439-46, 2014	Not specific to the antenatal period or to the first 8 weeks postpartum. Participants were grandmothers and mothers who had breast fed within the previous five years. The length of time mothers had breastfed their youngest child ranged from 2 days to 2 years.
McFadden, A., Renfrew, M. J., Atkin, K., Does cultural context make a difference to women's experiences of maternity care? A qualitative study comparing the perspectives of breast-feeding women of Bangladeshi origin and health practitioners, Health Expectations, 16, e124-35, 2013	Not specific to the antenatal period or to the first 8 weeks postpartum. Age of youngest child was between 3 weeks and 6 years.
McFadden, A., Toole, G., Exploring women's views of breastfeeding: a focus group study within an area with high levels of socio-economic deprivation, Maternal and Child Nutrition, 2, 156-168, 2006	Not specific to the antenatal period or to the first 8 weeks postpartum. Inclusion criteria were women who had one or more children under 4 years old or who were pregnant at the time of the study. Themes for pregnant women were not separated from themes for women in the postnatal period. The length of time that women had breastfed ranged from 1 day to over 1 year.

Study	Reason for exclusion
McInnes, R. J., Chambers, J. A., Supporting breastfeeding mothers: Qualitative synthesis, Journal of Advanced Nursing, 62, 407-427, 2008	Included studies from the UK were assessed for inclusion in the present review. The primary publication of the following studies was included: Bailey 2004, Condon 2003, Dykes 2003, Dykes 2005a, Stewart-Knox 2003. The following studies were excluded (please check exclusion reason in this table): Cloherty 2004, Dykes 1999, Dykes 2002, Dykes 2005b, Higginbottom 1998, Hoddinott 1999, Mahon-Daly 2002, Pain 2001, Shakespeare 2004, Shaw 2003, Scott 2003, Whelan 1998. The abstract of the following studies was checked but a full text was not requested because these are about information and support from healthcare professionals or professional peer supporters, which are topics covered by a separate review: Furber 2008, Graffy 2005, Hall Moran 2006, Hoddinott 2000, Huber 2006, Smale 2006, Simmons 2002. The abstracts of the following studies were checked but a full text was not requested because the participants were healthcare professionals or lay BF counsellors: Furber 2006, Tennant 2006.
McInnes, R. J., Hoddinott, P., Britten, J., Darwent, K., Craig, L. C., Significant others, situations and infant feeding behaviour change processes: a serial qualitative interview study, BMC Pregnancy & Childbirth, 13, 114, 2013	Not specific to the antenatal period or to the first 8 weeks postpartum. Interviews were conducted approximately 4 weekly from late pregnancy to 6 months after birth.
Moore, E. R., Coty, M. B., Prenatal and postpartum focus groups with primiparas: Breastfeeding attitudes, support, barriers, self-efficacy, and intention, Journal of Pediatric Health Care, 20, 35-46, 2006	Study was conducted in the United States.
Morris, C., Zarate de la Fuente, G. A., Williams, C. E., Hirst, C., UK Views toward Breastfeeding in Public: An Analysis of the Public's Response to the Claridge's Incident, Journal of Human Lactation, 32, 472-80, 2016	No relevant population. Views of the public rather than views of mothers. There is one sub-theme about positive experience of mothers when breastfeeding around older people, but it is unclear if this is specific to the first 8 weeks postpartum because the age of the infants is not specified.
Mozingo,J.N., Davis,M.W., Droppleman,P.G., Merideth,A., "It wasn't working. " Women's experiences with short-term breastfeeding, MCN, American Journal of Maternal Child Nursing, 25, 120-126, 2000	This study does not state the country where the study was conducted. The introduction mentions the United States. Approval for the study was obtained from the University of Tennessee, Knoxville, in the United States. The authors' affiliation is in the United States.
Muller, F. S., Silva, I. A., Social representations about support for breastfeeding in a group of breastfeeding women, Revista latino-americana de enfermagem, 17, 651-7, 2009	Study was conducted in Brazil.
Nelson, A. M., A meta-synthesis related to infant feeding decision making, MCN, American Journal of Maternal Child Nursing, 37, 247-52, 2012	Included studies conducted in the UK were assessed for inclusion in the present review. The primary publication of Bailey 2004 was included in the present review. Hughes 1997,

