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Rapid Evidence Synthesis: Family and community-focused approaches to promoting and supporting breastfeeding

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Rapid Evidence Synthesis:

Rapid Evidence Syntheses (RES) are produced by the National Institute for Health and Care Research (NIHR) Applied Research Collaboration for Greater Manchester (ARC-GM). The methods used are based on a framework set out in Norman et al. 2022 and previously registered on the Open Science Framework (OSF). [1,2]

RES use evidence synthesis approaches and draws on the GRADE Evidence to Decision framework[3] to provide rapid assessments of the existing evidence and its relevance to specific decision problems. In the first instance, they focus on evidence from guidance and existing evidence syntheses. They are undertaken in a real-time context of decision-making around adoption of innovative health technologies and are designed to provide a “good-enough” answer to inform decision problems in a short timescale. RES methods are flexible and adaptive. They have evolved in response to user feedback and differ depending on the nature of the assessment undertaken.

RES is not intended to serve as a substitute for a full systematic review.

We welcome feedback and are particularly interested to hear how you have used this Rapid Evidence Synthesis.

Please send any queries or comments to:

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This work was undertaken by the National Institute for Health Research (NIHR) Applied Research Collaboration for Greater Manchester (ARC-GM). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

[1] Norman, G. *Rapid evidence synthesis to support health system decision making. OSF registration.* 2020 [cited 2023]; Available from: osf.io/hsxk5

[2] Norman, G., et al., *Rapid Evidence Synthesis To Enable Innovation And Adoption in Health and Social Care.* Systematic Reviews, 2022. **11**: p. 250. https://doi.org/10.1186/s13643-022-02106-z

[3] Alonso-Coello, P., et al., *GRADE Evidence to Decision (EtD) frameworks: a systematic and transparent approach to making well informed healthcare choices. 1: Introduction.* BMJ, 2016. **353**: p. i2016.

1. Summary

Research evidence, while having **some uncertainties**, in general favours the use of extra family- and community-focused approaches over and above routine breastfeeding services or the UNICEF Baby Friendly Initiative Accreditation alone in promoting the initiation of breastfeeding, exclusive breastfeeding till 6-8 weeks and longer at 6 months, and continued breastfeeding at 12-23 months.

Among the effective intervention options, 1:1 counselling, education via home visits, those using digital technologies, and peer support have more evidence available. Group counselling and community-level education have less evidence.

We did not find evidence that local breastfeeding drop-ins, social groups and at-scale, integrated mass media, and community mobilisation interventions are effective.

We found a range of contextual factors associated with women's engagement with breastfeeding support and breastfeeding initiation and continuation. In general, the evidence suggests that information provided about breastfeeding often does not meet the needs and expectations of women for a range of reasons.

We summarise below the research evidence identified in this area. More details are in Section 3 Results.

Intervention types	Early initiation of breastfeeding	Exclusive breastfeeding (6-8 weeks)	Exclusive breastfeeding (4-6 months)	Continued breastfeeding (12-23 months)	Other breastfeeding outcomes
Family- and community-focused interventions	***Effective interventions based on evidence with some uncertainties*** • Counselling or education delivered in family environments • Community-focused support interventions • Interventions targeting both the home and family settings and the community environment ***Unclear evidence*** • General family-focused interventions	***Effective interventions based on good quality evidence*** • Breastfeeding support-only interventions ***Unclear evidence*** • Multi-component interventions including both breastfeeding support and non-breastfeeding related components	***Effective interventions based on evidence with some uncertainties*** • Community-focused support interventions • Interventions delivered in the home and family settings	***Effective interventions based on evidence with some uncertainties*** • Interventions delivered in home settings	***Effective interventions based on evidence with some uncertainties*** • Community-focused support interventions • Interventions spanning the pre- and post-natal periods • Support interventions engaging family members
Individual counselling or education: One-to-one family breastfeeding support via home visits	***Unclear evidence*** • Home visits with professional support for breastfeeding as a supplement to standard care	***Effective interventions based on evidence with some uncertainties*** • 1:1 counselling provided by peer counsellors during home visits, and telephonic interactions ***Unclear evidence*** • Remotely provided breastfeeding support and education	***Effective interventions based on evidence with some uncertainties*** • Remotely provided breastfeeding support and education ***Unclear evidence*** • Education or counselling delivered in home and family settings	***Effective interventions based on evidence with some uncertainties*** • Counselling or education delivered in home settings	***Effective interventions based on evidence with some uncertainties*** • Home-based interventions with professional support • Breastfeeding education delivered by non-healthcare professionals including peer counselling, particularly high-intensity counselling

