Healthcare professionals’ perspectives on infant feeding support in paediatric inpatients: single-centre qualitative study

Rosie Baker, Elizabeth Evans, Amy Fielden, Bronia Arnott

ABSTRACT

Objective To provide information on baseline knowledge, skills and attitudes (KSA) of paediatric staff to formulate a plan for improving infant feeding support in hospitals.

Design Semistructured interviews assessed baseline infant feeding KSA and experiences in 14 paediatric health professionals of various grades (medical students, healthcare assistants, ward nurses and specialist nurses). Audio recordings were transcribed verbatim and underwent thematic analysis. An online questionnaire gathered descriptive statistics about participants.

Setting A single large hospital trust, North East England.

Results Seven major themes were identified in KSA: culture and trends, roles and working practice, training and resources, the health professional, understanding the parent, effective communication and the challenges of feeding the ill child.

Staff discussed various organisational and personal barriers to acquiring infant feeding support training and experience, and to delivering feeding support. Staff were keen to support families with feeding but often felt constrained by a belief that this required specialist knowledge and skills. Although staff believed they actively promoted breastfeeding-friendly messages, it was evident that marketing communications and personal experiences inadvertently influenced their approach to families.

Conclusions The development of clear, evidence-based infant feeding education and training for paediatric staff delivered by experienced mentors is warranted. Training should cover background theory, delivering practical support, communication skills and creating a baby-friendly hospital environment. UNICEF Baby Friendly Standards would be suitable to inform content. Training is likely to be received positively by staff and benefit women and babies in this setting.

INTRODUCTION

Breastfeeding benefits for infants and their mothers are widely accepted. Human milk is uniquely suited to humans and breastfeeding has population level health benefits.1–6

Exclusive breastfeeding is an important global public health priority;7 however, UK rates remain low: only 48% of babies in England receive any breastmilk at 6–8 weeks.8 Existing health inequalities widen as infants of the youngest mothers and those from lower socioeconomic groups experience the lowest rates of breastfeeding.9

UNICEF UK describe breastfeeding as an emotive subject, as many families have not breastfed or have suffered trauma after unsuccessful attempts at breastfeeding. In 2016, UNICEF UK made a ‘Call to Action’ on governments to change the conversation around breastfeeding, stating:

‘In the UK breastfeeding is a highly emotive subject … No parent should have to feel the pain of any implication that they have not done the best for their child, but the UK context has become so fraught that conversations about breastfeeding are shut down’.
Infants requiring hospitalisation experience greater challenges to breastfeeding than their peers.\textsuperscript{10–12} Parents’ normal social networks are disrupted and psychological well-being can be affected.\textsuperscript{13–14} The COVID-19 pandemic has created additional challenges for parents and staff around infant feeding.\textsuperscript{15–17} Hospitals have a responsibility for health promotion: messages around infant feeding experienced during admission are inevitably disseminated through society and hospitals have a duty to ensure such messages are accurate and helpful. Breastfeeding support from healthcare professionals increases initiation and duration of breastfeeding.\textsuperscript{18–21} Support should consist of face-to-face contact with scheduled follow-up, tailored to the needs of the group.\textsuperscript{19,20} Improvements in attitudes of healthcare professionals increases the quality of care provided.\textsuperscript{22,23} Training staff in infant feeding improves knowledge and skills and engenders supportive attitudes,\textsuperscript{24} however, infant feeding training is not mandatory in UK nursing and medical undergraduate curricula. Deficits still exist in breastfeeding knowledge and skills across all disciplines of UK healthcare staff and this study aims to improve understanding of constraints on delivery of infant feeding support impacting on this important health promotion activity.

**METHODS**

**Setting**
A regional paediatric hospital, part of a large teaching hospital of which the maternity and neonatal departments have UNICEF UK Baby Friendly accreditation.

**Design**
A qualitative study using in-depth interviews.

**Sampling and recruitment**
All staff who had contact with families with infants <6 months working in paediatric wards were eligible for inclusion. Convenience sampling was employed. A draw for a £50 shopping voucher was offered as an incentive. The study was promoted by poster, leaflets and word-of-mouth within the paediatric department. The researcher contacted interested individuals via email and screened for inclusion by predetermined criteria. A 10+3 evidence-based approach was applied to power the study.\textsuperscript{25,26} 13 interviews plus pilot were conducted and analysis demonstrated saturation had been achieved.\textsuperscript{25,27} Audio recordings were transcribed verbatim by the interviewer.

