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Pat Hoddinott had the original idea for ABA-feed intervention and combining an assets-based approach for infant feeding with some of the learning gained from the FEST pilot trial which she led. The genogram component of the intervention is based on work undertaken by Dr Kirsty Darwent as part of her PhD at the University of Stirling.

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NM reports contributions to the Academy of Medical Sciences' Child Health report as part of its steering committee and to the BRIDGE Commission report. Both mention nutrition in early childhood but these were unrelated to this research.

JS reports NIHR funding, self-employment as a midwifery expert witness and membership of TSC/IDMC of NIHR studies.

NS reports NICE adoption and impact reference panel membership and is a clinical midwife at Cardiff and Vale University Hospital of Wales.

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Author contributions

All authors contributed to study conception and design.

JC, NC, DJ, JM and NS contributed to data collection.

JC, NC, DJ, JM and NS analysed the data, and all authors supported data interpretation.

JC and NC wrote the manuscript with input from GT.

All authors read and approved the final manuscript.

Data-sharing statement

All data requests should be submitted to the corresponding author for consideration. Access to anonymised data may be granted following review.

Experiences of the ABA-feed infant feeding intervention: a qualitative study with women, peer supporters and coordinators

Abstract

UK breastfeeding rates are low, with health inequalities in initiation and continuation. Breastfeeding peer support interventions are recommended in UK and global policy. The Assets-based feeding help Before and After birth (ABA-feed) trial tested the effectiveness of proactive, woman-centred support for infant feeding delivered by trained peer supporters (Infant Feeding Helpers; IFHs) in addition to usual care at 17 UK sites. Using data from an embedded process evaluation, this paper reports the views and experiences of women receiving, and the IFHs and coordinators delivering, ABA-feed.

Women (n=2475) were recruited to the trial antenatally; 1,458 were allocated to the intervention. Thirty women from five study sites took part in qualitative interviews between 9 and 23 weeks postnatal. IFHs (n=72) and coordinators (n=25) from across all sites participated in individual or group interviews towards the end of the intervention period. Interview transcripts were analysed alongside 1147 free-text responses from an eight-week postnatal follow-up survey using Framework Analysis. The ABA-feed intervention was highly acceptable to women, including younger women, those with less education, from diverse ethnic groups, single mothers, and those who intended to formula feed, as well as to IFHs and coordinators. Both remote and in-person support was acceptable. While women valued proactive daily contact during the first 14 days postpartum, some IFHs found this challenging, and some struggled with supporting women who chose formula feeding or were less engaged. This study highlights the value of flexible, proactive, woman-centred infant feeding support.

Keywords: acceptability, assets-based, breastfeeding, infant feeding, peer support, perinatal, qualitative

Introduction

Although short- and long-term health benefits of breastfeeding for both infants and mothers are well-established (Victora et al., 2016), UK breastfeeding duration remains low, with a significant decline in rates during the first two weeks of life (Public Health Agency 2021; Public Health England, 2021; Public Health Scotland, 2021; Welsh Government, 2021). There are health inequalities in breastfeeding initiation and continuation (Cohen et al., 2018; Mangrio et al., 2018). In the UK, women who are White, have lower levels of education, and those living in disadvantaged areas are less likely to breastfeed their infants Public Health Agency 2021; Public Health England, 2021; Public Health Scotland, 2021; Welsh Government, 2021).

A survey of women's experiences of maternity services in England and Wales found the most significant unmet support need was related to infant feeding (Plotkin, 2017). Women who feel they do not receive enough help with breastfeeding difficulties are more likely to discontinue breastfeeding within the first two weeks (McAndrew et al., 2012). Systematic review evidence identifies the need for early breastfeeding support (Ahmed et al., 2019).

The World Health Organization (WHO) recommends peer support for initiation and continuation of breastfeeding (WHO, 2003); this is reflected in UK guidance (National Institute for Health and Care Excellence, 2025). Peer support services are defined as "recruiting a group of local women, who have breastfed their babies, to undergo a brief training program focused on supporting other women to breastfeed" (Dykes, 2005).

A variety of breastfeeding peer support programmes are available in the UK (Grant et al., 2018), commonly using volunteers (Padgett et al., 2024). Research suggests that to enhance effectiveness and acceptability, peer support interventions should be woman-centred (Thomson et al., 2012; Hoddinott et al., 2012); help with formula and mixed feeding in a proactive manner (Hoddinott et al., 2012; Dennis et al., 2002); span antenatal and postnatal periods (Patnode et al., 2016); focus on the crucial early weeks (McAndrew et al., 2012; Ingram, 2013; Hoddinott et al., 2012); and extend beyond the first two weeks post-birth (Hoddinott et al., 2012; Paranjothy et al., 2017).

The Assets-based feeding help Before and After birth (ABA-feed) intervention was initially developed and delivered as part of a feasibility study (the ABA study) in two English sites with low breastfeeding rates (Clarke et al., 2020). Qualitative interviews conducted within the feasibility study found ABA to

be acceptable to women and peer supporters (Ingram et al., 2020). Insights from the ABA study informed the ABA-feed intervention.

In the ABA-feed trial, infant feeding leads and peer supporter coordinators (referred to as 'coordinators') received training to deliver an additional eight hours of instruction to local breastfeeding peer supporters. This training enabled peer supporters to take on the role of Infant Feeding Helpers (IFHs). A description of the ABA-feed training is available (Clarke et al., 2025 - submitted).

The ABA-feed intervention offers proactive, woman-centred support for all feeding types in addition to usual care. Women are assigned an IFH who delivers the intervention. The intervention uses an assets-based approach and incorporates behaviour change techniques (BCTs). The intervention begins antenatally around 30 weeks' gestation with IFHs offering a face-to-face meeting to discuss infant feeding and explore the woman's personal and local 'assets' for feeding. The assets include the IFH and woman developing a 'Friends and Family diagram' (infant feeding genogram) (Thomson et al., 2020) and an 'assets leaflet' called 'What's Available Locally', tailored for each site to include local information about infant feeding support and baby groups. At the antenatal meetings, IFHs also discuss the proposed 'intervention timeline' to gauge women's preferences for ongoing frequency and method of contact. Postnatally, IFHs provide daily text or telephone contact for the first two weeks, with contact decreasing in frequency up to eight weeks. Figure 1 shows women's and IFHs' journey through the intervention.

The ABA-feed study was a multicentre randomised controlled trial with economic evaluation to explore clinical and cost-effectiveness of the intervention plus usual care compared with usual care only in first-time mothers. Details of the ABA-feed trial and intervention (including logic model) are described in a protocol paper (Trial Registration: ISRCTN17395671) (Clarke et al., 2023). Trial results will be reported elsewhere.

This paper aims to describe intervention acceptability by exploring the views and experiences of women with different demographic backgrounds and feeding intentions receiving the intervention, and the views and experiences of IFHs and coordinators delivering the intervention.

Key messages

- 1. Women with a wide range of demographic characteristics and feeding intentions found the ABA-feed intervention acceptable, valuing the continued, proactive contact starting antenatally.
- 2. Women appreciated the woman-centred support that enabled them to draw on social support and local assets.
- 3. IFHs and coordinators were positive about the intervention, although there was some hesitancy from IFHs to provide daily postnatal contact, and to support formula feeding.
- 4. There is a need to feed back to IFHs how much women value daily proactive contact in the early days postnatally, to encourage them to continue even when women do not respond.
- 5. Both in-person and remote antenatal meetings were acceptable to women and IFHs, with some preferring in-person meetings and others liking the convenience of remote meetings.

