

ABM Clinical Protocol #19: Breastfeeding Promotion in the Prenatal Setting, Revision 2015

Casey Rosen-Carole,¹ Scott Hartman,² and the Academy of Breastfeeding Medicine

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.

Background

BREASTFEEDING PROVIDES IDEAL INFANT nutrition and is physiologic for mothers and children.¹⁻⁴ Pregnant women often make a decision regarding breastfeeding early in pregnancy, and many have already decided whether to breastfeed prior to conception.⁵⁻⁷ Encouragement and education from healthcare providers result in increased breastfeeding initiation, exclusivity, and duration.⁸⁻¹⁶ Yet, healthcare providers consistently overestimate the amount and adequacy of counseling and support that pregnant women receive.¹⁷⁻²⁴ Although the focus of this protocol is on the prenatal setting, programs or interventions that include preconception, prenatal, and postnatal components should be strongly considered as they appear to yield larger positive results on breastfeeding duration and exclusivity.^{8,10,25-27}

The quality of evidence (levels of evidence I, II-1, II-2, II-3, and III) is based on the U.S. Preventive Services Task Force Appendix A Task Force Ratings²⁸ and is noted throughout this protocol in parentheses.

Recommendations

1. Create a breastfeeding friendly office and community.

A. Breastfeeding friendly office⁹:

- The primary healthcare provider should be involved in each of the following steps, in cooperation with a multidisciplinary team that includes other healthcare professionals and healthcare workers (e.g., including, but not limited to, doctors, nurses, midwives, medical assistants, various lactation specialists/consultants [International Board Certified Lactation Consultants, in particular when their expertise is needed], nutritionists, doulas, health and breastfeeding educators, and peer support).
- Educate staff to promote, protect, and support breastfeeding.

- Have a written breastfeeding policy to facilitate such support.⁹ (III)
 - Literature and samples provided by artificial infant formula companies should not be used in health-care settings, as this advertising has been demonstrated to decrease breastfeeding initiation and shorten duration, and it constitutes a breach of the World Health Organization's International Code of Marketing of Breast-milk Substitutes.²⁹⁻³³ (I, II-2, II-3, III)
 - Intention to breastfeed should be included as part of all transfer-of-care materials, including prenatal records and hospital and birth center discharge summaries.
 - Create breastfeeding friendly office spaces, including safe, clean, and comfortable spaces for patients and staff to breastfeed or express milk, as well as posters and artwork supporting breastfeeding. For more details see the Academy of Breastfeeding Medicine's Protocol #14: "Breastfeeding Friendly Physician's Office."⁹ (III)
- B. Breastfeeding friendly community:
- Community-based interventions have shown significant success in improving breastfeeding outcomes.³⁴⁻³⁸ (I, II-1, II-2, III)
 - Partner with local and regional organizations in order to maximize patient services and support (e.g., local, regional, and national maternal-child organizations, local La Leche League International groups, community health workers, health departments, local or regional maternity hospitals or birth centers, not-for-profit organizations, breastfeeding peer counseling programs; supplemental food programs [such as the Special Supplemental Nutrition Program for Women, Infant and Children in the United States], and home visiting programs).

Departments of ¹General Pediatrics and ²Family Medicine, University of Rochester, Rochester, New York.