**Procedure**
Face-to-face semistructured interviews were conducted with 14 paediatric staff and students in May 2019. Interviews, conducted by the author on university premises adjacent to the Children’s Hospital, lasted approximately 45 min (range 32–64 min). The interviewer identifies as a mother and medical doctor of 18 years of experience and has had personal experience of breastfeeding.

**Data analysis**
Thematic analysis as described by Braun and Clarke\textsuperscript{28} was undertaken to interpret the qualitative data. Data from the pilot interview were considered to be of sufficient quality to be included in the main results. Data for the first three interviews were coded independently by three members of the research team. The findings were discussed using a reflexive approach and a coding framework was developed and applied to the remaining transcripts. This was an iterative process and codes were modified throughout the process. Common themes were identified on examining the codes and refined on further discussion with the research team.

The study used a contextualist paradigm: data were appreciated through the lens of critical realism and observation of the empirical domain to understand the causal mechanism underpinning health professionals’ knowledge. Simultaneously, a phenomenological approach was taken to study the conscious experience of the health professional from the first-person perspective.

**Ethics**
Approval was granted by Newcastle University. The National Health Service (NHS) ethical approval was not required as there was no patient involvement and staff participated in their own time. It was not possible to include patient or public involvement.

**Table 1** Summary of topic guide

| Domain                          | Question                                                                 |
|---------------------------------|--------------------------------------------------------------------------|
| Basic demographics              | Age, Gender, Parental status, Job role                                   |
| Prior training and experience   | Formal/informal training, Content, Resources and information sources, Frequency and nature of advice given to families |
| Confidence in giving infant feeding advice | Level of confidence, Barriers and enablers to delivering advice |
| Attitudes                       | Factors which might influence their advice, Opinion on whether infant feeding support is part of their role |
| Perceptions                     | Differences between breast milk and formula, Health benefits of modes of infant feeding, Superiority of either mode of feeding, Impact of mode of feeding on relationship with the infant |
RESULTS
Of the 14 participants, 11 responded to the online questionnaire. Analysis of demographics showed a diversity of ages, job roles, professional experience and parenting experience. Participant information is displayed in table 2.

From the interview data, seven themes with subthemes illustrating baseline knowledge, skills and attitudes of participants were identified (figure 1).

Societal issues
Most participants felt a societal structure based on nuclear families, work and Western parenting styles was detrimental to breastfeeding, creating isolation and poorer support for mothers.

In other cultures, women aren’t as isolated so there’s more support looking after the other children. (ID7)

Social norms including non-visible breastfeeding were thought to by some to contribute to low breastfeeding rates.

I think that communal knowledge is lost ... people probably have smaller families, there’s less opportunity to observe babies, the cultural loss of what’s normal. (ID1)

The sexualisation of the breast and low value placed on human milk were thought by some participants to encourage greater preference for formula feeding, fuelled by aggressive marketing tactics of manufacturers to which staff as well as parents have been exposed.

I’m assuming formulas have improved in terms of how much they try to match breast milk. (ID1)

Stigma associated with breastfeeding in public persisted, although many believed rates of breastfeeding in the UK were now increasing, and that the media have recently changed their position on infant feeding.

I think there’s a lot of women don’t feel comfortable breastfeeding in public and there’s still a lot of stigma around it which I think is ridiculous, (ID2)

Participants thought families and staff have become de-skilled in assessing infant nutritional sufficiency and milk volume assessment was promoted as the optimal measure of well-being.

With breastfeeding … how do you know if they’re getting enough? (ID6)
Roles and working practice
Infant feeding support was considered by most participants to be a clinical role, requiring training to provide the ‘right’ support. Despite daily contact with parents, non-clinical staff were not believed to have a significant influence of infant feeding.

Clerical stay with clerical, they don’t have any contact with bodily fluids. (ID3)

A strict qualification hierarchy was described by all, with breastfeeding coordinators and midwives considered senior alongside consultants, despite doctors’ absence of formal training in infant feeding.

They (breastfeeding coordinators) have got different techniques that we don’t know about. (ID13)

Staff, particularly those of lower grade, described concern at giving ‘wrong’ advice and expressed preference for specialist advice, even if this meant the family having to wait.

