# ABM Clinical Protocol #7: Model Maternity Policy Supportive of Breastfeeding

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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

**B** REASTFEEDING IS THE BIOLOGICAL NORM and early weaning carries considerable maternal<sup>1-5</sup> (1),<sup>6</sup> and infant health<sup>2,7-14</sup> (1) risks, and considerable social costs worldwide<sup>2,15</sup> (1).<sup>6,16</sup> The care that mother and infant receive in the first postpartum days will influence their future breastfeeding success<sup>17</sup> (2),  $^{18,19}$  health, and lives<sup>15</sup> (1). <sup>16</sup> To improve this care globally, the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) launched the Baby-Friendly Hospital Initiative (BFHI) in 1991, which has since been revised twice.<sup>20,21</sup> After 27 years, it has been implemented globally<sup>22</sup>; significantly improved infant health<sup>23–25</sup> (1); and increased initiation, duration, and exclusivity of breastfeeding  $^{1,24-27}$  (1). The BFHI is considered the gold standard of evidence-based policy for maternity facilities<sup>28</sup> that has been endorsed by different in-ternational organizations.<sup>28–30</sup> However, breastfeeding disparities associated with social and structural determinants of health are still widespread<sup>8,15,31,32</sup> (1).<sup>33</sup> These result in unequal rates of morbidity and mortality,<sup>33,34</sup> and health injustice for women and children<sup>2,7,35,36</sup> (1).<sup>33</sup> But, inequities may be reduced by implementing evidence-based maternity practices to support breastfeeding such as, BFHI<sup>2</sup> (1), one-to-one continuous support during labor and birth, culturally sensitive care<sup>37</sup> (M) or peer support<sup>38</sup> (1) among others.<sup>33,39</sup>

# Purpose

Perinatal care practices influence delivery method, affect breastfeeding and maternal and infant health  $^{40-44}$  (1) $^{45}$  (2) $^{46}$ (H)<sup>47,48</sup> and impact mother's satisfaction<sup>49</sup> (H). Thus, breastfeeding policies cannot be isolated from policies of maternity care as a whole. The purpose of this Protocol is to offer a "Model Maternity Policy Supportive of Breastfeeding," which includes an "Infant Feeding Policy." The term "Infant Feeding Policy" rather than "Breastfeeding Policy" is used as a step forward recognizing breastfeeding as the norm; it is inclusive (ensuring adequate support for parents feeding with supplements, exclusively with breast milk substitutes, exclusively with expressed breast milk, or chestfeeding in transgender individuals). It is also the language used in the updated 2018 WHO Ten Steps<sup>21</sup> (Table 1).

We have only included statements that are based on evidence or global recommendations in this document, which is intended to be a model for facilities seeking to implement high-quality perinatal care. It will need to be adapted to each specific institution, for example by including the name of the institution, and the date of revision, and follow each facility's institutional process for approval and implementation. We are aware that some of the recommendations listed here may need to be adapted to the specific situations of each country (e.g., a country lacking midwives may have other type of providers attending normal deliveries).

This protocol includes all the elements covered by the BFHI "Global Criteria,"<sup>21</sup> because the BFHI is, at present, the best model with proven efficacy. Some countries' national Baby-Friendly accreditation standards may be more or less stringent than Global Criteria and those described herein. Thus, this model policy may require minor changes to conform to specific country requirements. This protocol will not address some specific requirements related to neonatal units, for which thorough recommendations have been published.<sup>50,51</sup>

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Critical management procedures	Step 1. Policies 1a. Comply fully with the International Code of Marketing of Breast-milk Substitutes and
procedures	relevant World Health Assembly resolutions.
	1b. Have a written infant feeding policy that is routinely communicated to staff and parents 1c. Establish ongoing monitoring and data-management systems.
	Step 2. Ensure that staff has sufficient knowledge, competence and skills to support breastfeeding.
Key clinical practices	Step 3. Discuss the importance and management of breastfeeding with pregnant women and their families.
	Step 4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.
	Step 5. Support mothers to initiate and maintain breastfeeding and manage common difficulties
	Step 6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
	Step 7. Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day
	Step 8. Support mothers to recognize and respond to their infants' cues for feeding.
	Step 9. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.
	Step 10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

TABLE 1. TEN STEPS TO SUCCESSFUL BREASTFEEDING (REVISED 2018)

Adapted from The Ten Steps, WHO-UNICEF.<sup>21</sup>

#### About the 2018 Policy Protocol

This comprehensive protocol encompasses contents of many other ABM Protocols: #1 (Guideline for Hypoglycemia),<sup>52</sup> #2 "(Going Home),<sup>53</sup> #3 (Supplementary Feedings in the Full-Term Neonate),<sup>54</sup> #5 (Peripartum Breastfeeding Management),<sup>48</sup> #8 (Milk Storage Information for Home Use for Full-Term Neonates),<sup>55</sup> #10 (Breastfeeding the Late Preterm and Early Term Infant),<sup>56</sup> #14 (Breastfeeding-friendly Physician's Office),<sup>57</sup> #19 (Breastfeeding Promotion in the Prenatal Setting),<sup>58</sup> #21 (Guidelines for Breastfeeding and Substance Use or Substance Use Disorder),<sup>59</sup> #26 (Persistent Pain with Breastfeeding),<sup>60</sup> and 28# (Peripartum Analgesia for the Breastfeeding Mother).<sup>61</sup>

A thorough scientific literature review (including recent statements/guidelines<sup>21,50,51,62-66</sup> was conducted in PubMed and LILACS. The search included documents in English, Spanish, French, and Portuguese published between 2011 and 2018. More than 1,000 abstracts were reviewed, those of low quality were discarded and a final total of 302 articles were analyzed in full. Quantitative evidence was rated according to the 2011 Oxford Center for Evidence-Based Medicine criteria: Levels of evidence are graded from (1) to (5) according to this criteria.<sup>67</sup> Qualitative evidence was graded using GRADECERQual: H (HIGH), M (MODER-ATE), L (LOW), VL (VERY LOW).<sup>68</sup> All citations grouped before a given level of evidence share that level of evidence. Expert or international guidelines, including ABM protocols, are not assigned levels of evidence, and certain research studies do not fall into the level of evidence categories.