Methods

Study sites

Seventeen sites participated in the ABA-feed study, each being an English local authority area or National Health Service (NHS) Health Board in Wales or Scotland, or part of a local authority area with low breastfeeding rates. Sites were chosen where usual care did not provide universal proactive antenatal and postnatal peer support. The study was approved by the East of Scotland Research Ethics Committee (21/ES/0045).

Sampling and recruitment

Trial recruitment

From January 2022-January 2024, women aged 16 years or over with their first singleton pregnancy were recruited between 20⁺⁰ and 35⁺⁶ weeks' gestation regardless of feeding intention. Recruitment methods included direct invitations in antenatal clinics, posters and social media (Clarke et al., 2023). All women received a participant information leaflet (PIL) and completed a baseline survey that gathered demographic information and feeding intentions. Following survey completion, women provided informed consent in writing or by telephone/video call before randomisation.

2,475 women were recruited, with 1,458 randomised to receive the intervention. Participants were followed up with surveys (email or postal) at 8, 16, and 24 weeks postnatally. Non-responders received email and text message reminders. In this paper, we draw on data collected as part of the 8-week survey, alongside qualitative interview data.

Sampling and recruitment - women's interviews

We aimed to interview 30 women. Sampling was based on infant feeding intention, ascertained by responses to two baseline survey questions: (1) open-text responses to the question 'At the moment, what are your thoughts about how you might feed your baby?', where responses were categorised by two researchers using a scale developed by Hoddinott and Pill (1999) (Table 1); and (2) responses to the closed question 'What milk do you want to give your baby over the first 6 months of his/her life - breastmilk only, mainly breastmilk, half and half breast and formula milk, mainly formula or formula milk only?' Women whose responses suggested uncertain feeding intention were prioritised for sampling, as women interviewed for the feasibility study (Ingram et al, 2020) were more committed in their feeding intentions and we wanted to explore acceptability among less certain women. Women were purposively sampled from five sites, following completion of their 8-week survey. We also aimed to include women with varying levels of engagement with the intervention (ascertained from contact logs completed by IFHs), and diverse demographic characteristics to include a range of ages, education levels and ethnicities.

Selected women were sent an email invitation and PIL, with up to two reminders. Overall, 55 women were invited, of whom 30 agreed, 19 did not respond, and six declined (due to being too busy (n=3) or not interested (n=3)).

Recruitment of IFHs to the ABA-feed trial

Existing breastfeeding peer supporters were recruited locally by coordinators to become IFHs for the ABA-feed trial. Following receipt of the ABA-feed training, IFHs were asked to complete a short survey including demographic information.

Recruitment of IFHs and coordinators - qualitative study

At the end of the intervention, IFHs were sent a PIL and invited to take part in an individual or site-specific group interview via coordinators (who did not attend the interview). IFHs from all sites participated in an individual interview (n=8) or one of 18 group interviews. Reasons for IFHs declining participation were not recorded. Coordinators at all sites were also invited at the end of the study to take part in an individual interview, or group interview at sites with more than one coordinator. No demographic details were collected from coordinators.

Data collection

Topic Guides

Interview topic guides (Supplementary files) were informed by the ABA-feed logic model (Clarke et al., 2023) and designed to explore intervention acceptability and fidelity. Topic guides were reviewed after first use by research team discussions.

Interview consent process

For individual interviews, informed consent was recorded before the interview; consent for group interviews was recorded in advance by telephone. The consent process was recorded using an encrypted audio-recorder.

Interview conduct

Women's interviews took place from November 2022-November 2023; group and individual IFH and coordinator interviews from June 2023-April 2024. Interviews were conducted by five female researchers with qualitative research experience: JC (PhD, public health research), NC (DPhil, maternal health research), DJ (RM BSc, midwifery research), JM (MSc, public health research) and NS (PhD, midwifery research). Individual interviews were conducted by a single researcher who made field notes after interview. Most group interviews with IFHs (15/18) had a second researcher (from the above five researchers) present to assist with any coordination tasks. Interview discussions were audio-recorded. The five researchers met after conducting their first interviews with women, IFHs and coordinators, and then on a regular basis, to review the interview approach, including use of the topic guide.

Researchers had no or limited interactions with participants before the interviews (some women had spoken to the interviewing researcher as part of study recruitment; researchers were purposefully selected to conduct interviews with IFHs and coordinators where they had no or limited previous contact).

All women's, four IFHs' and one coordinator interviews were conducted via telephone. The remainder of the IFH and coordinator interviews were via video call. IFHs were sent a £25 shopping voucher following interview.

Interview duration was 12-73 minutes (women); 30-52 minutes (IFH individual interviews); 69-125 minutes (IFH group interviews) and 40-74 minutes (coordinator interviews).

Women's survey data

The 8-week survey included two open free-text questions which were used as data in this study: (1) Please describe any difficulties you have encountered when feeding your baby (please include

breastfeeding and formula feeding difficulties); and (2) Please tell us about the support you have received for feeding your baby. Please include who it was from and your experience of the support. Women received a £15 shopping voucher for completing the 8-week survey. Only responses to these free-text questions from women in the intervention arm were analysed for this qualitative study.

Data analysis

Interview audio-recordings were transcribed. Interview transcripts and survey data were managed and analysed using NVivo (v12) and Excel. Analysis was concurrent with data collection and carried out using a Framework Analysis (Gale et al 2013).

Researchers familiarised themselves with the interview data by reading and re-reading transcripts. For each dataset (women, IFHs and coordinators), an a priori coding frame was created based on intervention components and refined through independent coding of three transcripts by three researchers, followed by iterative rounds of discussion and comparison with the ABA-feed logic model (Clarke et al., 2023). The coding framework was then applied to the remaining transcripts. In Excel, we summarised each individual code for every interview into a matrix, along with an overall code summary.

Responses to open-text survey questions were coded using the women's interview coding framework. Coding summaries were produced for all women, and then for subgroups of women by age, education level, ethnicity, relationship status and feeding intention. We conducted subgroup analysis by comparison of the subgroup coding summaries with the overall coding summaries to explore potential differences. Additionally, we compared open-text coding summaries with interview coding summaries for any disconfirming data. As we continued to gather interview data across participant groups, and in coding the women's survey data to the same framework as the women's interview data, we identified no new codes.

Across all datasets, we grouped the code summaries according to their relevance to the key intervention components (for example all code summaries relating to 'woman-centred approach' were grouped to enable relevant data from all datasets to be viewed and interpreted together). Key intervention components are presented as overarching 'Themes', with specific elements described as 'Sub-themes'.

Patient and Public Involvement (PPI) input

PPI members, who were mothers with mixed infant feeding experiences, were involved throughout the ABA-feed study, including protocol development, development of participant-facing documents and topic guides, and intervention development. After expressing an interest in the qualitative data, five PPI members received training in qualitative methods and were involved in two data meetings to discuss the interpretations.

Results

Participants

Thirty women from five sites (six per site) were interviewed. They were aged 21-38 years (mean 30 years), around two-thirds (21/30, 70.0%) were White British, just over half (17/30, 56.7%) were

educated to university degree level or higher, and most (26/30, 86.7%) were married or living with their partner. At the time of interview, babies age ranged from 9–23 weeks (mean 13 weeks). Half of the women interviewed were 'possible breastfeeders'.

In total, 1262/1458 (86.6%) women in the intervention arm completed the 8-week survey, and 1147/1262 (90.9% of those completing the survey) answered free-text questions. Women providing free-text survey data were aged 16-50 years (mean 31 years), 83.3% were White British, 72.2% were educated to university degree level or higher, and 95.2% were married or living with their partner. Over half of women (53.4%) providing free-text survey data were 'committed breastfeeders'. See Table 2 for women's interview and survey participant characteristics. A supplementary table shows characteristics of women quoted.