Study	Reason for exclusion
	Hoddinott 1999a, Hoddinott 1999b, Earle 2000, Earle 2002, Murphy 1999 were excluded, please see exclusion reason in this table.
Nelson, A. M., Adolescent attitudes, beliefs, and concerns regarding breastfeeding, Mcn, The American journal of maternal child nursing. 34, 249-255, 2009	The country where the study was conducted is not stated; the initial section refers to the availability of studies conducted in the United States. The author's affiliation is in the United States.
Nelson, A. M., A metasynthesis of qualitative breastfeeding studies, Journal of Midwifery & Women's Health, 51, e13-20, 2006	Included studies were assessed for inclusion in the present review. Only was study was conducted in the UK, Dykes 1999, which was excluded from the present review, please see exclusion reason in this table.
Nolan, M., Couples' relationships and breastfeeding, Practising Midwife, 7, 37-9, 2004	Critical appraisal of a quantitative study conducted in Brazil on couples' relationships and breastfeeding.
Pain, Rachel, Bailey, Cathy and Mowl, Graham , Infant feeding in North East England: Contested spaces of reproduction, Area, 33, 261-272, 2001	Not specific to the antenatal period or to the first 8 weeks postpartum. Babies were aged 4 to 14 weeks. Breastfeeding duration varied from less to more than 8 weeks.
Potter, B., Women's experiences of managing mastitis, Community Practitioner, 78, 209-12, 2005	Not specific to the first 8 weeks postpartum.
Raine, P., Promoting breast-feeding in a deprived area: The influence of a peer support initiative, Health and Social Care in the Community, 11, 463-469, 2003	This intervention was based on partnership working between health professionals and lay volunteers. Voluntary-led peer support and support from healthcare professionals are covered by a separate review.
Rayment, J., McCourt, C., Vaughan, L., Christie, J., Trenchard-Mabere, E., Bangladeshi women's experiences of infant feeding in the London Borough of Tower Hamlets, Maternal & Child Nutrition, 12, 484-99, 2016	Not specific to the antenatal period or to the first 8 weeks postpartum.
Redshaw, M., Henderson, J., Just another new mother: Expectations and experiences of infant feeding support, Journal of Reproductive and Infant Psychology, 29 (3), e31, 2011	Conference abstract.
Rundall, P., Introducing the baby feeding law group, Practising Midwife, 10, 38-41, 2007	This paper describes a group that works to strengthen UK and European legislation relating to breastfeeding.
Ryan, K., Team, V., Alexander, J., The theory of agency and breastfeeding, Psychology & Health, 32, 312-329, 2017	Most of this study focuses on information and support from healthcare professionals, which is covered by a separate review. There is one sub-theme relating to expectations different from reality after the baby was born but this data was excluded due to data saturation.
Schmied, V., Olley, H., Burns, E., Duff, M., Dennis, C. L., Dahlen, H. G., Contradictions and conflict: A meta-ethnographic study of migrant women's experiences of breastfeeding in a new country, BMC Pregnancy and Childbirth, 12 (no pagination), 2012	Included studies conducted in the UK were assessed for inclusion in the present review. The primary publication of Condon 2003 was included in the present review. Choudhry 2012 and Ingram 2003 were excluded, please see exclusion reason in this table.