I’m not medical and I would hate to give the wrong advice…If I give the wrong advice, I’m in trouble. (ID6)

Participants all described a desire to do more to support infant feeding. Some felt skill development was not prioritised or encouraged by management while others recognised infant feeding ‘champions’ in the hospital.

I think that as a Trust there are personalities, people who are pushing it…we need those people to champion. (ID7)

Training and resources
Several staff described enjoying helping parents to feed their babies, that they want to learn more, and experience negative emotions when feeling ill-equipped to give support.

Participants overall believed basic training should be universal, accessible and delivered at induction. Several staff highlighted concerns that newly appointed staff were unskilled in delivering feeding support.

We do have a lot of young girls who obviously haven’t gone through the training yet and haven’t got the experience or are able to help them so sometimes the parents have to wait. (ID 13)

Health professionals stated information should be simple but approved by NHS. The desired content of the training included information on techniques around breastfeeding and formula feeding, constituent elements of milk including formula, and how to deliver advice effectively. None cited the published UNICEF UK guidance on formula feeding.

Many felt the existing training was focused on healthy children, whereas in hospital feeding problems can be more complex. Senior nurses and speech therapists read journals whereas junior nurses consulted protocols and guidelines or relied on colleague opinion.

I know we’ve got protocols to read through; I think I just use the colleague’s advice. (ID8)

All staff believed clarity and consistency of advice was important but believed that this was difficult to achieve.

I think between the health visitor and La Leche league….she’d been given lots of ideas and didn’t know which one was right or wrong. (ID5)

Time to spend with the patient was deemed vitally important by most, but difficult to achieve due to other pressures.

We could absolutely do it so much better and some of it comes down to time…It’s the availability of staff and for them to be able to access that kind of training. (ID7)

The health professional
Paediatric staff possessed a variety of personal feeding experiences and had differing views on to extent to which their own experience should form part of the support they give. Extensive workplace experience was considered by some to be similar in status to personal familiarity with feeding.

[name, non-parent] has been doing this job a long time, and had all of that experience of mums, she’s probably different to somebody’s that’s just started working on the wards. (ID9)

Staff without personal experience of a mode of feeding felt less able to support women using that mode of feeding. Some staff believed sharing personal experience enhanced the credibility of their support and advice while others purposefully avoided personal references.

I can say ‘Keep going, do try it, because it’s such an amazing feeling’. (ID13)

Staff who had difficult personal breastfeeding experiences had mixed views on whether this aided or hindered the delivery of breastfeeding support and messages, though all believed this enhanced empathy.

I didn’t know it could be hard, I think that’s a useful perspective to have. I didn’t find it easy to begin with,
so I am I thinking I do bring that supportive side to it. (ID12)

Parental attitudes
Staff appreciated parental autonomy. The parents’ right to choose feeding method was supported, but this was seen to close down some conversations around reasons behind formula feeding.

Several staff recognised that younger mothers faced challenges to breastfeeding, and that these often seemed interlinked with factors related to low socioeconomic status.

I think that can be a challenge for younger mums… It’s easier to go with whatever gets you most support from your extended family…you need support to breastfeed. (ID1)

Some identified a perceived increase in willingness of younger mothers to start breastfeeding but acknowledged family, particularly the woman’s mother, as having a significant influence on feeding mode.

You don’t want to sound patronising because that’s how they’ve been shown by their mam. (ID3)

Older mothers were perceived by a few participants as more motivated to persist with breastfeeding but to suffer more with feelings of inadequacy if this failed. Several staff believed that some infant-mother dyads were simply ‘not able’ to breastfeed.

If they’re really stressed, worried which is totally understandable, their supply kind of doesn’t come in properly. (ID2)

Effective communication
Building rapport, appearing friendly and regular contact were thought by most to be conducive to good feeding support. Encouragement and positive words were considered powerful, though some participants revealed they sometimes undermined breastfeeding friendly messages when attempting to give formula feeding mothers well-intentioned reassurance.

Sometimes I’ve said ‘You know when you see the children lined up to go into nursery when they’re three and a half you can’t tell’. (ID9)

Most staff had encountered difficult scenarios or conflict around feeding.