Social support: Peer support	***Effective interventions based on evidence with some uncertainties*** • Peer support and mother-to-mother support groups, with or without leadership from a healthcare professional • Peer support provided within the US Women, Infants and Children programme • Antenatal peer support provided for women who were considering breastfeeding ***Ineffective interventions based on good quality evidence*** • Additional 1:1, peer and/or group breastfeeding support • Antenatal peer support provided to all women including those not wishing to breastfeed	***Effective interventions based on evidence with some uncertainties*** • Peer support via home visits in community settings	***Effective interventions based on evidence with some uncertainties*** • Supportive interventions in general • Peer support provided within the Women, Infants and Children programme	Not available	***Effective interventions based on good quality evidence*** • Peer support/ peer counselling particularly those with high intensity • Postnatal-only peer support interventions • Antenatal plus postnatal support
Social support: Local breastfeeding drop-in or social groups	***Ineffective interventions based on good quality evidence*** • Increasing community-based breastfeeding social groups	***Unclear evidence*** • Family or social support	***Unclear evidence*** • Access to a community-based breastfeeding drop-in centre	***Effective interventions based on evidence with some uncertainties*** • Family or social support	Not available
Group counselling or education in communities	***Effective interventions based on good quality evidence*** • Informal, small group health education, delivered during the antenatal period	Not available	***Effective interventions based on good quality evidence***	Not available	Not available

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<td>• Group counselling or education in community settings</td>
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<td>At-scale, integrated mass media campaigns, and community mobilisation interventions</td>
<td>Unclear evidence
• Breastfeeding education interventions using multimedia
• Using media campaigns as a stand-alone intervention, and particularly television commercials</td>
<td>Not available</td>
<td>Effective interventions based on evidence with some uncertainties
• Integrated mass media and community mobilisation approach</td>
<td>Not available</td>
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<tr>
<td>Factors associated with women’s engagement in breastfeeding support</td>
<td colspan="5">Factors influencing women's engagement with breastfeeding support from the mothers’ perspective
• Information provision
• Nature of facilitators
• Delivery modes
• Maternal care pathways
Factors associated with the peer support implementation from the supporters’ perspective
• Recruitment and selection of peer supporters
• Resources and practical challenges to providing peer support such as time spent with mothers
• Understanding of peer supporters’ role
• Training and supervision of peer supporters</td>
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<td>Factors associated with breastfeeding initiation and maintenance</td>
<td colspan="2">Barriers to breastfeeding initiation and maintenance
• Smoking during pregnancy
• Admission to special or intensive care units
• Being multiparous
• Lack of breastfeeding education and follow-up
• Mothers’ negative experiences associated with breastfeeding such as no designated space or time to breastfeed while at work
• Mothers’ perceived barriers e.g., ‘breastfeeding does not fit my lifestyle’
• Lack of family, household or social support
• Mothers’ views on breastfeeding in public</td>
<td colspan="3">Facilitators for breastfeeding initiation and maintenance
• Peer counsellor support and guidance
• The mother’s pre-existing opinion that breastfeeding is the best infant feeding choice
• Living in a remote area
• Attending a regional breastfeeding support service
• Higher levels of educational attainment
• Living in larger households
• Having a partner</td>
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2. Methods

2.1 Description of the Intervention

Breastfeeding has short- and long-term benefits on child health, growth and development as well as benefits for the breastfeeding woman.[1] Supportive measures are required to promote and support mothers to breastfeed, and relevant interventions can include:

- **Family and community focused support**. Interventions targeted collectively at mothers, fathers, and other family members or with a wider community focus; including any measures that take place within the family and community settings. This can include counselling and education that can be variously delivered including e.g., peer support and one-to-one family or group interactions with specialist staff. Wider interventions might include social mobilisation and community action that builds partnerships and capacity across multiple stakeholders for a sustainable social transformation of breastfeeding culture, as well as mass media or social media related to breastfeeding.
- **Organisational-level programmes and services within maternity units**. For example, the UNICEF Baby Friendly Initiative Accreditation and the Baby Friendly Hospital Initiative were proposed to scale up ten interventions for use in birthing facilities to promote and support breastfeeding.
- **Workplace support**. Interventions are largely related to maternity leave, workplace support and facilities and the employment status of the mothers.
- **Wider policies or national and sub-national programmes to support breastfeeding**. Examples of relevant interventions include the implementation of the Breast-milk Substitutes Act (or the Code of Marketing of Breast Milk Substitutes), maternal and child health programmes.

As families, social networks and communities are important determinants influencing mothers' decisions to breastfeed, delivering support within the family and community context is considered a potential way to improve breastfeeding practices. The focus of this rapid evidence synthesis is on family and community interventions used as extra support over and above routine breastfeeding services or the UNICEF Baby Friendly Initiative Accreditation, including any specific measure that promotes and supports breastfeeding targeted at the family and wider community context.

2.2 Search

We searched Medline (Ovid) and the Epistemonikos database in July 2024. Our searches were based on key terms related to breastfeeding, community, family, counselling, education, social media, health campaigns, and reviews. We also searched the reference lists of the included reviews and used Google Scholar to identify further related articles.

2.3 Key Questions

Q1. What is the evidence for the impact of providing extra supportive measures in families and communities, particularly those taking the following three approaches, in addition to the UNICEF Baby Friendly Initiative Accreditation, on the rates of early initiation of breastfeeding, and breastfeeding at 6 to 8 weeks?

(1) Individual or group counselling or education
(2) Social support
(3) Promotion via mass media campaigns or community mobilisation interventions

Related to the question, where evidence was available, we explored the factors that seem to make supportive measures effective. We also considered impacts on health inequalities in breastfeeding practices in relation to this question.

Q2. What is the evidence regarding the influence of contextual factors associated with women's engagement with breastfeeding support and on the initiation and continuation of breastfeeding?

