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Original Article

Goals, dilemmas and assumptions in infant feeding education and support. Applying theory of constraints thinking tools to develop new priorities for action

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Abstract

Three important infant feeding support problems are addressed: (1) mothers who use formula milk can feel undersupported and judged; (2) mothers can feel underprepared for problems with breastfeeding; and (3) many mothers who might benefit from breastfeeding support do not access help. *Theory of constraints* (TOC) is used to examine these problems in relation to ante-natal education and post-natal support. TOC suggests that long-standing unresolved problems or '*undesirable effects*' in any system (in this case a system to provide education and support) are caused by conflicts, or *dilemmas*, within the system, which might not be explicitly acknowledged. Potential solutions are missed by failure to question assumptions which, when interrogated, often turn out to be invalid. Three core dilemmas relating to the three problems are identified, articulated and explored using TOC methodology. These are whether to: (1) promote feeding choice or to promote breastfeeding; (2) present breastfeeding positively, as straightforward and rewarding, or focus on preparing mothers for problems; and (3) offer support proactively or ensure that mothers themselves initiate requests for support. Assumptions are identified and interrogated, leading to clarified priorities for action relating to each problem. These are (1) shift the focus from initial decision-making towards support for mothers throughout their feeding journeys, enabling and protecting decisions to breastfeed as one aspect of ongoing support; (2) to promote the concept of an early-weeks investment and adjustment period during which breastfeeding is established; and (3) to develop more proactive mother-centred models of support for all forms of infant feeding.

Keywords: infant feeding, breastfeeding, infant formula, feeding problems, support, social factors, policy analysis and development.

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Introduction

Decades of research with UK mothers demonstrates that many find the commonplace experience of feeding a baby physically and emotionally challenging. While 80% of UK mothers initiate breastfeeding (NHS Information Centre 2011), successive Infant Feeding Surveys indicate that many mothers have high rates of difficult feeding experiences and often breastfeed for short durations. In 2005, only around half of UK mothers were breastfeeding at all at 4 months, and only a quarter at 6 months (Bolling *et al*. 2007), with rates declining most steeply in the first 4 days. Stopping breastfeeding in the first 6 months is linked to disappointed expectations. In 2005, 9 out of 10 mothers who stopped breastfeeding in the first 6 weeks, and around three quarters of mothers who stopped in the first 9 months, stopped before they had planned. Mothers frequently have to negotiate powerful social expectations and beliefs

in relation to feeding, whether breastfeeding among those for whom formula feeding is the norm (Hoddinott & Pill 1999; Scott *et al*. 2003; McFadden & Toole 2006; Faircloth 2010; Brown & Lee 2011) or formula feeding in a cultural context in which health benefits of breastfeeding are strongly promoted (Lee 2008; Lakshman *et al*. 2009). The pattern of low breastfeeding rates beyond the first weeks has persisted in the UK for decades and is seen in other developed countries, but is not universal. Substantially higher rates are found in Scandinavia, where around 80% of Norwegian mothers (Lande *et al*. 2003) and 68% of Swedish mothers (Sveriges officiella statistik och Socialstyrelsen 2009) are breastfeeding at 6 months. Continuation rates in Canada (Public Health Agency of Canada 2009), Australia (Australian Institute of Health and Welfare 2011) and Hungary (Euphix 2009) are lower than this; nonetheless, 'any breastfeeding' rates at 6 months in these countries are more than double those of the UK.

As the evidence that formula feeding is associated with poorer health outcomes for babies and mothers has grown (Hoddinott *et al*. 2008), UK governments have sought to promote conditions that encourage and enable more mothers to breastfeed. In 2003, the World Health Organization (WHO) and UNICEF published a jointly developed Global Strategy for Infant and Young Child Feeding (WHO 2003) with the objective of refocusing world attention towards the impact that feeding practices have on infant nutrition and health. Under successive UK labour governments (1997–2010), breastfeeding was framed as a public health issue, and seen as a means of reducing inequalities [Department of Health (DH) 1998, 2002, 2008]. Initiatives to increase breastfeeding rates, supported by National Institute for Health and Clinical Excellence (NICE) reviews and guidance (Dyson *et al*. 2006; NICE 2008), became embedded in the public health agenda across the four countries of the UK, with the introduction of national breastfeeding strategies in Northern Ireland, Wales and (more recently) in Scotland, regional strategies in some parts of England, and the creation of posts for area-based Infant Feeding Leads. The WHO and UNICEF Baby Friendly Initiative (BFI) (UNICEF UK Baby Friendly Initiative 2012) – an award designed to improve standards through breastfeeding-friendly protocols, training and information in health facilities – was included as a minimum standard in NICE guidance for post-natal care (NICE 2006), and funding was made available for community-based interventions, including breastfeeding peer support programmes. Mothers' rights to breastfeed in public places were clarified through specific legislation in Scotland (Scottish Parliament 2005) and in UK equality legislation (Equality Act 2010). The national and international policy drive to encourage breastfeeding has been associated with a rise in initiation of breastfeeding in the UK of around 10% over the past decade (NHS Information Centre 2011), though, as noted above, this rise in initiation has not been associated with a cultural shift in which breastfeeding is usually maintained for 6 months or longer (DH 2011). The current climate of cost cutting in the public sector has meant that in England the services and infrastructure to support breastfeeding have begun to be cut back.

Key messages

- *A theory of constraints* approach was helpful in addressing long-standing dilemmas in infant feeding education and post-natal support, enabling new priorities to be identified.
- There is a need to shift the focus from seeking to influence initial feeding decisions, towards supporting mothers throughout their feeding journeys, enabling and protecting decisions to breastfeed as one aspect of ongoing support.
- The concept of an 'early-weeks adjustment and investment period' during which breastfeeding is established, should be promoted.
- Models of support that are proactive and mother-centred should be developed. Proactive support must be genuinely mother-centred if it is to be acceptable.

During the last decade, third-sector organisations, including NCT (formerly the National Childbirth Trust), the UK's largest charity for expectant and new parents, have expanded their feeding support services. NCT now provides breastfeeding information and support via a mixed economy of ante-natal courses and post-natal one-to-one support provided free at point of delivery [via National Health Service (NHS) and other service contracts, and voluntary work of practitioners] and via ante-natal preparation sessions paid for out of pocket by parents. NCT trains breastfeeding counsellors to university diploma level to provide ante-natal preparation for breastfeeding sessions, and post-natal support at breastfeeding drop-ins, Baby Cafes and by telephone. The charity also provides training for health professionals and peer supporters, and develops information for parents and professionals about breastfeeding and formula feeding. Between 2000 and 2009 contacts between NCT breastfeeding counsellors and parents increased by 50%, to around 75,000 contacts in 2009.

In 2010, NCT's Board of Trustees commissioned a review of the impact of the charity's work on feeding to identify the charity's strengths and the potential for improvement, taking account of the views of service users, external professionals and NCT practitioners. A small number of long-standing unresolved issues associated with feeding support were identified. These problems were considered from a systems management perspective, drawing on *theory of constraints* (TOC), a business management theory (Goldratt & Cox 2004). TOC provides a framework for improving systems, by identifying root causes of long-running unresolved problems, making a key assumption that negative effects will persist where there are unexplored *competing* points of view that continually undermine the system as a whole. Goldratt's contention was that problems could be resolved by undertaking a specific series of analytic steps (Dettmer 1997). These include refocusing on the system's 'goal', identifying constraints to achieving that goal, and applying logical thinking tools to resolve system constraints. This paper describes the application of TOC tools to the long-standing problems identified in the impact review.

Method

The research took place over an 18-month period. The methodological approach is described in detail in the following five steps.

