

Postnatal care

[T] Formula feeding information and support

NICE guideline NG194

Evidence review underpinning recommendations 1.5.1 and 1.5.16 to 1.5.20

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Final

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

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Formula feeding information and support

Review question

This evidence report contains information on 2 qualitative reviews designed to identify what information and support women find useful with formula feeding. The committee anticipated that the relevant studies would have an overlapping focus on information and support in relation to formula feeding. For this reason, they agreed it would be appropriate for the reviews to be analysed and reported together in a single evidence report. The review questions are:

- What information on formula feeding do parents find helpful?
- What support with formula feeding do parents find helpful?

Introduction

Breastfeeding is known to have some benefits on mothers and babies, when compared with formula feeding. The benefits include lower rates of infection in the babies and reduced risk of breast cancer in the mothers. However, some mothers choose bottle feeding while others struggle to establish satisfactory breast feeding. This review aims to determine what information and support on formula feeding parents find helpful antenatally and within the first 8 weeks after birth.

Summary of the protocol

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 term baby and their partners.
Phenomenon of Interest (information)	Views and experiences of the information about formula feeding which is provided antenatally or in the first eight weeks after birth. Themes will be identified from the 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): • differences in types of bottles and teats • differences in formula milks (brands, 1st stage, 2nd stage etc.) • frequency (routines) and volume of formula • how to know when the infant has had enough/ too much milk • the best environment to feed in and how to feed when out • items to buy for bottle feeding • cleaning and sterilising bottles • how to make up feeds • special formula milk (e.g. anticolic milk) • responsive feeding – what stress cues to be aware of • technique for feeding (burping etc.) • machines available ('perfect prep' machines).
Phenomenon of Interest (support)	Views and experiences of the support available for formula feeding antenatally or during the first 8 weeks after birth. Themes will be identified from the 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): • types of support e.g. midwife, health visitor, GP, NCT group, maternity support worker, infant feeding specialist, helplines, telephone support, text support, children's centres, internet resources, online forums, etc • emotional support e.g. to help manage disappointment of being unable to breastfeed • accessibility of support e.g. out of hours, availability of appointments, language barriers, cost, when it should be given (antenatal / postnatal),

	frequency, where support is delivered (for example in home setting / support group) etc
	• reliability e.g. trust in the information given.
Context	Studies from the UK only.

GP: General Practitioner; NCT: National Childbirth Trust

For further details see the review protocol in appendix A.

Methods and process

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

Fourteen qualitative studies were included in this review (with 8 included for the information question and 9 included for the support question, although these were not always mutually exclusive with 3 papers reporting data on both). Eleven studies collected data from interviews or focus groups (Hoddinott 2000, Hoddinott 1999, Hoddinott 2012, Hughes 1997, Keely 2015, Lagan 2014, Martyn 1997, Murphy 2000, Sherriff 2009, Stewart-Knox 2003, Williamson 2012); 2 studies collected data from surveys with open ended questions (Graffy 2005, Redshaw 2012); and 1 study collected data from interviews or focus groups and surveys with open ended questions (Roberts 2009). It is likely that Hoddinott 2000 and Hoddinott 1999 are presenting qualitative data from the same 21 women, however since there is limited information on study dates, this cannot be confirmed. Each study presents different themes, therefore there are no concerns with duplicating information. The studies have been presented as separate publications.

One study (Roberts 2009) assessed the feasibility and acceptability of future infant feeding video support after hospital discharge and investigated general views on the potential of other communication technology in rural Scotland. Since this study was assessing infant feeding, the themes from this study appear in both the breastfeeding and formula feeding reviews.

Three studies specifically evaluated formula feeding (Lagan 2014, Martyn 1997, Hughes 1997), 6 studies evaluated infant feeding which included both breastfeeding and formula feeding (Hoddinott 1999, Hoddinott 2000, Hoddinott 2012, Murphy 2000, Redshaw 2012, Roberts 2009) and 5 studies primarily evaluated breastfeeding but formula feeding was also discussed (Graffy 2005, Keely 2015, Sherriff 2009, Stewart-Knox 2003, Williamson 2012). These latter 5 breastfeeding studies were all identified from review S examining the breastfeeding information and support that parents find helpful.

Some studies focused on participants' experiences up to 10 weeks postpartum. It was agreed with the committee that this threshold was close enough to the 8 weeks' threshold and that the population was similar to that of interest in the review, so these studies were checked to see if they

would add any additional themes to the review or if they should be excluded based on data saturation. Four studies (Hoddinott 1999, Hoddinott 2000, Martyn 1997, Keely 2015) covered a period up to the first 10 weeks and were included because they contributed to the review with new themes. Moreover, some studies interviewed women later than 8 weeks after birth, but referred to the time period of interest and so were included. These studies were: Sherriff 2018, which interviewed fathers with young babies between 6 weeks and 11 months of age, Hoddinott 2012, which interviewed women every 4 weeks over a period of 6 months, Lagan 2014 which interviewed women who were 4 to 8 months postpartum, Murphy 2000 which conducted interviews antenatally and at 5 intervals over the following two years and Redshaw 2012 whose questionnaire was returned by women whose infants were a mean age of 15.5 weeks old (range 13 to 28 weeks). In all cases, data were extracted in relation to their experiences of antenatal information and support, as this time period is relevant to this review.

One study (Roberts 2009) specifically evaluated the response to an intervention or proposed intervention. Roberts 2009 evaluated women's opinions on whether a video support service would be well received.

One study only included fathers (Sheriff 2009), and 1 study included women and their significant others (Hoddinott 2012), the remaining 12 studies only included mothers.

Four studies did not report the age of the participants (Martyn 1997, Murphy 2000, Sherriff 2009 and Stewart-Knox 2003) the remaining studies recruited women typically from 16 years to 40's.

One study mentioned a participant who had given birth to twins (Hughes 1997), but no themes or papers specific to twins or triplets were identified.

Five studies recruited primiparous mothers (Hoddinott 1999, Hoddinott 2000, Hughes 1997, Murphy 2000, Williamson 2012). Seven studies recruited a mixture of primiparous and multiparous mothers (Graffy 2005, Hoddinott 2012, Lagan 2014, Martyn 1997, Redshaw 2012, Roberts 2009, Stewart-Knox 2003,). One study did not report whether the mothers were primiparous or multiparous (Keely 2015). The study that recruited fathers (Sheriff 2009), recruited a mixture of first-time fathers and fathers with previous children.

Four studies specifically recruited participants from socially deprived areas or recruited only working class women (Hoddinott 1999, Hoddinott 2000, Hoddinott 2012, Hughes 1997). One study did not report on the socio-economic status, employment or education of their participants (Martyn 1997). The remaining 9 studies (Graffy 2005, Keely 2015, Lagan 2014, Murphy 2000, Redshaw 2012, Roberts 2009, Sherriff 2009, Stewart-Knox 2003, 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.

Three studies recruited all White participants (Hoddinott 1999, Hoddinott 2000 and Williamson 2012). Three studies recruited a population that was majority White with a small proportion of other ethnicities or countries of origin (Keely 2015, Lagan 2014, Murphy 2000). Graffy 2005 and Redshaw 2012 were the only studies to include a significant number (>10%) of people from ethnic minorities (either African, Caribbean or from the Indian subcontinent). The remaining 6 studies (Hoddinott 2012, Hughes 1997, Martyn 1997, Roberts 2009, Sherriff 2009, Stewart-Knox 2003) did not report the ethnicity of their participants.

Most studies did not report the mode of birth. Those that did (n=2) reported a variety of modes of birth.

Data from the included studies were explored in a number of central themes and subthemes:

Theme 1. Information

Sub-theme 1.1. Lack of information provision – especially compared to breastfeeding parents

Sub-theme 1.2. Inconsistent and poor communication of information

Sub-theme 1.3. Receiving information antenatally

Sub-theme 1.4. Sources of information

Theme 2. Feeling unsupported if choosing to formula feed

Sub-theme 2.1. How others interacted with formula feeding parents

Sub-theme 2.2. Feeling neglected – especially compared to breastfeeding mothers

Sub-theme 2.3. Switching from breast to formula feeding

Theme 3. Remote support

Sub-theme 3.1. Remote support as extra support as opposed to replacing face-to-face support

Sub-theme 3.2. Timing of remote support

Sub-theme 3.3. Response time of different communication technologies

Sub-theme 3.3. Privacy and security of video support

Sub-theme 3.4. Location of video support

Theme 4. Fathers are able to support better when formula feeding

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 exclusion are provided in appendix K.

Summary of 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
Graffy 2005	N=649 women from London	Questionnaire	Feeling unsupported if choosing to formula feed
Aim of the study To examine women's information, advice, and	Ethnicity (n=640): UK and other white n=440		

Study	Participants	Methods	Themes
support they receive with breastfeeding.	(68.8); African and Caribbean n=103 (16.1); Indian subcontinent n=50 (7.8); Other n=47 (7.3)		
Hoddinott 1999 Aim of the study To examine antenatal expectation and postnatal experiences of first-time mothers.	N=21 women from deprived inner London area	One-to-one interview	Information
Hoddinott 2000 Aim of the study To look at how communication by health professionals about infant feeding is perceived by first time mothers.	N=21 women from deprived inner London area	One-to-one interview	Feeling unsupported if choosing to formula feed
Hoddinott 2012 Aim of the study To investigate the infant feeding experiences of women and their significant others.	N=36 women from Scotland	Semi-structured interviews	- Information - Feeling unsupported if choosing to formula feed
Hughes 1997 Aim of the study To establish what influences women to bottle feed	N=20 women	Semi-structured interviews	Information
Keely 2015	N=28 women from Scotland	Semi-structured interviews	Information

Study	Participants	Methods	Themes
Aim of the study To explore the views and experiences of obese women who had either stopped breastfeeding or were no longer exclusively breastfeeding 6 to 10 weeks postpartum, despite an original intention to do so, in relation to current breastfeeding support services.			
Lagan 2014 Aim of the study To explore the expectations and experiences of postnatal mothers in relation to infant feeding.	N=38 women in focus groups and n=30 women in interviews from Scotland	Focus groups and one-to-one interviews	- Information - Feeling unsupported if choosing to formula feed
Martyn 1997 Aim of the study To identify influences determining how and why mothers choose one brand of baby milk rather than another.	N=20 women	Semi-structured interviews	Information
Murphy 2000 Aim of the study To explore how mothers deal with the threat to their	N=24 women from Nottingham	Qualitative one-to-one interviews	Feeling unsupported if choosing to formula feed

Study	Participants	Methods	Themes
identities as good mothers from feeding practices.			
Redshaw 2012 Aim of the study To understand what is needed in the early days to enable breastfeeding to continue.	N=1436 women	Open questions from questionnaire	Feeling unsupported if choosing to formula feed
Roberts 2009 Aim of the study To investigate whether future video support after hospital discharge would be feasible and acceptable to mothers as a useful method of post-natal support for infant feeding, and explore general views on the potential use of other communication technologies.	N=91 women responded to questionnaire. n=20 women participated in qualitative interviews from rural Scotland	Semi-structured qualitative telephone interviews and postal questionnaire	- Information - Remote support
Sherriff 2009 Aim of the study To explore fathers' experiences during the pregnancy, birth and up to the first year, and to provide insight into current issues and problems from a father's perspective and to identify	N=8 fathers from different socio-economic groupings from Brighton and Hove	Semi-structured in-depth interviews	Fathers able to support better when formula feeding

Study	Participants	Methods	Themes
possible interventions which could contribute to achieving behaviour change (only data referring to the antenatal period were extracted for this review).			
Stewart-Knox 2003 Aim of study To define and explore factors determining infant feeding decisions in Northern Ireland.	N=12 pregnant women at various stages of pregnancy	2 focus groups (7 and 5 participants each). Health promotion materials were presented as cues and prompts.	Information
Williamson 2012 Aim of study To explore the experiences of first-time mothers who struggled with breastfeeding.	N=8 first-time mothers	Semi-structured interviews and audio-diary recordings	Feeling unsupported if choosing to formula feed

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 clinical outcomes 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****Theme 1. Information****Sub theme 1.1 Lack of information provision – especially compared to breastfeeding parents**

- High quality evidence from 6 studies (N=155) reported on this theme. Women felt that they were never given any information or help with formula feeding, for example with preparing bottle feeds, how much to feed their baby and how to interpret their baby's behaviours and how to respond appropriately. Women were specifically interested in information on the nutritional content of baby milk, provided in a user friendly format. All the information, leaflets and discussions were focused on breastfeeding. Women were also not specifically aware about the implications of introducing bottle feeding early on and how that might impact breastfeeding.

Sub theme 1.2. Inconsistent and poor communication of information

- High quality evidence from 2 studies (N=129) reported on this theme. Women reported being given contradictory information by different members of staff. Poor communication and conflicting advice left women feeling confused and demoralised. Women expressed a desire for continuity of care, particularly for the aim of successful infant feeding.

Sub theme 1.3. Receiving information antenatally

- High quality evidence from 2 studies (N=56) reported on this theme. Women who had attended antenatal care sessions reported that they were taught about breastfeeding, but not about formula feeding. Women were left to self-educate or learn from friends and family but they would have appreciated learning about breast and formula feeding at the same time with an open discussion about both. In addition, women wanted healthcare professionals to show them how for example to make up a bottle, if only to confirm their self-education was correct. Women also wanted skilled facilitation of interactive discussions with individuals, families or groups regardless of feeding intention, which cover the practical and emotional realities of breast and formula feeding and involve parents who have had feeding difficulties and not always lived up to ideals.

Sub theme 1.4. Sources of information

- Moderate quality evidence from 2 studies (N=41) reported on this theme. Women tended to approach friends and family for advice and information on formula feeding before contacting a healthcare professional. However, they would have preferred to receive this information directly from healthcare professionals.

Theme 2. Feeling unsupported if choosing to formula feed**Sub theme 2.1. How others interacted with formula feeding parents**

- Moderate quality evidence from 5 studies (N=2153) reported on this theme. If women have chosen to formula feed, they did not want to hear comments that made them feel pressured, guilty, like a failure or inadequate, similarly they did not want to be spoken to 'like naughty

children' or 'reprimanded' for not breastfeeding. In addition, women who were unable to breastfeed were left feeling like they were causing their babies harm by switching to formula feeding. However, some women found healthcare professionals were able to offer words of comfort when they added formula to their feeding schedule.

