BMJ Paediatrics Open

Healthcare professionals' perspectives on infant feeding support in paediatric inpatients: Qualitative study

Journal:	*BMJ Paediatrics Open*
Manuscript ID	bmjpo-2021-001247
Article Type:	Original research
Date Submitted by the Author:	04-Aug-2021
Complete List of Authors:	Baker, Rosie; Newcastle University, Population Health Sciences Evans, Elizabeth; Newcastle University Fielden, Amy; Newcastle University Arnott, Bronia; Newcastle University
Keywords:	Health services research, Neonatology

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Original Research

Healthcare professionals' perspectives on infant feeding support in paediatric inpatients: Qualitative study

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What is already known on this topic?

- Rates of breastfeeding in the UK are low. UNICEF states 'conversations around breastfeeding are being shut down'
- Hospitalised infants start life from a position of disadvantage with regard to feeding and bonding. Barriers prevent their parents from delivering the best care
- Good infant feeding support provided by healthcare professionals can improve rates of breastfeeding: hospital staff are in a powerful position to deliver health promotion messages

What this study adds

- Provides further evidence of healthcare professionals' **learning needs**, based on their perspectives around infant feeding
- Highlights specific challenges in supporting parents to feed ill infants provides evidence for infant feeding training specific to the needs of **hospitalised babies**
- Acknowledges the **role of *all* staff** in providing infant feeding support and the power of hospitals to deliver breastfeeding-friendly messages to families and wider population

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: Semi-structured interviews assessed baseline infant feeding KSA and experiences in 14 paediatric health professionals of various grades (medical students, health care 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. While 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 experience 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 designed for humans and breastfeeding has population level health benefits(1) (2) (3, 4) (5, 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 socio-economic groups experience the lowest rates of breastfeeding (9).

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.'*** **(UNICEF UK)**

Infants requiring hospitalisation experience greater challenges to breastfeeding than their peers(10-12). Parents' normal social networks are disrupted and psychological wellbeing can be affected (13, 14). The COVID-19 pandemic has created additional challenges for parents and staff around infant feeding(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(18-21). Support should consist of face-to-face contact with scheduled follow up, tailored to the needs of the group(20) (19). Improvements in attitudes of healthcare professionals increases the quality of care provided(22, 23).

Training staff in infant feeding improves knowledge and skills and engenders supportive attitudes. (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

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 (26, 27). 13 interviews plus pilot were conducted and analysis demonstrated saturation had been achieved. (26, 28). Audio recordings were transcribed verbatim by the interviewer.

Procedure Face to face semi-structured 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 minutes. Topic guide discussion prompts were developed from a literature review and expert panel. Participants were fully informed and consented prior to the interview.

Following the interview, participants received an emailed link to the online questionnaire which included questions from the Australian Breastfeeding Knowledge Questionnaire ABKAQ(29), adapted for use in the this setting (author permission granted). The questionnaire remained open for 14 days and no reminders were sent.

Data analysis Thematic analysis as described by Braun and Clarke was undertaken to interpret the qualitative data(25). Data were coded by the author and drawn into common themes. 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. 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.

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. Specific questionnaire data on staff knowledge were disseminated directly to the hospital trust and are not explored here.

From the interview data, seven themes with sub-themes illustrating baseline knowledge, skills and attitudes of participants were identified(Figure 1):