Step 1 – System goal and long-running problems identified

A high-level goal for NCT's work on infant feeding – that parents should have '*every opportunity for positive feeding experiences*' – was identified from NCT policy statements (National Childbirth Trust 1999). Unresolved problems (in TOC terminology, '*undesirable effects*') in relation to meeting that goal were initially identified from open-question responses in two NCT surveys of first-time parents (Bhavnani & Newburn 2010; Newburn *et al*. 2011) and from the wider literature on mothers' experiences of feeding and feeding support in the UK. These were:

1. Some mothers who use formula milk feel unsupported and judged.
2. Mothers who run into breastfeeding problems sometimes feel that they have been given unrealistic expectations in ante-natal classes.
3. Many mothers who experience breastfeeding problems do not access the breastfeeding support available.

This NCT goal and these unresolved problems were explored at the charity's 2010 conference in a focus group of 16 NCT members who were mothers of children under 3 years old, and in a conference workshop with 35 NCT members and volunteers. Mothers were invited to discuss their experiences and support needs. Feedback from both groups confirmed that the three identified problems had a high level of resonance with both intended beneficiaries and those providing support. The identified problems were then explored further from the perspective of those providing infant feeding support via an e-discussion group set up as part of this research, joined by 111 NCT breastfeeding counsellors and breastfeeding counsellor students, of whom 55 actively contributed to the discussion. These qualitative data (to be reported separately) were used to ensure that practice-based knowledge informed the descriptions of the conflicts and proposed solutions.

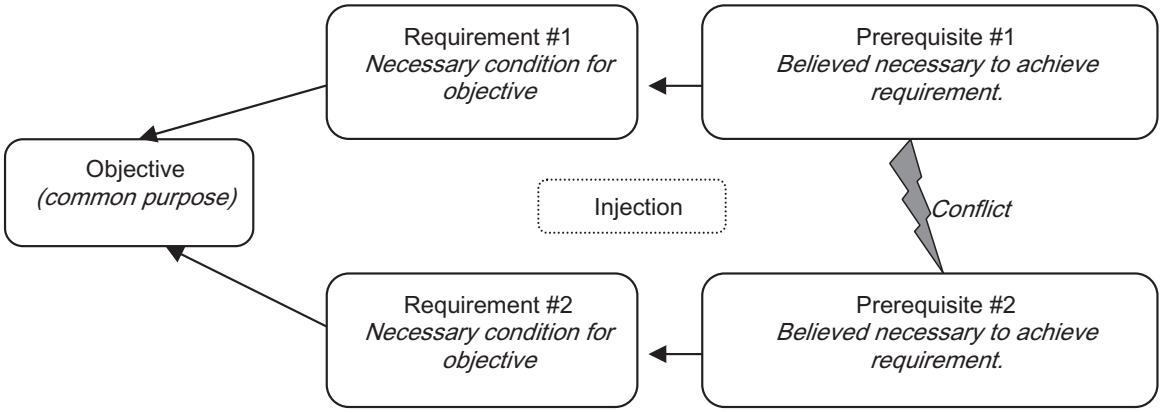

Fig. 1. Theory of constraints: conflict resolution diagram (CRD) (Source: Dettmer, 1997).

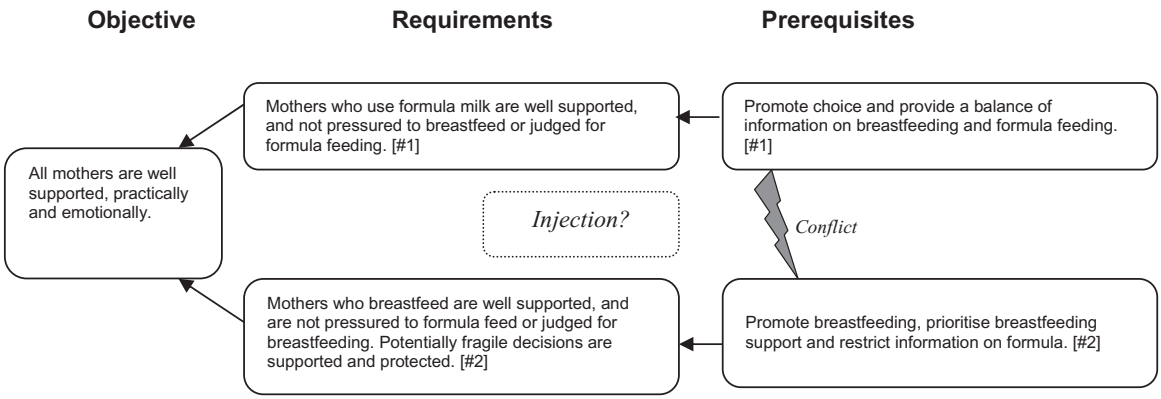

Fig. 2. Promote breastfeeding or promote feeding choice?

Step 2 – Common objectives and conflicts described

Competing perspectives were used to construct draft *conflict resolution diagrams* (CRDs) – visual thinking tools described by Dettmer (1997). A CRD template is presented in Fig. 1. On the far left of the diagram is the '*objective or common purpose*'. The objective describes a situation that eliminates the core problem being addressed, while avoiding creating a different set of problems, and is worded to describe the best possible end result. So that, in response to the problem 'mothers using formula milk feel unsupported', a CRD common objective of 'all mothers feel supported' is constructed – see Fig. 2. Achieving the objective usually means satisfying more than one '*underlying requirement*' (middle boxes), each of which is necessary but not sufficient to fulfil the objective, so that on the one hand mothers using formula milk are not pressured or judged (requirement #1), and on the other neither are mothers who are breastfeeding (requirement #2).

In reality there will be many requirements underlying any objective, but the purpose of the CRD is to identify those which are impacted by underlying conflict. Requirements (middle boxes) do not themselves tend to be in conflict with one another; however, they are assumed to be driven by '*pre-requisites*' – actions or conditions that are necessary to meet the requirements – (right hand boxes), and it is often at this level that conflict is expressed (as in Fig. 2, with conflict between prerequisite #1 'promoting choice' and prerequisite #2 'promoting breastfeeding'). The model requires that the most opposed versions of possible

prerequisites be included in the CRD, so that conflicts are immediately apparent. The zigzag arrow represents the underlying conflict itself.

The CRD diagram is verbalised by reading from left to right.

In order for the objective to be achieved, requirement #1 must be satisfied, and in order for that to be achieved, prerequisite #1 is necessary. However, in order for the objective to be achieved, requirement #2 must also be satisfied, and in order for that to be achieved, prerequisite #2, which *conflicts* with prerequisite #1, is necessary.

Conflict resolution is then achieved via a process of identifying and challenging assumptions (represented by the arrows between the boxes) with the aim of invalidating one or more opposing positions. Dettmer (1997) suggests that invalid assumptions are most likely to be found between 'pre-requisites' and 'requirements', though insight can also come from challenging assumptions underlying other parts of the CRD. The intended outcome of the CRD thinking tool is deeper understanding of conflicts and assumptions that exist in the system, so that this understanding can be used to develop new possible actions – or '*injections*' in TOC terminology – to help resolve the dilemmas.

Step 3 – Conflicts, assumptions and 'injections' explored and evaluated

Five draft CRDs, setting out different formulations of the three identified problems, were presented at a workshop for 40 participants attending NCT's Strategy Development Forum (SDF) in January 2011, including representatives from the charity's trustees, staff, breastfeeding counsellors, ante-natal teachers, post-natal leaders and volunteers. The draft CRDs were used to explore competing perspectives and assumptions:

a. Formula milk – Mothers using formula milk feel undersupported and judged.
b. Expectations – Mothers feel they are given unrealistic expectations about problems.
c. Expectations – Mothers feel they are encouraged to have unrealistic expectations of the early days.
d. Access – Many mothers experiencing problems do not access breastfeeding support.
e. Access – Support has inequitable social reach.

