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# Academy of Breastfeeding Medicine Clinical Protocol #2: Guidelines for Birth Hospitalization Discharge of Breastfeeding Dyads, Revised 2022

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#### Abstract

A central goal of the Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient. The Academy of Breastfeeding Medicine recognizes that not all lactating individuals identify as women. Using gender-inclusive language, however, is not possible in all languages and all countries and for all readers. The position of the Academy of Breastfeeding Medicine (https://doi.org/10.1089/bfm.2021.29188.abm) is to interpret clinical protocols within the framework of inclusivity of all breastfeeding, chestfeeding, and human milk-feeding individuals.

#### Introduction

REPARATION FOR DISCHARGE AND CLEAR TRANSITION planning during the birth hospitalization are recommended as a part of best practices in postpartum and neonatal care and are essential components of a comprehensive program to improve breastfeeding outcomes and reduce mortality.<sup>1,2</sup> Globally, ~300,000 women die during childbirth or in the weeks after delivery each year (211 per 100,000), and the risk of mortality during childbirth is estimated at 1 in 190 persons.<sup>3</sup> For newborns <28 days of age, global mortality rates are 17 per 1000 live births (1,700 per 100,000) and account for the vast majority of deaths under the age of 5 years.4 Newborns are at great risk of early adverse outcomes; globally 75% of newborn deaths occur in the first week after birth.

Exclusive breastfeeding is associated with improvements in neonatal mortality rates, in particular in low- and middle-income countries. 6-8 Breastfeeding initiatives including skin-skin care do not increase the rate of infant death during the first week. However, there is controversy about whether to advise against mothers falling asleep while holding their newborns in skin-to-skin care. In many high-resource countries, health inequities driven by structural racism and other forms of discrimination contribute greatly to poor maternal and newborn outcomes. There are higher neonatal and maternal mortality rates among U.S. Black persons and Aboriginal persons of Australia. 10-12 Appropriate assessment of the newborn and mother during and after birth is important to reduce adverse outcomes and ensure successful long-term breastfeeding.<sup>13</sup>

Across the world, births occur both in and out of the hospital setting. Some of the considerations in this protocol may be relevant (e.g., risk factors for lactation difficulties, weight loss, and jaundice) in all birth settings, but others may not be relevant for out-of-hospital births. Although this protocol focuses on discharge readiness from the perspective of newborn safety and breastfeeding ability, one must also carefully consider the physical and mental health of the mother with the goal of minimizing maternal-infant separation. More information regarding safe hospital discharge of the mother can be found through the World Health

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Organization (WHO) and National Institute for Health and Care Excellence U.K. guidelines. 1,14

The guidelines herein apply to discharge of healthy term breastfeeding newborns. Information about discharge for newborns cared for in the neonatal intensive care unit setting is available in ABM Protocol #12, about care for late preterm and early term infants in ABM Protocol #10, and about maternity policies in ABM Protocol #7. 15–17

## Recommendations

For each recommendation, the quality of evidence (levels of evidence 1, 2, and 3) and the strength of recommendation (A, B, and C) are noted as defined by the strength of recommendation taxonomy criteria. Recommendations are summarized in Table 1.

### In-hospital support of breastfeeding

1. Breastfeeding support should continue throughout the birth hospitalization and dyads should be connected to additional support after the hospitalization. <sup>2,19–24</sup>

The Academy of Breastfeeding Medicine supports birth hospital policies and procedures outlined by the WHO and UNICEF Baby Friendly Hospital Initiative (BFHI) Ten-Steps to Successful Breastfeeding.<sup>2</sup> Support during hospitalization should be obtained from a health professional trained in breastfeeding care.<sup>25,26</sup>

Formal assessments can include evaluation of positioning and attachment to the breast with careful attention to audible swallowing as a sign of milk transfer, newborn weight, presence of jaundice, and elimination patterns (including notation of frequency, color, and size of stools, and presence of urate crystals). Counseling should include practical demonstration of attachment to the breast and how to express breast milk.<sup>27,28</sup> In situations wherein the hospital stay may last up to a week, breastfeeding assessments can continue until breastfeeding is successfully established and then may decrease in frequency.

Levels of evidence: 1–3. Strength of recommendation: A.

#### Risks for early breastfeeding cessation

2. All concerns such as nipple pain, inability to express milk, perception of inadequate production, and any perceived need to supplement should be promptly evaluated and addressed. 19,28,29

In countries where discharge after birth hospitalization typically occurs by 1.5–2 days after a vaginal birth and 2–4 days after a cesarean section, there are important considerations. Newborn weight and weight loss percentiles or percentages should be assessed; the frequency of assessment will depend on anticipated timing of discharge and national recommendations. Discharge may need to be delayed if the newborn's weight loss is higher than expected and a safe and sustainable feeding and follow-up plan is not feasible.

Levels of evidence: 2, 3. Strength of recommendation: B.

3. The breastfeeding dyad benefits from a family-centered approach to breastfeeding education that focuses on improvement of maternal, paternal/partner, and extended family support of breastfeeding.

This approach has been demonstrated to improve breast-feeding outcomes at 6 months. <sup>31–35</sup> Anticipation of breastfeeding problems should be assessed based on maternal and newborn risk factors, addressed in ABM Protocol #7 Model Maternity Policy and ABM Protocol #3 Supplementary Feeding. <sup>17,36</sup>

Levels of evidence: 1, 2. Strength of recommendation: B.

4. In communities with suboptimal breastfeeding rates affected by health inequities, including structural racism and bigotry, it is important to intervene at multiple levels using integrative methods to better support maternal and infant health with breastfeeding. 11,12,37,38

Integrative methods include culturally appropriate communication, improved access to care, continuity of care, and incorporation of maternal health when counseling about breastfeeding intention, exclusivity, and duration.

People facing complex barriers to breastfeeding will benefit from an integrative approach in which comprehensive strategies replace current disjointed interventions that fail to meet social and psychological needs. These strategies should function seamlessly throughout society and across institutions at the individual, interpersonal, community, policy, and macrosystem level while also considering the sociohistorical context.<sup>34</sup>

Level of evidence: 2. Strength of recommendation: B.