We acknowledge that partners of birthing individuals may be of any gender. Also, although the vast majority of birthing individuals are women, we acknowledge that transgender men and nonbinary-gendered individuals may also give birth and many may want to breastfeed or feed at the chest (chestfeed). Some transgender female to male individuals who have undergone surgery to remove all or some of the breast parenchyma to achieve a flat chest wall may report variable experiences with milk production. They may wish to feed at the chest through supplemental devices or breastfeed, or conversely, some transgender parents may feel uncomfortable with the idea of breastfeeding or chestfeeding<sup>69</sup> (M)<sup>70</sup> (VL). Throughout this document, we may refer interchangeably to "mothers," "birthing individuals," or "parents."

We recognize that adopted newborns and their adoptive parents<sup>71</sup> (5), and infants born to surrogate mothers and their nonpuerperal mothers/parents<sup>72</sup> (5) equally need to bond and have the right for help with infant feeding (breastfeeding if chosen) and therefore are included in the words "mothers," "parents," and "infants."

Hereafter, the term "formula" refers to any kind of infant formula or breast milk substitute, including follow-up or any kind of "special formula."

### Recommendations

Model maternity policy supportive of breastfeeding

Policy.

- 1. This institution promotes breastfeeding considering that it is the biological norm for the human mother and infant (dyad) and that artificial feeding and early weaning carries considerable maternal and infant health risks<sup>1–5,7–14</sup> (1).<sup>6</sup>
- This institution recognizes the BFHI as the best and most efficacious intervention improving institutional maternity care with a significant positive effect on the incidence and duration of breastfeeding<sup>24–27</sup> (1) and infant health<sup>23</sup> (1).<sup>62</sup>
- 3. This document constitutes the Maternity Policy of this institution and includes an Infant Feeding Policy supportive of breastfeeding (or a dedicated Breastfeeding Policy). This policy is mandatory for all staff and non-abiding activities must be justified and written in the mother's and/or infant's clinical record.<sup>21</sup> This Policy:
  - A. Addresses institutional responsibilities with respect to complying with the International Code of Marketing of Breast Milk Substitutes and subsequent resolutions of the World Health Assembly (The Code)<sup>65,66</sup> guaranteeing staff clinical competency and skills to promote, protect, and support breastfeeding, and monitoring its implementation.

- B. Addresses staff responsibilities (the implementation of key clinical practices) to ensure best maternal and infant care and adequately support best infant feeding practices.
- C. Addresses the need for all protocols and standards related to breastfeeding and infant feeding used in the maternity facility to be in line with WHO recommendations (i.e., BFHI standards) and current evidence-based guidelines and protocols.<sup>21,63</sup>
- D. Promotes skin-to-skin contact (SSC) immediately after birth and active support of breastfeeding, as part of the delivery of essential quality care during labor and delivery and childbirth quality care.<sup>73</sup>
- E. Ensures respectful, nondiscriminatory care practiced with cultural humility<sup>74</sup> for all parents and newborns, including adopted infants.<sup>21,63,73</sup>
- F. Guarantees that care and support for mothers and families is timely, appropriate and, sensitive to their needs, <sup>21,62,63</sup> honors privacy and informed choice, <sup>57,63</sup> and secures coordination among providers. <sup>63</sup>
- 4. To guarantee implementation of this policy:
  - A. An Infant Feeding/Breastfeeding Committee whose primary focus is breastfeeding will be established to monitor and oversee the implementation of this Policy<sup>75</sup> (1). This committee is at the level of other Hospital Quality improvement committees and clinical practices.<sup>21</sup>
  - B. The policy must be multidisciplinary and culturally appropriate and be composed of representatives of decision makers in the areas of maternal and newborn health, quality assurance and management, providers/physicians, nurses, midwives, lactation specialists, other appropriate staff, and parents. An elected breastfeeding coordinator and a secretary will chair and respond to the board.<sup>21</sup>
  - C. Committee members will meet at least every 6 months for monitoring purposes. They will assess implementation of the policy and determine how often to assess institutional compliance with the policy. Committee members will define actions needed to remain compliant with the policy.<sup>21</sup>
  - D. A mechanism for data collection directed to routinely track breastfeeding and mother–infant care indicators and policy implementation will be in place to continually monitor and improve quality of perinatal care.<sup>21</sup> Incorporation of breastfeeding indicators into the facility quality-improvement monitoring system is mandated.
    - Early initiation of breastfeeding and exclusive breastfeeding are considered sentinel indicators and must be routinely tracked.<sup>21,63</sup>
    - Other indicators may be added whenever considered necessary by the Infant Feeding/ Breastfeeding committee.
  - E. All staff will receive appropriate orientation to this Policy in the first weeks after hiring and periodically afterward.<sup>21</sup>
  - F. A user-friendly summary of the policy will be made easily available to parents. There are clear written accountability mechanisms to redress comments,

compliments, or complaints on the Policy compliance and there is a comment mechanism easily accessible to mothers and families whose content is periodically revised.<sup>63</sup>