Study	Reason for exclusion
Scott, J. A., Mostyn, T., Greater Glasgow Breastfeeding Initiative Management, Team, Women's experiences of breastfeeding in a bottle-feeding culture, Journal of Human Lactation, 19, 270-7, 2003	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were recruited between January and March 2001, after they participated in a peer-support programme between September 1997 and December 2000. It is unclear to what postpartum period themes refer to.
Shakespeare, J., Blake, F., Garcia, J., Breast-feeding difficulties experienced by women taking part in a qualitative interview study of postnatal depression, Midwifery, 20, 251-260, 2004	Not specific to the antenatal period or to the first 8 weeks postpartum. Women were interviewed 15 months postpartum and breastfeeding duration was reported as ranging from less than 1 week to more than 6 weeks (no further details provided in relation to 'more than 6 weeks').
Shaw, Rachel & Wallace, Louise & Bansal, Mandeep., Is breast best? Perceptions of infant feeding, Community practitioner: the journal of the Community Practitioners' & Health Visitors' Association., 76, 299-303, 2003	Not specific to the antenatal period or to the first 8 weeks postpartum. Antenatal interviews were followed by 2 postnatal interviews at 6 and 17 weeks. Themes are not presented separately by different interview times. Breastfeeding duration varied and in at least one case it was longer than 8 weeks.
Sherriff, N., Hall, V., Engaging and supporting fathers to promote breastfeeding: A new role for Health Visitors?, Scandinavian Journal of Caring Sciences, 25, 467-475, 2011	Not specific to the antenatal period or to the first 8 weeks postpartum. Age of infants 'ranged from 6 weeks to 11 months, with 2 breastfed exclusively, 4 breastmilk and solids, and 2 formula only'.
Sherriff, N., Hall, V., Panton, C., Engaging and supporting fathers to promote breast feeding: a concept analysis, Midwifery, 30, 667-77, 2014	Not specific to the antenatal period or to the first 8 weeks postpartum.
Shulver, D., Shaw-Flach, A., Enabling women to breastfeed, The practising midwife, 7, 12-14, 16, 2004	No relevant study design. A questionnaire was used, which included closed, open or ranking questions.
Spear, H. J., Breastfeeding & support, AWHONN lifelines / Association of Women's Health, Obstetric and Neonatal Nurses, 9, 184, 181-183, 2005	One case study about one mother and her baby.
Sriraman, N. K., Kellams, A., Breastfeeding: What are the Barriers? Why Women Struggle to Achieve Their Goals, Journal of Women's Health, 25, 714-22, 2016	Literature review.
Teich, A. S., Barnett, J., Bonuck, K., Women's perceptions of breastfeeding barriers in early postpartum period: A qualitative analysis nested in two randomized controlled trials, Breastfeeding Medicine, 9, 9-15, 2014	Study was conducted in the United States.
Thomson, G., Dykes, F., Women's sense of coherence related to their infant feeding experiences, Maternal & Child Nutrition, 7, 160-74, 2011	Not specific to the antenatal period or to the first 8 weeks postpartum.
Thomson, G., Ebisch-Burton, K., Flacking, R., Shame if you do--shame if you don't: women's experiences of infant feeding, Maternal & Child Nutrition, 11, 33-46, 2015	Not specific to the antenatal period or to the first 8 weeks postpartum. The length of time women breastfed ranged from a few days to more than 12 months.

Study	Reason for exclusion
Twamley, K., Puthussery, S., Harding, S., Baron, M., Macfarlane, A., UK-born ethnic minority women and their experiences of feeding their newborn infant, Midwifery, 27, 595-602, 2011	Not specific to the antenatal period or to the first 8 weeks postpartum. Some women introduced artificial milk feeding in the first 48 hours, some women in the first 6 months, some women after 6 months.
Wagner, E. A., Chantry, C. J., Dewey, K. G., Nommsen-Rivers, L. A., Breastfeeding concerns at 3 and 7 days postpartum and feeding status at 2 months, Pediatrics, 132, e865-e875, 2013	This study was conducted in the United States.
Wambach, K. A., Cohen, S. M., Breastfeeding Experiences of Urban Adolescent Mothers, Journal of Pediatric Nursing, 24, 244-254, 2009	This study was conducted in the United States.
Wambach, K. A., Cole, C., Breastfeeding and adolescents, JOGNN - Journal of Obstetric, Gynecologic, & Neonatal Nursing, 29, 282-94, 2000	Included studies were assessed for inclusion in the present review. There were only 3 studies published later than 1995. Ineichen 1997 was excluded, please see exclusion reason in this table. For Wiemann 1998a and Wiemann 1998b, the abstract was checked but no full text was requested as the abstract indicated a quantitative study.
Watkinson, M., Murray, C., Simpson, J., Maternal experiences of embodied emotional sensations during breast feeding: An Interpretative Phenomenological Analysis, Midwifery, 36, 53-60, 2016	Not specific to the antenatal period or to the first 8 weeks postpartum.
Whelan, A., Lupton, P., Promoting successful breast feeding among women with a low income, Midwifery, 14, 94-100, 1998	This study was excluded due to data saturation. Themes included breastfeeding as natural, promoting bonding with the baby, realistic versus unrealistic expectations, ability to do everyday activities, support from family and friends, frequency of feeding and perceived issues with milk supply. Moreover, this paper also focused on support from healthcare professionals, which is a topic covered by a separate review.
White, M., Breast intentions, Nursing Standard, 15, 12, 2001	Discussion paper.
Woods, N. K., Chesser, A. K., Wipperman, J., Describing adolescent breastfeeding environments through focus groups in an urban community, Journal of primary care & community health, 4, 307-310, 2013	Country not stated. Authors' affiliation in the United States and participants received a $15 gift card for participating.

Economic studies

No economic evidence was identified for this review.

Appendix L – Research recommendations

Research recommendations for review question: What are perceived by parents to be the facilitators and barriers for starting and maintaining breastfeeding?

No research recommendations were made for this review question.