TOC conflict resolution methodology was explained to workshop participants, who worked in groups to explore the conflicts, verbalise the dilemmas and record underlying assumptions that they identified. Participants then intuitively evaluated these assumptions using their own expert or lay understanding of feeding support, and began to generate possible actions or 'injections'.

Step 4 – Conflicts refined, assumptions and 'injections' described

Using the outputs from the SDF workshop, the authors refined, rejected or combined draft versions of the CRDs. CRDs (a) and (d) remained intact. CRDs (b) and (c) relating to unrealistic expectations could be combined because they revealed a common underlying dilemma and generated similar solutions. CRD (e) relating to social reach was too broad to form part of this analysis (which focuses on NCT's model for infant feeding support) and is being addressed as a central aspect of NCT's new strategy. Three CRD diagrams, corresponding to the three long-running unresolved issues identified in step 1, were finalised (Figs 2–4).

The authors then drew on the work of SDF participants to create an 'assumptions table' for each CRD. Assumptions underlying different parts of the diagrams were categorised as 'valid', 'moderate validity', 'low validity', 'not valid' and 'likely to vary'. Where evidence was lacking this was also noted (Tables 1, 2 and 3). This step-by-step appraisal process enabled invalid assumptions to be set aside and new potential actions (injections) to be identified. Dettmer (1997) suggests that identifying 'invalid' assumptions tends to be most useful in moving thinking forward. In this analysis, highlighting areas where evidence is insufficient to judge validity was also instrumental. The authors drew on the wider research literature as part of this analysis. However, the process did not include a systematic review of the evidence and such a review is not a standard step in this methodology, which prioritises practice-based knowledge and experience.

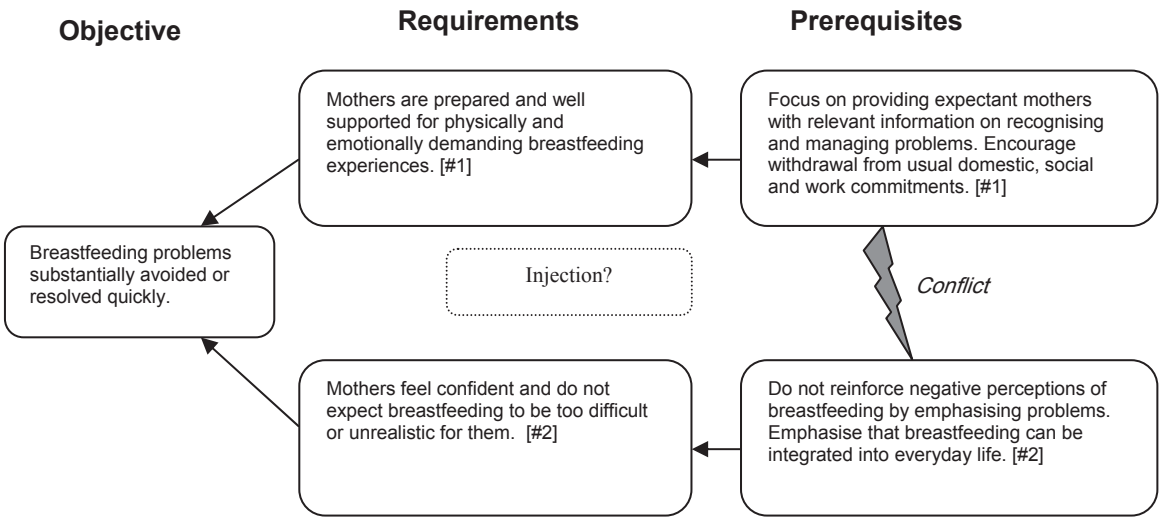

Fig. 3. 'Be prepared for problems' or 'breastfeeding is straightforward and rewarding'?

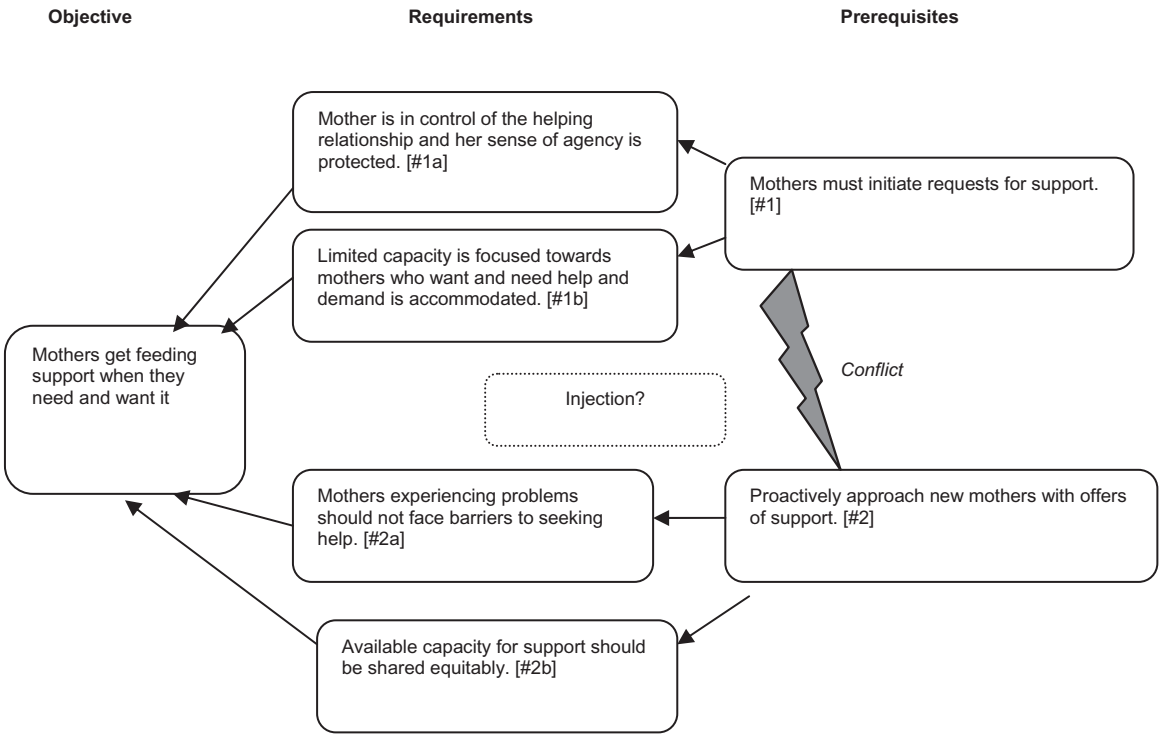

Fig. 4. Proactively support or protect the mother's sense of agency?

Step 5 – Priorities identified

As a final step, the authors identified a '*priority for action*' for each problem, which incorporated and summarised the 'injections' identified by participants during the assumption analysis. Priorities were then integrated into NCT's broader strategy development work.

Results

Results are described in four parts. First, NCT's high-level infant feeding goal is described in relation to other possible goals. The three CRD analyses, relating to the identified problems, are then presented in turn.

The goal: 'quality of experience' or 'health outcomes'?

The TOC assumes that the ultimate goal of any system can be clearly identified, though Dettmer (1997) notes that those working within a system may have different ideas about its ultimate purpose. The policy objectives of NCT and other statutory and voluntary organisations offering feeding support demonstrate a range of goals, with shifts of emphasis between improving mothers' experiences and improving health outcomes.