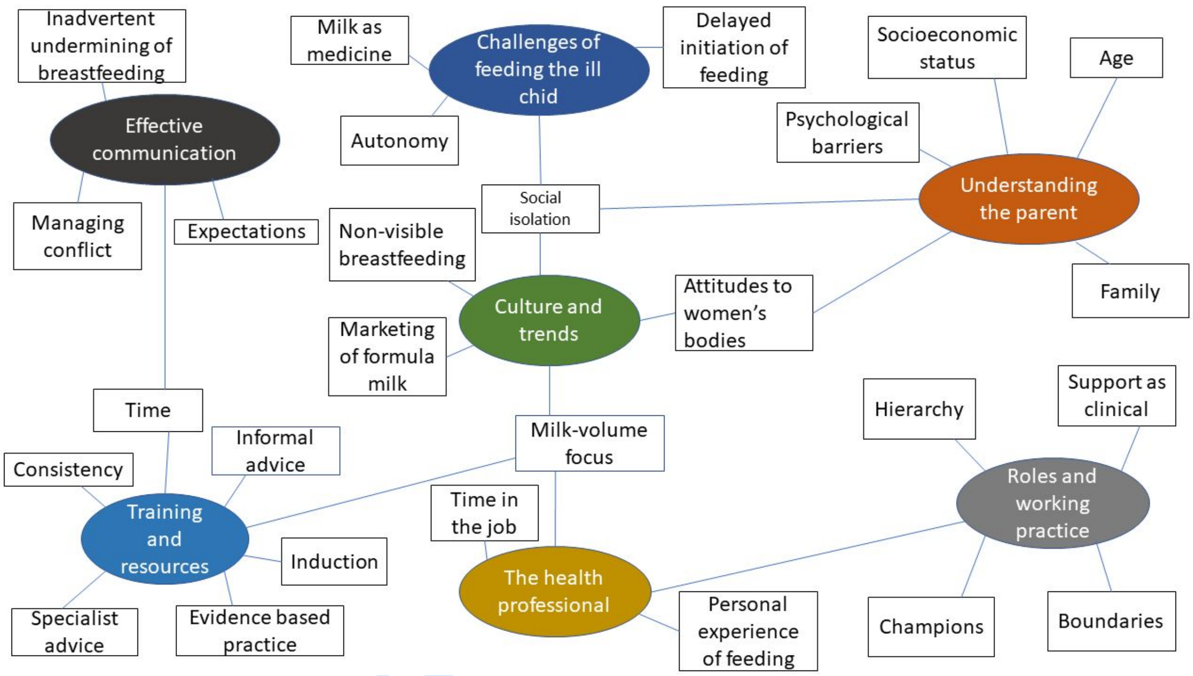

Figure 1 Thematic map

A. Culture and Trends: 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 Speech Therapist)

Social norms including non-visible breastfeeding were thought 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 GP)

The sexualisation of the breast and low value placed on human milk were thought 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 GP)

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 Staff Nurse)

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 wellbeing(30).

'With breastfeeding…how do you know if they're getting enough?'(ID6 Health Care Assistant)

B. Roles and working practice: Infant feeding support was considered 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 Play Specialist)

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

'They [breastfeeding coordinators]*'ve got different techniques that we don't know about.'*(ID13 Staff Nurse)

Staff 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 Health Care Assistant)

Participants 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 Speech Therapist)

C. Training and Resources: Staff enjoy helping parents to feed their babies, want to learn more, and experience negative emotions when feeling ill-equipped to give support.

Participants 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 Staff Nurse)

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 well 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 upon colleague opinion.

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

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 Specialist Health Visitor)

Time to spend with the patient was deemed vitally important, 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 Speech Therapist)

D. 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 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 Specialist Nurse)

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 Nurse)

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 Speech Therapist)

E. Understanding the Parent: 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.

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 GP)

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 Play Specialist)

Older mothers were perceived 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 Staff Nurse)

F. Effective Communication:

Building rapport, appearing friendly and regular contact were thought 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 3 and a half you can't tell"'*(ID9 Specialist Nurse)

Most staff had encountered difficult scenarios or conflict around feeding. All participant described feeling uncomfortable asking a formula fed parent why the baby was not being breastfed.

> *'"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 Staff Nurse)

G. Challenges of Feeding the Ill Child: Universally, staff identified differences in needs of hospitalised infants and their families compared to 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 Staff Nurse)

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.'*(ID 13 Staff Nurse)

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 whilst the baby's being fed…they feel they're actually an active participant in the baby's care.'(ID9 Speech Therapist)

Discussion

Aligning with previous learning needs studies, these outcomes indicate formal face to face training delivered at induction and 'situated learning' through practical work with a mentor to be the optimal format for improving the quality of infant feeding support(31) (32).

Knowledge Evidence based, consistent advice across services is needed. 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, is rationalised (33).

Skills Staff should be reminded to communicate tactfully and be sensitive to parents' feelings but avoid undermining breastfeeding. Helping a parent to discuss their infant feeding experience could help them to breastfeed their next baby successfully.

Good inter-professional communication and strong leadership are key to delivering an effective system of infant feeding support in this setting. Adequate resources, including time, should be allocated to allow prioritisation of infant feeding support training and delivery (18). Structural barriers to providing holistic support should be addressed to allow staff to manage mother and baby as a breastfeeding dyad, rather than 'patient and visitor'.

Specific targeted training in the feeding of ill babies should be developed, including managing delayed introduction of breastfeeding and empowering parents to be part of the daily care of their ill child.

Attitudes The responsibility of all staff to provide a baby-friendly hospital experience should be reinforced during training**.** Incorporating 'myth busting' in the infant feeding education may reduce the impact of commercial marketing on staff perspectives.

Staff should be educated that providing reassurance around formula feeding, however well intended, could undermine optimal feeding in the population. Training should include insight into influence of staff members' experience along with population level barriers and enablers to breastfeeding in the context of individual circumstances.

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 design increases the probability that latent participant perspectives have been elicited.