- Be aware of local community and professional breastfeeding support services and understand the particular content and services provided. Make available current listings of such support to women throughout their pregnancy.
 - Consider the use of prenatal home-visiting programs, particularly in underserved areas or populations, while ensuring that providers have been adequately trained.^{34,36,39-46} (I, II-1, III)
2. Consider the background, ethnicity, and culture of individual women, families, and communities.
 - Learn about patients' family and community structure. Social support, or the lack thereof, is likely to play a large role in feeding decisions of many women, particularly adolescents.^{7,47} (I, II-2)
 - Understand that perspectives and beliefs of partners and support persons may affect breastfeeding success and educate where appropriate.^{45,48-51} Attention to gender dynamics and targeted behavioral interventions (e.g., education, counseling, sharing housework) may improve breastfeeding duration and exclusivity.⁴⁸ (I, II-2, III)
 - In some cultures, enlisting the cooperation of an important family member may greatly assist in the promotion of breastfeeding.⁵¹ (I)
 - Ensure that parents from diverse cultures understand the importance of exclusive breastfeeding to their children's growth and development.⁵¹ (I) Acculturation or assimilation of immigrant populations should be considered with respect to a family's current feeding choices.⁵² (I)
 - Cultural traditions and taboos associated with lactation should be respected, adapting cultural beliefs to facilitate optimal breastfeeding, while sensitively educating about traditions that may be detrimental to breastfeeding.^{52,53} (I, II-1)
 - Whenever possible, provide all information and instructions in patients' native language and assess for literacy level when appropriate. Instructional photos and pictures can also be used where literacy is a concern.
 - Understand the specific financial, work, time, and sociocultural obstacles to breastfeeding and work with families to overcome them.
 - Healthcare providers should be aware of their own personal cultural attitudes when interacting with patients.² (III)
 3. Consider behavioral and psycho-educational approaches to breastfeeding support.
 - Self-efficacy and breastfeeding confidence play a large role in women's breastfeeding initiation, duration, and exclusivity.^{50,54-57} (I, II-2)
 - Cognitive-behavioral counseling, social-cognitive theory-based influential models, competence theory, and workbook-based or group self-efficacy interventions can be considered and have shown to improve breastfeeding outcomes.^{7,52,58-63} (I, II-1, II-2)
 - Whenever possible, healthcare providers should use motivational and self-efficacy supporting techniques when discussing breastfeeding, for example:
 1. Guiding a pregnant woman to consider her own knowledge of and reasons for breastfeeding: "What do you know about breastfeeding?" and "What are your reasons for breastfeeding your baby?"
 2. Helping to think through barriers: "Can you think of anything that might get in the way of you reaching your goal?" or
 3. Helping to associate breastfeeding with other successes in a woman's life: "Are there other areas in your life when you have been successful in reaching a goal you set out to achieve?"^{64,65} (II-3)
 - Consider strengthening routine prenatal education on postpartum symptoms (bleeding, mood changes, pain, hair loss, incontinence, infant colic, breastfeeding, etc.) and opportunities for social support and self-management, as qualitative work shows insufficient maternal preparation,⁶⁶ and this behavioral intervention has been shown to improve breastfeeding duration in one minority population.⁶⁷ (I, III)
 4. Integrate breastfeeding promotion, education, and support throughout prenatal care.
 - Support of breastfeeding should be actively stated in the preconception period,⁶⁸ or as early as possible in prenatal care, with acknowledgement that there are risks to artificial infant formula feeding.² Consider a statement such as "As your healthcare provider, I want you to know that I recommend breastfeeding. Formula feeding has many health risks for mothers and babies." (I, III)
 - Use of electronic medical record prompts may be used to improve consistency of healthcare provider support statements.^{69,70} (I, III)
 - Strongly consider integrating lactation consultant support and education into the prenatal office visits,⁷¹ as it is noted for its effect on improving breastfeeding initiation and exclusivity.^{69,70,72} (I, III)
 - Strongly consider offering group prenatal care or connecting women with a group prenatal care program as these groups have been noted for their positive impact on breastfeeding initiation.^{73,74} (I, II-3)
 - At this point, there is no evidence to determine what role Internet education can play in breastfeeding support.⁷⁵ However, many mothers will seek information on the Internet and may find Web sites with little medical oversight and factual errors. Patients should be directed to appropriate online sources of support and information, such as the World Health Organization's Web site on breastfeeding: www.who.int/topics/breastfeeding (II-2)
 - Consider using novel technological approaches such as education and networking through text-messaging/mobile phones as preliminary international data suggest improved breastfeeding duration and exclusivity with this approach.^{76,77} (I)
 5. Take a detailed breastfeeding history as a part of the prenatal history.^{2,9,78} (III)
 - For each previous child, ask about breastfeeding initiation, duration of exclusive/any breastfeeding, sources of prior breastfeeding support, perceived benefits and challenges, and reason(s) for weaning.
 - For women who did not breastfeed, consider asking about the perceived advantages of artificial infant formula feeding, as well as the perceived disadvantages. Inquiry should be made regarding what may have helped her breastfeed previous children.