2.4 Inclusion Criteria

2.4.1 Participants

We included evidence relating to study participants who were healthy women and were considering breastfeeding or were breastfeeding healthy babies. We excluded evidence focusing solely on women requiring additional medical care e.g. those with diabetes, women with HIV/AIDs, overweight or obese women.

We included evidence of interventions targeted at parents, families and wider communities. We excluded studies of organisational-level programme or service deliveries and those focused on health professionals e.g., studies that evaluated special training in health professionals on the topic of breastfeeding.

We focused on studies from high-income countries (including the UK) because we considered this evidence to be directly relevant to the RES questions. Studies from low- or middle-income countries were considered only when no study was identified from high-income countries.

2.4.2 Interventions

We included evidence on the impact of various interventions taking the following approaches.

- **Individual counselling or education focused on mothers or other family members**. Examples of relevant interventions include one-to-one family breastfeeding support offered by midwives, health visitors or trained local volunteers (peer supporters) via home visits or telephone or digital technologies; and antenatal breastfeeding education delivered by health professionals or by Voluntary Community and Social Enterprise groups;

- **Social support for mothers and/or family members**. Examples of relevant interventions include local breastfeeding drop-in sessions or social groups; peer support and the local breastfeeding friend chatbot on social media;
- **Group counselling or education in communities**; that is, formal or informal health education sessions delivered for a group of mothers in community settings to promote breastfeeding practices.
- **At-scale, integrated mass media campaigns, and community mobilisation interventions** that could involve community breastfeeding campaigns or champions.

Complex interventions which took a strategic, coordinated, multifaceted approach to supporting breastfeeding in the family and community context were also eligible.

We considered interventions eligible only if they were provided as extra breastfeeding support services in the family and community context over and above routine antenatal appointments or the UNICEF Baby Friendly Initiative Accreditation. Eligible interventions could be delivered face-to-face, digitally, or both.

It was challenging to distinguish counselling/education from support. We accepted authors' definitions as long as the interventions aimed to promote the breastfeeding practice of mothers within family and/or community environments.

We acknowledge that some studies evaluated the impacts of counselling or education measures provided in health systems or workplace environments. We noted these studies for further reference but excluded them from this RES.

For this RES, we only considered the above interventions implemented within the family and/or community context. We also excluded studies on wider policies or national programmes, as noted above, that are beyond the scope of family and/or community-based supportive measures.

2.4.3 Comparators

We considered evidence with any comparator group, including no extra family or community intervention over and above routine antenatal interventions or the UNICEF Baby Friendly Initiative Accreditation, and alternative extra family or community interventions.

2.4.4 Outcomes

For Q1, we focused on the following primary outcomes:

- **Early initiation of breastfeeding**. We acknowledge that this outcome can be defined or measured differently, e.g., either being defined as the provision of breast milk to infants within an hour of birth, or as the initiation of first breastfeeding with no specific time restriction. We accepted the author's definitions of this outcome regardless of the mode or the timing of breast milk delivery.
- **Rates of exclusive breastfeeding until 6 to 8 weeks**. We defined this as exclusive breastfeeding practice that continues at 6 to 8-week checkpoint.

We considered the following breastfeeding outcomes as secondary outcomes.

- **Exclusive breastfeeding until 4-6 months**. According to the World Health Organization (WHO) recommendations, we defined this outcome as feeding breast milk from the mother or wet nurse or expressed or donor breast milk, during the period from birth to 4 to 6 months of age, without feeding other liquids or solids apart from vitamin or extra nutritional supplements or prescribed medicines.
- **Continued breastfeeding**. We considered this outcome as the breastfeeding from 12 months to 23 months.

For Q2, we considered evidence about any contextual factors that, as reported, were associated with women's engagement in breastfeeding support and with their initiation and continuation of breastfeeding.

2.4.5 Study design

We recognised the extensive evidence available on this topic. In the first instance we considered existing overviews of reviews for this RES. Where relevant overviews of reviews had no eligible evidence, we included other forms of evidence syntheses, that is, systematic reviews of primary studies. We used a broad definition of systematic reviews as having a systematic search, clear inclusion criteria and critical appraisal of the included studies.

Where we were unable to identify existing evidence syntheses, or where the relevant review evidence was limited, we planned to consider primary studies, looking first at the most robust primary study designs. For Q1 this was randomised trials or well-designed alternative quantitative studies assessing interventions to promote or support breastfeeding in comparison with comparators, over a defined follow-up time in clearly defined participants, and adjusted for confounding factors in the analysis or by study design. These include controlled before-after studies, interrupted time series studies, and studies with regression discontinuity designs. For Q2 this was qualitative research, mixed-methods research and cross-sectional surveys that explored contextual factors associated with women's engagement in breastfeeding support and with their initiation and continuation of breastfeeding. We did not plan to consider other types of research in the absence of well-designed research.

In summarising the evidence identified, we followed the GRADE approach to categorising the certainty of evidence into four levels:

- **high** certainty, i.e., we are confident that the research findings reflect a true effect;
- **moderate** certainty, i.e., we are fairly confident that the finding reflects a true effect;
- **low** certainty, i.e., we have limited confidence in the findings, and more research is likely to change them;
- **very low** certainty, i.e., there are no clear findings.

We followed general GRADE criteria in assessing the certainty of evidence without performing a full GRADE assessment of the evidence.