NCT's Baby Feeding Policy states that: '*NCT believes it is important for parents to have every opportunity for positive feeding experiences*' (National Childbirth Trust 1999). The charity's explicit focus is on the experience of the parent rather than the experience of the baby, and does not relate to any one method of feeding. Philosophically, this position arises from a normative assumption that overwhelmingly parents are motivated to do the best for their children, sometimes in difficult circumstances, and, in the context of the information and support available to them, will seek to parent in a way that they feel is right for themselves and their children (National Childbirth Trust 2005). At a practical level, NCT breastfeeding counsellors are trained in, and explicitly make a commitment to providing non-judgmental, mother-centred support, based on person-centred counselling skills (Seel & Seel 1990; Wise 2003). The primary focus on *experience* articulated in NCT policy and training can be contrasted with more explicitly health-related goals of UNICEF and UK governments. NCT's goals are apparently one step removed from this wider health promotion agenda. The charity provides information, education and practical support for breastfeeding *primarily* because this is viewed as helpful in enabling more mothers to make and sustain decisions to breastfeed in a culture in which many experience obstacles and feel unsupported and most stop breastfeeding before they want to.

These differences should not be overstated. Statutory and voluntary organisations, including NCT, have a long history of working together to promote breastfeeding, and health impact information has been fundamental to NCT's lobbying for a more supportive context for breastfeeding mothers. This convergence of goals is unsurprising; the 'paradigm of health and health care', discussed in relation to infant feeding by Lee (2007), is not merely the context within which mothers feed their babies, but also the context in which support for feeding is funded and delivered. In the same way that a mother who is breastfeeding may lack the language to describe the emotional rewards of her decision (Smale 1998), and use her understanding of health benefits to explain her decision to those who view breastfeeding negatively (Graffy & Taylor 2005), perhaps as a kind of 'trump card', so organisations providing breastfeeding support will tend to highlight health outcomes, to attract space for breastfeeding on the policy agenda even though health concerns may only partially describe the motivations of the organisations and the individuals working within them. In fact, most public and third-sector organisations appear to value improved public heath, 'choice' *and* quality of experience, with varying levels of emphasis. Explicitly exploring and balancing such multiple goals may help minimise unintended negative effects. For example, a system that focuses on achieving better health outcomes (through increasing breastfeeding rates) may inadvertently subjugate focus on the quality of mothers' overall experiences to the extent that mothers' sense of satisfaction and autonomy is affected.

The following CRD analyses are conducted from the perspective of NCT, so that 'positive feeding experiences' are taken to be the ultimate 'goal' of feeding support. The 'objectives' on the far left of the CRD diagrams in the sections that follow (1) that all mothers are well supported, (2) that breastfeeding problems are substantially avoided or resolved quickly, and (3) that mothers get feeding support when they want and need it (Figs 2–4), can be viewed as aspects of NCT's ultimate goal of positive feeding experiences. The

analysis will be relevant to other organisations that value quality of experience (or service user satisfaction) alongside public health objectives.

Dilemma A: promote breastfeeding or promote feeding choice?

Using CRD methodology, the common purpose of 'all mothers are well-supported', consistent with the high-level goal of 'positive feeding experiences', was formulated to address the identified problem that some mothers using formula milk feel undersupported (Fig. 2). The problem was explored with SDF participants in terms of conflicting prerequisites of *promoting breastfeeding* on the one hand and *promoting feeding choice* on the other, and analysed further by the authors with reference to the published literature.

The rationale for promoting feeding choice (prerequisite #1) is that mothers' autonomy and capacity for decision-making should be prioritised. A systematic review of mothers' experiences of bottle feeding (Lakshman *et al*. 2009) explores concerns that, in a service context that promotes breastfeeding, many UK mothers who use formula milk may not be receiving the help they need. While UK professionals often have a good understanding of the challenges that mothers using formula milk face (Brown *et al*. 2011), mothers sometimes experience support for feeding as being delivered in a 'dogmatic' way, or feel that information about formula feeding is delivered 'covertly', with negative consequences for their sense of congruence (Thomson & Dykes 2011). The Lakshman *et al*.'s review also confirms that being '*made to feel guilty*' is a recurrent theme in the research literature for mothers using formula milk. Sociologists writing from a social constructionist perspective argue that professional validation and prioritising of the health advantages of breastfeeding over formula has left mothers increasingly open to moral judgements when they make infant feeding decisions that are perceived to be less healthy (Lee 2007, 2008; Wolf 2011). Lee (2008) contends that the framing of breastfeeding as a public health issue, and a language of 'risk', has led to mothers assessing themselves, or believing themselves to be assessed by others, as 'bad' parents, so that they may have to '*struggle hard to maintain a positive sense of themselves as mothers*'. Proposed solutions vary. Lakshman *et al*. recommend ensuring that UNICEF BFI advice on supporting mothers using formula milk is more closely followed, with appropriate and tailored advice in the context of breastfeeding promotion. Others call for an approach to providing information that is more '*balanced*', presenting health and non-health '*risks and benefits of both options*' (breastfeeding and formula feeding) – with a clear implication that such a balance would include many more benefits of formula feeding than are commonly presented – so that couples can '*make their own informed and voluntary choices*' (Nihlen Fahlquist & Roeser 2011).

The rationale for promoting breastfeeding (prerequisite #2) is most often presented from a public health perspective, but can also be based, as here, on a commitment to increase the personal autonomy of mothers who plan to breastfeed in the context of a formula feeding culture. While the term 'promotion' is often understood in the marketing sense of 'communicating in order to influence' (for example, by educating about the health benefits of breastfeeding), UNICEF and UK governments have taken a broader social and environmental intervention remit, in line with the WHO definition of 'health promotion': '*enabling people to increase control over, and to improve, their health*' (WHO 1986). Structural and social barriers to breastfeeding are addressed alongside individual factors (Dyson *et al*. 2006) through the development of breastfeeding strategies, introduction of BFI in hospitals and in the community, expansion of breastfeeding counselling and peer support, as well as legislation, media campaigns and schemes to enable breastfeeding when out and about. The promotion agenda has also involved providing limited protection from commercial pressure to formula feed, via UK legislation on formula milk advertising (Statutory Instruments 2008) and BFI guidelines (UNICEF 2011), while UK-based professional and third-sector organisations (Breastfeeding Manifesto Coalition 2007) have called for full implementation of the WHO International Code of Marketing of Breast-Milk Substitutes (WHO 1981) and subsequent World Health Assembly resolutions.

The dilemma can be verbalised as follows:

Table 1. Promote breastfeeding or promote feeding choice?