- It is also important to determine any family medical history that may make breastfeeding especially helpful for this child (e.g., asthma, eczema, diabetes, and obesity) and/or mother (e.g., obesity, diabetes, depression, and breast or ovarian cancer).¹⁻³ (I)
6. Incorporate breastfeeding as an important component of the initial prenatal breast examination.⁷⁹ (II-3)
 - Observe for appropriate breast development and anatomy.
 - Note whether the history or physical exam findings suggest that a pregnant woman is at high risk for breastfeeding problems (e.g., maternal history of failure to breastfeed a previous child, chronic medication or supplement use, infertility, breast surgery or trauma, cranial or chest irradiation, or domestic or intimate partner violence; physical exam suggestive of flat or inverted nipples, glandular hypoplasia, or obesity; history or physical exam suggestive of diabetes, thyroid conditions, or polycystic ovarian syndrome).¹ (I)
 - Consider a prenatal lactation referral to a physician who specializes in breastfeeding medicine or a lactation consultant (International Board Certified Lactation Consultant where possible) if concerns are identified.
 7. Discuss breastfeeding at each prenatal visit.^{1,2} (I)
 - Consider the use of the Best Start 3-Step Counseling Strategy^{64,79} by:
 1. Encouraging open dialogue about breastfeeding by beginning with open-ended questions.
 2. Affirming the patient's feelings.
 3. Providing targeted education.^{64,80} (II-2, II-3)
 - Address concerns and dispel misconceptions at each visit.
 - Provide information on medication safety during pregnancy and breastfeeding.
 - Consider using a set of educational materials in your practice, such as "Ready, Set, Baby" (www.tinyurl.com/readysbaby), which includes materials for patients and guidance for educators.

During the first trimester

- If there are no contraindications, make a clear recommendation to exclusively breastfeed for 6 months and then with complementary foods for 1–2 years or as long thereafter as the mother and infant desire. Making this recommendation alone has shown to improve breastfeeding rates.⁸¹ (II-2)
- Incorporate and educate partners and support persons about the benefits of breastfeeding for mothers and infants.⁸² (II-2)
- Address known common barriers such as lack of self-confidence, embarrassment, time and social constraints, dietary and health concerns, lack of social support, employment and childcare concerns, and fear of pain.^{65,79} (I, II-3) Addressing social and lifestyle factors can play a particularly pivotal role for adolescent^{7,45} (I), obese^{83,84} (I), and ethnic minority^{25,37,44,47,85} women. (I, II-2, II-3, III)

During the second trimester

- Encourage women to identify breastfeeding role models by talking with family, friends, and colleagues who have breastfed successfully.

- Recommend that pregnant women and their partners or support persons attend a breastfeeding course, peer support group, and/or group prenatal care in addition to routine office-based education.^{73,74,85-90} (I, II-1, II-3)
- Review breastfeeding basics, such as the importance of exclusive breastfeeding, the relationship of supply and demand, feeding on demand, frequency of feedings, cues of hunger and satiety, avoiding artificial nipples (teats) until the infant is breastfeeding well, and the importance of a good latch.
- For women who plan to return to school or work outside of the home after birth, encourage consideration of what facilities are available for expressing and storing mother's milk, how much time will be taken for maternity leave, and what worksite/school policies and legislation provide support.^{1,2} (III)
- Encourage women to engage the support of a trained birth assistant (doula) for labor, birth, and postpartum care, as this significantly improves breastfeeding outcomes.^{90,91} (I)

During the third trimester

- Consider demonstrating with dolls and props the mechanics of a good latch and common breastfeeding positions, such as laid-back breastfeeding, cradle, cross-cradle, and the clutch (football) hold.⁹² (I)
 - Review the physiology of breastfeeding initiation and the impact of supplementation.^{1,2,65} (II-3, III)
 - Recommend the purchase of properly fitting nursing bras and clothes that will facilitate breastfeeding, as culturally appropriate.
 - Encourage another visit to a breastfeeding support group as women's interest and goals of attending may be different than earlier in the pregnancy.^{3,26,32,36,79} (I, II-3)
 - Review potential options for pain management during labor and their possible impacts on breastfeeding, as many pain medications can negatively impact breastfeeding outcomes.⁹³⁻⁹⁵ (I, III)
 - Discuss the importance of early skin-to-skin contact after birth (regardless of delivery mode) and during the postpartum period for optimal breastfeeding outcomes and general newborn health.^{93,96-98} (I, II-3) Discuss the biologically normal first latch, including the "breast crawl," and how to facilitate this in the birthing room.^{99,100} (III)
 - Recommend that pregnant women discuss plans for their infant's health care and breastfeeding support with their infant's healthcare provider.¹⁰¹ (I)
 - Stress the need for early follow-up postpartum if there are any concerns that a woman, infant, or both are at high risk for breastfeeding problems.
8. Empower women and their families to have the birth experience most conducive to breastfeeding.
 - Inform patients about the Ten Steps to Successful Breastfeeding and how to advocate for breastfeeding friendly hospital care.¹⁰¹ (I)
 - Discuss support of breastfeeding in the event of a cesarean delivery.⁹⁶⁻⁹⁸ (I, II-3)
 - Encourage mothers to ask for help from a lactation specialist in the birth hospital and/or soon after discharge, particularly if they are having any breastfeeding difficulties.