Across the 17 sites, 72 IFHs participated in either a group (n=64) or individual interview (n=8), out of a total of 177 who had supported women during the trial. Most IFHs were 30-39 years old and of White British ethnicity. Most had two children; three-quarters had exclusively breastfed their children. Years of experience as a peer supporter ranged from one month to 34 years. See Table 3 for IFH characteristics.

Twenty-five coordinators, representing all 17 sites, took part in an individual interview (n=13) or one of five site-specific group interviews (n=12).

Themes

'We -categorised code summaries from the women's, IFHs' and coordinators' datasets into three main themes reflecting the intervention components: 'woman-centred approach' and 'encouragement to draw on assets', as well as 'acceptability of ABA-feed'. The themes were made up of eight subthemes in total. (Table 4).'

Coding of the women's survey data corroborated findings from women's interview data, and analysis of the different subgroups produced the same findings as the women's data overall, showing that acceptability and experience of the intervention did not differ by demographic characteristics. Data from women's subgroups were not available for all codes. Unless otherwise stated, 'women' refers to data from both interviews and surveys.

Acceptability of ABA-feed

Intervention acceptability overall

Overall, most women gave positive comments about being involved in ABA-feed and receiving extra feeding support. While a few women felt that having an IFH did not make much or any difference to their infant feeding experience, others felt the IFH had helped reassure them, reduced their anxiety, or stated that they 'would not still be breastfeeding so successfully without her' (Woman1). However, a few women reported not receiving any IFH support.

Acceptability was similarly high among IFHs, who valued providing antenatal and early postnatal contact: they believed the support empowered and reassured women and was particularly useful for women not from breastfeeding families. They saw the ABA-feed model as enabling links to breastfeeding groups, building a community for women, and felt it facilitated closer working with midwives. Coordinators frequently mentioned 'such lovely messages from the mums' (Coordinator,

Site12) and felt the one-to-one support made a big difference to women. Coordinators highlighted benefits of early IFH-women engagement and felt the model offered a good volunteering opportunity as a more flexible alternative to breastfeeding groups.

Opinions varied about optimum duration of support. Most women felt eight-weeks postnatal was around the right time 'to get yourself established and really settled, and understand things,' (Woman2), though a small number would have liked support for longer. Most IFHs agreed that eight weeks was sufficient, feeling this boundary encouraged women to seek other support. However, some instances of shorter, or more prolonged, support were described. A few coordinators believed four to six weeks would be sufficient.

Acceptability of the antenatal meeting

Most women found the antenatal meeting informal, friendly and helpful, citing the information they received as the main value and found it helped consider their support networks (via the Friends and Family diagram): 'The conversation at the beginning also really did help set the foundation up as to who I can turn to for support' (Woman3). Women were grateful for the time dedicated to the antenatal meeting, noting that healthcare professionals could not offer longer interactions like this. Some women interviewed who had an in-person antenatal meeting preferred this to a remote meeting as it helped them to get to know the IFH and encouraged them to access physical resources. Meeting at Children's Centres meant the IFHs could introduce women to breastfeeding groups, while others met in cafes, parks, or at the woman's home. Most (but not all) IFHs reported that in-person (rather than remote) antenatal meetings led to a better connection with women:

'I think the ones that I met face-to-face, especially if I was able to meet them just before or just after breastfeeding group, those were the ones that gelled more easily. There was that higher comfort with the Children's Centre, and the groups, so one or two would pop in every week for a few of them, or a couple of times within a month, and it was easier to keep track and keep contact and have that rapport with them.' (IFH group interview, Site9)

IFHs reported mixed experiences of making initial contact with women and arranging the antenatal meeting:

It depended on the women, some were very keen to have a chat. I found there were a couple that I really struggled to get to even want to talk to me. I don't know whether they misunderstood the point of the meeting, or that they even should be having one, or one of the ladies was very close to her having a baby and she just couldn't seem to schedule time to talk to me. (IFH group interview, Site5)

Coordinators held mixed views as to whether in-person or remote contact is better, supporting IFHs to take a woman-centred position. Most women were still working at the time the IFH made contact, and were typically busy, which made it difficult to arrange mutually convenient times or locations. Generally, women who had remote antenatal meetings found them more convenient -

'Honestly speaking ... there was lots that I perhaps would have preferred face-to-face, like antenatal classes and things like that, but I was working full time, and I had an immensely busy schedule, and so it was convenient that I was able to have this phone call.' (Woman 4)

- and some mentioned travel logistics, or preference for remote contact due to anxiety or low mood. A few women liked the fact that their partner could join the call.

Acceptability of early postnatal daily support

Most women reported their IFH checked in daily, or frequently, for the first 14-days postnatally, mainly via text messages. Most of these women appreciated these opportunities to ask questions and receive supportive and reassuring responses:

'She contacted me a lot after the baby just checking how I was, and how the baby is, which is nice, because I would probably be a bit nervous to reach out first, yeah it was nice that she caught up.' (Woman5)

Only a few women found daily text messages overwhelming. This view was echoed by some of the IFHs who typically described daily contact in the first 14 days postnatal as 'intense'. These IFHs felt that as women have substantial healthcare professional and family support in the early postnatal period, daily IFH contact was 'overkill' and 'intrusive'. They felt they had to be careful not to cross boundaries if women were still in hospital receiving support from healthcare professionals. While some IFHs reduced text frequency if women were not responsive, others carried on regardless. Sometimes text conversations continued over several days, and some IFHs also offered in-person, phone or video support. Coordinators also felt that daily messages were 'probably too much, too intensive' (Coordinator, Site15), while also holding the view that proactive early support was valuable and reminded women that their IFH was available. However, some IFHs reported early postnatal interactions to be rewarding particularly when they received positive feedback from women and recognised that 'although those daily messages felt awkward at times, that was the best way to set the foundation of being proactive' (IFH group interview, Site13). Some IFHs also believed that daily messaging opened the door for women to ask questions 'which they might not have asked a health professional, because they feel it's silly' (IFH group interview, Site1).

A woman-centred approach

Perceptions of woman-centredness

Most women felt their IFH was 'understanding and very respectful of my choices' (Woman6). Women described the IFH as 'helpful', 'neutral' and 'supportive' who adapted information and resources to meet their needs.

'No, I didn't feel pressurised at all. They gave me different links, different ways of feeding, so I had different options, and I felt like I could choose one of them that suits me, rather than just having well just try this one method.' (Woman7)

A small number of women felt the IFHs claimed support for formula feeding but had an underlying bias towards breastfeeding:

'She kept telling me that I was doing really well and to keep on going, but I still felt because it was to do with breastfeeding, it was again that undertones of breast is best.' (Woman8)

Others described poor IFH support, for example, feeling their IFH lacked knowledge or seemed uninterested. Generally, IFHs saw their role as offering infant feeding help, rather than a covert way to promote breastfeeding, echoed by coordinators who believed in the importance of open, non-judgmental conversations and 'giving them the right information, myth busting' (Coordinator, Site4) to allow women to explore and make their own decisions. However, a few IFHs felt that they should have 'been trying to convince them [to breastfeed] a bit more' (IFH group interview, Site2) or reported 'I don't want to promote it [formula]' (IFH interview, Site8). Some IFHs who had previously only supported breastfeeding found being open to all feeding intentions initially daunting, whereas other IFHs reported enjoying supporting formula feeding and were reassured those women

continued to ask questions about feeding when they switched to formula; some coordinators believed the IFHs previous experience influenced this:

'I think initially that was a tricky one for the breastfeeding peer supporters that were used to just breastfeeding. For the new peer supporters that came in I think they probably adapted a bit better to that, but all in all I think they all just adapted as time has gone on now to that okay.' (Coordinator, Site5)

IFHs found that some women who wanted to formula feed from the outset were less interested in the support or appeared defensive:

'I felt that I had a couple of mums that had decided to go down the route of formula feeding from the get-go. I did find that one of those mums in particular got really, well she started off quite defensive when talking about her decisions. She expected me to challenge it. So I made sure that the language I used was very open and supportive, and I cheerlead-ed [sic] her, so that... to put her mind at rest. I did find that it took a while into the antenatal meeting for her to come down from that defensive podium I guess.' (IFH group interview, Site6)

Women generally felt able to negotiate contact in some way, with most having discussed frequency of contacts with their IFH, and a few feeling that a pattern of contact had evolved organically rather than being explicitly arranged.