Aspect challenged	Assumption	Validity assessment		Injections
Common objective	All mothers are well supported, practically and emotionally.			
Req. #1, #2	Separate requirements imply that mothers using formula milk and mothers who breastfeed are different groups.	Low validity	Most UK mothers both breastfeed and formula feed their babies. Mixed feeding is common. Most mothers would like to breastfed for longer.	1. Review the language, tone, and content of infant feeding information, and promote a discourse shift away from the notion of one-off, unconstrained rational 'choices'. 2. Structure services with minimal initial categorisation of mothers according to feeding behaviour or feeding intention, emphasising the need for integrated mother-centred approaches. 3. Within a framework of integrated infant feeding support, provide services and implement policies that make breastfeeding decisions easier to realise and culturally acceptable. Ensure that the rationale for investing in protecting breastfeeding decisions, in a context where most mothers stop breastfeeding before they plan to, is widely understood. 4. Within a framework of integrated feeding support, improve access to one-to-one support for formula use when parents need it. Minimise the need for parents to rely on commercial information sources.
Req. #1, #2	Separate requirements imply that services and information need to be different and separate according to feeding behaviour.	Moderate validity	Current method of feeding need not determine access to feeding support services for individuals (e.g. face-to-face counselling, helpline support) as long as providers have capacity and skills. Group-based services specifically designed to support breastfeeding (e.g. breastfeeding drop-ins, peer support groups) are useful to provide micro-breastfeeding cultures; however, these can be accessed from within an individualised, non-dichotomising framework of care.	
Req. #2	Decisions to breastfeed are more fragile than decisions to formula feed.	Valid	Decision to breastfeed frequently requires external input to be maintained. Decision to formula feed not fragile in the same way, but nonetheless requires support.	
Prereq. #1	Balanced information enables a free choice.	Low validity	Breastfeeding frequently not perceived as a feeding option if limited experience among family or friends. Formula feeding frequently a means of coping, not a first choice. Some mothers may feel pressure to breastfeed to satisfy others' views.	
Prereq. #1	It is possible to provide an information balance and there is no existing imbalance in the decision-making context to be counteracted.	Low validity	Mothers' own informal networks are often lacking in direct experience of breastfeeding. There is limited access to information and support to prevent and resolve problems. Formula milk is commercially marketed. Information providers are not in a position to weigh information for mothers. However, narrow focus on health benefits is insufficient and accurate independent information on a broad range of issues relevant to decision-making is likely to be helpful.	
Prereq. #2	In order to promote breastfeeding, information about formula milk must be restricted.	Moderate validity	Promotional information, or information provided as a matter of course, can undermine decisions to breastfeed. Particularly, if there is a lack of skilled breastfeeding support, if formula milk is used as a standard response to problems, or when formula milk is presented as an inevitable feeding stage.	
Prereq. #2	Restricting services and information on formula milk can satisfy a common objective for all parents to feel supported.	Not valid	Failure to provide good information and services to aid use of formula milk will leave many parents undersupported	
The conflict	There is a conflict between promoting choice and promoting breastfeeding.	Valid	Notion of 'choice' undermines breastfeeding in a context where decisions to breastfeed are poorly supported; promotion may be experienced as pressure.	
PRIORITY FOR ACTION: SUPPORT ONGOING DECISION-MAKING, INCLUDING PROTECTING DECISIONS TO BREASTFEED.				

In order for all mothers to feel supported, parents who use formula must be supported, and must not feel pressured to breastfeed or judged, which means 'choice' must be promoted and there must be a balance of information and services for breastfeeding and formula feeding. On the other hand, in order for all parents to be supported, mothers who decide to breastfeed must be supported, must not feel pressured to formula feed or judged and must have their potentially fragile decisions to breastfeed protected; so breastfeeding must be promoted, breastfeeding support prioritised and information on formula restricted.

An assessment of validity of the assumptions underlying this dilemma is shown in Table 2. It is immediately apparent that while requirements #1 and #2 are necessary, the way that the problem has been framed reveals a tendency to categorise mothers as either 'mothers who breastfeed' or 'mothers who use formula'. This binary approach is problematic, as, in fact, most mothers breastfeed and then use formula milk; in 2005, 92% of UK mothers had introduced milk other than breast milk by 6 months. Mixed feeding is also common, practiced by around a fifth of mothers with babies aged between 4 and 10 weeks (Bolling *et al*. 2007). Hard and fast categories do not therefore reflect real-world experiences. Framing in terms of two distinct groups of women may exacerbate the need for mothers to undertake 'identity work' to justify their decisions (Lee 2007; Faircloth 2010) and lead to solutions based on different and separate services, further encouraging self-categorisation. In fact, person-centred support can be provided on a one-to-one basis (in person or on a helpline) as help with 'feeding your baby' without distinction according to feeding method, with referral to other services (such as peer support groups) occurring within an individualised, non-dichotomising framework of care.

The assumption expressed in requirement #2, that 'decisions to breastfeed are more fragile than decisions to formula feed', is clearly valid. Formula feeding is often the 'safety net' option, and unplanned switches are common. For 'all mothers to feel supported' in a context where breastfeeding problems are common and longer-term breastfeeding is not normalised, carers need to have the time, knowledge and skills to enable mothers who plan to breastfeed to overcome setbacks.

The assumption that 'choice' can be provided through balanced information (prerequisite #1) can be challenged on the grounds that feeding decisions are frequently not experienced as 'choices', particularly by the many mothers who turn to formula milk having run into breastfeeding problems. The notion of a 'balance' of information is also problematic because this implies that initial decisions are 'logical' and that options can be weighed equally by information providers, when in fact the process of 'balancing' information will be internalised by the mother and interdependent with cultural and psychological factors specific to her own circumstances. On the other hand, if 'providing balance' is taken to mean enabling individual mothers to receive accurate, independent information covering a wide set of social and support issues relevant to the decision-making process, with well-explained epidemiological evidence recognised as just one factor impinging on decision-making, then this assumption has validity for all organisations providing feeding support.

The assumption that information about formula milks should be restricted, expressed in prerequisite #2, is apparently in conflict with the common objective. Support for formula use, as and when mothers feel they want and need it, is clearly essential to the common objective of well-supported mothers. However, this assumption has partial validity because of the need to prevent formula milk being used as a 'quick fix' (perhaps where there is a shortage of time, knowledge or skills) when mothers themselves would prefer to have support to breastfeed. This danger is lessened if individualised feeding support is provided in an environment free of commercial and temporal pressure, by carers skilled in enabling breastfeeding and accepting of mothers' preferences and decisions.

A priority for action: ***to provide ongoing support for mothers and their decision-making while protecting decisions to breastfeed*** (Table 1) was developed, drawing on the analysis and incorporating the four 'injections' selected as having potential to be taken forward. Injections incorporated under this summary heading were:

1. Review the language, tone and content of infant feeding information, in particular promote a discourse shift away from the notion of mothers making one-off, unconstrained, rational 'choices'.
2. Structure services with minimal initial categorisation of mothers according to feeding behaviour or feeding intention, emphasising the need for mother-centred approaches.
3. Within a framework of integrated infant feeding support, provide services and implement policies that make breastfeeding decisions easier to realise and culturally acceptable. Ensure that the rationale for investing in protecting breastfeeding decisions, in a context where most mothers stop breastfeeding before they plan to, is widely understood.
4. Within a framework of integrated feeding support, improve access to one-to-one support for formula use as and when mothers need it. Minimise the need for parents to rely on commercial information sources.

Dilemma B: 'Be prepared for problems' or 'breastfeeding is straightforward and rewarding'?

A NICE evidence-into-practice briefing on promotion of breastfeeding initiation and duration recommends that 'a single session of informal, small group and discursive breastfeeding education should be delivered in the ante-natal period, including topics like the prevention of nipple pain and trauma' (Dyson *et al*. 2006). Breastfeeding counsellors contributing to this research varied in the emphasis that they placed on preparing parents for feeding problems as opposed to presenting breastfeeding as straightforward and rewarding. NCT has tended to focus attention on skin-to-skin care, the importance of support during the first days of feeding, effective positioning and attachment, and baby-led feeding (Bhavnani & Newburn 2010; Dodds & Newburn 2010). Breastfeeding counsellors contributing to this research indicated that getting a balance between presenting breastfeeding as a '*worthwhile and pleasant experience*' and discussing potential common challenges could be difficult. Extremes of approach can be expressed as a CRD (Fig. 3) in relation to a common objective of 'breastfeeding problems being substantially avoided or resolved quickly' (consistent with the high-level goal of 'positive feeding experiences').