Sub theme 2.2. Feeling neglected, especially compared to breastfeeding mothers

High quality evidence from 3 studies (N=1495) reported on this theme. Women formula feeding felt unsupported and neglected with their postnatal care, particularly when compared to women who were breastfeeding.

Sub theme 2.3. Switching from breast to formula feeding

- Low quality evidence from 1 study (N=38) reported on this theme. The care provided by health care professionals when women were choosing to change from breast to formula feeding could influence whether a women felt supported or judged.

Theme 3. Remote support**Sub theme 3.1. Remote support to complement rather than replace face-to-face support**

- Moderate quality evidence from 1 study (N=91) reported on this theme. Women had concerns about the impact that support provided via video might have on existing services. Women did not want new technologies to replace or reduce face-to-face contact during the postnatal period. Women were concerned about over-reliance on remote support and the possibility of technological solutions being used in order to save money.

Sub theme 3.2. Timing of remote support

- Moderate quality evidence from 1 study (N=91) reported on this theme. Women thought that remote support was especially useful during 'out of hours', when face-to-face support is not readily available.

Sub theme 3.3. Response time of different communication technologies

- Moderate quality evidence from 1 study (N=91) reported on this theme. Women said that e-mail and text messaging facilities were easier to use and more accessible than video. However, they wondered whether support would be available instantly and whether they would know if a text or e-mail had been successfully delivered. Women also made positive references to national websites currently sending weekly information via e-mail to registered mothers.

Sub theme 3.4. Privacy and security of video support

- Low quality evidence from 1 study (N=91) reported on this theme. Views varied in relation to privacy and security issues. Some women said they were reluctant to use video because of privacy and security concerns, while others felt more confident as long as security was assured by service providers. Women said they would feel somewhat reassured about this if they were talking to familiar staff.

Sub theme 3.5. Location of video support

- Low quality evidence from 1 study (N=91) reported on this theme. Women valued receiving support from the comfort of their home. Women did not want to travel to use a video link facility, as in that case, they would rather travel to speak to a professional face-to-face. Women mentioned the challenges that some mothers can face in relation to leaving the home after giving birth (for example lack of personal transport, distance to travel, responsibilities of other children and the physical limitations after a difficult birth or caesarean section).

Theme 4. Fathers are better able to support when formula feeding

- Low quality evidence from 1 study (N=8) reported on this theme. Fathers felt that using formula could allow them to be more involved in feeding, assisting them to bond with the baby and to monitor how much the baby was taking.

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 the information and support that parents find helpful for formula feeding. To address these issues 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 for information included:

- differences in types of bottles and teats
- differences in formula milks (brands, 1st stage, 2nd stage etc.)
- frequency (routines) and volume of formula
- how to know when the infant has had enough/ too much milk
- the best environment to feed in and how to feed when out
- items to buy for bottle feeding
- cleaning and sterilising bottles
- how to make up feeds
- special formula milk (for example anticolic milk)
- responsive feeding – what stress cues to be aware of
- technique for feeding (burping etc.)
- machines available ('perfect prep' machines).

Suggested themes for support included:

- types of support, for example midwife, health visitor, GP, NCT group, maternity support worker, infant feeding specialist, helplines, telephone support, text support, children's centres, internet resources, online forums
- emotional support, for example to help manage disappointment of being unable to breastfeed
- accessibility of support, for example out of hours, availability of appointments, language barriers, cost, when it should be given (antenatal / postnatal), frequency, where support is delivered (for example in home setting / support group)
- reliability, for example trust in the information given.

The evidence review provided data relating to the themes set out in the protocol and additional themes that were not set out in the protocol. The committee were able to draft a number of

recommendations in relation to the themes identified, however some of the studies were limited in the 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 low to high. The review findings were generally downgraded because of methodological limitations in the included studies, including, for example that data saturation was not discussed, that authors did not discuss the potential influence of the researchers and there was no discussion of contradictory data.

Some review findings were downgraded because of concerns about relevance for the context and population of interest to this guideline. Concerns ranged from minor to moderate, with the majority of review findings being minor. The most common concern was related to the transferability of findings to ethnic minorities. Some studies did not report information relating to ethnicity or socioeconomic status.

Concerns about coherence were no or very minor for all findings except one, 'feeling supported with formula feeding' which was rated moderate since studies indicated mothers felt supported and also unsupported with formula feeding.

Concerns about adequacy ranged from no or very minor to moderate. Moderate concerns were given to any theme that was supported by only 1 study of moderate quality.

The committee also highlighted that a number of the studies included in the review were published 15-20 years ago, with very few which provide an insight into the last 5 years. The committee agreed that the older studies may not provide an accurate or reliable insight of current formula feeding practice.

Benefits and harms

The committee agreed that breastfeeding has additional health benefits for both the baby and mother over formula feeding, nonetheless when discussing the baby's feeding options with the parents, healthcare professionals should acknowledge that emotional, social, financial, and environmental factors come into play for parents when deciding whether to breastfeed or formula feed their baby. The evidence from this review showed that women who formula feed may feel judged by healthcare professionals. In view of this, healthcare professionals should be respectful of the parents' choice when it comes to deciding whether to breastfeed or formula feed. The committee agreed that the content of the assessment should be aligned with recommendations on communications with women from the provision of information about the postnatal health of women in evidence review G.

The committee discussed the extent to which formula feeding should be discussed with parents during the antenatal period. Considering the amount of information that is provided to pregnant women during antenatal care, it would not be feasible or practical to provide information about formula feeding to women who are not considering it and who express they want to exclusively breastfeed. Therefore, the committee agreed that if parents are considering formula feeding, discussion around formula feeding should be held during pregnancy and continued after birth. In addition, those who need to formula feed for example, because they are advised not to breastfeed due to specific long-term medications, or have physiological or anatomical circumstances making exclusive breastfeeding unachievable should get information about formula feeding. The committee emphasised that this should occur before and after the baby is born, to ensure the mother has sufficient information and support to feed her baby. In the antenatal period, discussion and information provision is important so that women know what to expect and how to safely start

formula feeding. However, the committee noted that discussion and information provision in the postnatal period is also crucial as some women might be more receptive of the information once they are actually feeding the baby.

The committee agreed that parents should be provided with a one-to-one discussion about safe formula feeding. The evidence showed that mothers did not want remote support to replace face-to-face support, so the committee recommended to provide face-to-face support. The committee also recommended that information from face-to-face support should be supplemented (not replaced) by written, digital, or telephone information to ensure accessibility for the mother and her family.

The evidence showed that mothers who were formula feeding felt they were not offered the same support or treated equally when compared to mothers who were breastfeeding. The committee therefore, tried to align their support recommendations with those from the breastfeeding review (see evidence review S). Similar recommendations were therefore made for face-to-face support about recognising feeding cues from the baby, paced bottle feeding, dangers of 'prop' feeding, appropriate feeding positions and bonding with their baby through good feeding practices. Paced bottle feeding is still a relatively new concept for healthcare professionals and parents, the committee agreed that feeding more slowly would most likely lead to more of the feed being taken by the baby and a less "windy, colicky" baby, thus aiding the feeding experience and ensure feeding is effective.

The evidence showed that some fathers were usually supportive of formula feeding because they perceived it as the only way in which they could bond with their baby. Some fathers were unaware that they could have an important role and still bond with their baby even if breastfeeding was the chosen method of feeding. Furthermore, sometimes feeding is used a way to sooth and comfort the baby, however, there may be a risk of overfeeding if this is done frequently for formula-fed babies. Therefore, the committee recommended to provide information about how to comfort and soothe the baby in other ways than feeding.

The evidence showed that there are multiple reasons why mothers do not seek information or support with formula feeding. Mothers felt they would be judged for wanting information or support on formula feeding, knowing it would go against the message from healthcare professionals that breastfeeding is best. For some mothers, formula feeding was not their first choice and they had intended to breastfeed. These mothers in particular would need sensitive support since there could be negative emotional consequences when being faced with, for whatever reason, the need to switch to formula feeding. In addition, mothers were unaware or did not have a good understanding of the support services available to them. The committee therefore recommended that where it is needed or requested information and support should be provided for mothers and families in a non-judgemental way.

Although no evidence was located about whether mothers and families understood the differences between breast milk and formula milk, the committee agreed this should be a key issue covered by the information being provided. They were unable to set out those differences (for example in terms of health benefits) in the recommendations because this was not within the remit of any of the review questions. On the basis of their expertise the committee agreed that in practice healthcare professionals would be able to draw on their own knowledge to provide this information to mothers and families.

The evidence presented to the committee did show that mothers who had chosen to formula feed lacked information on the different types of formula milk, how to safely prepare formula feeds and the volume of milk required when formula feeding. From the committees own experience, providing

such information on how to formula feed properly could reduce the incidence of situations such as gastroenteritis and constipation of the baby that may be a direct consequence of inappropriate sterilising or making bottles up incorrectly. The committee therefore recommended that mothers and families who were formula feeding should be informed about first infant formulas (including how to interpret the nutritional information on the labels between the different brands), how to prepare formula (including a practical demonstration if requested), and the volume of formula milk required.

The committee discussed that some women choose to partially breastfeed and partially use formula to feed their babies. This 'mixed feeding' is common practice and may work well with some families. At the same time, the evidence showed that mothers who were trying to establish breastfeeding were unaware of the possible adverse effects of introducing formula on breastfeeding success. The committee therefore agreed that it is important to provide information about the ways to maintain adequate milk supply when supplementing with formula. In addition, the evidence showed that mothers who were considering or choosing to change from breastfeeding to formula feeding would feel unsupported by healthcare professionals in making this decision. The committee therefore recommended that to ensure mothers felt supported and could make informed decisions about infant feeding, that mothers should get balanced information about breastfeeding and formula feeding. This would help women to make an informed and guilt-free decision about supplementing with formula milk or changing from breastfeeding to formula feeding.

Cost effectiveness and resource use

No economic evidence is available for this review question. The committee agreed that providing information and support for formula feeding to parents entails small costs (additional health professional time), although some information and support is already provided in current practice. For parents who are formula feeding their babies, these recommendations are expected to reduce unsafe formula feeding patterns, increase parents' knowledge and confidence, and improve babies' feeding, thus improving health outcomes for the babies. Therefore, the committee expressed the view that the recommendations are likely to lead to efficient use of healthcare resources.

Other factors the committee took into account

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

- 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.

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Appendices

Appendix A – Review protocols

Review protocol for review question: What information on formula feeding do parents find helpful?

Table 3: Review protocol

Field (based on PRISMA-P)	Content
Review question	What information on formula feeding do parents find helpful?
Type of review question	Qualitative
Objective of the review	The review aims to determine what information on formula feeding, provided antenatally or in the first 8 weeks after a singleton or multiple birth, parents find helpful.
Eligibility criteria – population/disease/condition/issue/domain	Pregnant women and women who have given birth to a healthy term baby and their partners.
Eligibility criteria – phenomenon of interest	Views and experiences of the information about formula feeding which is provided antenatally or in the first eight weeks after birth. Themes will be identified from the 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): • differences in types of bottles and teats • differences in formula milks (brands, and 1st stage, 2nd stage etc) • frequency (routines) and volume of formula • how to know when the infant has had enough/ too much milk • the best environment to feed in and how to feed when out • items to buy for bottle feeding • cleaning and sterilising bottles • how to make up feeds

Field (based on PRISMA-P)	Content
	• special formula milk (for example anticolic milk) • responsive feeding – what stress cues to be aware of • technique for feeding (burping etc) • machines available ('perfect prep' machines). The main aim of the study needs to be about feeding. Studies about formula feeding and other postnatal issues will be excluded.
Eligibility criteria – comparator(s)	Not applicable, qualitative review
Outcomes and prioritisation	Not applicable, qualitative review
Eligibility criteria – study design	• Published full-text papers only • Qualitative studies (for example, studies that use interviews, focus groups, or observations) • Surveys using open ended questions and a qualitative analysis of responses • Studies using a mixed methods design (only the qualitative data will be extracted and risk of bias assessed using the relevant checklist). • Exclusions: ○ purely quantitative studies (including surveys reporting only quantitative data) ○ surveys using mainly closed questions or which quantify open ended answers for analysis ○ 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. 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.

Field (based on PRISMA-P)	Content
Other inclusion exclusion criteria	Only to include studies from the UK as the configuration of antenatal and postnatal services in other countries might not be representative of that in the UK and attitudes in other countries may also differ significantly. Cut-off dates: everything post-1995 as this is when the breastfeeding friendly initiative came into practice and practice was likely to change significantly.
Proposed sensitivity/sub-group analysis, or meta-regression	Groups that will be reviewed and analysed separately: • 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.
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)	CERQual will be used to assess the confidence in the findings of a thematic analysis.
Information sources – databases and dates	The following databases will be searched: • Embase • EMCare • MEDLINE and MEDLINE IN-PROCESS. Searches will be restricted by: • date limitations: 1995 to 10th June 2018 • English language • qualitative/patient concerns • UK geographic studies.

Field (based on PRISMA-P)	Content
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 will be 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 will be evaluated for each theme 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
Methods for analysis – combining studies and exploring (in)consistency	Thematic content analysis will be used to synthesise the qualitative data. A theme map may also be presented if there is sufficient information identified in the search. 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.

Field (based on PRISMA-P)	Content
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 a full description of methods see Supplement 1.
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

CERQual: Confidence in the Evidence from Reviews of Qualitative Research; CINAHL: Current Nursing and Allied Health Literature; GRADE: Grading of Recommendations Assessment, Development and Evaluation; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; PROSPERO: Prospective Register of Systematic Reviews; PsychINFO: Psychological Information.

Review protocol for review question: What support on formula feeding do parents find helpful?

Table 4: Review protocol

Field (based on PRISMA-P)	Content
Review question	What support on formula feeding do parents find helpful?
Type of review question	Qualitative
Objective of the review	The review aims to determine what support on formula feeding, provided antenatally or in the first 8 weeks after birth, parents find helpful.
Eligibility criteria – population/disease/condition/issue/domain	Pregnant women and women who have given birth to a healthy term baby and their partners.
Eligibility criteria – phenomenon of interest	Views and experiences of the support available for formula feeding antenatally or during the first 8 weeks after birth. Themes will be identified from the 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):

Field (based on PRISMA-P)	Content
	• types of support, for example midwife, health visitor, GP, NCT group, maternity support worker, infant feeding specialist, helplines, telephone support, text support, children's centres, internet resources, online forums • emotional support, for example to help manage disappointment of being unable to breastfeed • accessibility of support, for example out of hours, availability of appointments, language barriers, cost, when it should be given (antenatal / postnatal), frequency, where support is delivered (for example in home setting / support group) • reliability, for example trust in the information given. The main aim of the study needs to be about feeding. Studies about support for formula feeding and other postnatal issues will be excluded.
Outcomes and prioritisation	Not applicable, qualitative review
Eligibility criteria – study design	• Published full-text papers only • Qualitative studies (for example, studies that use interviews, focus groups, or observations) • Surveys using open ended questions and a qualitative analysis of responses • Studies using a mixed methods design (only the qualitative data will be extracted and risk of bias assessed using the relevant checklist). • Exclusions: ◦ purely quantitative studies (including surveys reporting only quantitative data) ◦ surveys using mainly closed questions or which quantify open ended answers for analysis ◦ 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. 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.