- Recommend the infant see a healthcare provider soon after hospital discharge to ensure infant health and optimal breastfeeding (III), particularly for infants discharged in the first 1–3 days of life.
- Ensure the mother has an adequate support system in place during the postpartum period and knows how to get help.
- Provide anticipatory guidance on topics such as engorgement, frequent feedings, and nighttime feedings.

Recommendations for Further Research

1. Although many studies have demonstrated efficacy of specific prenatal interventions, cost-effectiveness studies are needed to determine which of these interventions should receive the greatest emphasis in routine clinical practice.
2. Studies examining the cost-effectiveness of making an outpatient practice breastfeeding friendly are needed.
3. Additional research is needed on the effect of prenatal breastfeeding interventions on multiple populations, such as women of different socioeconomic status and cultural backgrounds. For instance, outcomes of father and partner studies vary significantly by geography; the sociocultural factors affecting the impact of these interventions deserve attention.
4. Studies are needed examining the role of technology (electronic medical record, mobile texting, online resources and groups, etc.) in improving the breastfeeding outcomes and experiences of women.
5. Many studies have been published in the past 5 years on prenatal interventions with substantial success. Translational research investigating implementation and advocacy among healthcare organizations, community organizations, and political systems should be undertaken.

Acknowledgments

This work was supported in part by a grant from the Maternal and Child Health Bureau, U.S. Department of Health and Human Services.

References

1. Eidelman A, Schanler R. AAP executive summary: Breastfeeding and the use of human milk. *Pediatrics* 2012;129:600–603.
2. AAFP Breastfeeding Advisory Committee. Position paper: Breastfeeding, family physicians supporting. Updated 2014. Available at www.aafp.org/about/policies/all/breastfeeding-support.html (accessed November 2, 2015).
3. 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;(153):1–186.
4. Horta B, Victora C. Long-Term Effects of Breastfeeding: A Systematic Review. Geneva: World Health Organization, 2013.
5. Izatt SD. Breastfeeding counseling by health care providers. *J Hum Lact* 1997;13:109–113.
6. Gurka KK, Hornsby PP, Drake E, et al. Exploring intended infant feeding decisions among low-income women. *Breastfeed Med* 2014;9:377–384.
7. Wambach KA, Aaronson L, Breedlove G, et al. A randomized controlled trial of breastfeeding support and education for adolescent mothers. *West J Nurs Res* 2011;33:486–505.
8. Guise JM, Palda V, Westhoff C, et al. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med* 2003;1:70–78.
9. Grawey AE, Marinelli KA, Holmes AV. ABM clinical protocol #14: Breastfeeding-friendly physician's office: Optimizing care for infants and children, revised 2013. *Breastfeed Med* 2013;8:237–242.
10. Mansbach IK, Palti H, Pevsner B, et al. Advice from the obstetrician and other sources: Do they affect women's breast feeding practices? A study among different Jewish groups in Jerusalem. *Soc Sci Med* 1984;19:157–162.
11. Hannula L, Kaunonen M, Tarkka MT. A systematic review of professional support interventions for breastfeeding. *J Clin Nurs* 2008;17:1132–1143.
12. Lu MC, Lange L, Slusser W, et al. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstet Gynecol* 2001;97:290–295.
13. Taveras EM, Li R, Grummer-Strawn L, et al. Opinions and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics* 2004;113:e283–e290.
14. Taveras EM, Capra AM, Braveman PA, et al. Clinician support and psychosocial risk factors associated with breastfeeding discontinuation. *Pediatrics* 2003;112:108–115.
15. Mekuria G, Edris M. Exclusive breastfeeding and associated factors among mothers in Debre Markos, Northwest Ethiopia: A cross-sectional study. *Int Breastfeed J* 2015;10:1.
16. Jahan K, Roy SK, Mihrshahi S, et al. Short-term nutrition education reduces low birthweight and improves pregnancy outcomes among urban poor women in Bangladesh. *Food Nutr Bull* 2014;35:414–421.
17. Cross-Barnet C, Augustyn M, Gross S, et al. Long-term breastfeeding support: Failing mothers in need. *Matern Child Health J* 2012;16:1926–1932.
18. Pound CM, Williams K, Grenon R, et al. Breastfeeding knowledge, confidence, beliefs, and attitudes of Canadian physicians. *J Hum Lact* 2014;30:298–309.
19. Demirci JR, Bogen DL, Holland C, et al. Characteristics of breastfeeding discussions at the initial prenatal visit. *Obstet Gynecol* 2013;122:1263–1270.
20. Archabald K, Lundsberg L, Triche E, et al. Women's prenatal concerns regarding breastfeeding: Are they being addressed? *J Midwifery Womens Health* 2011;56:2–7.
21. Szucs KA, Miracle DJ, Rosenman MB. Breastfeeding knowledge, attitudes, and practices among providers in a medical home. *Breastfeed Med* 2009;4:31–42.
22. Miracle DJ, Fredland V. Provider encouragement of breastfeeding: Efficacy and ethics. *J Midwifery Womens Health* 2007;52:545–548.
23. Dusdieker LB, Dungey CI, Losch ME. Prenatal office practices regarding infant feeding choices. *Clin Pediatr (Phila)* 2006;45:841–845.
24. Taveras EM, Li R, Grummer-Strawn L, et al. Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits. *Pediatrics* 2004;113:e405–e411.
25. Wong KL, Tarrant M, Lok KY. Group versus individual professional antenatal breastfeeding education for ex-