3. Results

3.1 Results of search

We identified 1714 records from the database searches. After screening, we considered one overview of reviews[2] and 17 systematic reviews[3-19] eligible for inclusion in this RES for Q1. We considered four systematic reviews eligible for inclusion for Q2.[20-23] As there were several existing evidence syntheses, we did not include primary studies in this RES.

We report evidence below by intervention types and different outcomes. In some sections, multiple reviews were included on the same topics. We recognise that there may be a potential overlap between primary studies included in those reviews, thus that multiple reviews on a topic may not mean multiple distinct bodies of primary research. However, due to time limitations, we were unable to explore the overlap of evidence between different reviews.

3.2 The impact of family and community-focused approaches to promoting and supporting breastfeeding (Q1)

3.2.1 Various family- and community-focused interventions as a general category

The overview of reviews and four systematic reviews summarised evidence on various family- and community-focused interventions that were grouped at a high level, meaning that evidence was not reported separately for specific interventions.[2, 9, 12, 14, 17] Of these reviews, Gavine et al. (2022) is a Cochrane Review including the most studies (116 RCTs, 125 various interventions) and is the most up-to-date.[9] The interventions included were diverse, e.g., 49 involving peer support, and three involving community-focused activities such as mass media campaigns and community meetings. Gavine classified the interventions into: breastfeeding support-only interventions (n = 91, consisting of breastfeeding support components only); and multi-component interventions (n = 34, including breastfeeding support components alongside wider components e.g., vaccination, and children's nutrition programmes).

Early initiation of breastfeeding. Of the five reviews, only Sinha et al. (2015) present evidence of this outcome in a review of 57 randomised and non-randomised studies in home and family settings and six studies in community settings.[17] The review suggested that interventions delivered in home and family settings were not effective in general, but that counselling or education in the home and family environment appeared effective in increasing early initiation rates on average (RR 1.74, 95% CI 0.97 to 3.12). Interventions delivered in community settings increased the rates of the early initiation of breastfeeding within 1 hour of birth (RR 1.86, 95% CI 1.33 to 2.59) as did interventions targeting not only the home and family settings but also the community environment (RR 1.85; 95% CI 1.08–3.17). The evidence has **some uncertainties** as nearly half of the relevant studies (22/49) were considered to have methodological limitations. The evidence is **directly relevant** to the UK context.

Exclusive breastfeeding until 6 to 8 weeks. Only the Cochrane review by Gavine et al. (2022) reports this outcome.[9] This review suggests that breastfeeding support-only interventions probably reduce

the risk of women stopping exclusive breastfeeding at 4-6 weeks and at two months (**moderate-certainty evidence**).[9] However, it is **unclear** if multi-component interventions reduce the number of women stopping exclusive breastfeeding at 4-6 weeks. Although only 56% of the 116 included RCTs were from high-income countries and evidence for high-income countries was not always separated from that for low- or middle-income countries, Gavine et al. suggest that the results are generally consistent between different countries. Thus, the evidence may be **directly relevant** to the UK context.

Exclusive breastfeeding until 4-6 months. Three reviews present evidence on this topic including the Cochrane Review.[9, 12, 17] Gavine et al. (2022) suggested that breastfeeding support-only interventions probably reduce the risk of women stopping exclusive breastfeeding at 3-4 months and six months (**moderate-certainty evidence**).[9] When offered breastfeeding support-only interventions, more women from high-income countries stopped exclusive breastfeeding at six months than those from low- or middle-income countries (RR 1.15, 95% CI 1.05 to 1.27). Multi-component interventions were also found to reduce the number of women stopping exclusive breastfeeding at six months (**moderate-certainty evidence**). As noted above, the evidence may be **directly relevant** to the UK context.

Of the remaining two reviews, Sinha et al. (2015) divided support interventions into those delivered in home and family settings and those delivered in community settings.[17] Kim et al. (2018) summarised RCT evidence solely on community-focused support interventions.[12] Both reviews suggested that community-focused interventions increased exclusive breastfeeding rates at 6 months. Sinha et al. (2015) also suggested that interventions delivered in the home and family settings increased exclusive breastfeeding rates at 6 months. The evidence has **some uncertainties** as over half of the relevant studies had methodological limitations. The evidence may be **directly relevant**.

Continued breastfeeding up to 23 months. Only Sinha et al. (2015) presents this outcome and suggested that interventions delivered in home settings were effective in general in increasing the rates of continued breastfeeding at 23 months.[17] The evidence has **some uncertainties** as over half of the relevant studies (11/18) were considered to have methodological limitations. The evidence is **directly relevant** to the UK context.

Other breastfeeding outcomes. Two reviews report evidence of breastfeeding outcomes that were not clearly specified and/or could not be defined as the outcomes noted above.[2, 14] Tomori et al. (2022) is the only overview of reviews identified on this topic.[2] The overview of reviews suggested that, of community- and family-focused interventions, effective breastfeeding promotion interventions sometimes engaged family members such as fathers and grandmothers. Home visits were reported to be a highly effective mode of delivering pre- and postnatal education and breastfeeding support from trained and community health workers (who are para-professionals or lay health workers offering breastfeeding support services to mothers in community settings). However, the evidence is **unclear** in terms of the constituent characteristics (e.g., the frequency, timing and duration of the visits) of the most effective home visits. Interventions spanning the prenatal and postnatal periods are often reported as effective.