5. All concerns with breastfeeding, whether observed by hospital staff or raised by the mother, should be addressed by a lactation consultant, counselor, or health care provider knowledgeable about clinical lactation care before discharge of the mother and newborn. <sup>39,40</sup>

There are multiple risk factors for early cessation of breastfeeding, some of which include perceived insufficient milk production, separation of the dyad after delivery, assisted vaginal delivery, cesarean delivery, maternal smoking, maternal drug use, lack of support from family or medical staff, intimate partner violence, young maternal age, low level of maternal education, lack of paid maternity leave, and maternal return to work. 41–46

There are numerous risk factors for delayed lactogenesis (onset of lactogenesis II >72 hours postpartum) including maternal diabetes, alcohol use during pregnancy, Edinburgh Postnatal Depression Score ≥10, and advanced maternal age. <sup>47,48</sup> Breastfeeding women who experience (or who are at risk for) delayed lactogenesis II are at higher risk of discontinuing breastfeeding early. <sup>49</sup> Women with overweight (BMI ≥25 kg/m²) or obesity (BMI ≥30 kg/m²) are less likely to initiate breastfeeding, less likely to exclusively breastfeed, and are at greater risk of early breastfeeding cessation. <sup>19,50–56</sup>

Infant-related risk factors for breastfeeding problems, including ankyloglossia, anatomic abnormalities of the oropharynx, hypotonia, prematurity, and other conditions should be addressed, and specific support plans should be developed before discharge. Ankyloglossia is discussed further in the related ABM Position Statement.<sup>57</sup>

Levels of evidence: 1–3. Strength of recommendation: B.

# Risks of early discharge

6. Early discharge should be carefully considered in exclusively breastfed newborns, as there is risk of readmission secondary to neonatal hyperbilirubinemia and dehydration. <sup>58–61</sup>

Table 1. Summary of Recommendations and Strength of Recommendation Taxonomy

		PRT		SORT	
Recommendation	LOE	SOR	Recommendation	LOE	SOF
In-hospital support of breastfeeding Breastfeeding support should continue throughout the birth hospitalization and connection to breastfeeding support after hospitalization should be established.	1–3	A	Discharge packs containing infant formula, pacifiers, or commercial advertising materials specifically referring to infant formula and foods should not be distributed. These products may encourage poor breastfeeding practices, which may	1, 2	A
Risks for early breastfeeding cessation All concerns such as nipple pain, inability to hand express, perception of inadequate milk production, and any perceived need to	2, 3	В	lead to premature weaning.  Suggested anticipatory guidance Use a family-centered culturally relevant	1–3	В
supplement should be promptly evaluated and addressed.  The breastfeeding dyad benefits from a	1, 2	В	approach to what to expect in the postpartum period and how to support the breastfeeding mother.	1 3	Б
family centered approach to breastfeeding education that focuses on improvement of maternal, paternal/partner, and extended family support of breastfeeding.  In communities with suboptimal breastfeeding rates that are affected by	2	В	Every breastfeeding mother should receive support and coaching on the technique of expressing milk to alleviate engorgement and obtain milk for feeding to the newborn should separation occur or if the newborn is unable to feed directly from the breast.	2	В
health inequities including racism both within and outside the health care setting, it is important to use integrative methods to better support maternal and infant health with breastfeeding.  All concerns with breastfeeding should be addressed and documented by a lactation	1–3	В	Continuity of and transitions in breastfeeding care Coordinated guidance and referral for breastfeeding problems that can occur after birth hospitalization discharge is important to best support the breastfeeding dyad.	3	С
consultant, counselor, or health care provider knowledgeable about clinical lactation care before discharge of the mother and newborn.			Type and timing of hospitalization follow-up Postpartum care of the newborn and birthing person by medical providers and/or community health workers is recommended after birth/birth	1–3	A
Risks of early discharge Early discharge should be carefully considered in exclusively breastfed newborns, as there is risk of readmission secondary to neonatal hyperbilirubinemia and dehydration.	1–3	В	hospitalization discharge.  Care for the breastfeeding dyad after birth/birth hospitalization can occur in the medical office or in the home as there is no difference in health outcomes in office versus home-based visits.	1, 2	В
Consideration of weight loss in the newborn When supplemental feeds are clinically indicated, providing supplemental feeds	1, 2	A	Newborns who are discharged before 48 hours of life should be evaluated within 24–48 hours after discharge.	2, 3	С
with alternative feeding methods (e.g., syringe, cup, etcetera, versus bottle) is protective of any and exclusive breastfeeding for preterm infants and may be used for term infants.			Follow-up to support breastfeeding after birth hospitalization Families should be connected at discharge with community-based breastfeeding support that can be in-person or through	2–3	В
The importance of dyad-based care  The breastfeeding dyad should not be separated if possible, and should regularly breastfeed, practice kangaroo mother care, and learn techniques to express breast milk when separated.	1, 2	В	telemedicine.  Office, home-based, telephone, and video visits with a lactation professional and peer-led breastfeeding support groups should be part of regular follow-up and have been variably shown to increase	1–3	В
Discharge bags/hospital-provided gifts Families benefit from appropriate evidence- based breastfeeding educational materials that are free of commercial bias during hospitalization, discharge, and postdischarge. Products with commercial bias can encourage poor breastfeeding practices and may lead to premature weaning.	2	В	breastfeeding exclusivity, duration, and to be cost-effective.  Educational materials, including those delivered through the internet or mobile device, can also contribute to breastfeeding success and may be most effective when delivered in settings with low baseline rates of breastfeeding.	1–3	В

LOE, level of evidence; SOR, strength of recommendation; SORT, strength of recommendation taxonomy.

Longer birth hospitalization stays and medicalization of newborn feeding are not necessarily associated with improved breastfeeding outcomes. <sup>62–64</sup> The minimum length of hospitalization of newborn and mother should be 24 hours after delivery. <sup>13,65,66</sup> For facilities that discharge home earlier than this, arrangements should be made to ensure adequate follow-up.

Before discharge, it is important to ensure that both mother and infant are stable. The infant should receive recommended interventions and screening as per local or national protocol (e.g., vitamin K, hepatitis B immunization, erythromycin ophthalmic ointment, newborn screening, and initiation of vitamin D). Other considerations are that maternal pain is managed, breastfeeding is successfully initiated, consistent and practical advice from all clinicians (e.g., physician, midwife, advanced practice provider, nurse, and lactation consultant) is provided to the family, and professional support is available after discharge. <sup>67</sup> Discharge might need to be delayed until these issues are addressed and follow-up arranged.

Levels of evidence: 1–3. Strength of recommendation: B.

## Consideration of weight loss in the newborn

7. When supplemental feeds are clinically indicated, providing supplemental feeds with alternative feeding methods (e.g., syringe, cup, etcetera, versus bottle) is protective of any and exclusive breastfeeding in preterm infants and may be used in term infants.<sup>2,68,69</sup>

In the term newborn, excessive weight loss (e.g., >75%ile on the Newborn Early Weight Loss Tool or weight loss of >10% of birth weight), or <1 void and stool per day of life should prompt a careful breastfeeding assessment. Many, but not all newborns, regain birth weight within 7–14 days after delivery.

The speed with which weight is regained is correlated with the mode of birth (vaginal or cesarean). Some newborns take >14 days to regain birth weight, especially if born through cesarean delivery. Supplementation for medical indication is preferred in the following order: mother's own milk, if unavailable then donor human milk, if unavailable then formula as outlined in ABM Protocol #3.