- tending breastfeeding duration and exclusivity: A systematic review. *J Hum Lact* 2015;31:354–366.
26. de Oliveira MI, Camacho LA, Tedstone AE. Extending breastfeeding duration through primary care: A systematic review of prenatal and postnatal interventions. *J Hum Lact* 2001;17:326–343.
 27. Renfrew MJ, McCormick FM, Wade A, et al. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database Syst Rev* 2012;5:CD001141.
 28. Appendix A Task Force Ratings. Guide to clinical preventive services: Report of the U.S. Preventive Services Task Force, 2nd ed. Available at www.ncbi.nlm.nih.gov/books/NBK15430/ (accessed November 2, 2015).
 29. Howard C, Howard F, Lawrence R, et al. Office prenatal formula advertising and its effect on breast-feeding patterns. *Obstet Gynecol* 2000;95:296–303.
 30. Donnelly A, Snowden HM, Renfrew MJ, et al. Commercial hospital discharge packs for breastfeeding women. *Cochrane Database Syst Rev* 2000;(2):CD002075.
 31. Rosenberg KD, Eastham CA, Kasehagen LJ, et al. Marketing infant formula through hospitals: The impact of commercial hospital discharge packs on breastfeeding. *Am J Public Health* 2008;98:290–295.
 32. 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.
 33. World Health Organization. International Code of Marketing of Breast-milk Substitutes, 1981, Resolution WHA34.22. Available at www.who.int/nutrition/publications/code_english.pdf (accessed September 10, 2015).
 34. Memon ZA, Khan GN, Soofi SB, et al. Impact of a community-based perinatal and newborn preventive care package on perinatal and neonatal mortality in a remote mountainous district in Northern Pakistan. *BMC Pregnancy Childbirth* 2015;15:106.
 35. Brunton G, O'Mara-Eves A, Thomas J. The 'active ingredients' for successful community engagement with disadvantaged expectant and new mothers: A qualitative comparative analysis. *J Adv Nurs* 2014;70:2847–2860.
 36. Lassi ZS, Das JK, Salam RA, et al. Evidence from community level inputs to improve quality of care for maternal and newborn health: Interventions and findings. *Reprod Health* 2014;11(Suppl 2):S2.
 38. Muhajarine N, Ng J, Bowen A, et al. Understanding the impact of the Canada Prenatal Nutrition Program: A quantitative evaluation. *Can J Public Health* 2012;103(7 Suppl 1):eS26–eS31.
 39. Edwards RC, Thullen MJ, Korfmacher J, et al. Breastfeeding and complementary food: Randomized trial of community doula home visiting. *Pediatrics* 2013;132(Suppl 2):S160–S166.
 40. Khan AI, Hawkesworth S, Ekstrom EC, et al. Effects of exclusive breastfeeding intervention on child growth and body composition: The MINIMat trial, Bangladesh. *Acta Paediatr* 2013;102:815–823.
 41. Karp SM, Howe-Heyman A, Dietrich MS, et al. Breastfeeding initiation in the context of a home intervention to promote better birth outcomes. *Breastfeed Med* 2013;8:381–387.
 42. Kirkwood BR, Manu A, ten Asbroek AH, et al. Effect of the Newhints home-visits intervention on neonatal mortality rate and care practices in Ghana: A cluster randomized controlled trial. *Lancet* 2013;381:2184–2192.