The rationale for focusing on recognition and management of breastfeeding problems (prerequisite #1) is based on the observation that these are extremely common, especially in the early weeks when they are experienced by around a third of breastfeeding mothers (Bolling *et al*. 2007). The most frequently experienced problems leading to breastfeeding cessation in the first 2 weeks are 'rejection of the breast', 'insufficient milk' and having 'painful breasts or nipples'. Problems may also be compounded by conflicting expectations and maternal exhaustion in a social context in which there is comparatively little emphasis on 'mothering the mother' or the need for rest and recovery after the birth (Newburn & Dodds 2010). Other personal priorities, pressures from the family, social and domestic demands all compete with the commitment, confidence and time that may be needed to overcome breastfeeding difficulties. Mothers often do not feel prepared for the problems that they encounter and professionals often feel that mothers are '*ill-equipped for the realities of breastfeeding*' (Brown *et al*. 2011). A metasynthesis of studies of the experiences of mothers who stop breastfeeding found that a disconnect between beliefs that breastfeeding is 'natural' (and therefore straightforward) and subsequent experience of difficulties can lead to confidence in feeding being undermined (Larsen *et al*. 2008). Mothers who contributed directly to the NCT focus group on feeding experiences for this impact review indicated confusion about the 'normal range' of pain associated with breastfeeding and frustration at the lack of awareness among health professionals of symptoms of common problems, such as thrush. Earlier NCT research found evidence of a social gradient in terms of women's experiences of encouragement and help, with women from lower socio-economic groups more likely to report a lack of breastfeeding support from their partner, and minority ethnic groups reporting less access to support from professional and community sources than other women (Singh & Newburn 2000, p. 85).

The rationale for encouraging expectant parents to view breastfeeding as straightforward and rewarding (prerequisite #2) comes from awareness that mater-

nal confidence and a strong sense of self-efficacy are important determinants of continued breastfeeding (Blyth *et al*. 2002) and that positive perceptions of breastfeeding are helpful in terms of sustaining decisions (Brown & Lee 2011). Blyth *et al*. (2002), who conducted a prospective study of 300 women, concluded that 'integrating self-efficacy enhancing strategies' into care may increase a new mother's confidence in her ability to breastfeed, and to persevere if she does encounter difficulties. Breastfeeding counsellors contributing to this research reported that helping mothers to overcome unhelpful perceptions, teaching positive skills that enable breastfeeding, and encouraging support-seeking were important objectives for their ante-natal sessions. While breastfeeding problems were frequently discussed, some counsellors felt that focusing on these could be counterproductive, reinforcing existing negative expectations. Others expressed doubt about the efficiency of ante-natal classes as a vehicle for conveying specific information about identifying and managing problems.

The dilemma can be verbalised as follows:

> In order for breastfeeding problems to be avoided or resolved, mothers need to be prepared for how physically and emotionally demanding feeding a baby can be in the early weeks and to know where to get support for problems, so ante-natal classes should focus on identifying and managing problems, and should encourage social withdrawal from usual domestic, social and work commitments. On the other hand, in order for breastfeeding problems to be avoided or resolved, mothers need to feel confident and not view breastfeeding as inherently difficult or unrealistic in the light of other commitments, so ante-natal classes should avoid emphasising problems and present breastfeeding as part of everyday life.

A striking feature of this dilemma is the limited evidence to support assumptions underlying both prerequisites (Table 2). In fact, a recent Cochrane systematic review of ante-natal-only breastfeeding education found that the quality of the evidence was too poor to recommend any one form of ante-natal intervention over any other (Lumbiganon *et al*. 2011). At a societal level, the link between breastfeeding rates and experience of breastfeeding problems is also unclear, as there is a lack of comparative data from developed countries with high breastfeeding rates to indicate whether mothers in these countries actually experience fewer feeding problems. UK studies of young mothers who decide to breastfeed (Brown *et al*. 2009) and mothers who breastfeed for at least 6 months (Brown & Lee 2011) indicate that *determination* is a key characteristic of their experience; mothers often breastfeed *despite* experiencing feeding difficulties (and negative attitudes of others), rather than in the absence of these problems. Clearly, ante-natal sessions are only one factor among many others influencing knowledge, perceptions and beliefs. Aspects of ante-natal preparation that could help to nurture motivation and a sense of self-efficacy have only recently begun to be explored critically. Promising results from a small trial of an ante-natal *plus* post-natal motivational intervention delivered by midwives, which incorporated raising awareness of common breastfeeding challenges, suggests that 'normalising' different breastfeeding experiences can provide mothers with a valuable opportunity to 'imagine, anticipate and visualise' how they would cope (Stockdale *et al*. 2008). Appraising and disseminating existing evidence, and improving understanding of whether and how integrated ante-natal–post-natal models of education and care can better support parents' subsequent feeding experiences, is a priority.

A second key insight arose through assessing the assumed conflict between encouraging (or sanctioning) withdrawal from social and domestic commitments on the one hand (part of prerequisite #1) and emphasising that breastfeeding can be integrated into everyday life on the other (part of prerequisite #2). Validity assessment led SDF participants to distinguish between experiences during the first weeks after the birth and the period beyond this, when the baby has passed out of the 'newborn' stage, and breastfeeding has become more established. This led to reflection around the potential usefulness of the concept of an early weeks' investment and adjustment period (Mohrbacher & Kendall-Tackett 2010, p. 103), during which the physical and emotional 'work' of breastfeeding may be initially harder than formula feeding, but which is likely to be 'rewarded' as the baby grows and breastfeeding becomes more practised and established. Such a concept may help

Table 2. 'Be prepared for problems' or 'breastfeeding is straightforward and rewarding'?

Aspect challenged	Assumption	Validity assessment		Injections
Common objective	Breastfeeding problems substantially avoided or resolved quickly.			
Req. #1	Feeding in the early days will be physically and emotionally demanding and problems are likely.	Valid	Feeding problems are common. Parents often feel unprepared for the experience of breastfeeding during the early weeks.	1. Identify, appraise and develop evidence to understand any impact of ante-natal and perinatal breastfeeding education interventions on maternal confidence and on preventing and overcoming problems. 2. Improve signposting to high-quality information and skilled problem-solving support, especially in the early post-natal period. 3. Promote broad cultural awareness that, during the early weeks, new mothers who decide to breastfeed benefit from informal support from family and friends that enables them to focus on establishing a breastfeeding relationship.
Req. #1	Knowing about problems and sources of support will help mothers to overcome them.	Moderate validity	Some evidence to support his view. Likely to be helpful if parents believe problems can be prevented or resolved and are motivated to self-treat and/or seek support, but there may be barriers to this. Also depends on effectiveness of the support provided.	
Req. #2	Feeling confident about breastfeeding is important in overcoming problems.	Valid	There is evidence to support the role of maternal confidence in overcoming problems. Interventions intended to enhance self-efficacy may have a positive effect but there is a limited evidence base.	
Req. #2	Withdrawing from other commitments in early weeks is associated with positive experiences of breastfeeding.	Moderate validity	More support and fewer competing demands and commitments (family, work, social) are likely to assist establishing breastfeeding. However, believing that breastfeeding strongly limits maternal autonomy is likely to be associated with negative experiences.	
Prereq #1	Raising awareness among expectant parents of problems and intensive nature of feeding will help them to address difficulties when they occur.	Moderate validity/ evidence lacking	Raising awareness of potential problems among expectant parents may help them to identify these and may help parents to consider how they would cope with challenges; however, it may be difficult for expectant parents to absorb such hypothetical information.	
Prereq #2	Discussion of problems will undermine confidence.	Evidence lacking	It is not known what impact discussion of problems will have. Likely to depend on context and manner in which information is given.	
Prereq #2	It is possible to improve maternal confidence in the ante-natal period, for example, by reinforcing positive aspects of breastfeeding.	Evidence lacking	There is little evidence about how different approaches to ante-natal education intervention can contribute to mothers' sense of self-efficacy.	
Conflict	Withdrawal from wider commitments will be viewed negatively.	Evidence lacking.	Likely to vary from individual to individual and to be dependent on social context. Known that different cultures have different expectations with regard to activity during the early weeks.	
Conflict	Withdrawal is incompatible with presenting breastfeeding as a manageable part of everyday life.	Moderate validity	Likely to vary from individual to individual and to be time dependent. Culturally approved temporary withdrawal from wider commitments while the breastfeeding relationship is becoming established may be beneficial, alongside an understanding that breastfeeding generally becomes manageable as part of everyday life as the breastfeeding relationship is established.	
PRIORITY FOR ACTION: PROMOTE THE CONCEPT OF AN INVESTMENT AND ADJUSTMENT PERIOD.				

parents to develop expectations that are more often congruent with their subsequent experiences, and to feel that breastfeeding is likely to become more straightforward as their baby gets older. Furthermore, a wider cultural and social context that accepts that mothers have a right to focus on adjusting to life with a new baby (and establishing a breastfeeding relationship) in the early weeks, and which licenses withdrawal from other responsibilities, is likely to be more enabling of this investment 'work'.