- 5. This institution facilitates breastfeeding to their employees, allows for breastfeeding breaks, and has suitable areas available where staff (including residents)<sup>76</sup>
  (3) may breastfeed, express, and store their milk in appropriate conditions<sup>77</sup> (1)<sup>78</sup> (3).
- 6. This institution abides by The Code and related World Health Assembly resolutions<sup>21,66</sup> because noncompliance is a major undermining factor for breastfeeding<sup>79–82</sup> (1)<sup>83</sup> (M)<sup>84</sup> (3).
  - A. This institution does not promote formula (nor related products covered in the Code). Direct contact of employees, manufacturers, or distributors of these products ("The Industry") with the public is not allowed inside premises<sup>79</sup> (1)<sup>83</sup> (M).<sup>21,63,66</sup>
  - B. Gifts of any kind (including nonscientific literature, materials, equipment or money for staff, and materials, samples, coupons, or gift packs for mothers/families), any display (including posters or placards) or educational material with brand logos, and any educational or other type of events supported or paid by "The Industry" and directed to the staff, pregnant women, mothers, or families, are prohibited<sup>63,84</sup> (3).<sup>66</sup>
  - C. Any product under the Code that may be needed by the institution (formula, teats, bottles, or pacifiers and others) will be bought at fair market value<sup>80</sup> (1).<sup>66</sup>
  - D. Health care providers will receive training on the Code to avoid conflicts of interest and to avoid giving conflicting advice to mothers<sup>81,85</sup> (1)<sup>83</sup> (M).
  - E. No promotional messages of industry foods or products, will be allowed in education materials aimed at mothers or families.<sup>21</sup>
  - F. This institution ensures that safe preparation and feeding of infant formula, and safe handling of bottles and teats, are demonstrated to birthing individuals and significant others only when needed (clinical indication for supplementation, breastfeeding contraindicated (Table 2), or not possible) or, after an informed choice made by parents (after a full explanation of the risks of breast milk substitutes).<sup>21,63</sup> This institution does not give group instruction on formula use and, the risks of not breastfeeding are fully explained to mothers who choose not to breastfeed.<sup>21</sup>

# Staff training.

- 7. This institution ensures that all staff caring for mothers and infants have the knowledge and skills needed for appropriate mother–infant care and breastfeeding management<sup>86,87</sup> (1)<sup>17</sup> (2) (Table 3).<sup>21</sup> A designated staff member coordinates staff training activity and keeps training records<sup>75</sup> (1).
  - A. Health staff's knowledge and skills, about breast-feeding management<sup>88,89</sup> (1), mother infant care, interpersonal communications, and counseling<sup>90</sup> (2),<sup>63</sup> shall be assessed at hiring and periodically.
  - B. The BFHI Breastfeeding education and skills standards will be the minimum required for all

Mother's conditions		
Ebola Virus Herpes virus	Suspected (until ruled out) or confirmed maternal Ebola virus. Mothers with active herpetic lesions on the breast(s) should not breastfeed from the affected breast, but may breastfeed from the unaffected breast. Milk can be pumped from the affected breast, as there is no concern of hematologic transmission through the milk itself. However, milk can become contaminated via the breast pump, and thus should any part of the breast pump come in contact with herpetic lesions, that milk should be discarded. In this case, expression with discarding of milk should be encouraged to maintain milk supply until breastfeeding is resumed.	
HIV	Maternal Human Immunodeficiency Virus infection is a contraindication in locations where artificial feeding is acceptable, feasible, affordable, sustainable, and safe. Check with local authorities as recommendations from individual countries may vary (for example, the US government stated that breastfeeding is not recommended for women living with HIV in the US, as of 2018, but offers guidance and counseling for those who wish to breastfeed).	
HLTV I and II	Mothers with human T-cell lymphotropic virus type I or type II Current use of illicit drugs (e.g., cocaine, heroin, phencyclidine) as determined on a case-by-case basis by the infant's health care provider.	
Varicella	If there is onset of Varicella within 5 days before or up to 48 hours after delivery, separation of the mother and infant with feeding of expressed milk until mother is no longer contagious is recommended, with administration of Varicella-Zoster Immune Globulin to the infant as soon as possible. Avoid close contact with skin lesions. (For older infants, separation of the mother and infant is not recommended, as the mother was contagious prior to the appearance of skin lesions and thus the infant was already exposed.) Expert consultation is advised.	
Brucella	Untreated maternal brucellosis.	
Tuberculosis	Mothers with active, untreated pulmonary tuberculosis (until no longer contagious: 15 days of treatment), should not breastfeed but infant can be given mother's own expressed milk. However, unless the diagnosis has been made in the 15 days pre-delivery, the infant will have been exposed by the time of the diagnosis, and must receive prophylaxis with isoniazid. There might thus be no reason to separate them, if the infant is already being treated. Expert consultation is advised.	
Medications	Treatment with some medications such as chemotherapy, temporary or permanent cessation of breastfeeding may be advised. Check with LactMed, InfantRisk.com, or e-lactancia, Lactation Study or other local available accurate resources.	
Illicit drugs	Current use of illicit drugs (e.g., cocaine, heroin, phencyclidine) as determined on a case-by-case basis by the infant's health care provider.	
Infant's conditions		
Inborn errors of metabolism	Galactosemia (except for Duarte variant, in which partial breastfeeding is possible). Congenital lactase deficiency. Some inborn errors of metabolism may require supplementation (phenylketonuria, maple syrup disease).	