Tomori et al. suggested that community health workers (i.e., trained para-professionals or lay health workers providing breastfeeding support in community settings) are (in their view) crucial in community- and family-focused interventions, and they are helpful in:

(1) building community engagement and delivering respectful and culturally appropriate support, particularly in under-served communities;
(2) establishing effective networks of support in complex situations; and
(3) maintaining the continuity of care and connecting community and family settings.

The quality of evidence is not stated in this overview. The evidence may be **indirectly relevant** as, of the 115 reviews, only 47 (40.9%) included studies from high- and upper-middle-income countries.

Segura-Perez et al. (2021) reviewed evidence solely on community-focused support interventions in ethnic minority women in the USA.[14] In line with the overview of reviews, this review favours use of community-focused interventions compared with not using these interventions. The evidence is **directly relevant** to this RES but has **some uncertainties** due to methodological limitations identified in most of the included studies.

3.2.2 Individual counselling or education

One-to-one family breastfeeding support via home visits, telephone or digital technologies

Seven reviews summarised evidence on counselling or education.[3, 5, 6, 15, 17-19]

Early initiation of breastfeeding. Only Cheng et al. (2019) reported evidence of this outcome. [6] This review included 26 RCTs and non-randomised studies evaluating the effectiveness of home visits with professional support for breastfeeding as a supplement to standard care in breastfeeding outcomes. There was **unclear** evidence about the benefits of home visits on breastfeeding initiation rates (four studies). The evidence may be **indirectly relevant** as only half of the included studies (15/26) were from high-income countries.

Exclusive breastfeeding until 6-8 weeks. Two reviews report this outcome, of which one is on digital support interventions.[15, 19] Shakya et al. (2017) included evidence of this outcome at multiple time points.[15] Of 47 studies, 38 focused on one-on-one counselling provided by peer counsellors during home visits, and telephone interactions. This review suggested that, compared with usual care, community peer support increased the rate of exclusive breastfeeding in mothers from high-income countries at 3 months but not at 1, 1.5, or 2 months. The evidence has **some uncertainties** due to methodological limitations in >50% of the included studies, but it is **directly relevant**.

Gavine et al. (2022) is a systematic review of RCTs that evaluated if breastfeeding support provided remotely is an effective method of support in promoting breastfeeding.[19] Various modes of remote interventions were reported in this review, with most involving telephone calls from peer supporters or health professionals. The review suggested that evidence is unclear for the impact of remotely delivered support on exclusive breastfeeding at 4–8 weeks. However, remotely provided one-to-one breastfeeding support and education combined with hospital-based support may be effective in increasing the average rates of exclusive breastfeeding at 3 months (RR 0.5, 95% CI 0.63 to 0.90; **low-**

certainty evidence). The evidence may be **directly relevant** to the UK context as half of the studies (12/23) accounting for 79% of participants were from high-income countries.

Exclusive breastfeeding until 4-6 months. Four reviews report evidence on this topic.[15, 17-19]

Considering education and counselling interventions together, the evidence is **inconsistent** between reviews in terms of whether the one-to-one focused interventions delivered in home and family settings increased exclusive breastfeeding rates at 6 months.[15, 17] The evidence has **some uncertainties** as noted above but is **directly relevant** to the UK context.

The evidence is however **consistent** between the two reviews of digital support interventions, both favouring the use of digital breastfeeding support and education interventions in increasing exclusive breastfeeding at 6 months compared with not using digital interventions.[18, 19] The evidence is of low-**certainty** and is **directly relevant** to the UK context as most studies were from high-income countries.

Continued breastfeeding up to 23 months. Only Sinha et al. (2015) presents this outcome and suggested that one-to-one counselling or education delivered in home settings was effective in increasing the rates of continued breastfeeding at 23 months.[17] The evidence has **some uncertainties** as noted above but is **directly relevant**.

Other breastfeeding outcomes. Three reviews report relevant evidence of outcomes that were not clearly specified and/or could not be defined as the outcomes noted above, [6] one of which included support interventions provided by health professionals whilst the other two reviews focused on non-professional support.[3, 5] The three reviews consistently suggest individual counselling or education increase exclusive breastfeeding rates. We report the evidence in detail for reference.

Cheng et al. (2019) reviewed 14 studies of one-to-one home-based interventions with professional support on promoting breastfeeding, 10 of which suggested an increase in exclusive breastfeeding rates. [6] Successful interventions tended to include:

(1) support-related elements (e.g., providing women with the support on positioning, hands-on breastfeeding support) and
(2) knowledge-enhancing programme, particularly on the topics of the benefits of exclusive breastfeeding, the mechanism of breastfeeding and milk flow, and avoiding the use of feeding bottles and pacifiers.