A priority for action: ***to promote the concept of an investment and adjustment period*** (Table 2) was reached, drawing on the analysis and incorporating the three 'injections' selected as having potential to be taken forward. Injections incorporated under this summary heading were:

1. Identify, appraise and develop evidence to understand any impact of ante-natal and perinatal breastfeeding education interventions on maternal confidence and on preventing and overcoming problems.
2. Improve signposting to high-quality information and skilled problem-solving support, especially in the early post-natal period.
3. Promote broad cultural awareness that, during the early weeks, new mothers who decide to breastfeed benefit from informal support from family and friends that enables them to focus on establishing a feeding relationship.

Dilemma C: proactively support or ensure that mothers themselves initiate requests for support?

The third problem identified is that many mothers who might be expected to benefit from offers of post-natal breastfeeding support do not seek it (e.g. Graffy *et al*. 2004; Newburn *et al*. 2011), suggesting that practical and social barriers to help-seeking are just too high. A common objective 'mothers get support when they need and want it' can be framed in terms of conflicting prerequisites of supporting proactively on the one hand and ensuring that requests for support are initiated by the mother on the other (Fig. 4).

The prerequisite of mothers initiating requests (prerequisite #1) was understood by SDF participants to support two requirements. First, the requirement for a mother's sense of agency to be prioritised, so that her autonomy is respected and she feels she has control over her own experience of feeding and feeding support. In contrast a proactive approach raises fundamental ethical concerns, particularly for breastfeeding counsellors, as it challenges a core belief embedded through their person-centred counselling skills training (Rogers 1951), that support should not be imposed because such imposition will impact on mothers' feelings of self-efficacy and sense of control (requirement #1a). This belief is strengthened by awareness that mothers frequently feel pressured over their feeding decisions, and is supported by evidence that a hands-off, non-directive, person-centred approach to breastfeeding support is valued by mothers (Graffy & Taylor 2005; Hall Moran *et al*. 2006; Schmied *et al*. 2011). Second, it can be argued that, in practice, the requirement to manage limited support-giving capacity is achieved by waiting for mothers to seek help (requirement #1b).

The perceived need for a proactive approach (prerequisite #2) was also understood to be supportive of two requirements. First, the requirement that mothers experiencing problems should not face barriers to seeking help (requirement #2a). The consistent experience of breastfeeding counsellors contributing to this research is that mothers frequently do not seek help until problems are well established. Barriers, perceived by breastfeeding counsellors contributing to the e-discussion, included mothers not wanting to impose on the supporter, not knowing the supporter well enough, not knowing whether a supporter will be able to help, feeling that they will be judged if using formula milk, and having already received too much 'advice'. Second, a proactive approach supports a requirement to provide access to feeding help more equitably (requirement #2b). The perception of participants, supported by independent evidence, was that there is a social gradient on help-seeking behaviour for infant feeding (e.g. Dykes 2005) and that forms of support that require mothers to seek out help attract older, better-educated women (e.g. Hoddinott *et al*. 2009).

The dilemma can be verbalised as follows:

Table 3. Support proactively or ensure support initiated by mother?

Aspect challenged	Assumption	Validity assessment		Injections
Common objective	Mothers get feeding support when they need and want it.			
Req. #1a	It is important for mothers to be in control.	Valid	Mother-centred approach is valued. Relationship-building known to be important. Pressure over feeding is an issue whether breastfeeding or using formula milk.	1. Increase capacity for infant feeding support in the community by developing well-integrated systems of supervised peer support and breastfeeding counselling, alongside access to health professional services. Use existing settings frequented by new mothers. Develop the evidence to enhance support from family and friends.
Req. #1b	Capacity is stretched.	Valid	Given the extent of need and limits of funding, there are capacity issues. However, capacity may be improved by more creative and integrated use of possible support options.	
Req. #2a	There are barriers to seeking help.	Valid	Mothers who need help frequently do not seek it.	
Req. #2b	Resources are not provided equitably through a non-proactive approach.	Valid	Services are not accessed equitably.	
Prereq. #1	Waiting to be approached puts mothers in control.	Likely to vary	Mothers may feel abandoned and alone when experiencing problems. Help-seeking may present an additional challenge, particularly if help is felt to be restricted to breastfeeding, or exclusive breastfeeding, rather than feeding more broadly.	2. Incorporate evidence for the importance of relationship-building into intervention design. 3. Reaffirm maternal experience and psychological well-being as key outcomes for feeding support interventions.
Prereq. #1	Waiting to be approached keeps capacity manageable.	Moderate validity	Limits number of help seekers, but may result in delayed help-seeking, when problems are at a more advanced stage. Also may mean that resources are not directed to greatest need.	
Prereq. #2	Making proactive offers of help will not be 'difficult' for mothers.	Likely to vary	In health promotion context offers of help may be interpreted (or exerted) as pressure to breastfeed. Less likely to be the case if delivered in walk-in community-based services and offered as 'help with feeding' to all mothers regardless of feeding decisions.	4. Develop an evidence base to support the effectiveness and acceptability of a range of proactive support models.
Conflict	There is no intermediate option between waiting to be approached and proactively offering help.	Low validty	Likely to be a continuum of approaches – including: high-profile advertising, ante-natal 'opt ins' to post-natal texting, phone calls, or visits, higher profile community-based support and fully integrated post-natal services – that are more or less acceptable.	
	PRIORITY FOR ACTION: DEVELOP MODELS OF SUPPORT THAT ARE MOTHER CENTRED AND PROACTIVE.			

In order for mothers to be able to access support when they need and want it, mothers need to be in control of the helping relationship with limited capacity for support targeted towards those who seek help; in order for this to be achieved, mothers should themselves initiate requests for support. On the other hand, in order for mothers to get support when they want and need it, mothers must not need to make difficult approaches at a distressing time, and capacity for support should be shared equitably, and, therefore organisations should proactively offer help.

Analysis of assumptions led SDF participants to conclude that the links between 'pre-requisites' and 'requirements' were poorly supported (Table 3). On the one hand, they could agree that breastfeeding counsellors waiting to be telephoned may not be the most equitable way of responding to need, and may leave mothers feeling unsupported, and have an unintended negative affect on resource availability if help-seeking is delayed until problems are more advanced and require more resource to resolve. On the other

hand, SDF participants felt that making proactive offers may actually increase the difficulties that a mother experiences if they disrupt her own problem-solving, or if she associates offers of help with not succeeding or with pressure over feeding decisions. In health promotion context, it was felt that offers of help may be interpreted (or exerted) as pressure to breastfeed.