"...she did say she was going to contact me every couple of days. She did say, "Look, if you don't want me to contact you let me know," and it was all going to be by text message, which is a lot easier... I did say, "No I'm happy for you to contact me, and if at any point I feel like a bit overwhelmed with it I'll let you know." But I was happy for her to do it." (Woman9)

IFH-woman relationship

Women described their IFH as understanding, empathic, attentive to their needs, approachable and responsive. IFHs were seen as knowledgeable and this knowledge was trustworthy. IFHs were seen as relatable because they were mothers:

'She was really professional, but in a way extremely human, because already had kids, and there was one day that she called me and the kids were screaming in the background. It was just nice, because she's gone through that. I could relate to her and the things that she was telling me, and she would give a lot of her experience of things, which was really good. It was more like a... she was really professional, but at one point it was more of a friend as well, someone to talk to.' (Woman10)

Most women described a warm, friendly relationship, and IFHs reported valuing building relationships with women, some of which continued after the intervention ended. Women valued a known supporter 'checking in' with them:

'It was quite nice to just speak to someone who knew about your care. So it's like the continuity of the care. So it wasn't too difficult to explain to [IFH], she knew straight away what I was talking about' (Woman11)

A small number of women provided more ambivalent responses, describing the relationship as pleasant but distant, or simply distant as they felt unable or did not want the support. A few women felt remote contact was insufficient and wanted 'a face-to-face meeting after giving birth'

(Woman12). IFHs reported feeling disheartened when women did not engage: 'I think because of all the non-responders, I think you lose heart a bit' (IFH interview, Site15).

Some IFHs from a South Asian background reported that South Asian women they had supported valued the shared cultural connection as 'we understood the cultural nuances and things like that' (IFH group interview, Site6). While some IFHs discussed being very aware of the age difference with teenage participants, age disparity was not mentioned by younger women and the intervention was acceptable to this group.

Encouragement to draw on assets

Friends and Family diagram

Coordinators and IFHs were largely positive about the Family and Friends diagram, though a few felt that drawing the diagram with women could be seen as intrusive. IFHs often reported that the diagram 'helped me understand a little bit more about who they [women] were' (IFH group interview, Site10), including women's support networks, their circumstances (e.g. rural location), and the family 'stories' about infant feeding. It also helped start conversations on a range of topics (e.g. infant feeding, bonding, types of practical and emotional support), and identify wider sources of support for women with smaller networks. Some IFHs said they used the diagram 'mainly just for names' (IFH group interview, Site12) to make the conversation more personal. If partners were at the antenatal meeting, IFHs felt it was good to involve them in making the diagram.

Some IFHs found it hard to draw the diagram when women had sparser networks and/or difficult circumstances. Most (though not all) women interviewed remembered the process of the diagram being drawn by the IFH and being sent a photograph of it later. Some women talked about discussing the diagram and showing it to their partner, family members or friends and how it helped remind them about available social networks: 'made me think about people that I wouldn't necessarily have drawn support from' (Woman13)

Assets leaflet and other resources

Many IFHs valued the leaflet as something to offer women after the antenatal meeting, with digital versions sent more often than paper copies. However, they felt that pregnant women are given a lot of information, some thought the leaflet was rarely read, and some felt their own knowledge was more useful. Most, but not all women interviewed remembered receiving an assets leaflet. While only a few described using it, some found it very helpful:

'To be honest it was great. It was good to just look and think oh okay what day is it? Okay, so it's Wednesday, oh so the clinic is on this afternoon, maybe I'll pop up.' (Woman14)

IFHs sent additional information to women on local groups, information about breastfeeding positioning and attachment, safe sleeping, paced bottle-feeding, and safety information on commercially available formula preparation machines. Women interviewed felt "confident the [internet links] that she was sending me were the most up-to-date and accurate information." (Woman15)

Signposting to local support

IFHs signposted women to local support, often breastfeeding groups but also other parenting groups or health services. Some women and IFHs reported meeting at a group, with some women saying they would not have gone without IFH encouragement. Women reported breastfeeding groups as a useful source of breastfeeding support and for meeting other mothers; however, some women were

unable to reach groups (e.g. if unable to drive following caesarean section) or found groups overwhelming and wanted one-to-one support:

'[IFH] met with me at the local breastfeeding group, and I have continued to go there weekly since (now mostly just socially as I feel confident in feeding my baby now).' (Woman16)

While data from women from ethnic minority backgrounds did not report on this, IFHs reported women from ethnic minorities appreciated diversity in groups. IFHs also signposted women to local Facebook breastfeeding groups, NHS Infant Feeding teams, lactation consultants, and to health visitors, midwives, and GPs; some women said they would otherwise not have known about these sources of support.

Discussion

From interviews with 30 women, survey responses from 1,147 women, and group and individual interviews with 72 IFHs and 25 coordinators, we described three main themes: 'acceptability of ABA-feed', 'a woman-centred approach' and 'encouragement to draw on assets'. The ABA-feed intervention was highly acceptable to most women - including younger women, those with fewer formal qualifications, from diverse ethnic backgrounds, single women, and with different infant feeding intentions – and IFHs and coordinators, whether delivered remotely or in-person Women, IFHs and coordinators described receiving or offering woman-centred support which appeared to encourage women to draw on their personal and local assets. Women's and IFHs' experiences mostly aligned, but while women valued proactive daily contacts in the first 14 days postnatally, many IFHs found providing this difficult. Some IFHs struggled with supporting women with formula feeding or when women did not engage.

Findings in this study echo systematic review evidence that breastfeeding peer support is highly valued by women (Chang et al., 2022). There are also strong similarities with the qualitative findings from the ABA feasibility study (Ingram et al., 2020) where women and IFHs were highly positive about the antenatal meeting for discussion of infant feeding and facilitation of regular ongoing communication including early postnatal contact. In this study, we confirm positive responses to the intervention components on a much larger sample of women and IFHs, and with the addition of coordinator views. The inclusion of the women's survey data in the qualitative analysis offered the opportunity to explore and confirm acceptability across different demographic groups and from women with a wider range of feeding intentions. Adding to the feasibility study, and to systematic review findings (Gavine et al., 2021), in this study we confirm the acceptability of delivery of peer support for infant feeding via remote methods for both women and peer supporters.

There were some issues reported by IFHs: a few women did not appear to understand the purpose of the antenatal meeting, perhaps reflecting a lack of understanding at recruitment or less optimal timing of recruitment relative to the start of the intervention. This finding may suggest that reminders (and a further summary of the nature, purpose and relevance of the intervention) could be issued to women prior to commencement of the intervention (Axén et al, 2021).