‘Is there a reason why you need to prop it up? Do you need a hand with something?’ We wouldn’t be doing our job properly if we didn’t….address the situation. (ID8)

All participant described feeling uncomfortable asking a formula fed parent why the baby was not being breastfed.

Challenges of feeding the ill child
Universally, staff identified differences in needs of hospitalised infants and their families compared with healthy peers. Several staff believed breast milk to be especially important for babies in hospital.

Our babies, they are really vulnerable…they don’t get that same protection from the formula that you would from breastfeeding. (ID2)

In contrast, some maintained that specialist formula was the optimal food for some ill children, particularly those extremely premature. Practical issues around establishing and maintaining adequate milk supply were discussed.

The main difficulty is getting them to latch on and feed 2 months down the line. (ID13)

Many highlighted the importance of including parents in childcare and empowering them as far as possible.

Continuing to support them to do what they can for that baby, even just holding the tube while the baby’s being fed…they feel they’re actually an active participant in the baby’s care. (ID9)

DISCUSSION
The findings of the study demonstrate the variation in experience, knowledge and skill of staff caring for families in a paediatric inpatient setting. Aligning with previous learning needs studies, staff wanted formal face-to-face training delivered at induction and ‘situated learning’ observing breastfeeding coordinators to empower them to deliver quality support.31 32

Knowledge
Staff identified the need for evidence-based, consistent advice across services. Basing the content on UNICEF BFI standards including; normal infant growth and behaviour, signs of good feeding including attachment and latch, infant contentment with a shift away from a milk-volume-based paradigm, and responsive feeding, whether with breast milk or formula, could be a rational choice.33 Such training is available in this setting through the specialist infant feeding health visitor, however this has traditionally been available only to staff working in midwifery and neonatology. Access to infant feeding training for all relevant staff should be built into organisational development plans.
Skills
Good interprofessional communication and strong leadership are key to delivering an effective system of infant feeding support and staff in this study identified the need for breastfeeding champions to support the work. Staff identified that parents on paediatric wards would benefit from the expertise of breastfeeding coordinators already working in the setting and better access to this specialist service appears to be warranted.\(^\text{18}\) Staff identified structural barriers within the NHS inpatient systems which can impair holistic care; addressing these could allow staff to manage mother and baby as a breastfeeding dyad, rather than ‘patient and visitor’.

Staff identified the needs of the healthy infant and the ill infant as different. Specific targeted training in the feeding of ill babies could help paediatric staff, gaps identified were best practice on managing delayed introduction of breastfeeding and empowering parents to be part of the daily care of their ill child.

Attitudes
Staff identified that good communication skills are needed to support infant feeding effectively, however some attitudes risk undermining breastfeeding. The responsibility of all staff to provide a baby-friendly hospital experience should be reinforced during training. The influence of formula milk marketing apparent in the participants responses should be taken into account during training and the importance of the WHO code made clear to staff.\(^\text{24,35}\)

Strengths
This study adds to the literature by providing up to date evidence for the need for staff training outside of maternity and neonatal settings. The diverse nature of the participant group allowed the study to demonstrate the variation in expertise and experience of staff who may have influence on infant feeding behaviours, outside of previously studied nurse and midwife populations.

Weaknesses
This study was conducted at a single site, potentially limiting generalisability to other settings. Heterogeneity of job roles between participants means the authors cannot recommend on targeting of training. Although the interview design is likely to demonstrate attitudes effectively, this method cannot provide an exhaustive list of knowledge or skill gaps to be addressed.

CONCLUSION
Hospital staff, particularly those working closely with feeding, are in a powerful position to influence infant feeding. This study highlights the need for the training to address the provision of consistent, sensitive and easily accessible practical support for parents during their time in hospital. Such a health promoting intervention can have wide reaching benefits for the population, but suitable structures and resources are essential to the provision of effective training and delivery of a high-quality service.

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Contributors
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Data are available upon reasonable request. Data are not in a repository. Unpublished data are stored securely in password protected files at Newcastle University, according to GDPR guidelines, and will be destroyed in August 2028. They include deidentified participant data including demographics, original transcripts, study protocol and the study presented as an original dissertation submission for Master of Public Health degree. Data are available from the first author at http://orcid.org/0000-0002-9183-5040.

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ORCID iD
Rosie Baker http://orcid.org/0000-0002-9183-5040

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