Levels of evidence: 1, 2. Strength of recommendation: A.

# The importance of dyad-based care

8. If the mother is medically ready for hospital discharge but the newborn is not, or vice versa, the newborn and mother should continue 24-hour rooming in to facilitate breastfeeding and optimize the health of the breastfeeding dyad. The mother should be encouraged to spend as much time as possible with the hospitalized newborn, regularly breastfeed, practice kangaroo mother care, and techniques to express breast milk should be taught so that expressed milk can be given to the hospitalized newborn if separation occurs. <sup>19–21,23</sup>

Ensure the mother has access to a breast pump or knows how to hand express if a breast pump is not available and that high-quality education regarding breast pump use is provided. <sup>73</sup> Programs should be in place for the mother to borrow a pump for use at home if she does not otherwise have access. If

there are any difficulties with pumping and/or problems with milk production, early referral to a lactation consultant and/or a physician skilled in breastfeeding medical management is indicated.

All hospitals and birthing facilities should develop a policy to support hospitalized infants and lactating parents as outlined in the ABM Protocol #35.<sup>69</sup> The data regarding provision of breast pumps during or after birth hospitalization to unseparated mother—infant dyads and improvement in exclusive breastfeeding rates are inconclusive.<sup>74,75</sup>

Levels of evidence 1, 2. Strength of recommendation: B.

#### Discharge bags/hospital-provided gifts

 Families will benefit from appropriate evidence-based educational materials free of commercial bias on breastfeeding during hospitalization, discharge, and postdischarge. 74,76,77

The WHO International Code of Marketing of Breast-Milk Substitutes must be followed in countries where the code has been enacted into law and in facilities with BFHI designation, and remains best practice in all settings. <sup>78</sup>

Level of evidence: 2. Strength of recommendation: B.

10. Discharge packs containing infant formula, pacifiers, or commercial advertising materials specifically referring to infant formula and foods should not be distributed and are not in accordance with the International Code of Marketing of Breastmilk Substitutes. These products undermine normal breastfeeding initiation and continuation, which may lead to premature weaning. 76,79–82

Levels of evidence: 1, 2. Strength of recommendation: A.

## Suggested anticipatory guidance

11. A family-centered approach of what to expect in the postpartum period can support the breastfeeding dyad, as lack of family and social support is well described to be a risk factor for early discontinuation of breastfeeding. <sup>29,45,83–86</sup>

Culturally relevant anticipatory guidance in the family's preferred language should be discussed before discharge, with written supplemental materials provided. Online forums and mobile apps recommended or produced by health care personnel may reduce confusion and exposure to inaccurate information.<sup>87</sup>

Levels of evidence: 1–3. Strength of recommendation: B.

12. Every breastfeeding mother should receive support and coaching on the technique of expressing milk by hand to alleviate engorgement and obtain milk for feeding to the newborn should separation occur or if the newborn is unable to feed directly from the breast.<sup>2,27,87</sup>

Anticipatory guidance topics can include issues to expect and potential situations requiring immediate evaluation:

- a. Prevention and management of engorgement
- Interpretation of newborn hunger cues, responsive feeding based on cues, and expectation of frequency of feedings
- c. Indicators of adequate intake and hydration

- d. Signs of excessive jaundice
- Sleep safety and bedsharing benefits and risks, see ABM Protocol #6<sup>88</sup>

Level of evidence: 2. Strength of recommendation: B.

#### Continuity of and transitions in breastfeeding care

13. In particular, coordinated guidance and referral for breastfeeding problems that can occur after early birth hospitalization discharge is important to best support the breastfeeding dyad.<sup>89</sup>

If the delivery/maternal provider and newborn provider are not the same person, there should be coordinated communication to optimize follow-up care. See ABM Protocol #10 for more details about late preterm and early term infants.<sup>16</sup>

Level of evidence: 3. Strength of recommendation: C.

## Type and timing of birth hospitalization follow-up

14. Postpartum visits for both members of the dyad are recommended regardless of birth setting.

Postdischarge visits can occur in the practitioner's office or in the patient's home. Since 2013, the WHO recommendations on postnatal care of the mother and newborn have included an evaluation of mother and newborn within 24 hours of a home-based birth. For in-hospital vaginal deliveries, the WHO recommends 24 hours of observation after delivery. Postnatal health evaluations are recommended for the mother and infant on newborn day of life 3 (48–72 hours), 1–2 weeks, and 6 weeks after delivery for all births.

In countries with longer birth hospitalizations, routine follow-up may be recommended at different intervals. Post-partum home-based care by medical providers and/or community health workers is associated with reduced neonatal mortality, higher rates of exclusive breastfeeding, increased maternal satisfaction with postnatal care, decreased health care utilization for the newborn, and is cost-effective, particularly in low- and middle-income countries. 91–96 Home visits have not been shown to be cost-effective in U.S.-based studies.

Levels of evidence: 1-3. Strength of recommendation: A.

15. In many settings, office-based or home-based visits with the breastfeeding dyad can occur, as evidence points to no difference in health outcomes for office-based versus home-based care. 99,100

Follow-up for the birthing person can be made with her birth attendant provider (e.g., obstetrician, family physician, or midwife) or a general practitioner who may have not attended the birth.

Levels of evidence: 1, 2. Strength of recommendation: B.

16. Newborns who are discharged before 48 hours of life should be evaluated within 24–48 hours after discharge. 65,66,101

In countries where hospital discharge is common within 72 hours after birth, appointments where breastfeeding can be assessed should be made before discharge for the newborn and mother (either in the office or home setting). Providers should be aware that many newborns who are discharged within 48 hours of birth do not receive early follow-up as recommended. <sup>102,103</sup> Barriers to newborn postbirth hospi-

talization checkup can be maternal illness, lack of reliable transportation, and lack of understanding of the importance of follow-up in healthy newborns. 102,104

Newborns who are not seen within the recommended time after birth hospitalization have higher rates of readmission to the hospital. Innovative methods to communicate with families such as text messaging, internet-based monitoring, and phone outreach have demonstrated an increased likelihood of timely postdischarge follow-up and support of breastfeeding. In countries where hospital stays are longer after birth (e.g., 5 days), newborn health and breastfeeding can be assessed over time; most newborns will have reached their nadir of weight loss and physiological peak of bilirubin before discharge. Thus, the first postdischarge visit may be scheduled at an older age (e.g., 2 weeks of age).

Levels of evidence: 2, 3. Strength of recommendation: C.

# Follow-up to support breastfeeding after birth hospitalization

17. Families should be connected at discharge with community-based breastfeeding support, which can be in the health care setting, in the home, or through telemedicine. <sup>2,110,111</sup>

The types of available support are wide ranging and vary based on location, local resources, and patient preference. Continuation of the BFHI through the Baby Friendly Community Initiative, a mother-to-mother and community-based breastfeeding support system, has been associated with a reduction of child mortality, improvement in breastfeeding rates, and reduction in prelacteal feeding. Doula support in the home can strengthen parenting beliefs and results in more positive interaction with the health care system. <sup>113,114</sup>

Levels of evidence: 2, 3. Strength of recommendation: B.