A qualitative synthesis of factors that influence women's engagement with breastfeeding support highlighted how women value building trust with those supporting them beginning in pregnancy, and that women want continuity in breastfeeding support (Bengough et al. 2022). Women taking part in the ABA-feed intervention valued the continuity of support offered by their IFH. Where IFHs felt that they had established a relationship with the woman antenatally they found it easier to make contact postnatally, offering a means through which early intensive postnatal contacts can be

facilitated. Our findings reinforce the importance of continuity of supporter through the antenatal to postnatal periods as a key component of breastfeeding support.

The sharp decline in UK breastfeeding rates in the early postnatal period and the difficulty women report in help-seeking shows a need for early proactive support (Trickey et al 2018). In our study, while most women valued daily contact in the first 14 days postnatally, many IFHs were concerned about being intrusive, felt this frequency of support was unnecessary, or found it taxing to deliver. Coordinator views suggested an understanding of the value of early support while also acknowledging the concerns of the teams they managed. Chi and Tu et al. (2023) argue that if individuals do not get reinforcement for their proactive helping efforts, then they may be less likely to do so in the future. It may be that some IFHs who initiated proactive daily contact received no or infrequent responses from women. If IFHs internalised this negatively (as pressuring women), it may have lowered their motivation for proactive helping. It is possible that such concerns about frequent contact in the early postnatal period impeded effective delivery of timely support. Comparing the views of women and IFHs on early, proactive support for all feeding types emphasises the importance of ongoing feedback to IFHs to raise awareness of women's appreciation and value of this support, to enhance their intrinsic motivation to continue contacting women to offer support regardless of their feeding method or level of response.

In a realist review, Trickey et al. (2018) found that breastfeeding peer supporters are motivated when they feel their work is valued and feel demoralised when they feel unappreciated. In consequence, peers tend to be more responsive to mothers who actively seek their support and convey their appreciation and disengage when mothers do not respond to offers of help or decide to formula feed their babies (Trickey et al. 2018). In our study, some IFHs reported feeling that women who intended to formula feed sometimes appeared defensive about their feeding intention, and that those who were formula feeding tended to need less support. In addition, some IFHs discussed feelings of uncertainty about offering support to women who intended to formula feed, perhaps reflecting that the IFHs taking part in the ABA-feed trial were trained breastfeeding peer supporters, all of whom had experience of breastfeeding their children, but only one quarter had any experience of mixed feeding. Despite these uncertainties from IFHs, our findings from women show that with few exceptions, women appreciated and valued the non-judgemental support for formula feeding from their IFH as part of the woman-centred approach to the ABA-feed intervention. Evidence presented by NICE shows that women receive a lack of information about formula feeding and feel unsupported if they choose to formula feed (National Institute for Health and Care Excellence, 2021). These findings also highlight that further training and support to build confidence and capacities in IFHs to sensitively and meaningfully support formula feeding is needed.

Strengths and limitations

In this study we explored experiences of three different participant groups from 17 sites across the UK giving a comprehensive view of how the ABA-feed intervention was delivered and received. In addition, by combining interview data from five sites with survey data from all sites we were able to include the views of a wide range of women with different demographic characteristics and feeding intentions.

Data analysis was conducted by five researchers with the wider research team (including PPI representatives) involved in overseeing all stages of data analysis and interpretation, enhancing robustness. Data analysis was completed before the results of the trial were known, reducing bias.

Limitations include our use of telephone and video interviews. We recognise that conducting remote interviews, while offering convenience for both participant and researcher, may have limited participants' ability to fully express themselves, and non-verbal cues may have been overlooked (Clarke and Braun, 2013). However, Krouwel et al., (2019) suggest that remote and in-person interviews produce a similar number of codes.

There was variation in interview duration, although this did not appear to be related to interviewer or site. Two of the women's interviews were under 20 minutes in duration. These two women were purposively sampled as having a low level of engagement in the intervention or limited contact with their IFH, meaning that some of the questions on the topic guide were not necessarily relevant. However, we were able to cover all relevant questions within the duration of the interview. It is likely that women who did not fully engage with the intervention did not provide survey responses or participate in an interview, so we have limited data on their reasons for this.

There was variation in women's baseline feeding intentions among both the interview and the survey respondents. Fifteen (50%) of the women interviewed were 'possible breastfeeders' according to their baseline survey responses. We also interviewed six (20%) 'committed breastfeeders', five (16.7%) probable breastfeeders and three (10%) probable formula feeders. Over half of survey respondents (53.4%) were 'committed breastfeeders'. Although we did receive responses from women from all different feeding intentions, and showed acceptability of the intervention among all groups, it may be that those with more committed breastfeeding intentions may have valued the intervention more and found it more acceptable than those with ambivalent intentions.

Conclusion

The findings of this qualitative study provide insight into women's, IFHs' and coordinators' experiences of receiving and delivering the ABA-feed intervention. The intervention was acceptable to all groups. This study highlights the value of flexible, proactive, woman-centred infant feeding support beginning antenatally. Feedback to IFHs emphasising how women value this support would help sustain motivation.

Figure 1. Schema of participant journeys through the ABA-feed intervention and study and associated data collection

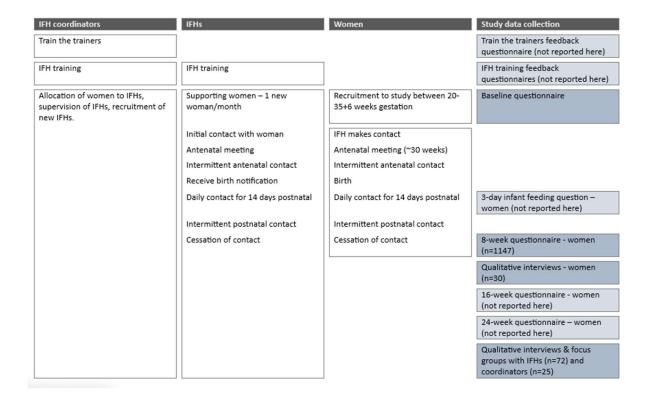


Table 1 Classification of breastfeeding intentions (Hoddinott and Pill, 1999).

Feeding intention	Description
Committed breastfeeder	Refers to perseverance, overcoming/coping with problems; don't mention anticipated problems
Probable breastfeeder	Express some doubt about own and other women's abilities to breastfeed
Possible breastfeeder	Less committed and mention scenario where they would change their feeding intention
Probable formula feeder	Initially say they will formula feed, but also that they might consider breastfeeding
Committed formula feeder	Do not mention considering breastfeeding
Not classified	No indication of feeding intention provided

Table 2 - Participant characteristics – women's interviews and survey respondents

	Interviews,	Survey*
	N=30 <i>,</i> n (%)	N=1147, n (%)