The remaining two reviews, including a Cochrane Review, reviewed RCTs involving one-to-one breastfeeding education delivered by non-healthcare professionals including peer counsellors.[3] [5] The interventions included: peer support services provided in addition to routine care; peer counselling; specialised breastfeeding peer counselling; services from paraprofessional doulas; breastfeeding educators (trained research assistants) who implemented phone-based breastfeeding education and support; trained credit officers who led monthly breastfeeding sessions; and home visits by community-based surveillance volunteers during pregnancy and in the first week of life. Evidence suggests that interventions delivered by non-healthcare professional counsellors and

support groups may improve breastfeeding initiation (**low-certainty evidence**). There is strong evidence favouring the provision of high-intensity counselling (i.e., interventions either including at least 3 contacts, or providing both prenatal and postpartum support, or delivering frequent in-person contacts). [5] Low-intensity interventions were less effective, i.e., interventions including either only prenatal education, or telephone support as the primary postpartum contact approach. The evidence is **directly relevant** to the UK context as most studies were from high-income countries.

Antenatal breastfeeding education

There are systematic reviews of antenatal breastfeeding education e.g., Wong et al. (2015) and Wong et al. (2021). [24, 25] However, we excluded all these reviews as none stated if the education was performed in hospitals or in the home and community settings.

3.2.3 Social support

Peer support

Eight reviews report evidence of peer support for all breastfeeding outcomes apart from continued breastfeeding up to 23 months.[4, 7, 8, 10, 11, 13, 14, 16]

Early initiation of breastfeeding. Four reviews report evidence on this topic, and their evidence was either from countries of any income level, [13] or focused on the UK countries, [16] or looked at a specific national programme, [8] or was for a specific under-served community. [10] Though having these heterogeneities, the evidence is generally favourable to use of peer support in promoting breastfeeding initiation. [8, 10, 13, 16] We report the evidence in detail below for reference.

Rodriguez-Gallego et al. (2021) summarised RCT and non-randomised evidence on the impacts of using peer support and mother-to-mother support groups, with or without leadership from a healthcare professional, on breastfeeding outcomes. [13] This review suggests that supportive interventions in general increase the rates of breastfeeding initiation. The evidence has **some uncertainties** as all included studies had methodological limitations, and it is **indirectly relevant** as only half of the included studies were from high-income countries.

Sinclair et al. (2018) included two **good-quality** RCTs and one poor-quality non-randomised study, all from the UK and Ireland, evaluating the effectiveness of additional one-to-one, peer and/or group breastfeeding support on breastfeeding outcomes.[16] None of the three studies suggested an increase in the rates of breastfeeding initiation. The evidence is **directly relevant**.

Feltner et al. (2018) included evidence of peer-support interventions offered within the Women, Infants and Children programme (a US Federal supplemental nutrition programme).[8] This review suggests that peer support may improve rates of any breastfeeding initiation (**low-certainty evidence**). The evidence is all based on USA studies (3 RCTs and 5 non-randomised studies), thus being **directly relevant**.

Ingram and colleagues (2010) found **high-quality RCT evidence** that universal antenatal peer support (i.e., support provided to all women) was not effective in increasing rates of breastfeeding initiation.[10] Evidence from two small US RCTs and one US non-randomised study suggested that

targeted antenatal peer support (i.e., those offered only to women who considered breastfeeding) might improve the rate of initiating breastfeeding. The evidence is relevant to low-income Hispanic women. The evidence is largely from the USA and the UK, thus being **directly relevant**.

Exclusive breastfeeding until 6 to 8 weeks. Two reviews report this outcome, and both suggested that supportive interventions may increase breastfeeding rates in the short term. [8, 13] Of the two reviews, Rodriguez-Gallego et al. (2021) looked at supportive interventions in general. [13] Feltner et al. (2018) focused on peer support provided via home visits within the Women, Infants and Children programme.[8] The evidence has **some uncertainties** but may be **indirectly relevant**.

Exclusive breastfeeding until 4-6 months. Two reviews report this outcome, both suggesting that supportive interventions may increase breastfeeding rates at 6 months.[8, 13] As noted above, the evidence has **some uncertainties** but may be **indirectly relevant**.

Other breastfeeding outcomes. Three reviews report outcomes that were not clearly specified and/or could not be defined as the outcomes noted above. These reviews either explored the subgroup effects of peer support interventions by their different characteristics,[11] or looked at specific underserved communities. [4] [7] Despite this heterogeneity, the three reviews consistently suggest that peer support is generally effective in promoting breastfeeding.[4, 7, 11] We report the details of all evidence below for reference.

Jolly et al. (2012) is a systematic review of 17 RCTs evaluating the effects of peer support interventions on breastfeeding at least four weeks postpartum.[11] Meta-regression was used to explore the subgroup effects by the factors of the setting (high-income countries, low- or middle-income countries, and the United Kingdom), intensity (<5 and ≥5 planned contacts), and timing of peer support (postnatal period with or without antenatal care). Compared with usual care, those using peer support had a lower risk of not breastfeeding and a lower risk of not breastfeeding exclusively at the last follow-up in both high-income and low- or middle-income countries. However, the effect was not seen in the analysis of the UK-only trials (not breastfeeding: 0.96, 0.89 to 1.04; not exclusively breastfeeding: 0.98, 0.96 to 1.01). Women in the more intensive interventions (≥5 contacts planned) had a significantly lower risk of not breastfeeding compared with usual care, whereas the effect was not seen in those using the less intensive interventions. ***Postnatal-only*** peer support interventions and ***antenatal plus postnatal support*** both significantly reduced the risk of not exclusively breastfeeding. The evidence is largely **directly relevant** to the UK context as most of the included studies (11/17) were from high-income countries. The evidence is of **moderate certainty** as almost all studies were free of substantial methodological limitations, although the variation of effects was large between studies.