 43. Ochola SA, Labadarios D, Nduati RW. Impact of counselling on exclusive breast-feeding practices in a poor urban setting in Kenya: A randomized controlled trial. *Public Health Nutr* 2013;16:1732–1740.
 44. Gogia S, Sachdev HS. Home visits by community health workers to prevent neonatal deaths in developing countries: A systematic review. *Bull World Health Organ* 2010;88:658–666B.
 45. Ingram J, Johnson D. Using community maternity care assistants to facilitate family-focused breastfeeding support. *Matern Child Nutr* 2009;5:276–281.
 46. Sandy JM, Anisfeld E, Ramirez E. Effects of a prenatal intervention on breastfeeding initiation rates in a Latina immigrant sample. *J Hum Lact* 2009;25:404–411.
 47. Apostolakis-Kyrus K, Valentine C, DeFranco E. Factors associated with breastfeeding initiation in adolescent mothers. *J Pediatr* 2013;163:1489–1494.
 48. Kraft JM, Wilkins KG, Morales GJ, et al. An evidence review of gender-integrated interventions in reproductive and maternal-child health. *J Health Commun* 2014;19(Suppl 1):122–141.
 49. Chapman DJ, Perez-Escamilla R. Breastfeeding among minority women: Moving from risk factors to interventions. *Adv Nutr* 2012;3:95–104.
 50. Inoue M, Binns CW, Otsuka K, et al. Infant feeding practices and breastfeeding duration in Japan: A review. *Int Breastfeed J* 2012;7:15.
 51. Clifford J, McIntyre E. Who supports breastfeeding? *Breastfeed Rev* 2008;16:9–19.
 52. Schlickau JM. Prenatal Breastfeeding Education: An Intervention for Pregnant Immigrant Hispanic Women. Lincoln, NE: University of Nebraska Medical Center, 2005.
 53. Bevan G, Brown M. Interventions in exclusive breastfeeding: A systematic review. *Br J Nurs* 2014;23:86–89.
 54. Meedy S, Fahy K, Kable A. Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women Birth* 2010;23:135–145.
 55. Otsuka K, Dennis CL, Tatsuoka H, et al. The relationship between breastfeeding self-efficacy and perceived insufficient milk among Japanese mothers. *J Obstet Gynecol Neonatal Nurs* 2008;37:546–555.
 56. Blyth R, Creedy DK, Dennis CL, et al. Effect of maternal confidence on breastfeeding duration: An application of breastfeeding self-efficacy theory. *Birth* 2002;29:278–284.
 57. Hundalani SG, Irigoyen M, Braitman LE, et al. Breastfeeding among inner-city women: From intention before delivery to breastfeeding at hospital discharge. *Breastfeed Med* 2013;8:68–72.
 58. Sikander S, Maselko J, Zafar S, et al. Cognitive-behavioral counseling for exclusive breastfeeding in rural pediatrics: A cluster RCT. *Pediatrics* 2015;135:e424–e431.
 59. Hildebrand DA, McCarthy P, Tipton D, et al. Innovative use of influential prenatal counseling may improve breastfeeding initiation rates among WIC participants. *J Nutr Educ Behav* 2014;46:458–466.
 60. Otsuka K, Taguri M, Dennis CL, et al. Effectiveness of a breastfeeding self-efficacy intervention: Do hospital practices make a difference? *Matern Child Health J* 2014;18:296–306.
 61. Nichols J, Schutte NS, Brown RF, et al. The impact of a self-efficacy intervention on short-term breast-feeding outcomes. *Health Educ Behav* 2009;36:250–258.