Age	Age at baseline in years (mean and range)	30.3 (21-38)	31.0 (16-50)
	16-19	0 (0)	10 (0.9)
Age	20-24	4 (13.3)	76 (6.6)
	25–29	9 (30.0)	316 (27.6)
	30 or over	17 (56.7)	745 (65.0)
Breastfeeding	Committed breastfeeder	6 (20.0)	613 (53.4)
intention	Probable breastfeeder	5 (16.7)	235 (20.5)
	Possible breastfeeder	15 (50.0)	217 (18.9)
	Probable formula feeder	3 (10.0)	13 (1.1)
	Committed formula feeder	0 (0)	36 (3.1)
	Unclassified	1 (3.3)	33 (2.9)
Milk intention, first	Breastmilk only	2 (6.7)	571 (49.8)
6 months	Mainly breastmilk	10 (33.3)	376 (32.8)
	Half and half	15 (50.0)	139 (12.1)
	Mainly formula milk	2 (6.7)	28 (2.4)
	Formula milk only	1 (3.3)	30 (2.6)
	No response	0	3 (0.3)
Ethnicity	White British	21 (70.0)	955 (83.3)
	White Irish	0 (0)	10 (0.09)
	White Gypsy or Irish Traveller	0 (0)	0 (0)
	White other	2 (6.7)	52 (4.5)
	Mixed White and Black Caribbean	0 (0)	16 (1.4)
	Mixed White and Black African	0 (0)	4 (0.3)
	Mixed White and Asian	0 (0.0	11 (1.0)
	Any other mixed ethnic background	1 (3.3)	9 (0.8)
	Indian/British Indian	0 (0)	24 (2.1)
	Pakistani/British Pakistani	1 (3.3)	9 (0.8)
	Bangladeshi/British Bangladeshi	0 (0)	1 (0.09)
	Chinese/British Chinese	0 (0)	5 (0.4)
	Any other Asian background	0 (0)	6 (0.5)
	Black African/ British African	2 (6.7)	18 (1.6)
	Black Caribbean/ British Caribbean	3 (10.0)	15 (1.3)
	Any other Black background	0 (0)	2 (0.2)
	Arab	0 (0)	0 (0)
	Any other ethnic group	0 (0)	6 (0.5)
	Prefer not to say	0 (0)	4 (0.3)
Relationship status	Married/civil partnership	13 (43.3)	594 (51.8)
	Living together	13 (43.3)	498 (43.4)
	Single	3 (10.0)	43 (3.7)
	Widowed, divorced or separated	0 (0)	0 (0)
	Prefer not to say	1 (3.3)	9 (0.8)
	No response	0 (0)	3 (0.3)
Education	University egree level or above	17 (56.7)	828 (72.2)
	A-level/AS level, Highers or equivalent**	8 (26.7)	195 (17.0)

GCSE, Standard Grade, National 5 or		
equivalent***	5 (16.7)	91 (7.9)
No formal qualification	0 (0)	1 (0.09)
Other	0	23 (2.0)
No response	0	9 (0.8)

^{*}women who provided any response to the open-text questions

Table 3: Characteristics of Infant Feeding Helpers taking part in group and individual interviews

		N=72; n(%)
Age group (years)	20-29	9 (13.2)
	30-39	44 (64.7)
	40-49	11 (16.2)
	50-59	2 (2.9)
	60+	2 (2.9)
	Missing	4
Number of months as	Range	1-408
peer supporter	Mean	46
	Missing	5
Number of children	1	14 (20.1)
	2	33 (48.5)
	3	15 (22.1)
	4	6 (8.8)
	missing	4
Infant feeding	Breastfeeding	51 (75)
experience	Both breastfeeding and formula feeding	17 (25)
	Missing	4
Ethnicity	White British	59 (87)
	White other	3 (4)
	Mixed/multiple ethnic background	1 (1)
	Indian/British Indian	1 (1)
	Caribbean/ British Caribbean	3 (4)
	Any other ethnic background	1 (1)
	Missing	4

^{**}qualifications typically taken at 18 years old

^{***}qualifications typically taken at 16 years old

Table 4 – Themes and sub-themes reflecting data on the ABA-feed intervention components and acceptability of the intervention

Theme	Sub-theme	Summary	Example quote(s)
Acceptability	Intervention acceptability overall	Most women were positive about the intervention, many saying IFH support had helped them continue breastfeeding, although there were some negative experiences of communication issues or the advice received from the IFH. IFHs and coordinators were similarly positive about the intervention	I have had fab support from [IFH], she has been amazing, had put me right at ease and has answered any queries even if they sounded silly. She has offered advice and sent me links to advise me and show me how to do things. She really has been a godsend and has made breastfeeding a positive, happy experience (Woman17)
	Acceptability of the antenatal meeting	Most women, IFHs and coordinators liked the antenatal meeting. Women highlighted the information they received as the main value of the meeting, IFHs and women felt the meeting helped build relationship.	I also found I agree that for me that was one of the pivotal parts of it, that antenatal contact made such a difference to also just pragmatically looking, having the time and resource to consider feeding, how you feed, where your support comes from. But also to build a rapport and a connection on a one-on-one basis with somebody, I think will make it a lot more likely for them to engage then with our professional support services that are available. The people that I engaged with antenatally had said that they were much perhaps they wouldn't have come to our peer support groups but for the antenatal contact that we had established. We'd met them in family hubs where the support groups would run, and we had said, "This is where we'll be," and people came along. I had several people, say, "I wouldn't have come along, I don't think we had met antenatally." So I thought it was a really pivotal key part of the whole process for me. (IFH group interview, Site16)
	Acceptability of early postnatal daily support	Most women liked daily contact in the first two weeks postnatal, but a small number of women found the daily text messages overwhelming. Coordinators were largely positive about the early postnatal contact and highlighted the value of proactive contact, but IFHs typically found it hard to manage and worried about being intrusive.	When my child was born [IFH] contacted me through text every day for the first 2 weeks. This was so helpful to me - I felt I could send photos and get feedback on my latching and just support on every step of the way through the colostrum period to cluster feeding etc. (Woman18) But I was really conscious that probably one [text] every day for 14 days didn't work out I don't think for anybody. Just I think that might be overkill given the different situations that women are in, particularly if they're in hospital where they've got everybody. Then they've got midwives, health visitors, and family. So

			I think we just have to be really cautious about how much we can come across as pressurising as well. So I was really conscious of that. But I hope that the women felt that I was led by them. So touching base if I hadn't heard from them for a couple of days, and then see what they came back with, and you get that feeling don't you, if they've got a long list of oh this has happened, this has happened, and then you run with it. But it seemed shoehorning a problem by checking in every day if there wasn't any. (IFH group interview, Site14)
Woman centred approach	Perceptions of woman-centredness	Most women felt their IFH was non-judgemental and supportive of their feeding choice, although a few women felt their IFH was biased towards breastfeeding. A few women reported receiving no contact or a lack of response from their IFH. IFHs and coordinators were positive about supporting all feeding types and the importance of open, non-judgemental conversations.	[IFH] was brilliant. She was the reassuring voice during the early weeks when it was really really difficult (tiny baby, undiagnosed posterior tongue tie and c section!) - she will also tell me how well I was doing which helped a lot because I felt extremely guilty when I needed to feed [baby] some formula when I couldn't cope with the pain or I noticed she wasn't really latching (never more than one feed, but it can get really stressful and make you feed really useless). (Woman19) I did feel however there was a bit of bias towards breastfeeding. So even though she said that it didn't matter what my choice was, she was going to give me all of the information. She did give me all the information for the different types, for the bottle feeding and expressing, and breastfeeding, but I felt once she spoke about breastfeeding she drew on her own personal experiences, so she did tell me that she breastfed all three of her children, and there was more of a positive nature to the way that she spoke about breastfeeding. (Woman8)
	IFH-woman relationship	Most women described a warm, friendly relationship and liked the empathy and responsiveness of the IFH and the continuity of support. IFHs valued the relationship-building with women and received positive feedback.	I have had amazing support from [IFH] my coach through this trial. She has been the most supportive person since I have given birth. I'm so grateful for her. She goes above and beyond and is always helping me and sending me useful information. She is the reason I have successfully breastfed for 8 weeks now. (Woman20)
Encouragement to draw on assets	Friends and family diagram	Women, IFHs and coordinators were mostly positive about the process of creating the Friends and Family diagram. Some women said they spoke to friends or family members about feeding as a result. IFHs reported finding it useful to know about the women's support networks.	I think it's just the tool, the actual diagram once you've done it isn't really that useful, the thing for me was useful is to just show them that they're not alone [] it's just for me that's what the purpose of having that conversation was, rather than having the actual diagram and using it afterwards. (IFH group interview, Site5) I had a couple of ladies who were in difficult social situations, and so that became difficult, because trying to find the support that they had. They didn't know, but I did, so looking at their diagram compared to other people's I was like, "Have you