18. Office or home-based visits with a lactation professional should be part of regular follow-up.

In particular, breastfeeding support that includes face-to-face visits and frequent interactions can prevent early breast-feeding cessation. Worldwide proactive telephone- or video-based lactation outreach after the birth hospitalization by health care providers knowledgeable in lactation has been shown to be well received by families and providers and demonstrates increases in exclusive breastfeeding rates. Peer-led breastfeeding support groups, both in-person and online, have also been shown to increase breastfeeding exclusivity and duration and are cost-effective. 122–132

Levels of evidence: 1–3. Strength of recommendation: B.

19. Educational materials, including those delivered through the internet or mobile device, can also contribute to breastfeeding success and may be most effective when delivered in settings with low baseline rates of breastfeeding. 133

These interventions can support maternal self-efficacy, connect with health care providers, help with latch, and can support breastfeeding. Lastly, online support forums and mobile applications are commonly accessed by new families, although the quality of the content, amount of educational material, and attention to diversity are variable between products. 138–145

Levels of evidence 1-3. Strength of recommendation: B.

#### **Areas for Future Research**

Many of the clinical recommendations in this policy are evidence based, but areas for future study remain. Methods to support breastfeeding women and newborns during birth hospitalization are well described by the medical literature and by standard practices and policy set by the WHO BFHI, 10-Steps to Successful Breastfeeding. After birth hospitalization discharge, it is clear that any breastfeeding support is associated with improved any/exclusive breastfeeding rates; however, there are limits to the generalizability as there are not many well-controlled studies that examine the effect of governmental or broad system-based policies to support breastfeeding after birth hospitalization discharge. <sup>110</sup>

Furthermore, there is no global standardized method of follow-up for women and newborns after delivery. Where systems do exist, they are not universally applied; there is disparate care based on race, ethnicity, socioeconomic status, education level, and payer type (insurance versus none). We recommend further well-designed studies, as suggested by Tiruneh et al., to elucidate and standardize home-based postpartum visits and newborn care.

Well-designed studies using telemedicine after birth hospitalization, specifically examining the safety and clinical effectiveness of providing general pediatric, obstetric, and lactation care, need to be conducted. Research and community collaboration is needed to address maternal and infant morbidity and mortality for populations who experience lack of equity in health care. <sup>10–12</sup> Lastly, studies are needed that examine the long-term impact of pandemics, epidemics, and natural disasters on birth outcomes, birth hospitalization, and discharge.

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### References

- WHO Safe Childbirth Checklist Collaboration Evaluation Report. Geneva, 2017. Available at https://apps.who.int/iris/ bitstream/handle/10665/259953/9789241511490-eng.pdf?seq uence=1&isAllowed=y (accessed March 24, 2021).
- Implementation Guidance: Protecting, Promoting and Supporting Breastfeeding in Facilities Providing Maternity and Newborn Services—the Revised Baby-Friendly Hospital Initiative. Geneva: World Health Organization, 2018. Available at http://apps.who.int/bookorders (accessed February 5, 2021).

 Trends in Maternal Mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva, 2019. Available at http://apps.who.int/bookorders (accessed April 6, 2021).

- Sharrow D, Hug L, Liu Y, et al. Levels & Trends in Child Mortality: Estimates Developed by the United Nations Inter-Agency Group for Child Mortality Estimation. New York, New York, 2020. Available at: https://www.unicef.org/media/79371/file/UN-IGME-child-mortality-report-2020.pdf.pdf (accessed March 1, 2022).
- 5. Lawn JE, Cousens S, Zupan J. 4 Million neonatal deaths: When? Where? Why? *Lancet* 2005;365:891–900.
- Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess (Full Rep)* 2007:1–186. DOI: 10.1542/gr.18-2-15.
- 7. Edmond K, Newton S, Hurt L, et al. Timing of initiation, patterns of breastfeeding, and infant survival: Prospective analysis of pooled data from three randomised trials. *Lancet Glob Health* 2016;4:266–275.
- 8. Liang LD, Kotadia N, English L, et al. Predictors of mortality in neonates and infants hospitalized with sepsis or serious infections in developing countries: a systematic review. *Front Pediatr* 2018;6:277.
- Bartick M, Boisvert ME, Philipp BL, et al. Trends in breastfeeding interventions, skin-to-skin care, and sudden infant death in the first 6 days after birth. J Pediatr 2020;218:11–15.
- Greenwood BN, Hardeman RR, Huang L, et al. Physicianpatient racial concordance and disparities in birthing mortality for newborns. *Proc Natl Acad Sci U S A* 2020; 117:21194–21200.
- Sivertsen N, Anikeeva O, Deverix J, et al. Aboriginal and Torres Strait Islander family access to continuity of health care services in the first 1000 days of life: A systematic review of the literature. *BMC Health Serv Res* 2020;20. DOI: 10.1186/s12913-020-05673-w
- Chen L, Xiao L, Auger N, et al. Disparities and trends in birth outcomes, perinatal and infant mortality in Aboriginal vs. non-aboriginal populations: A population-based study in Ouebec, Canada 1996–2010. PLoS One 2015;10:e0138562.
- Feldman-Winter L, Kellams A, Peter-Wohl S, et al. Evidencebased updates on the first week of exclusive breastfeeding among infants ≥35 weeks. *Pediatrics* 2020;145:e20183696.
- 14. National Institute for Health and Clinical Excellence. Intrapartum care for healthy women and babies: Clinical Guideline. *Nice* 2017:1–90. Available at https://www.nice.org.uk/guidance/cg190 (accessed March 25, 2021).
- Noble LM, Okogbule-Wonodi AC, Young MA, et al. ABM clinical protocol #12: Transitioning the breastfeeding preterm infant from the neonatal intensive care unit to home, revised 2018. *Breastfeed Med* 2018;13:230–236.
- Boies EG, Vaucher YE. ABM clinical protocol #10: Breastfeeding the late preterm (34–36 6/7 weeks of gestation) and early term infants (37–38 6/7 weeks of gestation), second revision 2016. *Breastfeed Med* 2016;11:494–500.
- Hernández-Aguilar MT, Bartick M, Schreck P, et al. ABM clinical protocol #7: Model maternity policy supportive of breastfeeding. *Breastfeed Med* 2018;13:559–575.
- Ebell MH, Siwek J, Weiss BD, et al. Strength of recommendation taxonomy (SORT): A patient-centered approach
  to grading evidence in the medical literature—American
  family physician. Vol 69; 2004. Available at www.aafp.org/
  afp (accessed March 25, 2021).
- Gubler T, Krähenmann F, Roos M, et al. Determinants of successful breastfeeding initiation in healthy term singletons:

- A Swiss university hospital observational study. *J Perinat Med* 2013;41:331–339.
- Jaafar SH, Ho JJ, Lee KS. Rooming-in for new mother and infant versus separate care for increasing the duration of breastfeeding. Cochrane Database Syst Rev 2016:CD006641.
- Moore ER, Bergman N, Anderson GC, et al. Early skin-toskin contact for mothers and their healthy newborn infants. Cochrane database Syst Rev 2016;11:CD003519.
- 22. Smith ER, Hurt L, Chowdhury R, et al. Delayed breast-feeding initiation and infant survival: A systematic review and meta-analysis. *PLoS One* 2017;12:e0180722.
- Cottrell BH, Detman LA. Breastfeeding concerns and experiences of African American mothers. MCN Am J Matern Child Nurs 2013;38:297–304.
- Yotebieng M, Labbok M, Soeters HM, et al. Ten steps to successful breastfeeding programme to promote early initiation and exclusive breastfeeding in DR congo: A cluster-randomised controlled trial. *Lancet Glob Heal* 2015;3:e546–e555.
- WHO/UNICEF. Ensuring competency of direct care providers to implement the baby-friendly hospital initiative. 2020:1–40. Available at: https://www.who.int/publications/i/item/9789240008854 (accessed March 1, 2022).
- World Health Organization and the United Nations Children's Fund (UNICEF). BFHI-Training-Course-for-Maternity-Staff. 2020. Available at: https://www.who.int/publications/i/item/ 9789240008915 (accessed March 1, 2022).
- 27. Hennessy M, Byrne M, Laws R, et al. "They just need to come down a little bit to your level": A qualitative study of parents' views and experiences of early life interventions to promote healthy growth and associated behaviours. *Int J Environ Res Public Health* 2020;17:3605.
- 28. Witt AM, Bolman M, Kredit S. Mothers value and utilize early outpatient education on breast massage and hand expression in their self-management of engorgement. *Breastfeed Med* 2016;11:433–439.
- 29. Yilmaz E, Doğa Öcal F, Vural Yılmaz Z, et al. Early initiation and exclusive breastfeeding: Factors influencing the attitudes of mothers who gave birth in a baby-friendly hospital. *Turk J Obs Gynecol* 2017;14:1–9.
- Kilpatrick Lu-Ann Macones, George A. SJP, ed. Guidelines for Perinatal Care, 8th Edition. Elk Grove Village, IL; Washington, DC: American Academy of Pediatrics; The American College of Obstetricians and Gynecologists, 2017.
- 31. Ke J, Ouyang YQ, Redding SR. Family-centered breast-feeding education to promote primiparas' exclusive breastfeeding in China. *J Hum Lact* 2018;34:365–378.
- Fu I, Fong D, Heys M, et al. Professional breastfeeding support for first-time mothers: A multicentre cluster randomised controlled trial. *BJOG* 2014;121:1673–1683.
- Bich TH, Long TK, Hoa DP. Community-based father education intervention on breastfeeding practice—Results of a quasi-experimental study. *Matern Child Nutr* 2019; 15(Suppl 1). DOI: 10.1111/mcn.12705.
- 34. Martin SL, McCann JK, Gascoigne E, et al. Mixed-methods systematic review of behavioral interventions in low- and middle-income countries to increase family support for maternal, infant, and young child nutrition during the first 1000 days. Curr Dev Nutr 2020;4:nzaa085.
- 35. Zhu Y, Zhang Z, Ling Y, et al. Impact of intervention on breastfeeding outcomes and determinants based on theory of planned behavior. *Women Birth* 2017;30:146–152.
- Kellams A, Harrel C, Omage S, et al. ABM clinical protocol
   #3: supplementary feedings in the healthy term breastfed neonate, revised 2017. *Breastfeed Med* 2017;12:188–198.

37. Johnson A, Kirk R, Rosenblum KL, et al. Enhancing breastfeeding rates among African American women: A systematic review of current psychosocial interventions. *Breastfeed Med* 2015;10:45–62.

- 38. Morrow AL, McClain J, Conrey SC, et al. Breastfeeding disparities and their mediators in an urban birth cohort of black and white mothers. *Breastfeed Med* 2021;16:452–462.
- 39. Patel S, Patel S. The effectiveness of lactation consultants and lactation counselors on breastfeeding outcomes. *J Hum Lact* 2016;32:530–541.
- 40. McFadden A, Siebelt L, Marshall JL, et al. Counselling interventions to enable women to initiate and continue breastfeeding: A systematic review and meta-analysis. *Int Breastfeed J* 2019;14:42.
- 41. Wachman EM, Byun J, Philipp BL. Breastfeeding rates among mothers of infants with neonatal abstinence syndrome. *Breastfeed Med* 2010;5:159–164.
- 42. Coy KC, Haight SC, Anstey E, et al. Postpartum marijuana use, perceptions of safety, and breastfeeding initiation and duration: an analysis of PRAMS data from seven states, 2017. *J Hum Lact* 2021;37:803–812.
- Zitkute V, Snieckuviene V, Zakareviciene J, et al. Reasons for breastfeeding cessation in the first year after childbirth in lithuania: A prospective cohort study. *Medicina* 2020;56:226.
- 44. Ogbo FA, Eastwood J, Page A, et al. Prevalence and determinants of cessation of exclusive breastfeeding in the early postnatal period in Sydney, Australia. *Int Breastfeed J* 2017;12. DOI: 10.1186/s13006-017-0110-4.
- 45. Mangrio E, Persson K, Bramhagen A-C. Sociodemographic, physical, mental and social factors in the cessation of breastfeeding before 6 months: A systematic review. *Scand J Caring Sci* 2018;32:451–465.
- 46. Gianni ML, Bettinelli ME, Manfra P, et al. Breastfeeding difficulties and risk for early breastfeeding cessation. *Nutrients* 2019;11:2266.
- 47. De Bortoli J, Amir LH. Is onset of lactation delayed in women with diabetes in pregnancy? A systematic review. *Diabet Med* 2016;33:17–24.
- 48. Rocha BO, Machado MP, Bastos LL, et al. Risk factors for delayed onset of lactogenesis II among primiparous mothers from a Brazilian baby-friendly hospital. *J Hum Lact* 2020;36:146–156.
- 49. Brownell E, Howard CR, Lawrence RA, et al. Delayed onset lactogenesis II predicts the cessation of any or exclusive breastfeeding. *J Pediatr* 2012;161:608–614.
- Preusting I, Brumley J, Odibo L, et al. Obesity as a predictor of delayed lactogenesis II. *J Hum Lact* 2017;33: 684–691.
- Garcia AH, Voortman T, Baena CP, et al. Maternal weight status, diet, and supplement use as determinants of breastfeeding and complementary feeding: A systematic review and meta-analysis. *Nutr Rev* 2016;74:490–516.
- 52. Marchi J, Berg M, Dencker A, et al. Risks associated with obesity in pregnancy, for the mother and baby: A systematic review of reviews. *Obes Rev* 2015;16:621–638.
- 53. Turcksin R, Bel S, Galjaard S, et al. Maternal obesity and breastfeeding intention, initiation, intensity and duration: A systematic review. *Matern Child Nutr* 2014;10:166–183.
- 54. Fair FJ, Ford GL, Soltani H. Interventions for supporting the initiation and continuation of breastfeeding among women who are overweight or obese. *Cochrane Database Syst Rev* 2019;9:CD012099.