Field (based on PRISMA-P)	Content
Other inclusion exclusion criteria	Only to include studies from the UK as the configuration of antenatal and postnatal services in other countries might not be representative of that in the UK and attitudes in other countries may also differ significantly. Cut-off dates: everything post-1995 as this is when the breastfeeding friendly initiative came into practice and practice was likely to change significantly.
Proposed sensitivity/sub-group analysis, or meta-regression	Groups that will be reviewed and analysed separately: • 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.
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)	CERQual will be used to assess the confidence in the findings of a thematic analysis.
Information sources – databases and dates	Sources to be searched: • Embase • Emcare • Medline • Medline In-Process Limits: • date limitations: 1995 to 10th of June 2018 • English language • qualitative/patient concerns

Field (based on PRISMA-P)	Content
	• UK geographic
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) of the full guideline. 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) of the full guideline. 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 will be 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
Methods for analysis – combining studies and exploring (in)consistency	Thematic content analysis will be used to synthesise the qualitative data. A theme map may also be presented if there is sufficient information identified in the search. 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.

Field (based on PRISMA-P)	Content
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 a full description of methods see Supplement 1.
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

CERQual: Confidence in the Evidence from Reviews of Qualitative Research; CINAHL: Current Nursing and Allied Health Literature; GP: General Practitioner; GRADE: Grading of Recommendations Assessment, Development and Evaluation; NCT: National Clinical Trial; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; PROSPERO: Prospective Register of Systematic Reviews; PsychINFO: Psychological Information

Appendix B – Literature search strategies

Literature search strategies for review questions:
What information on formula feeding do parents find helpful?
What support with formula feeding do parents find helpful?

Clinical search

The search for this topic was last run on 10th June 2018.

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

#	Search
1	artificial milk/ or baby food/ or bottle feeding/ or exp breast milk/ or infant feeding/ or milk substitute/
2	1 use emczd, emcr
3	bottle feeding/ or infant food/ or infant formula/ or exp infant food/ or milk, human/ or milk substitutes/
4	3 use ppez
5	((((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 adj2 nipple*) or milk pump*)).ti,ab.
6	or/2,4-5
7	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/
8	7 use emczd, emcr
9	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 narrative/ or qualitative research/ or "surveys and questionnaires"/ or sampling studies/ or tape recording/ or videodisc recording/
10	9 use ppez
11	group*.ti,ab.
12	(qualitative* or interview* or focus or questionnaire* or narrative* or narration* or survey*).ti,ab.
13	(ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic adj4 analys*) or theoretical sampl* or purposive sampl*).tw.
14	(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.
15	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them*).tw.

#	Search
16	(critical interpretive syntheses* or (realist adj (review* or syntheses*)) or (noblit and hare) or (meta adj (method or triangulation)) or (cerqual or conqual) or ((thematic or framework) adj syntheses*).tw.
17	or/8,10-16
18	((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.
19	((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.
20	((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.
21	or/18-20
22	or/17,21
23	united kingdom/
24	(national health service* or nhs*).ti,ab,in,ad.
25	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
26	(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.
27	(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 (worchester not (massachusetts* or boston* or harvard*)) or ("worchester'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,ad.

#	Search
28	(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.
29	(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.
30	(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.
31	or/23-30
32	(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/)
33	31 not 32
34	33 use emczd, emcr
35	exp united kingdom/
36	(national health service* or nhs*).ti,ab,in.
37	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
38	(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.
39	(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 (worchester not (massachusetts* or boston* or harvard*)) or ("worchester'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.
40	(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.
41	(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.

#	Search
42	(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.
43	or/35-42
44	(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/)
45	43 not 44
46	45 use ppez
47	or/34,46
48	6 and 22 and 47
49	limit 48 to yr="1995 -current"
50	limit 49 to english language

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 (global) – 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
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

#	Search
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
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 qual* or euro qual* or euro qual5d* or euroqual5d* 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	(multiattribute* 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.

#	Search
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

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 in 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*)) in hta, nhs eed
5	#1 or #2 or #3 or #4
6	mesh descriptor breast feeding explode all trees in hta, nhs eed
7	mesh descriptor lactation in hta, nhs eed

#	Search
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*))) in hta, nhs eed
9	#6 or #7 or #8
10	mesh descriptor bottle feeding in hta, nhs eed
11	mesh descriptor infant formula in 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 formula feed 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*)) in hta, nhs eed
13	#10 or #11 or #12
14	#5 or #9 or #13

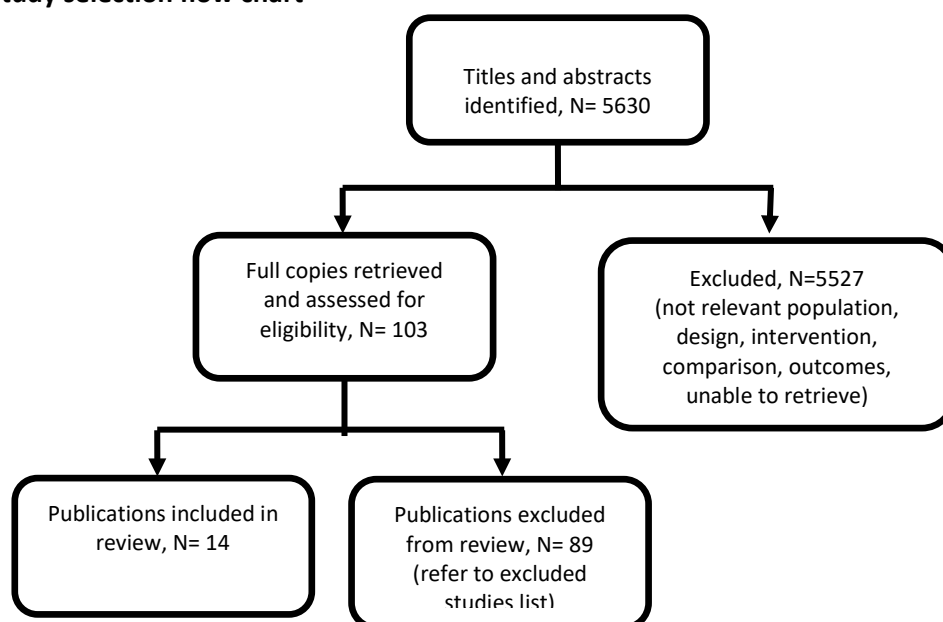
Appendix C – Clinical evidence study selection

Clinical study selection for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

Figure 1: Study selection flow chart



evidence tables**Clinical evidence tables for review questions:****What information on formula feeding do parents find helpful?****What support with formula feeding do parents find helpful?****Table 5: Clinical evidence tables**

Study details	Participants	Methods	Findings	Comments
Full citation Sherriff, N., Hall, V., Pickin, M., Fathers' perspectives on breastfeeding: ideas for intervention, British Journal of Midwifery, 17, 223-227, 2009 Ref Id 880005 Study type Qualitative Aim of the study To explore fathers' experiences during the pregnancy, birth and up to the first year, and to provide insight into current issues and problems from a father's perspective and to identify possible interventions which could contribute to achieving behaviour change.	Sample size N=8 fathers Characteristics Fathers with young babies between 6 weeks and 11 months of age. Fathers were drawn from different socio-economic groupings. Inclusion criteria Not reported Exclusion criteria Not reported	Setting This study 'was part of a larger social marketing project focusing on increasing rates of exclusive breastfeeding in Brighton and Hove'. Brighton had become a 'National Social Marketing Demonstration site for Breastfeeding. The aim of this demonstration site is to examine how social marketing techniques might be used to improve rates of breastfeeding in the city'. Sample selection Fathers were recruited through their partners or via the local community breastfeeding coordinator. Data collection Semi-structured in-depth interviews Data analysis All interviews were recorded and transcribed verbatim. Transcripts were content analysed using thematic analysis.	Themes/categories 'Antenatal experiences' Views on experiences after birth were not reported for this review because they were not specific to the first 8 weeks.	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 study authors did not justify the methods they used. 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 researchers on the study findings. Ethical issues: The study authors reported that they adhered to principles of confidentiality, privacy and data protection.

Study details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out UK Study dates Interviews were conducted between July and August 2008. Source of funding Brighton and Hove City Teaching PCT				Data analysis: The analytical process was described but the use of predefined methods from the literature was not mentioned. 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. Credibility of the findings was not discussed. Value of research: The authors did not discuss the transferability of the findings to other populations. Apart from this, the authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice and identified areas where future research is needed. Overall methodological concerns: serious
Full citation Roberts, A., Hoddinott, P., Heaney, D., Bryers, H., The use of video support for infant feeding after hospital discharge: A study in remote and rural Scotland, Maternal and Child Nutrition, 5, 347-357, 2009 Ref Id 807238 Study type	Sample size N=91 responded to questionnaire. n=20 participated in qualitative interviews Characteristics 'At the time of completing the questionnaire, 54% (n = 49) of mothers were exclusively breastfeeding, 35% (n = 32) were formula feeding and 11% (n = 10)	Setting Rural Scotland. Video support had not yet been implemented so the views were about a hypothetical intervention. Sample selection Survey: '466 took place in the regional maternity unit and 59 at three rural community midwifery units. Of these 525 women, 403 mothers were given a questionnaire prior to discharge from the post-natal ward. Of the 122 women who did not receive a	Themes/categories Timing of video support. Location of video support. 'Continuity of care' 'Privacy and security of video link' 'Interfacing with existing services' 'The potential of other communication technology'	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 study authors justified the methods they used because they mentioned that 'Telephone interviews were the chosen method of the remote and rural residences of

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Study details	Participants	Methods	Findings	Comments
Qualitative (mixed methods, but only qualitative findings were reported). Aim of the study To investigate whether future video support after hospital discharge would be feasible and acceptable to mothers as a useful method of post-natal support for infant feeding, and explore general views on the potential use of other communication technologies. Country/ies where the study was carried out UK Study dates Between 15 November 2006 and 15 February 2007 Source of funding NHS Highland	were mixed breast and formula feeding'. '61.5% (n = 56) of mothers indicating they have a mobile phone with video facility, 68.1% (n = 62) a digital camera with video facility, 72.5 % (n = 66) of respondents have broadband facility at home, but only 28.6% (n = 26) use video through their home computer'. Women who participated in the qualitative interviews included women belonging to all these groups: 'pro-video' or 'anti-video' responses to the survey; primiparous or multiparous; initiating breast- or formula feeding; currently breast- or formula feeding; maternal age (up to 25, over 25); rurality was taken into account in sampling frame too. Inclusion criteria Not reported. Exclusion criteria Not reported.	questionnaire, four declined, nine were considered inappropriate for clinical or social reasons by midwifery staff, 21 had poor English and 88 were missed because of internal staffing/organizational issues. A total of 91 women (response rate 22.6%) completed the questionnaire'. The participants for telephone interview were then purposively selected (n = 20) using responses from the survey data. The sampling frame included women from the following groups: 'pro-video' or 'anti-video' responses to the survey; primiparous or multiparous; initiating breast- or formula feeding; currently breast- or formula feeding; maternal age (up to 25, over 25); and rurality. Data collection Mothers were requested to complete the postal return questionnaires at home, over the first 2 weeks post discharge. The questionnaire included a free text section, where participants could freely express their views about the use of video link for infant feeding support. Semi-structured qualitative telephone interviews were also conducted. Data analysis The interviews were digitally recorded, transcribed verbatim and entered onto qualitative data software NVivo for coding and analysis. Members of the research team listened to audio recordings/read interview transcripts of the first seven interviews and independently identified emerging key		women over a wide geographical area, and to provide flexibility for mothers during a transitional and demanding time'. Recruitment strategy: Sample selection was clearly reported. Data collection: There is a clear description of how data collection was conducted. Saturation of data was not discussed. Relationship between researcher and participants: The authors did not discuss the potential influences of the researchers on the study findings. Ethical issues: Ethical approval for this study 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 highlighted by the authors, for example the study authors outlined that some women said they were reluctant to use video because of privacy and security concerns, while others felt more confident provided that security was assured by service providers. 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 finding, 'Members of the research team listened to audio

Study details	Participants	Methods	Findings	Comments
		themes. A full coding framework was then established, thorough detailed discussion by the research team and applied to all interview transcripts using NVivo. The analysis undertaken for this paper was selective, in that it primarily focused on the overarching theme of video support for infant feeding rather than encompassing all topics within the interview schedule. Some key themes directly related to questions asked in the interview topic guide and others emerged from summarizing and reflecting on the data. Framework matrices for key themes were systematically constructed and compared according to two typologies: pro or anti the future use of video technology and residence in an urban, small town or rural/remote location. Data were searched for patterns, associations and for disconfirming cases. Analysis was discussed at research team meetings, to inform subsequent descriptive data analysis.		recordings/read interview transcripts of the first seven interviews and independently identified emerging key themes'. Moreover, the authors mention that by concurrently collecting and analysing quantitative and qualitative data, they used triangulation to search for disconfirming perspectives and improve the rigour of their analysis. Value of research: In relation to the transferability of the findings to other populations, the authors used purposive sampling based on survey responses, and as a limitation they mentioned that women's views should be tested with actual pilots using video and other technology rather than the hypothetical preferences expressed in this study. The authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice and identified areas where future research is needed. Overall methodological concerns: minor Other information The authors emphasise that their study includes the views of women who choose to formula feed as well as the views of women who choose to breastfeed.
Full citation Graffy, J., Taylor, J., What information, advice, and support do women want with	Sample size N=654	Setting London General practices. Practices selected on pragmatic criteria including serving mixed or deprived populations and	Themes/categories Components of good breastfeeding support	Limitations Limitations (assessed using the CASP qualitative checklist)