Buckland et al. (2020) summarised evidence from nine randomised and non-randomised studies comparing various interventions with usual care in promoting exclusive breastfeeding in young mothers from high-income countries.[4] The review suggested that interventions involving peer counselling appear to be the most successful in increasing exclusive breastfeeding rates in young mothers. The evidence has **some uncertainties** due to methodological limitations identified in most studies but is **directly relevant**.

Fairbank et al. (2000) systematically reviewed 59 randomised and non-randomised studies up to November 1998 of various interventions.[7] The review presents evidence of peer support in women on low incomes. The evidence suggests that peer support delivered in the ante- and postnatal periods is effective at increasing both initiation and duration rates of breastfeeding among women on low incomes. The evidence is **directly relevant** as both peer support non-RCTs were from high-income countries, but the evidence has **some uncertainties** due to methodological limitations identified.

Local breastfeeding drop-in or social groups

Three reviews summarised evidence on community-based social support interventions, of which none reports rates of exclusive breastfeeding until 6 to 8 weeks.[3, 8, 17]

Early initiation of breastfeeding. Balogun et al. (2016) is a Cochrane Review in which only one UK trial (18,603 women) was identified comparing two strategies of providing community-based support groups: increasing community-based breastfeeding groups available to pregnant and breastfeeding women in localities (intervention group) versus not changing the provision of breastfeeding support groups (control group).[3] The review suggested no difference between groups in the rates of the breastfeeding initiation at. The evidence is **directly relevant** and has **moderate certainty**.

Exclusive breastfeeding until 4-6 months. Only Sinha et al. (2015) presents evidence of this outcome.[17] The review suggested that family or social support did not increase exclusive breastfeeding rates at 6 months (RR 0.95, 95% CI 0.87 to 1.02). As noted above, the evidence has **some uncertainties** but is **directly relevant**.

Exclusive breastfeeding until 4-6 months. Feltner et al. (2018) included five studies evaluating the effectiveness of community-based breastfeeding drop-in centre on promoting breastfeeding.[8] Access to a community-based breastfeeding drop-in centre among women receiving early home-based breastfeeding support may not increase breastfeeding rates at 3, 4, or 5 months (**low certainty evidence**). The evidence is **directly relevant** as most studies are from high-income countries.

Continued breastfeeding up to 23 months. Only Sinha et al. (2015) presents this outcome and suggested that family or social support was effective in increasing the rates of continued breastfeeding at 23 months (RR 1.69, 95% CI 0.95 to 2.99). The evidence has **some uncertainties** as noted above but is **directly relevant**.

Local breastfeeding friend chatbot on social media

None of the reviews identified for this RES reported evidence on this topic.

3.2.4 Group counselling or education in communities

Only two reviews include evidence of this type of intervention for the following two outcomes.[7, 17]

Early initiation of breastfeeding. Fairbank et al. (2000) included nine RCTs, seven non-RCTs, and three before–after studies of group health education.[7] The review suggested that informal, small group health education, delivered during the antenatal period, appeared to be effective at increasing

initiation rates among women from different income groups and some minority ethnic groups. The evidence has **some uncertainties** due to the methodological limitations identified and the small sample sizes of the included studies. The evidence is **directly relevant** to the UK context as most studies are from high-income countries.

Exclusive breastfeeding until 4-6 months. Sinha et al. (2015) presents evidence of this outcome, suggesting that group counselling or education in community settings increased exclusive breastfeeding rates at 6 months (RR 1.61, 95% CI 0.95 to 2.71).[17] The evidence has **some uncertainties** as noted above but is **directly relevant**.

3.2.5 At-scale, integrated mass media, counselling, and community mobilisation interventions including community breastfeeding campaigns or champions

Three reviews include evidence of this type of intervention for the following two outcomes.[3, 7, 17]

Early initiation of breastfeeding. Two reviews report this outcome but find that the evidence on at-scale, mass media, community mobilisation interventions is either unclear or limited.[3, 7]

Balogun et al. (2016) is a Cochrane Review that identified only two trials (497 women) related to this outcome.[3] Interventions included in these two studies are: (1) the use of a self-help manual seven weeks before delivery designed to communicate simple breastfeeding skills to pregnant women; and (2) a low-cost breastfeeding education video shown to women prenatally. The review suggested that the evidence is **unclear** if breastfeeding education interventions using multimedia improve breastfeeding initiation among women (average RR 1.16, 95% CI 0.63 to 2.41). The evidence is **uncertain** due to the large variation of effects between the two studies and the methodological limitations of the studies. The evidence is from high-income countries and **directly relevant**.[3]

Fairbank et al. (2000), the earlier review of only two before-after studies on this topic, [7] suggested that the available evidence is **limited** in terms of the effectiveness of using media campaigns as a stand-alone intervention, and particularly television commercials, to increase initiation rates of breastfeeding. The evidence is from high-income countries but has **some uncertainties** due to methodological limitations of the included studies.

Exclusive breastfeeding until 4-6 months. Only Sinha et al. (2015) presents evidence of this outcome.[17] The review suggested that integrated mass media and community mobilisation approach in the community increased exclusive breastfeeding rates at 6 months (RR 1.17, 95% CI 1.01 to 1.14). The evidence has **some uncertainties** as noted above but is **directly relevant**.