A key insight from the work of SDF participants to resolve this dilemma is that any service models based on greater proactiveness (e.g. ante-natal 'opt-in' to lay postnatal feeding support, or higher profile community focal points for integrated peer and professional support) must ensure a concurrent emphasis on a respectful, non-directive, mother-centred approach, in order to be acceptable and congruent with the goal of positive feeding experiences. This insight is consistent with a metasynthesis of 31 studies examining perceptions and experiences of support (Schmied *et al*. 2011) which suggests that organisational systems that are mother centred and enable relationship-building are likely to be perceived as more supportive and acceptable.

SDF participants recognised that capacity to provide high-quality, proactive, ongoing support for all mothers, regardless of their feeding trajectories, would create capacity problems among counsellors working as unpaid volunteers. This is also likely to be an issue for statutory and funded services in the current financial climate. SDF participants generated several options to ameliorate capacity issues. These included: developing well-integrated systems of supervised peer support, backed up by support from breastfeeding counsellors and health professionals, with skill level escalated to meet need; seeking ways to enhance existing assets within parent's social networks by engaging with family and friends; and, providing support in existing settings already used by parents.

A priority for action: ***to develop models of support that are mother centred and proactive*** (Table 3) was reached, drawing on the analysis and incorporating four 'injections' selected as having potential to be taken forward. Injections incorporated under this summary heading were:

1. Increase capacity for infant feeding support in the community, by developing well-integrated systems of supervised peer support and breastfeeding counselling, alongside access to health professional services. Use existing settings, frequented by new parents. Develop evidence and interventions to enhance support from family and friends.
2. Incorporate evidence for the importance of relationship-building into intervention design.
3. Reaffirm maternal experience and psychological well-being as key outcomes for feeding support interventions.
4. Develop an evidence base to support the effectiveness and acceptability of a range of proactive support models.

Discussion

Using a TOC approach to explore long-running problems in infant feeding education and support appears to have been useful. The methodology was successful in identifying underpinning dilemmas for each of the problems considered, and these had resonance with participants attending stakeholder meetings. The first problem, that mothers using formula milk feel undersupported, revealed a pervasive underlying conflict between 'promoting choice' vs. 'promoting breastfeeding'. The second problem, that some mothers feel that they have been given a 'rose-tinted' picture of breastfeeding, was found to stem from different beliefs about the role of ante-natal preparation, and a tension between presenting breastfeeding as 'straightforward and rewarding' vs. preparing parents for common problems. The third problem, that some mothers do not access available support that might help them, revealed a dilemma for those delivering support, between proactively providing help vs. ensuring that mothers initiate requests for support.

In practice, the CRD method helped facilitate shifts in thinking towards greater self-awareness and mutual understanding, so that participants gained a shared overview of a complex problem, enabling them to agree practical options for action. The methodology seems to have the potential to work even when beliefs have previously been polarised, because

it uses a single conceptual system that requires participants to identify explicitly a shared objective or common purpose and to frame a conflict in relation to that shared objective. As well as enabling use of formal academic or professional knowledge, the approach can be used to draw directly on the experiences and insights of service users and providers, in this case mothers and NCT practitioners, including breastfeeding counsellors.

A potential weakness of the TOC approach is that the analysis is only as good as the combined knowledge of the people engaged in working through the technique. No systematic review of the literature is required; neither is there any requirement to consider external evidence of benefits, risks or possible unintended consequences of the proposed solutions. Rather, the methodology provides stakeholders and decision-makers with a framework for appraising the information they already have and leaves the inclusion of other knowledge to the discretion of the process managers. In consequence, there is considerable potential for bias if those involved in the process have limited knowledge or are unwilling to appraise critically. In *this* research process, the perspectives of parents and those providing education and support services were sought and included, along with independent research findings. Nonetheless, direct engagement in the process was limited to those mothers and practitioners involved with NCT and the lack of input from those not using these services may limit relevance. Despite this limitation, it is notable that several of the proposed solutions identified by participants resonate with those identified through a metasynthesis of studies of experiences of breastfeeding support (Schmied *et al*. 2011), which highlights the importance of person-centred communication and relationship-building, and also with those emerging from a longitudinal qualitative study of the feeding experiences of UK mothers, published as this article was going to press (Hoddinott *et al*. 2012), in which it is suggested that a proactive family-centred approach, based on mother-centred and incremental feeding goals, may better help parents to manage challenges that arise and more effectively engage with the reality of mothers' feeding experiences.

Using the TOC approach, three priorities for action were identified in relation to the three problems discussed.

1. To support mothers throughout their feeding journeys, at each stage of decision-making, including *protecting* decisions to breastfeed as a key aspect of that decision-making support. The CRD technique produced a shared understanding that it is unhelpful to define mothers according to current feeding behaviour, moving the discussion about breastfeeding support beyond polarised positions of promoting choice vs. promoting breastfeeding, both of which focus on the initial decision rather than the subsequent experience of feeding. While the analysis was articulated in separate CRDs, feelings of pressure, experience of problems and barriers to support are interrelated problems. For example, a mother might (1) plan to breastfeed, (2) experience breastfeeding problems and inadequate support to resolve them, (3) experience conflicting opinions or pressure over her decision, (4) introduce formula milk before she had planned, (5) feel judged for using formula milk and, finally, (6) feel that she has had a stressful and frustrating feeding experience. Thinking about the range of feeding journeys that mothers experience should help policy-makers and service managers to design and supply responsive and sustainable services to support individual (changing) circumstances. The focus should be directed towards 'protecting' the conditions that make breastfeeding decisions realistic, and away from 'promotion' in the narrow sense of using health information to persuade more mothers to initiate breastfeeding.

2. To promote the concept of an investment and adjustment period in the first weeks, during which mothers may need additional support while breastfeeding is becoming established. Breastfeeding is a complex biopsychosocial process requiring the learning of a skill and psychological adjustment and involving new physical sensations and uncertainty. The early weeks are a vulnerable period when timely support, relevant knowledge and expectations seem to make a difference to how women and their partners feel about their feeding experience, and the feeding decisions they continue to make. There is limited under-

standing of which aspects of ante-natal education are effective in improving subsequent experiences, either by building confidence or preventing and resolving problems in the early days after birth. Further evidence is needed about the efficacy of education in preparation for breastfeeding, both as an intervention in its own right, and as part of a more complex intervention starting during pregnancy and continuing after birth. In particular, this work highlights the potential for ante-natal education to raise awareness among women and their partners of the need for practical domestic help, emotional encouragement, and of how to access prompt skilled support for problems in early days and weeks.

3. To develop capacity for models of support that are both mother centred *and* proactive. Finally, the analysis revealed that due consideration needs to be paid to the relationship-building aspects of any new models of infant feeding support, in order to ensure 'acceptability' to women. Any expansion of 'proactiveness' and of capacity, for example, by increased use of peer support, will need to be accompanied by equivalent focus on the needs and wishes of the mother if it is to improve mothers' experiences. Outcomes measuring aspects of women's psychological well-being, such as self-efficacy, sense of fulfilment, confidence or maternal autonomy, are central to the work of breastfeeding counsellors trained to work as person-centred practitioners, but they have tended to be considered as secondary outcomes in UK intervention studies. A renewed professional focus on ongoing support to improve breastfeeding duration rates (Entwistle *et al*. 2011), alongside a growing body of evidence that indicates that confidence (Ertem *et al*. 2001), conviction (Brown *et al*. 2009; Brown & Lee 2011) and sense of coherence (Thomson & Dykes 2011) are key to enabling breastfeeding to be sustained, may in the future lead to greater convergence of thinking around the goals of improving feeding experiences and improving health outcomes.

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The authors declare that they have no conflicts of interest. NCT is a parent-support charity which provides support for breastfeeding.

Contributions

HT led the conceptualisation, design, analysis and interpretation of the data, and drafting of the paper. MN made significant contributions to the conceptualisation, design, analysis, interpretation and drafting.

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