# TABLE 2. POTENTIAL CONTRAINDICATIONS TO BREASTFEEDING

Sources: (ABM Protocols),<sup>59,60</sup> (official recommendations),<sup>172,180</sup> (web pages),<sup>169–171</sup> and (5),<sup>181–184</sup> Numbers in parentheses refer to Levels of Evidence (LOE) assigned, according to the OCEBM<sup>67</sup> (as in the rest of the text).

staff.<sup>21</sup> Whenever previous training does not meet the requirements, additional training will be required and breastfeeding and lactation management, and competencies will be verified within 6 months of hire, but ideally within 2 months of hire.

- C. In-service training and periodic updates<sup>75,87,91,92</sup>  $(1)^{62}$  with the appropriate content and duration to ensure compliance with BFHI Guidance<sup>87,93</sup> (1) and this policy, will be provided as needed.<sup>21</sup> D. Supportive supervision<sup>94</sup> (2) will ensure that care is
- offered according to this Policy<sup>63</sup> and that correct, current, and consistent information is provided to all parents.63

#### Antenatal.

8. Mothers will be empowered to have the birth experience most conducive to breastfeeding. A detailed breastfeeding history, including breastfeeding desired objectives, will be part of the prenatal history in the clinical record<sup>95</sup> (1).<sup>58</sup>

- 9. This facility ensures that all pregnant mothers attending prenatal care in this facility will be offered personalized antenatal breastfeeding support and education75,87,96  $(1)^{41}$  (2) tailored to their concerns and needs. It will work with related facilities providing prenatal care to ensure that all mothers receive the information they need.
  - A. Sessions will start early in the first or second antenatal visit to avoid lack of information to women who may deliver prematurely.<sup>21</sup>
  - B. One-on-one and/or small group sessions will be delivered<sup>97</sup> (1) and partners and family will be encouraged to participate<sup>98,99</sup> (1).<sup>58</sup> C. Midwives<sup>100</sup> (1)<sup>101</sup> (1) and other health care pro-
  - viders with lactation specialization<sup>102</sup> (1) will

## TABLE 3. LIST OF ABILITIES TO BE ASSESSED AMONG STAFF WORKING WITH MOTHER AND INFANTS IN MATERNITY FACILITIES

- 1. How to use listening and learning skills to counsel a mother and use skills for building confidence and giving support to counsel a mother.
- 2. How to counsel a pregnant woman about breastfeeding.
- 3. How to explain to a mother about the optimal pattern of breastfeeding.
- 4. How to counsel a mother about benefits of breastfeeding to her own health.
- 5. How to help a mother to initiate breastfeeding within the first hour after birth.
- 6. How to adequately assess a breastfeed.
- 7. How to efficiently help a mother to position herself and her infant for breastfeeding and achieve a proper attachment of the infant.
- 8. How to help a mother to express her breast milk and to cup feed her infant.
- 9. How to help mothers with most frequent breastfeeding issues:
  - a. mother who thinks she does not have enough milk;
  - b. mother with an infant who cries frequently;
  - c. mother whose infant is refusing to breastfeed;
  - d. mother who has flat or inverted nipples;
  - e. mother with engorged breasts;
  - f. mother with sore or cracked nipples;
  - g. mother with mastitis;
  - mother breastfeeding a low-birth-weight or sick infant, using a supplemental tube at the breast or other devices, if indicated.
- 10. How to implement the Code in the health facility.

Source: World Health Organization-UNICEF.21

be the preferred staff providing this antenatal education.

- 10. The education provided at each visit will be documented in the woman's clinical history and all women will be provided a schedule with the information that will be offered (Table 4).<sup>21</sup> The curriculum taught to pregnant women includes essential information pertinent to breastfeeding and is shared with nearby organizations that offer antenatal education to families in the community.
- Special consideration will be given to behavioral and psychoeducational approaches<sup>58</sup> to increase selfconfidence<sup>103</sup> (3) and empowerment techniques, including gender equity.
- 12. Education will be tailored to mothers' personal determinants (background, ethnicity, culture, socioeconomic)<sup>58</sup> and the special needs of women at risk of low breastfeeding: adolescents<sup>104</sup> (1), obese<sup>105</sup> (1), disenfranchised<sup>102</sup> (1),<sup>106</sup> (M) or disadvantaged groups<sup>87,96</sup> (1),<sup>107</sup> (2),<sup>108</sup> (M). mHealth (the use of mobile and wireless devices for health services) training will be offered if deemed necessary for families with difficult access to the institution<sup>109</sup> (1).<sup>21</sup>

Labor and delivery care.