55. Lepe M, Bacardí Gascón M, Castañeda-González LM, et al. Effect of maternal obesity on lactation: Systematic review. *Nutr Hosp* 2011;26:1266–1269.

- 56. Amir LH, Donath S. A systematic review of maternal obesity and breastfeeding intention, initiation and duration. *BMC Pregnancy Childbirth* 2007;7:9.
- LeFort Y, Evans A, Livingstone V, et al. Academy of breastfeeding medicine position statement on ankyloglossia in breastfeeding dyads. *Breastfeed Med* 2021;16:278–281.
- 58. Lain SJ, Roberts CL, Bowen JR, et al. Early discharge of infants and risk of readmission for jaundice. *Pediatrics* 2015;135:314–321.
- 59. Jones E, Taylor B, Rudge G, et al. Hospitalisation after birth of infants: Cross sectional analysis of potentially avoidable admissions across England using hospital episode statistics. BMC Pediatr 2018;18:390.
- Flaherman V, Schaefer EW, Kuzniewicz MW, et al. Health care utilization in the first month after birth and its relationship to newborn weight loss and method of feeding. Acad Pediatr 2018;18:677–684.
- 61. Blumovich A, Mangel L, Yochpaz S, et al. Risk factors for readmission for phototherapy due to jaundice in healthy newborns: A retrospective, observational study. *BMC Pediatr* 2020;20:248.
- Knudsen RK, Kruse AR, Lou S. Parents' experiences of early discharge after a planned caesarean section: A qualitative interpretive study. *Midwifery* 2020;86:102706.
- Álianmoghaddam N, Phibbs S, Benn C. Resistance to breastfeeding: A Foucauldian analysis of breastfeeding support from health professionals. Women Birth 2017;30:e281–e291.
- Jones E, Taylor B, MacArthur C, et al. Early postnatal discharge for infants: A meta-analysis. *Pediatrics* 2020; 146:e20193365.
- 65. Benitz WE, Watterberg KL, Aucott S, et al. Committee on Fetus and Newborn, American Academy of Pediatrics. Hospital stay for healthy term newborn infants. *Pediatrics* 2015;135:948–953.
- Lemyre B, Jefferies AL, O'Flaherty P. Facilitating discharge from hospital of the healthy term infant. *Paediatr Child Health* 2018;23:515–531.
- 67. James L, Sweet L, Donnellan-Fernandez R. Breastfeeding initiation and support: A literature review of what women value and the impact of early discharge. *Women Birth* 2017;30:87–99.
- 68. McKinney CM, Glass RP, Coffey P, et al. Feeding neonates by cup: A systematic review of the literature. *Matern Child Health J* 2016;20:1620–1633.
- Bartick M, Hernández-Aguilar M, Wight N, et al. ABM clinical protocol #35: Supporting breastfeeding during maternal or child hospitalization. *Breastfeed Med* 2021;16:664–674.
- 70. Flaherman VJ, Schaefer EW, Kuzniewicz MW, et al. Early weight loss nomograms for exclusively breastfed newborns. *Pediatrics* 2015;135:e16–e23.
- 71. Paul IM, Schaefer EW, Miller JR, et al. Weight change nomograms for the first month after birth. *Pediatrics* 2016;138:e20162625.
- 72. Wilbaux M, Kasser S, Gromann J, et al. Personalized weight change prediction in the first week of life. *Clin Nutr* 2019;38:689–696.
- 73. Chen PG, Johnson LW, Rosenthal MS. Sources of education about breastfeeding and breast pump use: What effect do they have on breastfeeding duration? An analysis of the Infant Feeding Practices Survey II. *Matern Child Health J* 2012;16:1421–1430.

 Bai Y, Wunderlich SM, Kashdan R. Alternative hospital gift bags and breastfeeding exclusivity. *ISRN Nutr* 2013; 2013:560810.

- 75. Fewtrell M, Kennedy K, Lukoyanova O, et al. Short-term efficacy of two breast pumps and impact on breastfeeding outcomes at 6 months in exclusively breastfeeding mothers: A randomised trial. *Matern Child Nutr* 2019;15:e12779.
- Sadacharan R, Grossman X, Matlak S, et al. Hospital discharge bags and breastfeeding at 6 months: Data from the infant feeding practices study II. *J Hum Lact* 2014;30: 73–79
- Waite WM, Christakis D. The impact of mailed samples of infant formula on breastfeeding rates. *Breastfeed Med* 2016:11:21–25.
- 78. WHO/UNICEF. Marketing of Breast Milk Substitutes: National Implementation of the International Code, Status Report 2020. Geneva: World Health Organization, 2020. Available at: https://www.who.int/publications/i/item/9789240006010 (accessed March 1, 2022).
- Hermanson Å, Åstrand LL. The effects of early pacifier use on breastfeeding: A randomised controlled trial. Women Birth 2019. DOI: 10.1016/j.wombi.2019.10.001.
- Manhire KM, Williams SM, Tipene-Leach D, et al. Predictors of breastfeeding duration in a predominantly Māori population in New Zealand. *BMC Pediatr* 2018;18:299.
- 81. Mauch CE, Scott JA, Magarey AM, et al. Predictors of and reasons for pacifier use in first-time mothers: An observational study. *BMC Pediatr* 2012;12:7.
- 82. Feldman-Winter L, Grossman X, Palaniappan A, et al. Removal of industry-sponsored formula sample packs from the hospital: Does it make a difference? *J Hum Lact* 2012;28:380–388.
- 83. Nilsson IMS, Kronborg H, Rahbek K, et al. The significance of early breastfeeding experiences on breastfeeding self-efficacy one week postpartum. *Matern Child Nutr* 2020;16. DOI: 10.1111/mcn.12986.
- 84. Feenstra MM, Nilsson I, Danbjørg DB. "Dad—a practical guy in the shadow": Fathers' experiences of their paternal role as a father during early discharge after birth and readmission of their newborns. Sex Reprod Healthc 2018; 15:62–68.
- 85. Houghtaling B, Byker Shanks C, Jenkins M. Likelihood of breastfeeding within the USDA's food and nutrition service special supplemental nutrition program for women, infants, and children population: A systematic review of the literature. J Hum Lact 2017;33:83–97.
- 86. Ogbo FA, Akombi BJ, Ahmed KY, et al. Breastfeeding in the community—how can partners/fathers help? A systematic review. *Int J Environ Res Public Health* 2020;17. DOI: 10.3390/ijerph17020413.
- Orbatu D, Karaca SY, Alaygut D, et al. Educational features of Youtube videos depicting breastfeeding: quality, utility, and reliability analysis. *Breastfeed Med* 2021;16: 635–639.
- 88. Blair PS, Ball HL, McKenna JJ, et al. Bedsharing and breastfeeding: The Academy of Breastfeeding Medicine Protocol #6, revision 2019. *Breastfeed Med* 2020;15:5–16.
- 89. McLelland G, Hall H, Gilmour C, et al. Support needs of breast-feeding women: Views of Australian midwives and health nurses. *Midwifery* 2015;31:e1–e6.
- WHO Recommendations on: Postnatal Care of the Mother and Newborn. Geneva: World Health Organization; 2013. https://www.who.int/maternal\_child\_adolescent/documents/ postnatal-care-recommendations/en/.