Study details	Participants	Methods	Findings	Comments
breastfeeding?, Birth (Berkeley, Calif.), 32, 179-186, 2005 Ref Id 806011 Study type Qualitative Aim of the study To examine women's perspectives on the information, advice, and support they receive with breastfeeding Country/ies where the study was carried out UK Study dates April 1995 to August 1998 Source of funding Grant funding was provided by the Royal College of General Practitioners, London, and National Health Service Responsive Funding Scheme, London, United Kingdom.	Characteristics Age (n=649): <20 years n=36 (5.5); 20-24 years n=101 (15.6); 25-29 years n=214 (33); 30-34 years n=207 (31.9); >35 years n=91 (14). Mean 28yrs 10 months 'Although they had all begun breastfeeding, by 6 weeks, most had introduced at least some formula feeds; 249 (38%) were exclusively breastfeeding, 183 (28%) were giving both breast and bottle, and 222 (34%) were bottle-feeding exclusively'. Previous children (n=654): Yes n=162 (24.8); No n=492 (75.2) Age completed education (n=639): ≤16 years n=192 (30.1); 17-18 years n=188 (29.4); ≥19 n=259 (24.8) Social class (n=626): I and II n=240 (38.7); III non-manual n=116 (18.7); III manual n=155 (25); IV and V n=82 (13.2); Other n=27 (4.4) Ethnicity (n=640): UK and other white n=440 (68.8); African and Caribbean n=103 (16.1); Indian subcontinent n=50 (7.8); Other n=47 (7.3)	not undertaking specific initiatives to promote breastfeeding. Sample selection Women were recruited at between 28 and 36 weeks' gestation. Eligible women were randomly allocated to receive either normal care or additional support from a breastfeeding counsellor. The procedure used was to place random permuted blocks of numbers in sealed envelopes, stratified by practice and birth order, that were held in the study office. Six weeks after the birth, we asked those who had begun breastfeeding to complete a questionnaire about their experiences of breastfeeding support. This thematic analysis of their comments and combines responses from both intervention and control groups. Data collection A questionnaire that enquired about feeding behaviour, satisfaction with breastfeeding, and advice women had received for common problems. Questionnaires were left in each baby's medical records for mothers to complete at the 6-week checkup. If they had not returned this by 8 weeks, we sent the first of two postal reminders. Non-responders were contacted by telephone. Data analysis All the women's responses were transcribed. The 3 researchers then read	Information about breastfeeding and what to expect Practice help with positioning Effective advice and suggestions Acknowledgement of Mothers' experiences and feelings Reassurance and encouragement Support from breastfeeding counsellors	Aims and qualitative methodology: Aim of the study was clearly reported, qualitative research design was appropriate for answering the research question Research design: The study authors did not justify the methods they used Recruitment strategy: Sample selection was clearly reported. Data collection: Data collection relied on a piloted questionnaire that included open questions. Data saturation was not discussed Relationship between researcher and participants: Not discussed Ethical issues: The study obtained ethical approval. 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 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. In relation to the credibility of findings, a triangulation methods approach was used along with a summer of findings sent to 80 participants to check the findings accurately reflected womens' views.

Study details	Participants	Methods	Findings	Comments
	Inclusion criteria Considering breastfeeding, not having previously breastfed to 6 weeks, speaking sufficient English, and not planning to contact a breastfeeding counselor, since this would have conflicted with the trial. Exclusion criteria Not reported	the transcripts independently to identify initial themes. They used a grounded theory approach, describing the data, ordering and classifying concepts, and then constructing theory to relate the concepts identified. At each stage of the analysis, the researchers worked together, searching for patterns and comparing the experiences, feelings, and perceptions within women's accounts until a consistent thematic framework developed. This method meant that each individual response could fit into a particular category with no new themes emerging. To enhance the validity of the findings, triangulation was used to compare the categorisation of what women found most and least helpful with conclusions drawn from their free text comments. To check that the findings accurately reflected women's views, 80 participants received a 2-page summary and structured response sheet. This document asked whether they agreed with the report, whether anything should be changed, how they felt about taking part in the research, and whether they should have done anything differently.		Value of research: The authors mentioned that transferability of findings to populations who speak limited English was not possible as these participants weren't captured in their paper. The authors provide adequate discussion of their findings. They also discuss the implications of their findings for policy and practice but do not identify areas where future research is needed. 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 year 2000: initiation rate: 54%. 6-month continuation rate: 10%. Sample selection	Themes/categories Perceptions of breastfeeding promotion materials	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 survey studies have provided 'very little in-depth knowledge

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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	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 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.		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. Ethics: Not reported whether ethical approval was obtained. 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'. 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. The authors did not discuss the potential influences of the researchers. 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

Study details	Participants	Methods	Findings	Comments
				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 & 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 Murphy, Elizabeth, Risk, responsibility, and rhetoric in infant feeding, Journal of Contemporary Ethnography, 29, 291-325, 2000 Ref Id 881001 Study type Qualitative Aim of the study To consider who mothers deal with the threat to their identities as good, neoliberal	Sample size N=24 from an original sample of 36 women Characteristics Occupational class 1/2 (professional/intermediate): n=6 ; Occupational class 3 (skilled non-manual/manual): n=10 ; Occupational class 4/5 (semiskilled/unskilled): n=8 Ethnicity: N=1 African Caribbean and N=1 South Asian, N=24 White British. This paper focused on 24 of the 36 mothers - those who initially elected to breastfeed but	Setting Nottingham, England Sample selection Occupational class profiles of the NHS general medical practices within a ten-mile radius of Nottingham was obtained. From here, 10 general medical practices with contrasting occupational class profiles were selected. From here, 36 women were recruited to fill the quota sample. Data collection Six qualitative interviews were conducted with each woman - one before birth and the remaining five at fixed intervals up to two years after birth. Interviews lasted between	Themes/categories Antenatal talk about infant feeding The following themes were not relevant to this review question as data could not be certain within the first 8 weeks postnatally, as per review protocol: Rhetorical construction of moral meanings Postnatal talk about formula feeding The baby is unharmed by formula milk Beyond the mother's control Physical incapacity Blaming others	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 author does not justify the methods used. Sample selection: Sample selection was reported. Ethics: Not reported whether ethical approval was obtained. Data collection: There is some description of how interviews were

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Study details	Participants	Methods	Findings	Comments
citizens and mothers that arises from such feeding practices. Country/ies where the study was carried out UK Study dates Unclear, study claims 'recently completed interviews' and paper was published in 2000 Source of funding UK Economic and Social Research Council as part of the Nation's Diet Programme (L209252035)	subsequently introduced formula milk. Breastfeeding lasted from 4 hours to 14 weeks, with half having stopped by 2 weeks and 21 women by 8 weeks. Inclusion criteria Women were first time mothers and were selected to meet the occupational class profiles. This paper focused on 24 of the 36 mothers - those who initially elected to breastfeed but subsequently introduced formula milk. Exclusion criteria Not reported	one and two hours. Interviews were audio-tape-recorded and fully transcribed, although 3 women requested their interviews were not recorded but notes were taken instead. NB: Only data relating to before birth was relevant to this research question Data analysis A subsample of twelve women were selected, reflecting age, occupational class, and feeding outcome variations. Interview transcripts for this subsample were subjected to detailed inductive analysis by the author and two research associates. The emerging analysis was discussed in weekly analysis meetings. A coding framework was developed on the basis of these twelve case studies. Operational definitions of codes were specified and incorporated into a coding handbook. This coding framework was then applied to the interview transcripts. Difficulties in applying the framework to the data were discussed and the coding handbook was amended to take account of the data that did not fit the framework or derived from the first twelve cases. The revised coding frame was then applied to all the interviews.		conducted. Saturation of data was not discussed. Data analysis: The analytical process was described but not use of predefined methods from the literature. It is clear how themes were identified. Contradictory data were not discussed. The author did not discuss the potential influences of the researchers. Findings: Results were presented clearly with some use of quotes (quotes and the researchers' own input were clearly distinguished). In relation to the credibility of the findings, the three researchers worked on analysis with regular meetings to discuss themes. Value of research: In relation to transferability of findings, the authors mention that their findings are location and UK- specific. The authors provide a very 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. The author does not identify areas where future research is needed. Overall methodological concerns: Moderate
Full citation Hoddinott,P., Pill,R., A qualitative study of women's views about how health	Sample size n=21 women	Setting Deprived inner London Health Authority area. Women initially recruited were older and intending to breastfeed, so purposeful	Themes/categories Perceived pressures Differing goals	Limitations Limitations (assessed using the CASP qualitative checklist)

Study details	Participants	Methods	Findings	Comments
professionals communicate about infant feeding, Health Expectations, 3, 224-233, 2000 Ref Id 166574 Study type Qualitative Aim of the study To look at how communication by health professionals about infant feeding is perceived by first time mothers. Country/ies where the study was carried out UK Study dates Unclear Source of funding One study author received a Royal College of General Practitioners/Medical Insurance Agency Research Training Fellowship and from Grampian Healthcare NHS Trust and Grampian Primary Care NHS Trust	Characteristics First time mothers Lower social class Low educational level White British women Feeding intentions (and outcomes): Committed to breastfeeding n=4 (2 exclusive breastfeeding at 6 weeks, 2 partial breastfeeding at 6 weeks) Probable breastfeeding n=6 (2 exclusive breastfeeding at 6 weeks, 1 partial breastfeeding at 6 weeks, 1 breast fed between 1 and 6 weeks, 2 breastfed less than 1 week) Possible breastfeeding n=6 (1 partial breastfeeding at 6 weeks, 1 breast fed between 1 and 6 weeks, 3 formula throughout, 1 moved away) Probable formula feeding n=2 (1 formula fed throughout, 1 formula fed apart from 1 token breastfeed on day 3) Committed to formal feeding n=3 (3 formula fed throughout) Inclusion criteria First time mothers	sampling was used to target teenage women intending to formula feed to ensure that all viewpoints were represented Sample selection Recruited by general practitioners and midwives known to the researcher (PH) Data collection n=21 were interviewed by PH prior to ante-natal booking and n=19 were re-interviewed 6±10 weeks after birth. Data was collected using a topic guide developed during four pilot interviews rather than using a structured questionnaire, to enable respondents to tell their stories in their own way. Women chose the time and place of interview (all except three took place at home) and whether to be interviewed alone or with another person of their choice (nine partners, three mothers, one father and two sisters were present). Interviews were tape-recorded, fully transcribed and field notes of reflexive observations were recorded in a research diary. Data analysis Data collection and analysis was conducted in line with grounded theory. This allowed concepts to be confirmed, rejected or modified as the study progressed. The Framework method of data analysis was applied systematically both within and across cases using categories and themes identified by reading the transcripts. A	Words are not enough - show, inform, suggest but don't advise	Aims and qualitative methodology: Aim of the study was clearly reported, qualitative research design was appropriate for answering the research question Research design: The study author justified the study 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. Relationship between researcher and participants: The author discussed the potential influences of the researchers on the study findings because 'The influence of the role of PH as a researcher and a general practitioner on both the recruitment and the interview data has been reported elsewhere' Ethical issues: The study obtained ethical approval. 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 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. Credibility of the findings

Study details	Participants	Methods	Findings	Comments
	Exclusion criteria Not reported	coding index was developed and applied to each transcript using Microsoft Word computer software. Ante-natal and post-natal matrices of the coded themes were created for five feeding intention groups. These matrices consisted of the women grouped according to feeding intention group along the vertical axis and the coding index across the horizontal axis. Extracts of the data were entered into the boxes of the matrices, with cross reference to the interview transcript page. Post- natal matrices were also created using women grouped according to the six feeding outcome groups along the vertical axis. This enabled patterns and associations to be identified according to both feeding intention and outcome. The language used by women when recounting communication scenarios with health professionals was examined in detail using the principles of discourse analysis. The use of words like 'show', 'advise', 'tell', 'reassure' and 'help' were compared between feeding outcome groups.		was discussed through respondent validation. Value of research: 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 do not identify areas where future research is needed. Overall methodological concerns: minor
Full citation Hoddinott, P., Pill, R., Neonatal. Nobody actually tells you: a study of infant feeding, British Journal of Midwifery, 7, 558-565, 1999 Ref Id 825126 Study type Qualitative	Sample size N=21 Characteristics First-time mothers, white, lower social class and low educational level, living in a deprived inner London health authority Inclusion criteria	Setting Deprived inner London health authority Sample selection Women were recruited by GPs and midwives known to the researcher and interviewed before antenatal booking. Contrary to expectations, women initially recruited were older and intending to breastfeed, so purposeful sampling was used to target teenage women intending to formula feed to ensure that all viewpoints were represented.	Themes/categories Help-seeking behaviour. Other themes were relevant to the present review but were not extracted, as per protocol, due to data saturation, as relevant data on the same themes had been extracted from more recent and more comprehensive papers.	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 study authors justified the methods they used, for example they mentioned that data collection and analysis was conducted in an iterative manner because this

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Study details	Participants	Methods	Findings	Comments
Aim of the study To examine antenatal expectations and postnatal experiences of first-time mothers. Country/ies where the study was carried out UK Study dates Not reported Source of funding Royal College of General Practitioners/Medical Insurance Agency Research Training Fellowship; Grampian Healthcare NHS Trust and Grampian Primary Care NHS Trust.	First-time mothers living in a deprived inner London health authority Exclusion criteria Not reported	Data collection All women were interviewed before antenatal booking and 19 women were re-interviewed 6-10 weeks after birth. Two women had moved away. A topic guide was used during four pilot interviews. Women chose the time and place of interview and whether to be interviewed alone or with another person of their choice. Interviews were tape-recorded, transcribed and field notes of reflexive observations were recorded in a research diary. Data analysis Data collection and analysis was conducted in an iterative manner. This allowed concepts to be confirmed, rejected or modified as the study progressed. The framework method of data analysis was applied systematically. The language used by women was examined using the principles of discourse analysis. Respondent validation was carried out by sending women a synopsis of their individual case analysis, together with a summary of key research findings. Confirmatory feedback was received by 11 women, with 2 letters being returned undelivered. The emerging analysis was crosschecked using data obtained from different sources (individuals and couples). Both authors were involved in reading and analysing transcripts.		allowed concepts to be confirmed, rejected or modified as the study progressed. Recruitment strategy: Sample selection was clearly reported. The study authors mentioned that contrary to expectations, women initially recruited were older and intending to breastfeed, so purposeful sampling was used to target teenage women intending to formula feed to ensure that all viewpoints were represented. Data collection: There was a clear description of how interviews were conducted. Saturation of data was not discussed. Relationship between researcher and participants: The authors partially considered the potential influences of the researchers on the study findings, because they mentioned that women were interviewed by the researcher who introduced herself as a researcher, not a doctor. Ethical issues: Ethical approval was obtained. Data analysis: The analytical process was described and the use of predefined methods from the literature was not mentioned. In relation to the identification of contradictory data, the authors mentioned that data collection and analysis proceeded in an iterative manner. This allowed concepts to be confirmed, rejected or modified as the study progressed.