13. Physiological labor and birth will be promoted<sup>49</sup> (H) and harmful practices and unnecessary outdated interventions will be avoided.<sup>63,73</sup>

- A. All practices and interventions during labor, childbirth, and the early postnatal period in this institution conform to a written, up-to-date guidance that minimize the risk of cesarean delivery and instrumental vaginal delivery.<sup>73</sup> Both have been associated with adverse mother–child health outcomes<sup>44,96,110</sup> (1)<sup>42</sup> (2) and adverse breastfeeding outcomes<sup>111,112</sup> (1)<sup>43</sup> (2).
- butcomes<sup>111,112</sup> (1)<sup>43</sup> (2).
  B. Patient-centered<sup>47</sup> sensitive and supportive care shall be offered.<sup>63,73</sup> The benefits, risks, and possible complications of interventions, such as pain control measures, route and type of narcotic analgesia, planned Cesarean delivery, and induced delivery, will be discussed.<sup>73</sup> Birthing individuals' informed choices will be respected<sup>40,43,44</sup> (1)<sup>49</sup> (H).
- C. Mothers will be encouraged to choose the companion(s) of their choice during labor.<sup>48,63,73</sup>
- D. Women with low-risk pregnancies who have the expectation of a normal delivery should be offered the option of a Midwife-Led Continuity of Care model service,<sup>113</sup> with one-on-one support being offered whenever possible<sup>38,114,115</sup>(1)<sup>49</sup>(H). (This recommendation applies only to settings with well-functioning midwifery programs).<sup>63</sup>
- E. A trained birth companion or doula, will be allowed following the mother's wishes and the country/institution policies<sup>38</sup> (1).<sup>48</sup>
- F. Nonpharmacological measures will be favored for uncomplicated cephalic deliveries. Medication, timing, and route of narcotic analgesia will be carefully chosen and discussed with the mother<sup>113</sup>  $(1)^{61}$  to minimize risks for the dyad's health and breastfeeding<sup>40</sup> (1).

### Postnatal care.

- 14. Immediately after vaginal and Cesarean births, SSC will be offered and encouraged for all mothers and newborns without complications<sup>115,116</sup> (1), regardless of feeding choice, and including late preterm (LPT) infants (34–36 6/7 weeks gestation)<sup>56</sup> and low birth weight (LBW) (between 1,200 and 2,500 g),<sup>117</sup> whenever stability of mother/infant allows.<sup>117,118</sup>
  - A. All well and alert newborns will be placed prone on mother's bare chest, naked, immediately after birth<sup>119</sup> (2). They will then be thoroughly dried (except hands), a diaper placed (if mother desires), and cover provided with a warm blanket to contain mother's heat<sup>120</sup> (5). Dyad and partner will be allowed to bond while being carefully observed. Infants should be left to experience the nine phases of newborn behavior that occur naturally when an infant is placed skin-to-skin at birth<sup>121</sup> (2), such as smelling, licking, resting, and crawling toward the nipple before latching spontaneously<sup>121</sup> (2)<sup>122</sup> (4)<sup>123</sup> (5).<sup>28,117</sup>
  - B. SSC will not be interrupted for at least 2 hours<sup>115,116,124,125</sup> (1)<sup>126</sup> (2)<sup>127</sup> (5) (Table 4) or until first breastfeed, unless required for justified medical reasons. If a delay or interruption of initial SSC has been necessary, staff will ensure that

Visit date (weeks gestation)	Topics	Staff signature
Gest. week:Visit #:	1. The right to receive respectful maternity care – which refers to care organized for and provided to all women in a manner that maintains their dignity, privacy and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labour and childbirth.	
Gest. week:Visit #:	2. Non-pharmacologic pain relief methods during labor and the influence of delivery methods on breastfeeding success	
Gest. week:Visit #:	3. Global recommendations and importance of breastfeeding the importance of exclusive breastfeeding for the first 6 months, the risks of giving breast milk substitutes, and the importance of continuing breastfeeding after 6 months with appropriate complementary foods, for the first two years or beyond	
Gest. week:Visit #:	4. The importance of immediate and sustained skin-to-skin contact after birth	
Gest. week:Visit #:	5. The importance of early initiation of breastfeeding and rooming in on a 24-hour basis	
Gest. week:Visit #:	6. The basics of milk supply and demand, to ensure the infant's adequate nourishment.	
Gest. week:Visit #:	7. The basics of good positioning and attachment and recognition of feeding cues	
Gest. week:Visit #:	8. Management of most common initial challenges such as pain, cluster feeding, sleepy newborns, latching issues, engorgement and practice of safe sleep	

TABLE 4. TOPICS TO BE COVERED IN ANTENATAL EDUCATION, MODEL SCHEDULE

Depending on each institution's and/or BFHI national country requirements, topics and antenatal information may be needed to be covered at a certain time point (e.g., Baby-Friendly USA requires topics to be covered before 28 weeks). Sources: (numbers in parentheses refer to the LOE assigned according to OCEBM<sup>67</sup>: (1),<sup>40,44,186–187</sup> (2),<sup>43,107,188</sup> <sup>189–190</sup> (5),<sup>189–190</sup> (guidelines or protocols are not rated).<sup>21,28,62,63,73</sup>

Visit #, visit number; Gest. week:, Gestational week at which the visit should take place.

mother and infant receive SSC as soon as clinically possible<sup>127</sup> (5).<sup>21,28,48,62,128</sup> Time of initiation and end of SSC shall be documented in the medical record.