3.2.6 Workplace-based interventions

We identified five reviews on the topics of workplace-related breastfeeding promotion programmes.[26-30] As pre-planned, we listed these reviews in the Reference section for information but did not summarise their evidence in this RES.

3.3 Contextual factors associated with breastfeeding and support (Q2)

3.3.1 Factors associated with women's engagement in breastfeeding support

Two reviews present evidence on this topic but look at the associated factors from different perspectives.[20, 21] Bengough et al. (2022) reviewed 22 qualitative studies of factors that influenced women's engagement with breastfeeding support from the mothers' perspective.[20] Most studies (19/22) included were from high-income countries, and the study settings considered were home and communities. The review identified four process-related, overarching themes and specific sub-themes of factors affecting the engagement with breastfeeding support programmes:

(1) **information provision**. The review identified the following elements that should be included in breastfeeding information:

- *"Women do not want technical breastfeeding information"* (**moderate confidence**)
- *"Women want consistent messages about infant feeding"* (**high confidence**)
- *"Women want realistic information on benefits as well as risks and challenges of breastfeeding"* (**moderate confidence**)

(2) **nature of the facilitators**. The following (un-)supportive characteristics of the facilitators affected the implementation of support programme.

- *"Women prefer the support of an implementer who has gone through similar experiences in relation to breastfeeding"*. (**moderate confidence**)
- *"Women experienced disconnected encounters with hospital staff*." (**high confidence**)
- *"Women value one-on-one support in the form of (online) community-based supporters"*. (**moderate confidence**)
- *"Women judge the quality of the information provided as high when delivered in the context of official breastfeeding support programmes"*. (**high confidence**)

(3) **delivery modes**. Two factors of '*being supported as an individual*' were reported.

- *"Women want implementers of support to respect their individual choice of whether and how to breastfeed"*. (**moderate confidence**)
- *"Women do not like their breasts to be touched*." (**low confidence**)

(4) **maternal care pathways**. There were five factors related to service designs and care pathway timeline.

- *"Women want support to be easily and flexibly available*." (**moderate confidence**)
- *"Women perceive benefits of home visits in combining various forms of support*." (**moderate confidence**)
- *"Women want information about breastfeeding support options in early pregnancy*." (**low confidence**)
- *"Women want continuity in breastfeeding support"*. (**moderate confidence**)
- *"Women perceive the optimal duration of physical support as the observation of whole feeds"*. (**low confidence**)

Where the evidence is of **low confidence**, it was largely due to the methodological limitations of the included studies. The evidence overall is **directly relevant** to the UK context.

Chang et al. (2022) summarised evidence of 22 qualitative studies – mostly from high-income countries – on this topic,[21] but facilitators and barriers to the peer support implementation were presented from a supporter's perspective:

- recruitment and selection of peer supporters
- resources and practical challenges to providing support such as time spent with mothers
- understanding of peer supporters' role
- training and supervision of peer supporters

The evidence was largely judged as **high confidence**. It is **directly relevant** to the UK context.

3.3.2 Factors associated with the initiation and continuation of breastfeeding

Two reviews present evidence on this topic.[22, 23] Springall et al. (2023) reviewed 14 quantitative studies that explored the factors associated with breastfeeding initiation and maintenance for Aboriginal and Torres Strait Islander women in Australia. [22] Factors associated with successful promotion of breastfeeding included: living in a remote area, attending an Aboriginal-specific service, attending a regional breastfeeding support service, higher levels of educational attainment, increased maternal age, living in larger households, having a partner, and having a higher reported number of stressful events and social health issues. Barriers to breastfeeding were: smoking in pregnancy, admission to special care nurseries or neonatal intensive care units, and being multiparous. Most studies had **no serious methodological limitations**. The Australian evidence is **indirectly relevant** to the UK context.

Weston et al. (2023) summarised 11 qualitative studies on the experience in breastfeeding and support interventions among low-income women in the USA. [23] Factors influencing the decision of mothers to breastfeed or not were identified and grouped. Barriers identified included:

- lack of breastfeeding education and follow-up;
- mothers' negative experiences associated with breastfeeding such as no designated space or time to breastfeed while at work;
- mothers' perceived barriers such as 'breastfeeding does not fit my lifestyle';
- lack of family, household or social support; and
- mothers' views on breastfeeding in public.

Facilitators associated with breastfeeding decision included:

- peer counsellor support and guidance and follow-up from nurses, midwives, and breastfeeding consultants that strengthened mothers' desire to breastfeeding;
- the opinion that breastfeeding was the better or best infant feeding choice.

Studies were considered to have **no serious methodological limitations**. The evidence is **directly relevant** to mothers of low socioeconomic status in the UK.

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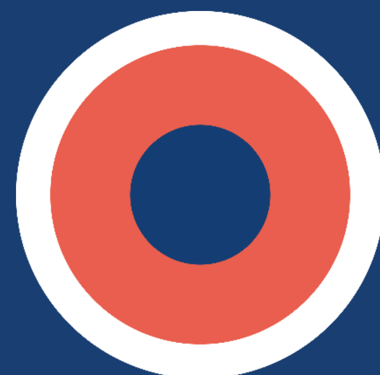

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