Weaknesses Heterogeneity of job roles between participants means the authors cannot recommend on targeting of training. While 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 families, 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 require suitable structures and resources are essential to the provision of effective training and delivery of a high-quality service.

Funding: No grant was obtained for this research from any public, commercial or not for profit funding agency

Competing interests: None declared

Patient consent for publication: Not required.

Provenance and peer review: Not commissioned; externally peer reviewed

Data availability statement: Data are available on reasonable request. The data consist of the full transcripts. Audio recordings have been destroyed.

Boxes- 47

Text 2498

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BMJ Paediatrics Open

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Journal:	*BMJ Paediatrics Open*
Manuscript ID	bmjpo-2021-001247.R1
Article Type:	Original research
Date Submitted by the Author:	29-Sep-2021
Complete List of Authors:	Baker, Rosie; Newcastle University, Population Health Sciences Evans, Elizabeth; Newcastle University Fielden, Amy; Newcastle University Arnott, Bronia; Newcastle University
Keywords:	Health services research, Neonatology

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Original Research- Title page

A. Title

Healthcare professionals' perspectives on infant feeding support in paediatric inpatients: Single centre qualitative study

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D. MeSH headings
Infant D007223
Breast Feeding D001942
Inpatients D007297
Pediatrics D010372
Education D004493

E. Word count: (after editorial review): 2770

F. Reference count: 36

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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(10-12). Parents' normal social networks are disrupted and psychological wellbeing can be affected (13,14). The COVID-19 pandemic has created additional challenges for parents and staff around infant feeding(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(18-21). Support should consist of face-to-face contact with scheduled follow up, tailored to the needs of the group(20)(19). Improvements in attitudes of healthcare professionals increases the quality of care provided(22,23).

Training staff in infant feeding improves knowledge and skills and engenders supportive attitudes(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(25, 26). 13 interviews plus pilot were conducted and analysis demonstrated saturation had been achieved(25, 27). Audio recordings were transcribed verbatim by the interviewer.

Procedure Face to face semi-structured 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 minutes(range 32- 64 minutes). The interviewer identifies as a mother and medical doctor of 18 years' experience and has had personal experience of breastfeeding. Participants were fully informed and consented prior to the interview. Topic guide discussion prompts were developed from a literature review and expert panel and are summarised in table 1.

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

Data analysis Thematic analysis as described by Braun and Clarke was undertaken to interpret the qualitative data(29). 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. 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.

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 below.

Table 2, Participant information

Age	Mean 44 years (range 21-58 years)	
Job role with frequency	Staff nurse	3
	Play specialist	2
	Health visitor	1
	Health care assistant	1
	Medical student	3
	Specialist nurse	1
	Speech and language therapist	2
	General Practitioner	1
Time since qualification	Mean 21 years (range 0-38 years)	
Parity	Mode 2 (range 0-3)	

From the interview data, seven themes with sub-themes illustrating baseline knowledge, skills and attitudes of participants were identified(Figure 1):

Figure 1 Thematic map

A. 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 Speech Therapist)

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 GP)

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 GP)

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 Staff Nurse)

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 wellbeing(30).

> *'With breastfeeding…how do you know if they're getting enough?'*(ID6 Health Care Assistant)

B. 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 Play Specialist)

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]*'ve got different techniques that we don't know about.'*(ID13 Staff Nurse)

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 Health Care Assistant)

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 Speech Therapist)

C. 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 Staff Nurse)

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(31).

Many felt the existing training was focused on well 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 upon colleague opinion.

> *'I know we've got protocols to read through; I think I just use the colleague's advice'*(ID8 Staff Nurse)

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 Specialist Health Visitor)

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 Speech Therapist)

D. 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 Specialist Nurse)

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 Nurse)

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 Speech Therapist)

E. 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 GP)

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 Play Specialist)

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 Staff Nurse)

F. 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 3 and a half you can't tell"'(ID9 Specialist Nurse)

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 Staff Nurse)

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

G. Challenges of Feeding the Ill Child: Universally, staff identified differences in needs of hospitalised infants and their families compared to 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 Staff Nurse)

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.'*(ID 13 Staff Nurse)

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 whilst the baby's being fed…they feel they're actually an active participant in the baby's care.'*(ID9 Speech Therapist)

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(32)(33).

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(34). 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 inter-professional 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(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 well 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(35, 36).

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. While 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 families, 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.

Study statement

Funding: No grant was obtained for this research from any public, commercial or not for profit funding agency

Competing interests: None declared

Patient consent for publication: Not required.

Provenance and peer review: Not commissioned; externally peer reviewed

Data availability statement: Data are available on reasonable request. The data consist of the full transcripts. Audio recordings have been destroyed.

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