- Tiruneh GT, Shiferaw CB, Worku A. Effectiveness and cost-effectiveness of home-based postpartum care on neonatal mortality and exclusive breastfeeding practice in low-and-middle-income countries: A systematic review and meta-analysis. BMC Pregnancy Childbirth 2019;19:507.
- Zhao P, Han X, You L, et al. Effect of basic public health service project on neonatal health services and neonatal mortality in China: A longitudinal time-series study. *BMJ Open* 2020;10. DOI: 10.1136/bmjopen-2019-034427.
- 93. Olson T, Bowen A, Smith-Fehr J, et al. Going home with baby: Innovative and comprehensive support for new mothers. *Prim Heal Care Res Dev* 2018;20. DOI: 10.1017/S1463423618000932.
- 94. Paul IM, Beiler JS, Schaefer EW, et al. A randomized trial of single home nursing visits vs office-based care after nursery/ maternity discharge: The Nurses for Infants through Teaching and Assessment after the Nursery (NITTANY) study. Arch Pediatr Adolesc Med 2012;166:263–270.
- 95. Janmohamed A, Sohani N, Lassi ZS, et al. The effects of community home visit and peer group nutrition intervention delivery platforms on nutrition outcomes in low and middle-income countries: A systematic review and metaanalysis. *Nutrients* 2020;12. DOI: 10.3390/nu12020440.
- Lassi ZS, Kedzior SGE, Bhutta ZA. Community-based maternal and newborn educational care packages for improving neonatal health and survival in low- and middleincome countries. *Cochrane Database Syst Rev* 2019; 2019. DOI: 10.1002/14651858.CD007647.pub2.
- 97. Escobar G, Braveman P, Ackerson L, et al. A randomized comparison of home visits and hospital-based group follow-up visits after early postpartum discharge. *Pediatrics* 2001;108:719–727.
- Lieu TA, Braveman PA, Escobar GJ, et al. A randomized comparison of home and clinic follow-up visits after early postpartum hospital discharge. *Pediatrics* 2000;105:1058– 1065.
- 99. Yonemoto N, Dowswell T, Nagai S, et al. Schedules for home visits in the early postpartum period. *Cochrane database Syst Rev* 2017;8:CD009326.
- Verpe H, Kjellevold M, Moe V, et al. Early postpartum discharge: Maternal depression, breastfeeding habits and different follow-up strategies. *Scand J Caring Sci* 2019; 33:85–92.
- Jing L, Bethancourt C-N, McDonagh T. Assessing infant and maternal readiness for newborn discharge. *Curr Opin Pediatr* 2017;29:598–605.
- 102. Milambo JPM, Cho K, Okwundu C, et al. Newborn follow-up after discharge from a tertiary care hospital in the Western Cape region of South Africa: A prospective observational cohort study. *Glob Heal Res Policy* 2018;3. DOI: 10.1186/s41256-017-0057-4.
- Kaplan M, Zimmerman D, Shoob H, et al. Post-discharge neonatal hyperbilirubinemia surveillance. *Acta Paediatr* 2020;109:923–929.
- 104. Goyal NK, Hall ES, Kahn RS, et al. Care coordination associated with improved timing of newborn primary care visits. *Matern Child Health J* 2016;20:1923–1932.
- Shakib J, Buchi K, Smith E, et al. Timing of initial wellchild visit and readmissions of newborns. *Pediatrics* 2015; 135:469–474.
- 106. Hannan J, Brooten D, Page T, et al. Low-income first-time mothers: effects of APN follow-up using mobile technology on maternal and infant outcomes. *Glob Pediatr Heal* 2016;3:2333794X1666023.

107. Ahmed AH, Roumani AM, Szucs K, et al. The effect of interactive web-based monitoring on breastfeeding exclusivity, intensity, and duration in healthy, term infants after hospital discharge. *J Obstet Gynecol Neonatal Nurs* 2016;45:143–154.

- 108. Grylka-Baeschlin S, Iglesias C, Erdin R, et al. Evaluation of a midwifery network to guarantee outpatient postpartum care: A mixed methods study. *BMC Health Serv Res* 2020;20. DOI: 10.1186/s12913-020-05359-3.
- 109. Odendaal WA, Anstey Watkins J, Leon N, et al. Health workers' perceptions and experiences of using mHealth technologies to deliver primary healthcare services: A qualitative evidence synthesis. Cochrane Database Syst Rev 2020;2020. DOI: 10.1002/14651858.CD011942.pub2.
- 110. Patnode CD, Henninger ML, Senger CA, et al. Primary care interventions to support breastfeeding: Updated evidence report and systematic review for the US preventive services task force. *JAMA* 2016;316:1694–1705.
- 111. National Institute for Health and Care Excellence. Postnatal Care (NICE Guideline 194). 2021. www.nice.org.uk/ guidance/ng194. Accessed May 18, 2021.
- 112. Kavle JA, Ahoya B, Kiige L, et al. Baby-friendly community initiative—From national guidelines to implementation: A multisectoral platform for improving infant and young child feeding practices and integrated health services. *Matern Child Nutr* 2019;15(Suppl 1). DOI: 10.1111/mcn.12747.
- 113. Munns A, Watts R, Hegney D, et al. Effectiveness and experiences of families and support workers participating in peer-led parenting support programs delivered as home visiting programs: A comprehensive systematic review. *JBI Database Syst Rev Implement Rep* 2016;14:167–208.
- 114. Kåks P, Målqvist M. Peer support for disadvantaged parents: A narrative review of strategies used in home visiting health interventions in high-income countries. *BMC Health Serv Res* 2020;20:1–15.
- 115. McFadden A, Gavine A, Renfrew MJ, et al. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database Syst Rev* 2017. DOI: 10.1002/14 651858.CD001141.pub5.
- 116. Kimani-Murage EW, Griffiths PL, Wekesah FM, et al. Effectiveness of home-based nutritional counselling and support on exclusive breastfeeding in urban poor settings in Nairobi: A cluster randomized controlled trial. *Global Health* 2017;13. DOI: 10.1186/s12992-017-0314-9
- 117. Cheng LY, Wang X, Mo PK. The effect of home-based intervention with professional support on promoting breastfeeding: A systematic review. *Int J Public Health* 2019;64:999–1014.
- 118. Uscher-Pines L, Ghosh-Dastidar B, Bogen DL, et al. Feasibility and effectiveness of telelactation among rural breastfeeding women. *Acad Pediatr* 2019;20:652–659.
- 119. Puharić D, Malički M, Borovac JA, et al. The effect of a combined intervention on exclusive breastfeeding in primiparas: A randomised controlled trial. *Matern Child Nutr* 2020;16:e12948.
- 120. Patel A, Kuhite P, Puranik A, et al. Effectiveness of weekly cell phone counselling calls and daily text messages to improve breastfeeding indicators. BMC Pediatr 2018;18:337.
- 121. Jerin I, Akter M, Talukder K, et al. Mobile phone support to sustain exclusive breastfeeding in the community after hospital delivery and counseling: A quasi-experimental study. *Int Breastfeed J* 2020;15:1–11.