- C. The room temperature in the birthing environment will be set at or above 25°C (77°F) and free of draughts.<sup>63</sup> Staff will avoid bright lights and loud noises to help the infants unfold their innate reflexes.<sup>28,63</sup>
- D. Needed measures will be in place to facilitate immediate (or as soon as possible) SSC after a Cesarean delivery, ideally in the operating room or the recovery area<sup>115,125</sup> (1)<sup>126</sup> (2). Use of transparent surgical drapes will be favored attending to the mother's wishes to provide a positive experience for the mother.
- E. Continuous supervision (intervening only if needed) and safe positioning to minimize the risk of Sudden Unexpected Postnatal Collapse with directions for staff and the mother's companions to monitor the mother and infant are included in skinto skin procedures protocol. A protocol with recommendations on safe sleep and SSC in the neonatal period based on evidence<sup>127</sup> (5) will guide staff practice.
- F. Apgar scores will be performed with the infant skinto-skin<sup>127</sup> (5). Oral, nasal, or tracheal suction will not be done for babies who start to breathe on their own even when meconium is present in the amniotic fluid.<sup>117</sup>

- G. Umbilical cord clamping will be delayed in both preterm and term infants<sup>129</sup> (1)<sup>117,130</sup> except when mother or infant are unstable<sup>131</sup> (1)<sup>117</sup> or if harvesting of cord blood is desired.<sup>132</sup>
- H. The infant's anthropometric measurements,<sup>133</sup> (3) intramuscular vitamin K administration,<sup>134,135</sup> ophthalmic prophylaxis,<sup>136</sup> and hepatitis B vaccine administration<sup>137</sup> will be delayed at least after the first hours of uninterrupted mother–infant contact or first breastfeeding.<sup>48,63</sup>
- I. Bathing will be delayed for at least 24 hours.<sup>73</sup>
- J. Immediate SSC with father or partner will be offered only if mother is not available<sup>126</sup> (2).<sup>50</sup>
- K. All parents (with preference time for the mother) will be encouraged to have their newborns SSC during their stay in the postpartum unit<sup>127</sup> (5).
- 15. All mothers and all newborns able to breastfeed (including LBW and preterm infants) shall be supported to breastfeed as soon as possible within the first hour of birth<sup>125,138,139</sup> (1).<sup>56,62,118</sup>
  - A. Help will be offered to facilitate the infant's first latch, if the infant does not latch spontaneously in the first hour or at the request of the mother<sup>115</sup> (1).<sup>48,118</sup>
  - B. Preterm infants, and early term babies will be offered special help to ensure latch and adequate transfer of milk<sup>140</sup> (1).<sup>56</sup> Close observation needed by preterm and LBW infants for the first 12–24 hours will be offered during skin-to-skin care,

TABLE 5. LIST OF ESSENTIAL ISSUES THAT EVERY New Breastfeeding Mother (and Family) Should Know and/or Demonstrate (to Be Verified with Mothers Before Discharge)

- 1. The importance of breastfeeding exclusively and mother/ parent infant eye-to-eye and body contact while feeding.
- 2. Feeding cues and signs of an adequate latch, swallowing, milk transfer and infant satisfaction and how to recognize all of them.
- 3. The average feeding frequency (8–12 times per 24 hours) with some infants needing more frequent feedings.
- 4. How to breastfeed in a comfortable position without pain.
- 5. Infants should be fed in response to feeding cues, offered both breasts per feeding and fed and until they seem satisfied.
- 6. How to ensure and enhance milk production and let down. a. Why and how to hand express colostrum/breastmilk.
  - b. Mothers who need to pump must know how to correctly use and care for their breast pump.
- 7. The effects of pacifiers and artificial teats on breastfeeding and why to avoid them until lactation is established.
- 8. Not all medications nor mother's illnesses contraindicate breastfeeding.
  - Accurate information resources: www.e-lactancia.org and www.mommymeds.com are user-friendly resources for parents.
  - b. Reasons for a breastfeeding mother to avoid tobacco, alcohol and other drugs.
- 9. Safe sleeping instructions (how to make co-sleeping safer), particularly avoiding sofas and tobacco.
- 10. Recognize signs of undernourishment or dehydration in the infant and warning signs for calling a health professional.
  - a. <u>Infant:</u> usually not waking for more than 4 hours or, always awake or, never seeming satisfied or, more than 12 feeds per day, or no signs of swallowing with at least every 3–4 sucks, too few wet/heavy or soiled diapers per day, fever.
  - b. <u>Mother:</u> persistent painful latch or, breast lumps, breast pain, fever, doubts with milk production, aversion to the child, profound sadness and any doubt with breastfeeding self-efficacy.

Adapted from WHO-UNICEF<sup>21</sup> with additions from the following sources: (numbers in parentheses refer to the LOE assigned according to OCEBM<sup>67</sup>): (web pages),<sup>172,192</sup> (5),<sup>191</sup> (1).<sup>192</sup>

Kangaroo care,<sup>141</sup> (1) breastfeeding, and roomingin.<sup>56,117</sup> Mothers will be encouraged to breastfeed on demand as soon as the infant's condition permits.<sup>21</sup>

- 16. Every mother shall be offered as much help as needed with breastfeeding. The staff will ensure that the mother is able to position and attach her infant at the breast. At-risk mothers (complicated and Cesarean deliveries, obese, adolescents, patients with tobacco use, lack of partner support, intimate partner violence) will have tailored extra help.<sup>21,48</sup>
  - A. Trained staff will observe carefully the first breastfeeding sessions, looking for signs of effective latch, position, and effective feeding. If ev-

erything goes well they will not intervene. If improvement is needed, the mother will first be gently shown how to improve the latch and positioning herself, and avoid having the staff do it for her.<sup>28</sup>