		got a neighbour?" Because it just looked so sparse compared to the lady that I'd had, the other one who she'd got a million brothers and sisters, and cousins, and aunties who were living close by. (IFH group interview, Site15)
Assets leafle & other resources	Women were mainly positive about the resources (including the assets leaflet) provided to them by their IFH, feeling confident that the information was from a trusted source. IFHs liked the assets leaflet and valued the opportunity to send it out with other relevant information after the antenatal meeting as a way of keeping in touch with women.	I provided it [assets leaflet] to all my mums as well. I would always touch upon it at least for a minute or two during the antenatal meeting just to say that I would include it in the links that I'm sending after the antenatal meeting, and to have a look through it to see if there's any information. I would always point out the national breastfeeding number, that there's not just the local stuff but that one that's quite a useful one if they can't get hold of anybody else anywhere, that they're also there on bank holidays and stuff like that. So I always pointed that out as an extra one. (IFH group interview, Site3)
Signposting to local support	Women reported being signposted to local support, mainly breastfeeding groups, and being encouraged to attend; some women reported their IFH accompanying them to a group. IFHs and coordinators received feedback from women that they appreciated the signposting to groups and other support.	Yeah, I used it [breastfeeding group] as the first solo outing, so testing the waters. I was a bit nervous to go and meet new people and all that, but no she reassured me. (Woman21)

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Supplementary materials

Supplementary file: topic guide for women

	SECTION A - ANTENATAL EXPERIENCE
1	Thinking back to <u>before your baby was born</u> when you first heard about the ABA-feed study
	Tell me about how you heard about the study and why you decided to take part? How did you find signing up to the study?
	Can you remember what your thoughts were about feeding your baby at the time?
2	Thinking back to the first time you had contact with your ABA-feed Infant Feeding Helper,
	before your baby was born can you tell me what happened?
	How/when did she contact you? Were there any issues arranging the antenatal meeting?
	Did you have your 'antenatal meeting' in person or via video/phone call? How did you decide whether to meet in person/online? How do you feel the meeting worked online/in person?
	Where did you meet (if in person)? Who was there? What did you talk about? What was it like? How did it work for you?
	Did you and the Infant Feeding Helper talk about how friends/family members had fed their babies? (If so) What did you talk about? How did you find the conversation?
	Did you discuss the postnatal contact and how this would work/frequency?
3	After the antenatal meeting, can you tell me about the contact you had with your Infant Feeding Helper before your baby was born?
	Tell me about the text messages/phone calls. How often? Who initiated the contact? Did you ask for any support or help? – if yes what? What did you think about the messages and calls that you received? What did you think about how often they kept in contact – was it enough, more needed?
4	What are your thoughts about seeing/talking to an Infant Feeding Helper in pregnancy?
	To what extent did help from the Infant Feeding Helper influence how you were thinking of feeding your baby? How? Why/why not?
	SECTION B - POSTNATAL EXPERIENCE
5	Can you talk me through what happened after the birth with the Infant Feeding Helper?
	Who contacted who, how, when, what happened next? Timing of contact as soon as possible after birth is considered important by some women but not by others - what are your thoughts?
6	Can you tell me about any ABA-feed help you were offered or received?
Ľ	dan you can me about any non reed help you were offered of received:

Was the help from the Infant Feeding Helper as you expected? How did you organise how often and how she would contact you – how did she support you – what it was like – was it enough/too much?

How was the support provided - text message/phone calls/face to face? Were there times

How was the support provided - text message/phone calls/face to face? Were there times that you asked your Infant Feeding Helper for help? Tell me about it – what was your experience of the support you received?

(If formula or mixed feeding) Tell me about the support you received for formula feeding from your Infant Feeding Helper. What support did you need? How did you find the help provided? To what extent did the support meet your needs? What more support was needed?

7 Can you tell me about any <u>times when you particularly needed help</u> with feeding your baby?

What happened? What help did you need? Did you get the help you needed? If not, why was this, and what could be done about it?

SECTION C - RELATIONSHIP WITH ABA-FEED INFANT FEEDING HELPER

8 How would you describe your relationship with the Infant Feeding Helper?

Tell me how you got on. Was there anything that influenced your relationship with her? Did your relationship with the Infant Feeding Helper change over time? If so, how?

How did the support from your Infant Feeding Helper end?

9 Can you tell me about any ways in which the Infant Feeding Helper has influenced you or your <u>experience</u> of feeding your baby?

How and why?

SECTION D – ACCESSING SUPPORT FROM OTHERS

10 | FRIENDS AND FAMILY DIAGRAM (both antenatally and postnatally)

Do you remember a 'Friends and Family diagram'?

Tell me what you remember and any thoughts you had at the time....

How did it work drawing the diagram online/in-person? What happened to the diagram after it was drawn – did you receive a copy?

Did you show anyone the diagram or talk to anyone about it?

After your baby was born, did you or your Infant Feeding Helper use the 'Friends and Family diagram' at all? If yes, tell me about this - how did it influence help-seeking — do you have any recommendations for how this could be developed or improved?

11 Were you offered/were you aware of/did you ask for or receive any feeding support or information about feeding from anyone else either before or after your baby was born?

E.g. midwives, health visitors, Children's Centres, antenatal classes, social media.

	If so, tell me about this; how did you find out about the support; how did the ABA-feed support fit in with any other support received (did it complement the support you received, were different types of support offered/provided, etc?).
12	Did your Infant Feeding Helper provide you with any information about local groups or where to get support?
	If so, tell me about the information provided. Can you tell me if/how this information influenced any support you accessed?
	Prompt if required about the 'what's available locally' leaflet – did you receive this? Online or on paper? What did you do with it? How did you use it (both before and after your baby was born)? Do you have any recommendations for how this could be developed or improved?
13	Did any of the midwives or health visitors that you spoke to as part of your routine care mention the ABA-feed service?
	(If so) What did they say about it? How did what they said about ABA-FEED affect you? Why was that?
	Overall, who do you feel has been most helpful to you with feeding your baby? Why/how?
	Section E - FINAL THOUGHTS
14	Is there anything you would say to friends who are pregnant for the first time to help them prepare for feeding their baby?
15	Is there anything you would change about ABA-feed?
16	Is there anything else you wish to share about your experiences?

Supplementary file: topic guide for Infant Feeding Helpers

	SECTION A - PEER EXPERIENCE AND UNDERSTANDING
1	Tell us about your experience of being an Infant Feeding Helper?
	(if applicable) How does being an Infant Feeding Helper compare to the help you used to/usually provide?
	SECTION B - ANTENATAL DELIVERY
2	Tell us about the antenatal contact. How did you find it?
	How was it arranging a video call or a time and place to meet? Was anyone else there? Were there any difficulties or challenges? Were women interested or engaged? Did they understand the purpose of the meeting? Did they ask questions?
3	Thinking more about those <u>first face-to-face</u> (or <u>video/phone call</u>) <u>meetings</u> , how did you find discussing the women's feeding views/intentions?