62. Olenick P. The Effect of Structured Group Prenatal Education on Breastfeeding Confidence, Duration and Exclusivity to Twelve Weeks Postpartum [PhD thesis]. Toronto: Toronto University International, 2006.
63. Kronborg H, Maimburg RD, Vaeth M. Antenatal training to improve breast feeding: A randomised trial. *Midwifery* 2012;28:784–790.
64. Best Start Social Marketing. Using Loving Support® to Implement Best Practices in Peer Counseling. Updated 2004. Available at www.nal.usda.gov/wicworks/Learning_Center/research_brief.pdf (accessed July 3, 2015).
65. Hartley BM, O'Connor ME. Evaluation of the 'Best Start' breast-feeding education program. *Arch Pediatr Adolesc Med* 1996;150:868–871.
66. Martin A, Horowitz C, Balbierz A, et al. Views of women and clinicians on postpartum preparation and recovery. *Matern Child Health J* 2014;18:707–713.
67. Howell EA, Bodnar-Deren S, Balbierz A, et al. An intervention to extend breastfeeding among black and Latina mothers after delivery. *Am J Obstet Gynecol* 2014; 210:239–248.
68. Dean SV, Lassi ZS, Imam AM, et al. Preconception care: Closing the gap in the continuum of care to accelerate improvements in maternal, newborn and child health. *Reprod Health* 2014;11(Suppl 3):S1.
69. Andaya E, Bonuck K, Barnett J, et al. Perceptions of primary care-based breastfeeding promotion interventions: Qualitative analysis of randomized controlled trial participant interviews. *Breastfeed Med* 2012;7: 417–422.
70. Bonuck K, Stuebe A, Barnett J, et al. Effect of primary care intervention on breastfeeding duration and intensity. *Am J Public Health* 2014;104(Suppl 1):S119–S127.
71. Committee on Health Care for Underserved Women, American College of Obstetricians and Gynecologists. ACOG committee opinion no. 361: Breastfeeding: Maternal and infant aspects. *Obstet Gynecol* 2007;109: 479–480.
72. Hartman S, Barnett J, Bonuck K. Implementing international board-certified lactation consultants intervention into routine care: Barriers and recommendations. *Clin Lact* 2012;3–4:131–137.
73. Ickovicks JR, Kershaw TS, Westdahl C. Group prenatal care and perinatal outcomes: A randomized, controlled trial. *Obstet Gynecol* 2007;110:330–339.
74. Tanner-Smith E, Steinka-Fry K, Lipsey M. Effects of CenteringPregnancy group prenatal care on breastfeeding outcomes. *J Midwifery Womens Health* 2013;58: 389–395.
75. Giglia R, Binns C. The effectiveness of the internet in improving breastfeeding outcomes: A systematic review *J Hum Lact* 2014;30:156–160.
76. Gallegos D, Russell-Bennett R, Previte J, et al. Can a text message a week improve breastfeeding? *BMC Pregnancy Childbirth* 2014;14:374.
77. Flax VL, Negerie M, Ibrahim AU, et al. Integrating group counseling, cell phone messaging, and participant-generated songs and dramas into a microcredit program increases Nigerian women's adherence to international breastfeeding recommendations. *J Nutr* 2014;144:1120–1124.
78. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Breastfeeding Handbook for Physicians, 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics, 2013, p. 337.
79. Issler H, de Sa MB, Senna DM. Knowledge of newborn health care among pregnant women: Basis for promotional and educational programs on breastfeeding. *Sao Paulo Med J* 2001;119:7–9.
80. Humenick SS, Hill PD, Spiegelberg PL. Breastfeeding and health professional encouragement. *J Hum Lact* 1998; 14:305–310.
81. Lu MC, Lange L, Slusser W, et al. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstet Gynecol* 2001;97:290–295.
82. Ingram J, Johnson D. A feasibility study of an intervention to enhance family support for breast feeding in a deprived area in Bristol, UK. *Midwifery* 2004;20: 367–379.
83. Martin J, MacDonald-Wicks L, Hure A, et al. Reducing postpartum weight retention and improving breastfeeding outcomes in overweight women: A pilot randomised controlled trial. *Nutrients* 2015;7:1464–1479.
84. Chapman DJ, Morel K, Bermudez-Millan A, et al. Breastfeeding education and support trial for overweight and obese women: A randomized trial. *Pediatrics* 2013; 131:e162–e170.
85. Pitcock N. Evaluation of an Initiative to Increase Rates of Exclusive Breastfeeding Among Rural Hispanic Immigrant Women [PhD thesis]. Charlottesville, VA: University of Virginia, 2013.
86. Reifsnider E, Eckhart D. Prenatal breastfeeding education: Its effect on breastfeeding among WIC participants. *J Hum Lact* 1997;13:121–125.
87. Wong KL, Fong DY, Lee IL, et al. Antenatal education to increase exclusive breastfeeding: A randomized controlled trial. *Obstet Gynecol* 2014;124:961–968.
88. Lumbiganon P, Martis R, Laopaiboon M, et al. Antenatal breastfeeding education for increasing breastfeeding duration. *Cochrane Database Syst Rev* 2012;9:CD006425.
89. Chapman DJ, Damio G, Perez-Escamilla R. Differential response to breastfeeding peer counseling within a low-income, predominantly Latina population. *J Hum Lact* 2004;20:389–396.
90. Chapman DJ, Damio G, Young S, et al. Effectiveness of breastfeeding peer counseling in a low-income, predominantly Latina population: A randomized controlled trial. *Arch Pediatr Adolesc Med* 2004;158:897–902.
91. Hodnett ED, Gates S, Hofmeyr GJ, et al. Continuous support for women during childbirth. *Cochrane Database Syst Rev* 2013;7:CD003766.
92. Duffy EP, Percival P, Kershaw E. Positive effects of an antenatal group teaching session on postnatal nipple pain, nipple trauma and breast feeding rates. *Midwifery* 1997; 13:189–196.
93. Holmes AV, McLeod AY, Bunik M. ABM clinical protocol #5: Peripartum breastfeeding management for the healthy mother and infant at term, revision 2013. *Breastfeed Med* 2013;8:469–473.
94. American College of Obstetricians and Gynecologists. Committee opinion: Breastfeeding in underserved women: Increasing initiation and continuation of breastfeeding. *Obstet Gynecol* 2013;122:423–428.
95. Montgomery A, Hale TW, Academy of Breastfeeding Medicine. ABM clinical protocol #15: Analgesia and anesthesia for the breastfeeding mother, revised 2012. *Breastfeed Med* 2012;7:547–553.