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, respondent validation was carried out (see data analysis section for details on how respondent validation was carried out). Value of research: The authors did not discuss the transferability of the findings to other populations. Apart from this, the authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice. Overall methodological concerns: minor
Full citation Martyn, T., How mothers choose baby milk brands, Modern midwife, 7, 10-14, 1997 Ref Id 825014 Study type Qualitative Aim of the study To explore the influences determining how and why	Sample size N=20 Characteristics Primiparous or multiparous. n=8 intended to bottle feed n=11 had chosen specific brands of baby milk before birth n=5 had purchased a tin of baby milk before birth Inclusion criteria	Setting Not reported Sample selection Health visitors from five health centres within the same health authority were contacted and asked to participate in the study. They were considered to be in an ideal position to select and contact appropriate women. They would also allay any fears of 'bogus health workers', that might occur if the researcher contacted the women directly. Data collection	Themes/categories Nutrition seen as important Multiple personal influences Friends and family before health professionals Brand placement in wards	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 study author justified the study methods they used. Recruitment strategy: Sample selection was somewhat reported. Data collection: Data collection relied on semi-structured interviews. There is a clear description of how interviews

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Formula feeding information and support

Study details	Participants	Methods	Findings	Comments
mothers choose one brand of baby milk rather than another. Country/ies where the study was carried out UK Study dates Not reported Source of funding Not reported, however the author worked for Baby Milk Action.	If at the time of interview, they had an infant aged 10 weeks or less. The infant must have been healthy and term at birth (>37 weeks and <43 weeks gestation). Wholly bottle-fed from at least 3 weeks of age. Exclusion criteria None reported	Semi-structured interviews were conducted, consisting of predominantly open-ended questions. Interviews were conducted in the woman's own home. Interviews were tape recorded and transcribed after the interview. Data analysis The material was analysed using a 'sorting and coding' system, which enabled the researcher to categorise responses and classify them under various headings and subheadings. Some of the categories were established prior to analysis, since they were based on components of the Health Action Model, whereas others arose as a result of the open-ended exploratory nature of the questionnaire.		were conducted. Saturation of data was not discussed. Relationship between researcher and participants: The authors also discussed the potential influences of the researchers on the study findings. Ethical issues: The study obtained ethical approval. Data analysis: The analytical process was described but the use of predefined methods from the literature was touched on. Contradictory data were not highlighted by the authors. Findings: Results were presented clearly with some use of quotes. Quotes and the researchers' own input were clearly distinguished. Credibility of the findings was not discussed. Value of research: The authors did discuss the transferability of the findings, in that they thought their research would be, however with limited population characteristics and setting information, it is hard to form an objective opinion. The author does however provide adequate discussion of the findings. The author makes recommendations from their findings but does not discuss future research is needed Overall methodological concerns: moderate
Full citation	Sample size N=20 women	Setting On the postnatal wards of one maternity unit over a 2-month period.	Themes/categories	Limitations Limitations (assessed using the CASP qualitative checklist)

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Study details	Participants	Methods	Findings	Comments
Hughes, P., Rees, C., Clinical. Artificial feeding: choosing to bottle feed, British Journal of Midwifery, 5, 137-142, 1997 Ref Id 881234 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 Study dates not reported. The study was carried out over a 2-month period. Source of funding Not reported	Characteristics N=20 Primiparous women 13 were below 20 years of age, and 7 were 20 or above. N=3 married, N=6 had partners, N=11 single parents. N=20 working class N=19 had decided to bottle feed within first 3 months of pregnancy Inclusion criteria Primiparous women who had chosen to bottle feed and had done so for at least a day Exclusion criteria None reported	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 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.	None reported. Results presented as general write up of all results	Aims and qualitative methodology: Aim of the study was clearly reported, qualitative research design was appropriate for answering the research question Research design: The study author justified the study methods they used. Recruitment strategy: Sample selection was clearly reported. Data collection: Data collection relied on 'conversations' interviews. There is some 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 recorder because they felt that the use of the tape recorder may be intimidating, particularly for younger mothers. Ethical issues: The study obtained 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 not highlighted by the authors.

Study details	Participants	Methods	Findings	Comments
				Findings: Results were not presented clearly and there were limited use of quotes. Credibility of the findings was not discussed. 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
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	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 other women were	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 not they would be willing to take part in an interview. In all, 55 women were	Themes/categories 'Physical difficulties' 'Early introduction of formula' Breastfeeding clinics Other sources of 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 '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) 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

Study details	Participants	Methods	Findings	Comments
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, 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	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' postnatal, and BMI at the start of pregnancy of	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 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		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 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

Study details	Participants	Methods	Findings	Comments
	>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.	'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 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'.		order to reposition and present themselves as 'good mothers'. 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 '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 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 very minor
Full citation	Sample size	Setting	Themes/categories	Limitations

Study details	Participants	Methods	Findings	Comments
Lagan, B. M., Symon, A., Dalzell, J., Whitford, H., 'The midwives aren't allowed to tell you': perceived infant feeding policy restrictions in a formula feeding culture - the Feeding Your Baby Study, Midwifery, 30, e49-e55, 2014 Ref Id 806515 Study type Qualitative Aim of the study To explore the expectations and experiences of postnatal mothers in relation to infant feeding, and to identify how care could be improved. Country/ies where the study was carried out UK Study dates May to September 2010 Source of funding This study was part of the 'Feeding Your Baby Study' which was supported by funding from the Scottish	Seven focus group interviews (n=38 participants) and 40 semi-structured one-to-one interviews with mothers Characteristics Marital status: n=46 married, n=26 single but in relationship, n=6 single Age: mean 31 years, range 19-41yrs First baby n= 49, second or more baby n=29 Mode of childbirth: Spontaneous n=43; Assisted vaginal instrument n=12; caesarean n=23 Ethnicity: all but 3 were Caucasian Occupation classification: Managers, directors, senior officials n=2 Professional occupations n=23 Associate professional and technical occupations n=14 Administrative and secretarial occupations n=13 Skilled trades occupations n=2 Caring, leisure and other services n=8 Sales and customer services n=7	Tayside area of Eastern Scotland where the local maternity hospital (but not the community service) was awarded Stage 2 BFI (staff training) during the data collection period of this study and full BFI accreditation just after the end of the study. Sample selection Participants in the quantitative longitudinal phase of the study were asked at the exit point about taking part in a focus group discussion or one to one interview. Women were eligible for the qualitative phase regardless of their chosen method of infant feeding. Those who expressed an interest were sent a participant information leaflet and opt-in form. If they returned the reply slip confirming their interest, they were contacted by the researcher (BML) by telephone to arrange either a focus group discussion or one-to-one interview. Purposive sampling using the information about infant feeding from the quantitative phase ensured that sufficient variation was present in the sample, in terms of infant feeding method. Data collection The focus groups took place in a central location and were kept homogenous in terms of infant feeding method: exclusive formula, changed from breast feeding to formula feeding, and exclusive breast feeding. Women who opted for a one-to-one interview were given the choice of having the discussion in their own home or at the university. Their feeding practices mirrored	Mixed and missing messages Conflicting advice Information gaps Unrealistic preparation and the pressure to breast feed Emotional costs	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 study authors justified 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 did not discuss the potential influences of the researchers on the study findings. Ethical issues: The study obtained ethical approval 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 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). In relation to the

Study details	Participants	Methods	Findings	Comments
Chief Science Office, Grant reference no. CZH/4/568.	Process, plant and machine operatives n=0 Elementary occupations n=5 Unemployed n=4 Feeding details Exclusively formula feed n=18 Breast fed from birth to <2 weeks n=13 Breast fed >2 weeks to < 6 weeks n=10 Breast fed > 6 weeks to < 16 weeks n=14 Exclusively breast fed > 16 weeks n=23 Scottish Index of Multiple Deprivation (SIMD) quintile 2010 1. most deprived n=26 2. n=7 3. n=13 4. n=17 5. n=15 least deprived Inclusion criteria Participants in the quantitative longitudinal phase of the study were asked at the exit point about taking part in a focus group discussion or one to one interview. Women	those represented in the focus groups, with the addition that mixed feeding was often recorded. Broad open-ended questions asked women to reflect on their infant feeding plans, expectations; their feeding experiences; and their thoughts about how care could be improved. The facilitator of the interviews and focus groups (BML) encouraged participants to express their own views by keeping the interview style informal, allowing the discussion to follow a natural course and probing for greater detail when necessary using prompts like 'what and why' to explore and gain a deeper insight into their infant feeding expectations and experiences Data analysis All discussions were digitally recorded and transcribed verbatim by an experienced independent transcriber. The interviewer checked each transcription against the recordings and then read them for accuracy. Emergent themes from the transcripts were used as triggers for subsequent interviews and focus group discussions. Field notes were also made in order to increase the depth of the data. All transcripts were analysed with the assistance of NVivo software (QSR International Pty Ltd, 2012). To guide this process the transcripts were subjected five-stage analytic framework approach: familiarisation, developing a thematic framework from the interview questions and the themes identified from the data, indexing, charting, and mapping to search for interpretations in the data. The process of identifying themes was driven partly by the		credibility of the findings, the authors mention that they checked the understanding both during and at the conclusion of each interview/focus group with participants. Value of research: The authors mentioned that transferability of the findings to other populations, even across the UK could not be claimed. The authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice and identified areas where future research is needed. Overall methodological concern: minor

Study details	Participants	Methods	Findings	Comments
	were eligible for the qualitative phase regardless of their chosen method of infant feeding. Exclusion criteria If their infant was under the care of social services or still in hospital.	research objectives. The first author (BML) first carried out an independent reading to identify key categories, subcategories, and themes. To address reliability AS and HW independently analysed a sub-set of the transcripts. Any differences in coding were discussed and a consensus reached on the identified themes, and sub-themes.		
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.	Sample size N=8 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	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 ward shortly after birth and invited to take part in the study.	Themes/categories 'Breastfeeding as 'natural' vs. the lived embodied struggle to feed'	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 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). IPA represents a flexible method for analysing phenomenological data 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

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 The research was funded by the British Academy, London	Not reported	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 idiographically, 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 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'.		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. 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

Study details	Participants	Methods	Findings	Comments
				'enriched the ways in which data were 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 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	Sample size N=2,966 women	Setting National survey	Themes/categories Matching experiences with expectations	Limitations Limitations (assessed using the CASP qualitative checklist)

Study details	Participants	Methods	Findings	Comments
Redshaw, M., Henderson, J., Learning the Hard Way: Expectations and Experiences of Infant Feeding Support, Birth-Issues in Perinatal Care, 39, 21-29, 2012 Ref Id 695739 Study type Qualitative Aim of the study Gain a better understanding of what is needed in the early days to enable women to initiate and continue breastfeeding their infants Country/ies where the study was carried out UK Study dates March 2006 Source of funding The Maternal Health and Care Research Unit within the National Perinatal Epidemiology Unit (NPEU) is funded by the Department of Health in England. The views	Women who responded to open questions on postnatal stay n=1436 Women who responded to open questions on anything else n=1172 Women who did not respond to open questions n=902 Characteristics Only extracted data for Women who responded to open questions on postnatal stay (n=1436) Age: 16-19 n=54 (3.8%) 20-24 n=193 (13.5%) 25-29 n=349 (24.5%) 30-34 n=470 (33.0%) 35-39 n=300 (21.0%) 40+ n=60 (4.2%) Age on leaving full time education: <17 yrs n=333 (23.2%) 17-18 yrs n=427 (29.8%) 19+yrs n=649 (45.5%) Still in full-time education n=16 (1.1%) Previous births: None n=638 (46.3%) One or more n=739 (53.7%) Ethnicity: White n=1247 (88.2%)	Sample selection A random sample of women who gave birth in a week in March 2006 were selected by the Office for National Statistics (ONS) Data collection Structured question response formats and two open questions were used. "If there was anything about your postnatal care in hospital that you could change, what would it be?" "Is there anything else you would like to tell us about your care while you were pregnant or since you have had your baby?" Reminders were sent to non-respondents at 2 weeks and a further questionnaire at 4 weeks. Data analysis In the process of qualitative analysis the responses were read and reread separately by two researchers, anticipated and emergent themes were identified, and differences in interpretation were discussed. Initially, after reading all the responses, each was coded under an overarching theme, and by subthemes that had been identified and agreed upon. For the purposes of numerical analysis, up to three predominant themes were coded for each response. Codes were refined further as the analysis progressed in an iterative manner, and discrepant cases were sought to illuminate the issues. In rereading the responses, new associations were made	Staff attitudes and behaviours 'Naughty children' and 'bad mothers' Women's emotional reactions Learning the hard way Organisational Factors	Aims and qualitative methodology: Aim of the study was clearly reported, qualitative research design was appropriate for answering the research question Research design: The study authors did not justify the methods they used. Recruitment strategy: Sample selection was reported. Data collection: Data collection relied on survey responses. There is a clear description how the surveys were analysed. Data saturation was not discussed. Relationship between researcher and participants: Not applicable Ethical issues: The study obtained ethical approval. 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 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. Credibility of the findings was not discussed but the analysis was completed independently by two researchers and compared.