- B. Trained staff will observe and document at least one feed every shift until discharge and, with each staff contact with the mother whenever possible. Positioning, latch, milk transfer, infant's output frequency and characteristics, jaundice and infant's weight, and any feeding problem will be recorded in the clinical history.<sup>48</sup>
- C. Maternal semirecumbent position (biologic nurturing) will be encouraged in the early postpartum period,<sup>122</sup> (4) but each mother will be empowered to find her own most comfortable position.
- D. Mothers and partners will be enabled to recognize hunger cues, signs of good positioning and effective latching, to identify suckling, swallowing, and milk transfer and, to optimize milk production.<sup>21,48</sup>
- E. The staff will address any breastfeeding problem (nipple pain, latch difficulties, insufficient milk supply)<sup>48</sup> and referral will be made to a lactation specialist whenever needed. Management of most common breastfeeding difficulties will be discussed with every breastfeeding parent before discharge (Tables 3 and 5).<sup>21</sup>
- 17. All mothers will be taught breast massage and breast milk hand-expression techniques during their stay<sup>142</sup>  $(1)^{143}$  (2) and, if desired they will be taught how to use a breast pump. Mothers and families will be taught that obtaining only a few milliliters is frequent during the first episodes of milk expression, and does not signify low milk production.
  - A. Breast massage and hand expression shall be taught early whenever:
    - Newborns are not able to get colostrum through latch alone.
    - Preterm, early term, and any infant are not latching effectively in the first 24 hours<sup>143</sup> (2).
    - Newborns are at risk of hypoglycemia (diabetic mothers, undernourished infants), to supplement with colostrum on the first feeds after breastfeeding.
    - The infant cannot breastfeed directly (e.g., preterm or sick infants).
    - Mother-infant separation is unavoidable.
    - Mother is at risk for delayed lactogenesis II (Table 6).
  - B. Whenever separation lasts more than a few days mothers will be advised to use a double set-up electric breast pump, at least eight times per day, combined with hand expression <sup>144</sup> (3) (which has proven useful in mothers of preterm infants), and breast massage and hand expression will also be taught early.
  - C. Mothers identified prenatally or soon after delivery, as at risk of delayed lactogenesis II (Table 6), will be assigned to special help as deemed appropriate. A feeding plan and close follow-up of the infant (for adequate hydration and nutrition besides help with expression) will be offered. At discharge,

Maternal factors	Infant factors
Age over 30, Primiparity.	Early term birth (37–39 weeks).
Breast problems: Insufficient glandular tissue, flat or inverted nipples tissue, history of breast surgery.	Infant Apgar <8.
Delivery problems: Cesarean delivery (especially if unplanned), complicated delivery, significant hemorrhage, prolonged labor, preterm delivery (<37 weeks), retained placenta.	High birth weight >3600 g.
Postpartum depression.	Low birth weight (<2500g).
Metabolic problems: Diabetes (gestational, types 1 or 2), hypertension, preeclampsia, polycystic ovary syndrome, obesity (pre-pregnancy BMI >30), high cortisol levels, hypothyroidism, extreme tiredness, fatigue or stress.	Poor or painful latch / restricted feedings.
Previous low supply.	Prelacteal feeds.
Tobacco use and some drugs and medications may cause low milk supply.	Prematurity (<37 weeks).

TABLE 6. RISK FACTORS FOR DELAYED OR FAILED LACTOGENESIS II OR LOW MILK SUPPLY

Delayed Lactogenesis II is defined as little or no maternal perception of breast fullness or leaking at least 72 hours post-birth. Sources: This table has been constructed with information from references (numbers in parentheses refer to the LOE assigned according to OCEBM<sup>67</sup>): (1),<sup>141,193</sup> (5).<sup>194</sup>

continuum of care will be ensured with a feeding plan and close follow-up.  $^{48}\!$ 

- D. Enough staffing time will be allocated to ensure that adequate supervision and help is possible for all new mothers and infants.<sup>21,48</sup>
- E. Painful procedures, such as Immunizations, vitamin K administration, or heel pricks shall be done while breastfeeding as it is the best method to soothe pain in the neonate<sup>145</sup> (2).
- 18. Individualized appropriate care for each mother of preterm or LBW infants will be offered, both for attending to the infant needs as well as family centered care and continuity of care.<sup>50,51</sup>
  - A. Preterm infants may be able to root, latch, and suck from 27 weeks; however, ineffective breastfeeding is likely.<sup>21</sup> Preterm and early term infants will be offered special help to ensure adequate latch and milk transfer<sup>140</sup> (1).<sup>56</sup>
  - B. Every effort will be made for LBW (including Very Low Birth Weight) infants, to be fed their mother's own milk or, if that is unavailable, pasteurized donor human milk.<sup>117,128</sup> Mothers of preterm and LBW infants will be helped to start expressing as soon as possible, preferably within 1 hour of birth<sup>146</sup> (3),<sup>21,63</sup> (if no SSC has been possible)<sup>147</sup> (3) but at least in the first 6 hours<sup>146</sup> (3).<sup>56</sup>
  - C. Mothers will be supported and encouraged to express their breasts at least five times per day aiming to eight sessions per day, and at least one night session in 24 hours, to ensure an adequate milk supply. Space to pump milk near their infants in the neonatal ward will be made available and privacy may be provided with screens upon request. Guidance will be offered on breast massage, hand expression, usage of an electric breast pump (double set-up if feasible)<sup>148</sup> (2). Encouragement to pump immediately after SSC<sup>149</sup> (2) and hand expression accompanied by pumping at least eight times<sup>56</sup> will be offered to increase milk supply whenever needed<sup>144</sup> (3).