96. Thukral A, Sankar MJ, Agarwal R, et al. Early skin-to-skin contact and breast-feeding behavior in term neonates: A randomized controlled trial. *Neonatology* 2012;102:114–119.
97. Hung KJ, Berg O. Early skin-to-skin after cesarean to improve breastfeeding. *MCN Am J Matern Child Nurs* 2011;36:318–324.
98. Mahmood I, Jamal M, Khan N. Effect of mother-infant early skin-to-skin contact on breastfeeding status: A randomized controlled trial. *J Coll Physicians Surg Pak* 2011; 21:601–605.
99. Henderson A. Understanding the breast crawl: Implications for nursing practice. *Nurs Womens Health* 2011;15: 296–307.
100. Klaus M. Mother and infant: Early emotional ties. *Pediatrics* 1998;102(5 Suppl E):1244–1246.
101. Loh NR, Kelleher CC, Long S, et al. Can we increase breast feeding rates? *Ir Med J* 1997;90:100–101.

ABM protocols expire 5 years from the date of publication. Evidence-based revisions are made within 5 years or sooner, if there are significant changes in the evidence.

The Academy of Breastfeeding Medicine Protocol Committee:
Kathleen A. Marinelli, MD, FABM, Chairperson
Maya Bunik, MD, MSPH, FABM, Co-chairperson
Larry Noble, MD, FAMB, Protocols Committee
Translations Chairperson
Nancy Brent, MD
Cadey Harrel, MD
Ruth A. Lawrence, MD, FABM
Kate Naylor, MBBS, FRACGP
Sarah Reece-Stremtan, MD
Casey Rosen-Carole, MD, MPH
Tomoko Seo, MD, FABM
Rose St. Fleur, MD
Michal Young, MD

For correspondence: abm@bfmed.org