Study details	Participants	Methods	Findings	Comments
expressed are those of the authors and do not necessarily reflect those of the Department of Health. The original survey was funded by the Department of Health (London, UK), the Care Quality Commission (formerly Healthcare Commission; London, UK), and the NHS Information Centre (London, UK).	non-white n=167 (11.8%) Index of multiple deprivation (IMD) Quintile 1 n=335 (23.4%) Quintile 2 n=280 (19.6%) Quintile 3 n=293 (20.5%) Quintile 4 n=263 (18.3%) Quintile 5 n=259 (18.1%) Inclusion criteria Given birth in a week in March 2006 Exclusion criteria None reported	among different facets of the analysis. The quotations selected and discussed illustrate the themes arising from the experience of early infant feeding and support.		Value of research: Given this was a national survey, the results would be transferable to the whole of the UK. They also discussed the implications of their findings for policy and practice and identified areas where future research is needed. Overall methodological concern: minor
Full citation Hoddinott, P., Craig, L. C. A., Britten, J., McInnes, R. M., A serial qualitative interview study of infant feeding experiences: Idealism meets realism, BMJ Open, 2 (2) (no pagination), 2012 Ref Id 883370 Study type Qualitative	Sample size N=36 Characteristics Age: ≤20 n=3 21-30 n=8 31-40 n=22 ≥40 n=3 Age at leaving full-time education ≤16 n=4 17 n=6 18 n=4 ≥19 n=22	Setting The study was conducted in two contrasting Scottish Health Boards around 100 miles apart, where maternity units were implementing the BFI. Areas included were from deprived postcodes based on the Scottish Index of Multiple Deprivation (SIMD). Sample selection Maternity unit databases were used to identify 459 (site 1) and 533 (site 2) women due to give birth between September and October 2009. As mothers living in disadvantaged areas are less likely to breast feed and to participate in research, women	Themes/categories Pregnancy: rosy pictures and the word on the street - idealism meets realism before birth Care after the birth Goals: future health versus current well-being Family bonds and intensive mothering Time values and strategies Rules and being a 'good' parent Pivotal points and feeding transitions Feeding care: What would make a difference	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 study author justified the study methods they used. Recruitment strategy: Sample selection was clearly reported. Data collection: Data collection relied on interviews. There is a clear

Study details	Participants	Methods	Findings	Comments
Aim of the study To investigate the infant feeding experiences of women and their significant others from pregnancy until 6 months after birth to establish what would make a difference. Country/ies where the study was carried out UK Study dates Women due to give birth between September and October 2009 Source of funding Funded by NHS Health Scotland. The Health Service Research Unit, University of Aberdeen, is supported by the Chief Scientist Office (CSO) of the Scottish Government Health Directorates. The views expressed are those of the authors and the authors are all independent of the funding body	Occupational classification 1-3 n=16 4-6 n=13 7-9 n=5 Not employed n=2 (1. Managers and senior officials, 2. Professional occupations, 3. Associate professional and technical occupations, 4. Administrative and secretarial occupation, 5. Skilled trade occupations, 6. Personal service occupations, 7. Sales and customer service occupations, 8. Process and plant and machine operatives and 9. Elementary occupations.) Parity 0 n=19 ≥1 n=17 Scottish Index of Multiple Deprivation (SIMD) 1-3 n=26 4-5 n=10 (SIMD 1 is the most deprived quintile. SIMD 5 is the least deprived quintile. Inclusion criteria Women from deprived postcodes based on the	living in the three more deprived postcode quintiles of the Scottish Index of Multiple Deprivation (SIMD) (n=420) and a smaller sample of women living in the two more advantaged SIMD quintile areas (n=121). In more advantaged areas, we recruited families where the woman or her partner had a low age of leaving full-time education, a non-professional occupation, or were immigrants to the UK which may be a disadvantage, particularly around the time of childbirth. The research commissioning brief was to aim to recruit over 75% of participants from the three more disadvantaged SIMD quintiles and select women with diverse characteristics who intended to breast feed or who had breastfed a previous baby. Invitation packs included an introductory letter on Maternity Unit-headed paper signed by a lead health professional, an information leaflet and a short opt-in characteristics questionnaire (S1) with a free post envelope to inform purposive sampling. Of 541 invitation letters sent out 4-8 weeks prior to a woman's estimated date of delivery, 72 (13%) women volunteered to participate and provided socio-demo- graphic data. Using a sampling frame, we selected 18 women from each site for their characteristics. The index women were asked to identify significant others (partners, family, friends and health professionals) throughout the study and the researcher negotiated informed consent to interview a diverse range of information rich significant others at different points. Data collection		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 on the study findings. Ethical issues: The study obtained ethical approval Data analysis: The analytical process was described but the use of predefined methods from the literature was not mentioned. Contradictory data were 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. Credibility of the findings were discussed Value of research: The authors mentioned that transferability of the findings outside of the UK would be uncertain. The authors provided adequate discussion of the findings. They also discussed the implications of their findings for policy and practice and identified areas where future research is needed. Overall methodological concerns: minor

Study details	Participants	Methods	Findings	Comments
	Scottish Index of Multiple Deprivation (SIMD) Exclusion criteria Not reported	Aimed to interview women and their significant others every 4 weeks, at a time and place to suit them. Face-to-face interviews took place at home during pregnancy, within 4 weeks of birth and at 6 months, with shorter, mostly telephone, interviews (0-5) in between. Two participants preferred face-to-face interviews throughout as English was not their first language. Prior to contact after birth, we consulted midwives who accessed NHS records to ensure a safe delivery had occurred. A website discussion forum was available throughout the study. This complemented interview data and enabled contributions from volunteer parents who had not been selected to participate. However, only 25 people registered; one was a woman participating in the study (4 posts) and two of the 72 volunteers who were not selected for the study posted twice each. The research team posted five questions to stimulate discussion (S2). Interviews were semi-structured, using topic guides that were modified over the course of the study to probe emerging themes in more depth and to search for disconfirming data (S3). At the end of each interview, researchers collected structured information about significant others influential since the last interview (age, relationship, distance from the family and feeding experience). In particular, any inconsistencies or changes in the person(s) nominated as significant at different time points could be explored. Similarly, researchers collected structured data at each time point about breastfeeding duration, exclusivity and introduction of non-milk liquids and solids, based on the Office for National Statistics five yearly UK survey questions.		

Study details	Participants	Methods	Findings	Comments
		Data analysis Data collection and analysis progressed iteratively, with the four authors involved in listening to interview recordings, reading verbatim transcripts, identifying and interpreting themes and agreeing modifications to topic guides according to the emerging analysis. All interview transcripts were entered as data units onto FrameWork software. The four researchers independently constructed a thematic index by reading a sample of six information rich and diverse transcripts of antenatal and first post-natal interviews and then reached consensus through discussion. A further six interviews were selected in a similar manner to add to the index to cover the introduction of solids. A final thematic index for the antenatal and early postnatal interviews was agreed approximately half way through data collection when these interviews were complete and finalised for the introduction of solids towards the end of data collection. The index was used to organise, label and summarise data, which facilitated the construction of different charts, with cases (rows) and themes (columns). Charts compared summarised theme data for couples with differing attributes, for example, primiparous compared with multiparous women, early cessation of breast feeding compared with late, early introduction of solids compared with late and differences in the level of partner or significant other involvement with infant feeding. Analysis proceeded by researchers listening to interviews, reading transcripts, keeping reflective diaries, identifying		

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Study details	Participants	Methods	Findings	Comments
		interpretive themes, discussing them, generating research questions, creating different FrameWork charts to explore patterns and to search for disconfirming data.		

BFI: baby friendly initiative; BFN: breastfeeding network; CASP: critical appraisal skills programme; GP: General Practitioner; SMID: Scottish Index of Multiple Deprivation

Appendix E – Forest plots

Forest plots for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

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

CERQual tables**GRADE-CERQual tables for review questions:****What information on formula feeding do parents find helpful?****What support with formula feeding do parents find helpful?****Table 6: Clinical evidence profile for theme 1: information**

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub theme 1.1. Lack of information provision – especially compared to breastfeeding parents			
Six studies: - Hoddinott 1999 To examine antenatal expectations and postnatal experiences of first-time mothers. - Hoddinott 2012 To investigate the infant feeding experiences of women and their significant others - Keely 2015 To explore factors that influence breastfeeding practices in obese women who had either stopped or were no longer breastfeeding	Women felt that they were never given any information or help with formula feeding, for example with preparing bottle feeds, how much to feed their baby and how to interpret their baby’s behaviours and how to respond appropriately. Women were specifically interested in information on the nutritional content of baby milk, provided in a user friendly format. All the information, leaflets and discussions were focused on breastfeeding. <i>‘...2 weeks after she was born and we were still feeding her 40 mls and she (midwife)’s saying, ‘No you should be going up 5 mls every day’, and I think, ‘Well, nobody told me this’. No wonder she was screaming’. NB Formula Fed (FG) (Lagan 2014, p52)</i> <i>‘I was literally reading the boxes on the steriliser, you know, to know what to do.... there isn’t that information available or given to you’. DS Breast to Formula Fed (FG) (Lagan 2014, p52)</i> Women were also not specifically aware about the implications of introducing bottle feeding early on and how that might impact breastfeeding <i>‘Maybe if someone had said to me when I gave him his first top up of Aptamil: ‘You do realise if you start topping him up you’re probably</i>	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was no or very minor for 1 study, minor for 4 studies and moderate for 1 study)	High
		Relevance: Minor concerns (in 4 studies, there was adequate participant information to ensure relevance, however 2 studies reported limited demographic information making the relevance unclear).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: no or very minor concerns (5 studies that offered moderately rich data)	

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Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
- Lagan 2014 To explore the expectations and experiences of postnatal mothers in relation to infant feeding - Martyn 1997 Influences determining how and why mothers choose one brand of baby milk rather than another - Stewart-Knox 2003 To determine infant feeding decisions	<i>not going to get him over to the breast?’ [But..] there wasn’t that level of information given to me’ [Connie 29, 1st baby, SVD] (Keely 2015, p536)</i>		
Sub theme 1.2. Inconsistent and poor communication of information			
Two studies: Lagan 2014 To explore the expectations and experiences of postnatal mothers in relation to infant feeding	Women reported being given contradictory information by different members of staff. Poor communication and conflicting advice left women feeling confused and demoralised. Women expressed a desire for continuity of care, particularly for the aim of successful infant feeding. <i>One of them said I was feeding her too much; the other one said let her have it. JL Formula Fed (FG) (Lagan 2014, p51)</i>	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was minor for both studies) Relevance: Minor concerns (in both studies, there was adequate participant information to ensure relevance).	High

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Roberts 2009 To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data) Adequacy: no or very minor concerns (both studies offered moderately rich data)	
Sub theme 1.3. Receiving information antenatally			
Two studies: - Hoddinott 2012 To investigate the infant feeding experiences of women and their significant others - Hughes 1997 What influences women to bottle feed	Women who had attended antenatal care sessions reported that they were taught about breastfeeding, but not about formula feeding. Women were left to self-educate or learn from friends and family but they would have appreciated learning about breast and formula feeding at the same time with an open discussion about both. In addition, women wanted health care professionals to show them how for example to make up a bottle, if only to confirm their self-education was correct. Women also wanted skilled facilitation of interactive discussions with individuals, families or groups regardless of feeding intention, which cover the practical and emotional realities of breast and formula feeding and involve parents who have had feeding difficulties and not always lived up to ideals. <i>'one mother spoke about her experience when the classes covered 'infant feeding'. She enjoyed the session on breastfeeding when a mother came and demonstrated breastfeeding. She asked the midwife when was the session on bottle feeding, and was told there</i>	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was minor for both studies) Relevance: Minor concerns (in both studies, there was adequate participant information to ensure relevance). Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data) Adequacy: no or very minor concerns (both studies offered moderately rich data)	High

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Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
	would not be one as 'midwives did not do that'. ' (Hughes 1997, p140)		
Sub theme 1.4. Sources of information			
Two studies: - Martyn 1997 Influences determining how and why mothers choose one brand of baby milk rather than another - Hoddinott 1999 To examine antenatal expectations and postnatal experiences of first-time mothers.	Women tended to approach friends and family for advice and information on formula feeding before contacting a health care professional. However they would have preferred to receive this information directly from health care professionals <i>'I come home and I'm thinking, "How do I make these bottles?" and in the end I said it to my mum. My mum showed me how to make the bottles and you know, bath him. They don't tell you nothing at all. They didn't even tell me how to put him to sleep.'</i> (Hoddinott 1999, p560)	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was moderate for Martyn 1997 and minor for Hoddinott 1999)	Low
		Relevance: Moderate concerns (in Martyn 1997 limited demographic detail to ensure relevance, but there was adequate information on the demographics in Hoddinott 1999).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: Moderate concerns (one study offered moderately rich data)	

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

Table 7: Clinical evidence profile

for theme 2: feeling unsupported if formula feeding

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub theme 2.1. How others interacted with formula feeding parents			
5 studies	If women have chosen to formula feed, they did not want to hear comments that made them feel pressured, guilty, like a failure or inadequate, similarly they did not want to be spoken to ‘like naughty children’ or ‘reprimanded’ for not breastfeeding. In addition, women who were unable to breastfeed were left feeling like they were causing their babies harm by switching to formula feeding. <i>‘I made the choice not to breastfeed my baby as my attempts at feeding my first child were unsuccessful I was made to feel (by some midwives) like I was a bad mother ... and felt that I had somehow failed... . Is there a reason why we are made to feel an inferior mother for making the choice to bottle feed ...? I was most upset that I couldn’t feed my own child and felt that I needed support, not criticism. I still feel like I haven’t given my children the best start in life and feel like I lack something as a mother.’ (3026) (Redshaw 2012, p25)</i> However, some women found healthcare professionals were able to offer words of comfort when they added formula to their feeding schedule <i>‘Woman: That first weekend we gave him a bottle. “That’s fine”., “we call that a crisis bottle,” she [health visitor] went, “and there’s nothing wrong with that. If it works for you, that’s fine, but one bottle a day is not going to do any harm,” so if anything she was a bit more encouraging.’ (ID 2003. Interview 3 weeks after birth: breastfeeding, with formula introduced at 1 week) (Hoddinott 2012, p9)</i>	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was minor for 4 studies and moderate for 1 study)	Moderate
• Graffy 2005 To examine women's perspectives on the information, advice and support they receive with breastfeeding.		Relevance: Minor concerns (all 5 studies had adequate participant information to ensure relevance).	
• Hoddinott 2012 To investigate the infant feeding experiences of women and their significant others.		Coherence: moderate concerns (some data was contradictory in that most women felt others interacted with them in a negative manner when choosing to formula feed, whereas 1 paper (Hoddinott 2012) reported positive interactions relating to formula feedings.	
• Murphy 2000 How mothers deal with the threat to their identities as good mothers from feeding practices.		Adequacy: no or very minor concerns (five studies offered moderately rich data)	
• Redshaw 2012 To understand what is needed in the early days to enable breastfeeding to continue			