	How did ABA-feed fit with women's feeding views/intentions? How did you find the							
	antenatal meeting worked with women who wanted to formula feed?							
4	Did you use the <u>family and friends diagram</u> ?							
	How did women engage with the task? Can you tell me about any difficulties you had with							
	using the diagram? What influence do you think it had (if any)? (e.g. women seeking out							
	support) Any suggestions for using the diagram in the future?							
5	How did you pass on information about local groups and other sources of help?							
	Did you use the 'assets leaflet'? How was it received? How useful was it?							
6	How did you find texting and making calls to the women before their babies were born?							
	What worked well, what didn't work well?							
7	<u>Did you accompany</u> any of the women you met to a local group before her baby was born?							
	If yes, how was it? If no, why not?							
8	Do you think the antenatal support could be provided as part of normal peer support practice?							
	SECTION C - POSTNATAL DELIVERY							
9	Tell us about the postnatal contact. How did you find it?							
10	Tell us about the support for the first 14 days postnatal.							
	How often did you text/call women? How did the women respond? Did women contact you? Can you tell me about any particular text/telephone conversations you had with women?							
11	Tell us about the ongoing support from 2 to 8 weeks.							
	How did you find the postnatal support worked with women who wanted to formula feed?							
12	Did you refer to the friends and family diagram or assets leaflet at all postnatally? Tell us about this.							
13	How did you find ending the help with women?							
	How did you end the contact with women? How did you feel about this? Did you get any							
	impression about how women felt about this?							
14	How did the ABA-feed support fit in with usual care (e.g. from midwives and health visitors)?							
15	Do you think the postnatal support could be provided as part of normal peer support practice?							
	SECTION D - EXPERIENCE OF TRAINING AND SUPERVISION							
16	What are your thoughts about the ABA-feed training?							

	Did it prepare you well enough to deliver the intervention? Do you have any suggestions						
	for how the training could be improved or done differently?						
17	What are your thoughts about the support and supervision required for Infant Feeding Helpers?						
	Tell us about the support and supervision you received. How was this? How did it meet your needs?						
	SECTION E - FUTURE IMPLEMENTATION AND FINAL THOUGHTS						
18	How would you feel if the ABA-feed model became usual practice for peer supporters? (i.e. antenatal meeting and proactive contact) –advantages/disadvantages						
	How would you feel about using your own personal mobile phone for delivering the ABA-feed intervention?						
19	Would it be helpful to roll out the ABA-feed intervention to all mothers?						
	Why/ Why not? Which mothers would be best to target?						
20	Will the training and your experience of delivering the ABA-feed intervention change the way you help mothers in the future once the ABA-feed study has ended?						
	If so, how?						
21	Do you have any <u>other issues</u> or views you wish to share about the ABA-feed intervention?						

Supplementary file: topic guide for Coordinators

	SECTION A - UNDERSTANDING AND AWARENESS					
1	Tell me about your role in relation to the ABA-feed study.					
	Tell me about your role in relation to the Infant Feeding Helpers.					
2	Which outcomes of the ABA-feed study are most of interest to you? Why?					
	SECTION B - FIT WITH EXISTING SYSTEMS OF CARE AND OTHER PRIORITIES					
3	How has ABA-feed <u>fitted</u> with the support already offered for infant feeding in your area? (E.g. midwives, health visitors and peer supporters)?					
	Tell me about any boundary issues between IFHs and health professionals.					
	Are you aware of women being signposted/referred as a result of the ABA-feed intervention? Tell me about this.					
4	How does ABA-feed fit with other national or local strategic priorities? For example Baby Friendly and Start for Life?					
5	Can you tell me about any conversations you had with colleagues about ABA-feed?					

6	What influence (if any) has ABA-feed had on health professional practices in your area							
	SECTION C – THE WOMEN							
7	Tell me about any conversations you have had with women about ABA-feed. What feedback have you received about ABA-feed?							
8	How do you feel the ABA-feed intervention fits with the local population?							
	SECTION D - IMPLEMENTATION AND CONTAMINATION							
9	What has been your experience of working with the ABA-feed Infant Feeding Helpers?							
10	Thinking about							

	Why/Why not? Which women should the intervention be targeted at? (if any)						
16	How feasible would it be roll out the ABA-Feed model in your area after the study has finished? (prompt as appropriate)						
	 Are there any plans to continue with delivering the ABA-Feed intervention? What findings would influence your decision about continuing to deliver ABA-feed in practice? How would it work for you locally? Would you make any changes to the intervention? How would you hear about births? Would IFHs be paid or volunteers? How would you manage volunteer expenses (including phone expenses)? Would you make any changes to the training? 						
17	Would you recommend the ABA-Feed intervention, or aspects of the intervention, to other areas? Why/why not? What advice would you give to other areas thinking about implementing ABA-feed?						
18	Do you have any <u>other issues</u> or views you wish to share about the ABA-feed intervention?						

Supplementary table – Characteristics of women quoted in the qualitative study

Identifier	Data source - Survey or interview	Site	Ethnic group	Age group (years)	Education level*	Relationship status	Feeding intention
Woman1	Survey	4	White British	25-29	University degree level or above	Living together	Probable breastfeeder
Woman2	Interview	15	White British	25-29	A-level or equivalent	Married	Probable breastfeeder
Woman3	Survey	3	Black Caribbean/British Caribbean	35-39	University degree level or above	Married	Probable breastfeeder
Woman4	Interview	3	Pakistani/British Pakistani	30-34	University degree level or above	Married	Committed breastfeeder
Woman5	Interview	12	White British	20-24	A-level or equivalent	Living together	Possible breastfeeder
Woman6	Survey	15	White British	20-24	A-level or equivalent	Living together	Committed breastfeeder
Woman7	Interview	3	Black Caribbean/British Caribbean	30-34	A-level or equivalent	Prefer not to say	Possible breastfeeder
Woman8	Interview	5	White British	30-34	University degree	Married	Possible breastfeeder

					level or		
					above		
Woman9	Interview	5	Any other mixed	35-39	University	Married	Committed
			background		degree		breastfeede
					level or		
					above		
Woman10	Interview	5	White other	25-29	GCSE or	Married	Not
					equivalent		classifiable
Woman11	Interview	15	Black	30-34	University	Single	Possible
			African/British		degree		breastfeeder
			African		level or		
					above		
Woman12	Interview	3	White other	35-39	University	Living	Possible
					degree	together	breastfeeder
					level or		
					above		
Woman13	Interview	12	White British	30-34	University	Married	Possible
					degree		breastfeeder
					level or		
					above		
Woman14	Interview	12	White British	30-34	University	Married	Possible
					degree		breastfeeder
					level or		
					above		
Woman15	Interview	3	White British	25-29	A-level or	Living	Committed
					equivalent	together	breastfeeder
Woman16	Survey	14	White British	30-34	A-level or	Living	Committed
					equivalent	together	breastfeeder
Woman17	Survey	15	White British	30-34	GCSE or	Living	Committed
					equivalent	together	breastfeeder
Woman18	Survey	3	White British	30-34	A-level or	Living	Probable
					equivalent	together	breastfeeder
Woman19	Survey	13	White other	35-39	University	Married	Probable
					degree		breastfeeder
					level or		
					above		
Woman	Survey	6	White British	16-19	GCSE or	Living	Committed
20					equivalent	together	breastfeeder
Woman21	Interview	5	White British	25-29	University	Living	Committed
					degree	together	breastfeeder
					level or		
				1	above		

^{*} A-level or equivalent are qualifications typically taken at 18 years old; GCSE or equivalent are qualifications typically taken at 16 years old