122. Shakya P, Kunieda MK, Koyama M, et al. Effectiveness of community-based peer support for mothers to improve their breastfeeding practices: A systematic review and meta-analysis. *PLoS One* 2017;12:e0177434

- 123. Forster DA, McLachlan HL, Davey MA, et al. Ringing up about breastfeeding: A randomised controlled trial exploring early telephone peer support for breastfeeding (RUBY) trial protocol. BMC Pregnancy Childbirth 2014;14:177.
- 124. McLardie-Hore FE, McLachlan HL, Shafiei T, et al. Proactive telephone-based peer support for breastfeeding: A cross-sectional survey of women's experiences of receiving support in the RUBY randomised controlled trial. BMJ Open 2020;10:e040412.
- 125. Ara G, Khanam M, Papri N, et al. Peer counselling improves breastfeeding practices: A cluster randomized controlled trial in urban Bangladesh. *Matern Child Nutr* 2018;14:e12605.
- 126. Assibey-Mensah V, Suter B, Thevenet-Morrison K, et al. Effectiveness of peer counselor support on breastfeeding outcomes in WIC-enrolled women. J Nutr Educ Behav 2019;51:650–657.
- 127. Buckland C, Hector D, Kolt GS, et al. Interventions to promote exclusive breastfeeding among young mothers: A systematic review and meta-analysis. *Int Breastfeed J* 2020;15:102.
- Burns ES, Duursma L, Triandafilidis Z. Breastfeeding support at an Australian Breastfeeding Association dropin service: A descriptive survey. *Int Breastfeed J* 2020;15. DOI: 10.1186/s13006-020-00345-1
- 129. Camacho EM, Hussain H. Cost-effectiveness evidence for strategies to promote or support breastfeeding: A systematic search and narrative literature review. *BMC Pregnancy Childbirth* 2020;20. DOI: 10.1186/s12884-020-03460-3
- 130. Clark A, Baker SS, McGirr K, et al. Breastfeeding peer support program increases breastfeeding duration rates among middle- to high-income women. *Breastfeed Med* 2018;13:112–115.
- 131. Lee YH, Chang GL, Chang HY. Effects of education and support groups organized by IBCLCs in early postpartum on breastfeeding. *Midwifery* 2019;75:5–11.
- 132. McCoy MB, Geppert J, Dech L, et al. Associations between peer counseling and breastfeeding initiation and duration: An analysis of Minnesota participants in the special supplemental nutrition program for women, infants, and children (WIC). Matern Child Health J 2018;22:71–81.
- 133. Palmer MJ, Henschke N, Bergman H, et al. Targeted client communication via mobile devices for improving maternal, neonatal, and child health. *Cochrane database Syst Rev* 2020;8:CD013679.
- Mbuthia F, Reid M, Fichardt A. mHealth communication to strengthen postnatal care in rural areas: A systematic review. BMC Pregnancy Childbirth 2019;19:N.PAG-N.PAG.
- 135. Martinez-Brockman JL, Harari N, Segura-Pérez S, et al. Impact of the lactation advice through texting can help (LATCH) trial on time to first contact and exclusive breastfeeding among WIC participants. J Nutr Educ Behav 2018;50:33–42.e1.
- 136. Martinez-Brockman JL, Harari N, Goeschel L, et al. A qualitative analysis of text message conversations in a breastfeeding peer counselling intervention. *Matern Child Nutr* 2020;16. DOI: 10.1111/mcn.12904
- 137. Almohanna AA, Win KT, Meedya S. Effectiveness of internet-based electronic technology interventions on breastfeeding outcomes: Systematic review. *J Med Inter*net Res 2020;22:e17361.

 Regan S, Brown A. Experiences of online breastfeeding support: Support and reassurance versus judgement and misinformation. *Matern Child Nutr* 2019;15:e12874.

- 139. Robinson A, Davis M, Hall J, et al. It takes an E-village: Supporting African American mothers in sustaining breastfeeding through Facebook communities. *J Hum Lact* 2019;35:569–582.
- 140. Robinson A, Lauckner C, Davis M, et al. Facebook support for breastfeeding mothers: A comparison to offline support and associations with breastfeeding outcomes. *Digit Health* 2019;5. DOI: 10.1177/2055207619853397
- 141. Lebron CN, St. George SM, Eckembrecher DG, et al. "Am I doing this wrong?" Breastfeeding mothers' use of an online forum. *Matern Child Nutr* 2020;16:e12890.
- 142. Alianmoghaddam N, Phibbs S, Benn C. "I did a lot of Googling": A qualitative study of exclusive breastfeeding support through social media. Women Birth 2019;32: 147–156.
- 143. Cavalcanti DS, Cabral CS, de Toledo Vianna RP, et al. Online participatory intervention to promote and support exclusive breastfeeding: Randomized clinical trial. *Matern Child Nutr* 2019;15:e12806.
- 144. Sidhu S, Ma K, Sadovnikova A. Features and educational content related to milk production in breastfeeding apps: Content analysis informed by social cognitive theory. *JMIR Pediatr Parent* 2019;2:e12364.
- Shieh C, Khan I, Umoren R. Engagement design in studies on pregnancy and infant health using social media: Systematic review. *Prev Med Reports* 2020;19:101113.

ABM protocols expire 5 years from the date of publication. Content of this protocol is up to date at the time of publication. Evidence-based revisions are made within 5 years or sooner if there are significant changes in the evidence.

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