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Williamson 2013 Explore experiences of first-time mothers who struggled with breastfeeding.			
Sub theme 2.2. Feeling neglected, especially compared to breastfeeding mothers			
Three studies: - Hoddinott 2000 To look at how communication by health professionals about infant feeding is perceived by first time mothers. - Lagan 2014 To explore the expectations and experiences of postnatal mothers in relation to infant feeding. - Redshaw 2012 To understand what is needed in the early days to enable breastfeeding to continue.	Women formula feeding felt unsupported and neglected with their postnatal care, particularly when compared to women who were breastfeeding. <i>The midwife in the Hospital - I think she had a bit of a hump about breastfeeding. She asked me if I was going to do breastfeeding, I said "no, I'd rather bottle feed" and she just bunged the bottles on to me and walked off... I think they do prefer you breastfeeding because the lady in front of me, she was breastfeeding and she got visited about three times in the morning and no-one ever come to me. The midwife came up to show me - about 24 hours later - I had to make up my own bottles in that time, so lucky that mum was there. (Hoddinott 2000, p229)</i>	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was minor for all three studies) Relevance: Minor concerns (all 3 studies had adequate participant information to ensure relevance). Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data) Adequacy: no or very minor concerns (both studies that offered moderately rich data)	High
Sub theme 2.3. Switching from breast to formula feeding			

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Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
One study: Lagan 2014 To explore the expectations and experiences of postnatal mothers in relation to infant feeding.	The care provided by health care professionals when women were choosing to change from breast to formula feeding could influence whether a women felt supported or judged. <i>'The plan had been to breastfeed because everything that you read says, 'Breastfeed, breastfeed, breastfeed; don't formula, don't formula'. So you feel so guilty switching to formula..... I was convinced it was all going to go horribly wrong ...FM Breast to Formula Fed (FG) (Lagan 2014, p52)</i> <i>I wanted to give up in the hospital... ... I couldn't get any sleep, I had a C/Section and my third night there I was like, 'I want to change to bottle', and the midwife told me I wasn't allowed.'</i> KA Breast to Formula Fed (1–1) (Lagan 2014, p53)	Methodological limitations: Minor concerns (The quality rating based on the CASP checklist was minor for Lagan 2014)	Low
		Relevance: Moderate concerns (in Lagan 2014 there was adequate participant information to ensure relevance).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: Moderate concerns (one study offered moderately rich data)	

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

Table 8: Clinical evidence profile for theme 3: remote support

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
Sub theme 3.1. Remote support to complement rather than replace face-to-face support			
One study: • Roberts 2009	Women had concerns about the impact that support provided via video might have on existing services. Women did not want new technologies to replace or reduce face-to-face contact during the	Methodological limitations: minor concerns (The quality rating based on the CASP checklist was minor. Data saturation was not discussed, and	Moderate

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland.	postnatal period. Women were concerned about over-reliance on remote support and the possibility of technological solutions being used in order to save money. <i>'If you've got video link, then you're not obviously, I mean people might not see their health visitor or their midwife, they might just rely too much on the technology.'</i> (P11, anti-video, remote and rural) (Roberts 2009, p354)	the relationship between researchers and participants was not discussed)	
		Relevance: minor concerns (socio-economic status and ethnicity of participants was not reported; women included 'pro-video' or 'anti-video' responses to the survey; however women were only talking about a hypothetical video support intervention and their views may be different from someone that actually experienced it).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub theme 3.2. Timing of remote support			
One study: Roberts 2009 To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland	Women thought that remote support was especially useful during 'out of hours', when face-to-face support is not readily available. <i>'It would really need to be 24/7 because it's something you need to discuss at the time, if it was a major issue and with a new baby it's not always convenient during set hours. You need the support when you have the time not when a place is open.'</i> (P13, pro-video, urban) (Roberts 2009, p352)	Methodological limitations: minor concerns (The quality rating based on the CASP checklist was minor. Data saturation was not discussed, and the relationship between researchers and participants was not discussed)	Moderate
		Relevance: minor concerns (socio-economic status and ethnicity of participants was not reported; women included 'pro-video' or 'anti-video' responses to the survey; however women were only talking about a hypothetical video support intervention and their views may be	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		different from someone that actually experienced it).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub theme 3.3. Response time of different communication technologies			
One study: • Roberts 2009 To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland	Women said that e-mail and text messaging facilities were easier to use and more accessible than video. However, they wondered whether support would be available instantly and whether they would know if a text or e-mail had been successfully delivered. Women also made positive references to national websites currently sending weekly information via e-mail to registered mothers. <i>'I think it would be easier (e-mail) if it's just as simple as sending a text or an e-mail and waiting for a reply I would have more time for that.'</i> (P17, pro-video, remote and rural) (Roberts 2009, p354)	Methodological limitations: minor concerns (The quality rating based on the CASP checklist was minor. Data saturation was not discussed, and the relationship between researchers and participants was not discussed)	Moderate
		Relevance: minor concerns (socio-economic status and ethnicity of participants was not reported; women included 'pro-video' or 'anti-video' responses to the survey; however women were only talking about a hypothetical video support intervention and their views may be different from someone that actually experienced it).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	

Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub theme 3.4. Privacy and security of video support			
One study: • Roberts 2009 To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland	Views varied in relation to privacy and security issues. Some women said they were reluctant to use video because of privacy and security concerns, while others felt more confident as long as security was assured by service providers. Women said they would feel somewhat reassured about this if they were talking to familiar staff. <i>'I don't think I would like to have pictures of my breasts up on the screen, and who knows, I don't know who else could be looking at it, I just wouldn't feel comfortable about doing that.'</i> (P5, anti-video, remote and rural) (Roberts 2009, p354) <i>'You would need to be reassured that you are not going to get hacked into by Internet people who are going to start showing your breasts to the rest of the world.'</i> (P14, pro-video, urban) (Roberts 2009, p354)	Methodological limitations: minor concerns (The quality rating based on the CASP checklist was minor. Data saturation was not discussed, and the relationship between researchers and participants was not discussed)	Low
		Relevance: minor concerns (socio-economic status and ethnicity of participants was not reported; women included 'pro-video' or 'anti-video' responses to the survey; however women were only talking about a hypothetical video support intervention and their views may be different from someone that actually experienced it).	
		Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data)	
		Adequacy: moderate concerns (1 study that offered moderately rich data)	
Sub theme 3.5. Location of video support			
One study: • Roberts 2009	Women valued receiving support from the comfort of their home. Women did not want to travel to use a video link facility, as in that case, they would rather travel to speak to a professional face-to-	Methodological limitations: minor concerns (The quality rating based on the CASP checklist was minor. Data saturation was not discussed, and	Low

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Study information	Description of review finding	CERQual Quality Assessment	
		Assessment of CERQual components	Overall Confidence
To assess the feasibility and acceptability of future infant feeding video support after hospital discharge and investigates general views on the potential of other communication technology in rural Scotland	face. Women mentioned the challenges that some mothers can face in relation to leaving the home after giving birth (e.g. lack of personal transport, distance to travel, responsibilities of other children and the physical limitations after a difficult birth or caesarean section)'. <i>No supporting quote.</i>	the relationship between researchers and participants was not discussed)	
		Relevance: minor concerns (socio-economic status and ethnicity of participants was not reported; women included 'pro-video' or 'anti-video' responses to the survey; however women were only talking about a hypothetical video support intervention and their views may be different from someone that actually experienced it).	
		Coherence: no or very minor concerns (no data that contradict the review finding or 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 9: Clinical evidence profile for theme 4: fathers are better able to support when formula feeding

Study information	Description of review finding	Assessment of CERQual components	Overall confidence
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FINAL

Formula feeding information and support

One study: • Sherriff 2009 Exploring fathers experiences during pregnancy, birth and up to the first year.	Fathers felt that using formula could allow them to be more involved in feeding, assisting them to bond with the baby and to monitor how much the baby was taking. <i>No supporting quote.</i>	Methodological limitations: Moderate concerns (The quality rating based on the CASP checklist was moderate for Sherriff 2009) Relevance: Moderate concerns (in Sherriff 2009 there was limited demographic detail to ensure relevance). Coherence: no or very minor concerns (no data that contradict the review finding or ambiguous data) Adequacy: Serious concerns (1 study offered thin data)	Very low
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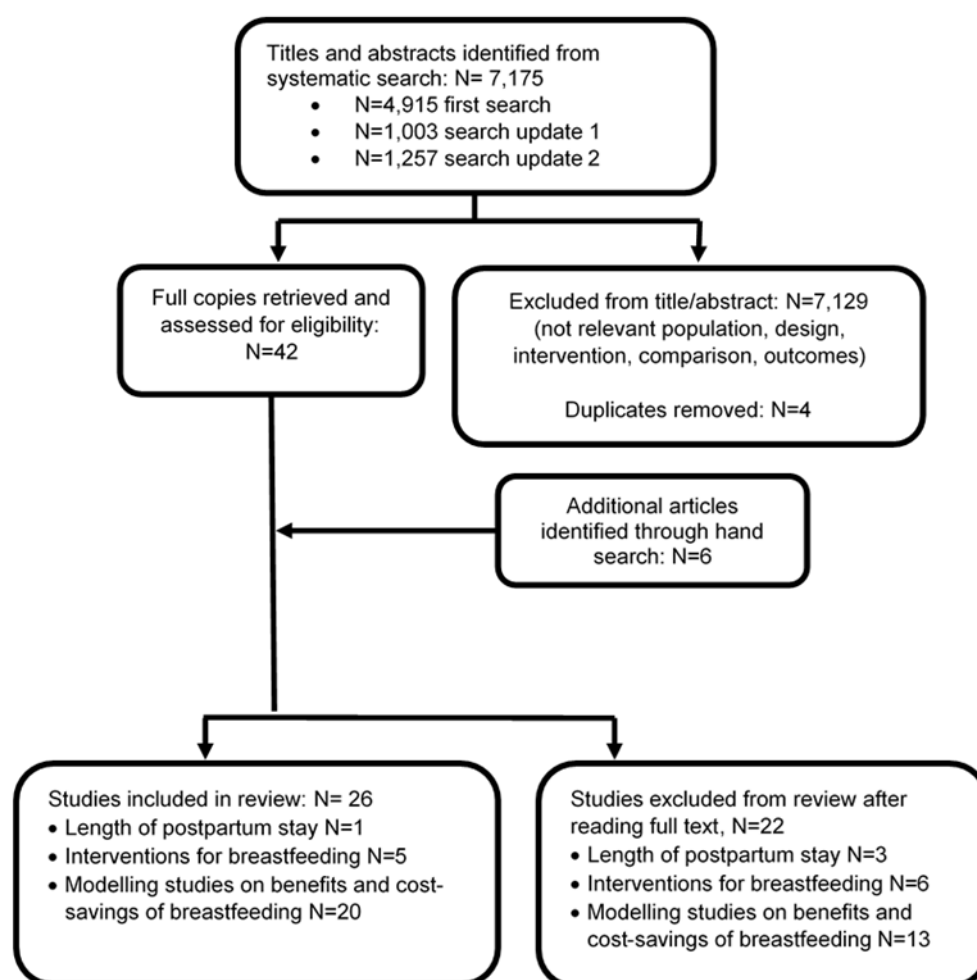
CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Appendix G – Economic evidence study selection

Economic evidence study selection for review questions:
What information on formula feeding do parents find helpful?
What support with formula feeding do parents find helpful?

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 questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

No economic evidence was identified which was applicable to these review questions.

Appendix I – Economic evidence profiles

Economic evidence profiles for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

No economic evidence was identified which was applicable to these review questions.

Appendix J – Economic analysis

Economic analysis for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

No economic analysis was conducted for these review questions.

Appendix K – Excluded studies

Excluded studies for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

Clinical studies

Table 10: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
Abbott, S., Lay and professional views on health visiting in an orthodox Jewish community, British journal of community nursing, 9, 80-86, 2004	Paper not exclusively about feeding.
Allen, C., PSHE education on infant feeding: influencing young people's views, British Journal of School Nursing, 3, 331-337, 2008	Population - children in school receiving a lesson on feeding.
Andrew, N., Harvey, K., Infant feeding choices: Experience, self-identity and lifestyle, Maternal and Child Nutrition, 7, 48-60, 2011	Not specific to the antenatal period or to the first 8 weeks after birth. Participants were mothers of infants aged between 7 and 18 weeks.
Andrews, E. J., Symon, A., Anderson, A. S., 'I didn't know why you had to wait': an evaluation of NHS infant-feeding workshops amongst women living in areas of high deprivation, Journal of human nutrition and dietetics : the official journal of the British Dietetic Association, 28, 558-567, 2015	Study focused on weaning.
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. Participants fed for different durations, ranging from formula feeding from birth to exclusive breastfeeding up to 6 months followed by mixed feeding.
Bailey, S., Postnatal care: exploring the views of first-time mothers, Community practitioner : the journal of the Community Practitioners' & Health Visitors' Association, 83, 26-29, 2010	Paper not exclusively about feeding.
Beake, S., McCourt, C., Bick, D., Women's views of hospital and community-based postnatal care: the good, the bad and the indifferent, Evidence Based Midwifery, 3, 80-86, 2005	Paper not exclusively about feeding.
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	Paper not exclusively about feeding.
Blaney, C. L., Involving men after pregnancy, Network, 17, 22-5, 1997	Unavailable.
Brooker, S., Infant Feeding Survey 2000. A review of the findings from this new report, The practising midwife, 5, 24-26, 2002	Study design - not qualitative.
Brown, A., Raynor, P., Lee, M., Healthcare professionals' and mothers' perceptions of factors that influence decisions to breastfeed or	Most of the themes are only relevant for the separate review on

formula feed infants: a comparative study, Journal of Advanced Nursing, 67, 1993-2003, 2011	facilitators and barriers for breastfeeding.
Browne, S., Dundas, R., Wight, D., Assessment of the Healthy Start Voucher scheme: A qualitative study of the perspectives of low income mothers, The Lancet, 388 (SPEC.ISS 1), 12, 2016	Abstract.
Burden, B., Privacy or help? The use of curtain positioning strategies within the maternity ward environment as a means of achieving and maintaining privacy, or as a form of signalling to peers and professionals in an attempt to seek information or support, Journal of Advanced Nursing, 27, 15-23, 1998	Paper not exclusively about feeding.
Bylaska-Davies, Paula, Exploring the effect of mass media on perceptions of infant feeding, Health care for women international, 36, 1056-1070, 2015	Study was conducted in USA.
Cabieses, B., Waiblinger, D., Santorelli, G., McEachan, R. R. C., What factors explain pregnant women's feeding intentions in Bradford, England: A multi-methods, multi-ethnic study, BMC Pregnancy and Childbirth, 14 (1) (no pagination), 2014	Themes not relevant - qualitative part on study was on why women intend to breastfeed.
Campbell, C. M. A., Pay attention to the first week, BMJ (Online), 338, 557, 2009	Editorial.
Caswell, H., A summary of the Infant Feeding Survey, Nutrition Bulletin, 33, 47-52, 2008	Study design - not qualitative.
Chamberlain, R., Newburn, M., The more things change, The practising midwife, 2, 27-29, 1999	Paper not exclusively about Feeding.
Cheung, N. F., Chinese zuo yuezi (sitting in for the first month of the postnatal period) in Scotland, Midwifery, 13, 55-65, 1997	Paper not exclusively about feeding.
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.
Cloherly, 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	Info on supplementing feeds, which is covered in the breastfeeding review.
Cloherly, 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	Info on supplementing feeds, which is covered in the breastfeeding review.
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.
Condon, L. J., McClean, S., Maintaining pre-school children's health and wellbeing in the UK: a qualitative study of the views of migrant parents, Journal of Public Health, 39, 455-463, 2017	Paper not exclusively about feeding.
Condon, L. J., Salmon, D., 'You likes your way, we got our own way': Gypsies and Travellers' views on infant feeding and health professional support, Health Expectations, 18, 784-95, 2015	Not in the antenatal or first 8 weeks postnatal periods – retrospective.
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, <i>Practising Midwife</i> , 11, 12-4, 2008	Discussion paper.
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, <i>Birth</i> , 37, 141-9, 2010	No relevant themes about information or support.
England, R., Doughty, K., Genc, S., Putkeli, Z., Working with refugees: Health education and communication issues in a child health clinic, <i>Health Education Journal</i> , 62, 359-368, 2003	Study design - not specifically on postnatal feeding but children under 5 eating in general.
Fahlquist, J. N., Experience of non-breastfeeding mothers: Norms and ethically responsible risk communication, <i>Nursing Ethics</i> , 23, 231-41, 2016	Study not conducted in the UK.
Fahlquist, Jessica Nihlén, Experience of non-breastfeeding mothers, <i>Nursing ethics</i> , 23, 231-241, 2016	Study not conducted in the UK.
Farrow, Alice, Lactation Support and the LGBTQI Community, <i>Journal of Human Lactation</i> , 31, 26-28, 2015	Study design - not qualitative.
Fern, Victoria Anne, Buckley, Emily, Grogan, Sarah, Women's experiences of body image and baby feeding choices: Dealing with the pressure to be slender, <i>British Journal of Midwifery</i> , 22, 788-794 7p, 2014	On body image of feeding.
Finigan, V., A day in the life of ... a consultant midwife for infant feeding, <i>RCM Midwives</i> , 14, 50, 2011	Editorial.
Finigan, V., Davies, S., 'I just wanted to love, hold him forever': women's lived experience of skin-to-skin contact with their baby immediately after birth, <i>Evidence Based Midwifery</i> , 2, 59-65, 2004	Paper not exclusively about feeding.
Finigan, V., Long, T., Skin-to-skin contact: multicultural perspectives on birth fluids and birth 'dirt', <i>International nursing review</i> , 61, 270-277, 2014	Paper not exclusively about feeding.
Fitzharris, L., An infant feeding journey, <i>Community Practitioner</i> , 89, 16-7, 2016	Editorial.
Foster, A., Foster, Alison, A topic in 10 questions. How to give feeding and nutrition support to new parents, <i>Journal of Family Health Care</i> , 22, 24-25, 2012	News article.
Furber, C. M., Thomson, A. M., The power of language: a secondary analysis of a qualitative study exploring English midwives' support of mother's baby-feeding practice, <i>Midwifery</i> , 26, 232-240, 2010	Population - health care professionals.
Furber, C.M., Thomson, A.M., 'Breaking the rules' in baby-feeding practice in the UK: deviance and good practice?, <i>Midwifery</i> , 22, 365-376, 2006	Population - health care professionals.
Gallagher, J., James, D., Infant feeding in the north east of England: Stories, choice and influence, <i>Maternal and Child Nutrition. Conference</i> , 14, 2017	Conference Abstract.
Gallegos, Danielle, Russell-Bennett, Rebekah, Previte, Josephine, An innovative approach to reducing risks associated with infant feeding: The use of technology, <i>Journal of Nonprofit & Public Sector Marketing</i> , 23, 327-347, 2011	Study was conducted in Australia.
Halliday, J., Wilkinson, T., Young, vulnerable and pregnant: family support in practice, <i>Community Practitioner</i> , 82, 27-30, 2009	Paper not exclusively about feeding.

Henderson, L., McMillan, B., Green, J. M., Renfrew, M. J., Men and infant feeding: perceptions of embarrassment, sexuality, and social conduct in white low-income British men, <i>Birth</i> (Berkeley, Calif.), 38, 61-70, 2011	No relevant themes about information or support - also not specific to the antenatal or postnatal period.
Higham, B., La Leche League: The ultimate mother's help, <i>Practising Midwife</i> , 9, 22, 2006	Editorial.
Hinton, L., Locock, L., Knight, M., Maternal critical care: what can we learn from patient experience? A qualitative study, <i>BMJ Open</i> , 5, e006676, 2015	Paper not exclusively about feeding.
Hoddinott, P., Pill, R., Qualitative study of decisions about infant feeding among women in east end of London, <i>British Medical Journal</i> , 318, 30-34, 1999	No relevant themes about information or support.
Huften, E., Raven, J., Exploring the infant feeding practices of immigrant women in the North West of England: A case study of asylum seekers and refugees in Liverpool and Manchester, <i>Maternal and Child Nutrition</i> , 12, 299-313, 2016	Not specific to the antenatal period or to the first 8 weeks.
Hunt, L., Thomson, G., Pressure and judgement within a dichotomous landscape of infant feeding: a grounded theory study to explore why breastfeeding women do not access peer support provision, <i>Maternal and Child Nutrition</i> , 13 (2) (no pagination), 2017	Not specific to the antenatal period or to the first 8 weeks postpartum.
Hunter, L., The views of women and their partners on the support provided by community midwives during postnatal home visits, <i>Evidence Based Midwifery</i> , 2, 20-27, 2004	Paper not exclusively about feeding.
Ingram, J., The father factor: Men can make the difference, <i>Practising Midwife</i> , 11, 15-16, 2008	Discussion paper and literature review.
Johnson, Sally, Working with the tensions between critique and action in critical health psychology, 17-28, 2012	Study Design: Not qualitative study.
Jones-Hughes, C., Naughton, L., Changing attitudes, <i>Community Practitioner</i> , 87, 18-9, 2014	News article.
Keeling, June, Exploring women's experiences of domestic violence: Injury, impact and infant feeding, <i>British Journal of Midwifery</i> , 20, 843-848, 2012	Paper not exclusively about feeding.
Lakshman, R., Griffin, S., Hardeman, W., Schiff, A., Kinmonth, A. L., Ong, K. K., Using the Medical Research Council Framework for the Development and Evaluation of Complex Interventions in a Theory-Based Infant Feeding Intervention to Prevent Childhood Obesity: The Baby Milk Intervention and Trial, <i>Journal of Obesity</i> , 2014 (no pagination), 2014	Study design - not qualitative.
Lakshman, R., Landsbaugh, J. R., Schiff, A., Cohn, S., Griffin, S., Ong, K. K., Developing a programme for healthy growth and nutrition during infancy: understanding user perspectives, <i>Child: care, health and development</i> , 38, 675-682, 2012	Not specific to the antenatal period or to the first 8 weeks after birth.
Lee, E., Health, morality, and infant feeding: British mothers' experiences of formula milk use in the early weeks, <i>Sociology of Health & Illness</i> , 29, 1075-90, 2007	Not specific to the antenatal period or to the first 8 weeks postpartum - mothers with children under 1 year.
Lee, E. J., Living with risk in the age of 'intensive motherhood': maternal identity and infant feeding, <i>Health, Risk & Society</i> , 10, 467-477, 2008	Study design - not qualitative.

Lee, E. J., Infant feeding in risk society, <i>Health, Risk and Society</i> , 9, 295-309, 2007	Not specific to the antenatal period or to the first 8 weeks postpartum. Participants were selected because they used formula milk to feed their babies wholly or in part when their babies were aged 0 to 3 months
Leeming, D., Williamson, I., Johnson, S., Lyttle, S., Making use of expertise: A qualitative analysis of the experience of breastfeeding support for first-time mothers, <i>Maternal and Child Nutrition</i> , 11, 687-702, 2015	No relevant themes to formula feeding - all breastfeeding.
Leung, Georgine, Cultural considerations in postnatal dietary and infant feeding practices among Chinese mothers in London, <i>British Journal of Midwifery</i> , 25, 18-24, 2017	No relevant themes about information or support.
Manchester, A., Every baby's right, <i>Nursing New Zealand</i> (Wellington, N.Z. : 1995). 3, 26-27, 1997	Study not conducted in the UK.
Marshall, J., Infant feeding. 3. Skills to support infant feeding, <i>The practising midwife</i> , 15, 43-46, 2012	Discussion paper and literature review.
Marshall, J. L., Godfrey, M., Renfrew, M. J., Being a 'good mother': Managing breastfeeding and merging identities, <i>Social Science and Medicine</i> , 65, 2147-2159, 2007	No relevant themes to formula.
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, <i>BMC Pregnancy & Childbirth</i> , 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.
More, Judy, Understand infant feeding to best support mothers' choices, <i>Independent Nurse</i> , 21-27, 2015	Discussion paper and literature review.
More, Judy, Understand infant feeding to best support mothers' choices, <i>Independent Nurse</i> , 3-7, 2016	Duplicate.
Murphy, Elizabeth, Expertise and forms of knowledge in the government of families, <i>The Sociological Review</i> , 51, 433-462, 2003	No data on information or support.
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, <i>Sexual and Reproductive Healthcare</i> , 2, 43-48, 2011	Not specific to feeding.
Pain R, Bailey C, Mowl G. , Infant Feeding in North East England: Contested Spaces of Reproduction, <i>Area</i> , 33, 2001	Not specific to the antenatal period or to the first 8 weeks after birth. One baby was aged 11 months and the other babies were aged 4 to 14 weeks.
Palmer, G., 'It's the belief that's important! Interview by Mary Stewart, <i>The practising midwife</i> , 6, 20-22, 2003	Interview.
Peacock-Chambers, E., Dicks, K., Sarathy, L., Brown, A. A., Boynton-Jarrett, R., Perceived Maternal Behavioral Control, Infant Behavior, and Milk Supply: A Qualitative Study, <i>Journal of developmental and behavioral pediatrics : JDBP</i> , 38, 401-408, 2017	Study was conducted in the USA.
Rayment, J., McCourt, C., Vaughan, L., Christie, J., Trenchard-Mabere, E., Bangladeshi women's experiences of infant feeding in the London	Not specific to the antenatal period or to the first 8 weeks postpartum.

Borough of Tower Hamlets, Maternal & Child Nutrition, 12, 484-99, 2016	
Robb, Y., McNery, D., Hollins Martin, C. J., Exploration of the experiences of young mothers seeking and accessing health services, Journal of Reproductive and Infant Psychology, 31, 399-412, 2013	Paper not exclusively about feeding.
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.
Scott, J. A., Mostyn, T., Women's experiences of breastfeeding in a bottle-feeding culture, Journal of human lactation : official journal of International Lactation Consultant Association, 19, 270-277, 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.
Sheridan, V., Organisational culture and routine midwifery practice on labour ward: implications for mother-baby contact, Evidence Based Midwifery, 8, 76-84, 2010	Paper not exclusively about feeding.
Shloim, N., Hugh-Jones, S., Rudolf, M. C. J., Feltbower, R. G., Lans, O., Hetherington, M. M., "It's like giving him a piece of me.": Exploring UK and Israeli women's accounts of motherhood and feeding, Appetite, 95, 58-66, 2015	Not specific to the antenatal period or to the first 8 weeks after birth. Women in the UK were interviewed when their infants' age was on average 11.8 weeks.
Soltani, H., Dickinson, F. M., Kalk, J., Payne, K., Breast feeding practices and views among diabetic women: a retrospective cohort study, Midwifery, 24, 471-479, 2008	Population - Women with diabetes.
Stapleton, H., Fielder, A., Kirkham, M., Managing infant feeding practices: the competing needs of bulimic mothers and their children, Journal of Clinical Nursing, 18, 874-883, 2009	Population - Women with bulimia.
Stapleton, H., Fielder, A., Kirkham, M., Breast or bottle? Eating disordered childbearing women and infant-feeding decisions, Maternal & Child Nutrition, 4, 106-20, 2008	Population - Women with eating disorders.
Stewart-Moore, Jill, Furber, Christine M., Thomson, Ann M., Postnatal care across the Northern Ireland and Republic of Ireland border: a qualitative study exploring the views of mothers receiving care, and midwives and public health nurses delivering care, Evidence Based Midwifery, 10, 16-22, 2012	Not specific to the antenatal period or to the first 8 weeks after birth. Women were interviewed between 3 and 14 weeks after birth.
Symon, A. G., Whitford, H., Dalzell, J., Infant feeding in Eastern Scotland: a longitudinal mixed methods evaluation of antenatal intentions and postnatal satisfaction--the Feeding Your Baby study, Midwifery, 29, e49-e56, 2013	Not specific to the antenatal period or to the first 8 weeks postpartum.
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 and Child Nutrition, 11, 33-46, 2015	Not specific to the antenatal period or to the first 8 weeks postpartum.

Trotter, Sarah, Support for the most vulnerable, Midwives, 17, 52-52, 2014	This article describes the work performed by two maternity support workers.
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.
Whitmore, M., Peer support: helping to influence cultural change, Practising Midwife, 18, 25-8, 2015	This article describes some breastfeeding peer support initiatives. Not a qualitative study design.
Wood, L., Young, D., Expecting twins and more: support and information, British Journal of Midwifery, 12, 610-615, 2004	Not specific to the antenatal and postnatal period.

Economic studies

No economic evidence was identified for this review.

Appendix L – Research recommendations

Research recommendations for review questions:

What information on formula feeding do parents find helpful?

What support with formula feeding do parents find helpful?

No research recommendations were made for these review questions.