- D. For infants <2,000 g, Kangaroo mother care will be instituted as soon as possible after birth for infants and as close to continuously as possible,<sup>63,117</sup> and will be facilitated to all mothers once the infant is stable<sup>141,150</sup> (1)<sup>151</sup> (5). Unlimited access to the neonatal ward for mothers and partners<sup>141,152</sup> (1) is guaranteed. For that purpose, mothers will be provided with clothing and adequate space to sit–lay in a semireclined position and enabled to hold their infants prone and naked between their breasts. Staff will facilitate feedings whenever infant shows early feeding cues.
- E. When going home, written and spoken instructions for proper storage and labeling of breast milk will be provided for all mothers who are separated from their infants.<sup>55</sup> Mothers will be encouraged to continue pumping and whenever possible, the institution will facilitate the provision of breast pumps.
- 19. Breastfeeding mothers will be encouraged to exclusively breastfeed (feeding only breast milk, no other liquids or solids except for vitamins/medications) unless supplements (water, glucose solutions, formula, or other liquid) are medically indicated (ABM Protocol #3).<sup>54</sup> Supplements will not be offered to newborns unless medically indicated or by the mother's documented and informed request.<sup>21,62</sup> If supplements are needed:
  - A. Preferred order will be: colostrum/mother's own milk, pasteurized donor human milk,<sup>21,62</sup> ready-mixed formula, and powdered or concentrated formula mixed with clean water. On the first 1–2 days of life, term infants do not need more than 2–15 mL per feeding.<sup>48</sup>
  - B. Mothers will be encouraged to express colostrum or milk directly into the infant's mouth or to feed by alternative methods other than bottle/artificial teats (a cup, finger, syringe, paladai, or a spoon are preferred).<sup>54</sup> Supplementing through tubing at chest may help stimulate the mother's breast while feeding the infant<sup>153</sup> (1).

- C. Supplements will not be given without a medical order,<sup>21</sup> including by mother's request. Orders given for medical indications will require daily review and renewal. Medical indications for supplementation, type of supplement, times, amount, method of feeding the supplement, and instructions given to mothers regarding supplementation will be documented in the clinical record of mother/infant.<sup>21,54</sup>
- D. Mothers who ask for supplementation when not medically indicated will have their reasons listened to and explored. A careful assessment of breast-feeding will be offered and the risks of supplementing will be discussed with mothers and relatives.<sup>54</sup>
- E. Safe preparation, feeding, handling, and storage of breast milk substitutes will be individually taught to families who do not breastfeed or need supplements, at discharge,<sup>21</sup> and written instructions will be given if appropriate.
- 20. In this institution, we recognize and facilitate the need for all mothers and healthy term babies to remain together 24 hours per day (rooming-in) for their mutual well-being, regardless of parent's feeding choice, or delivery method)<sup>154</sup> (1).<sup>63,117</sup> Unless legally mandated, this facility does not have a dedicated nursery space for healthy term newborns (although eliminating the nursery is not a requirement of BFHI). Should this institution maintain a nursery, the infants therein would not be visible to passersby, thereby deflecting interest, and neither normalize separation nor appear to endorse or encourage its use.
  - A. Rooming-in is facilitated for all newborns<sup>155</sup> (2),<sup>21</sup> including LPT infants<sup>140</sup> (1)<sup>56</sup> or LBW >1,750 g who meet specific medical and safety criteria<sup>156</sup> (2). Maternity beds with sidecar basinets will be facilitated for hospital use<sup>157,158</sup> (2).
  - B. Separation of mothers and infants will occur only for justified clinical reasons. Documentation of interruption of rooming-in with reason for interruption, location of infant during interruption, and time parameters for interruption is required<sup>154</sup>  $(1)^{56}$  from staff. Rooming-in will be reinstated as soon as the reason ceases. Whenever a mother must be separated from her infant the staff will support the mother to begin expressing her milk as soon as possible and at least within the first 6 hours of separation.<sup>21</sup> Whenever parents request their infant be kept apart from them, their reasons for such care will be explored and the importance of rooming-in for the infant's health and wellbeing will be explained  $^{154}$  (1). The education will be documented. If the infant is separated either for medical reasons or parental choice, the nurse caring for the infant will be responsible for bringing the infant to the mother as soon as the infant displays feeding cues, to support exclusive breastfeeding.
  - C. All routine procedures, assessments, newborn screens, cardiac screens, immunizations, hearing screens, and routine laboratory draws shall be performed at the mother's bedside.<sup>48,63</sup> Routine

blood glucose monitoring of term healthy infants is not indicated.<sup>52,73</sup> Newborn bathing is not necessary in most cases, but if desired, parents will perform it whenever possible, with assistance of staff.<sup>48,73</sup>

- D. Infants who need intravenous antibiotics or phototherapy, but are otherwise healthy and stable, will be allowed to remain with the mother<sup>125</sup> (1).<sup>56</sup>
- E. Safe rooming-in practices training to prevent infant falls and suffocation incidents, will be regularly offered to families, including information about high-risk hours (early morning) and risk factors (exhausted parents), particularly advice to feed the infant in an adult bed at night or when tired, instead of on a sofa or recliner.<sup>159</sup> Increased surveillance will be offered to mother–infant dyads that have been identified at higher risk<sup>127</sup> (5).<sup>56</sup>
- 21. Hospital staff will ensure that all mothers, regardless of delivery method or feeding choice, know how to respond to their infant cues for feeding, closeness, and comfort. Scheduled feeding of stable newborns is not recommended.<sup>21,30,73</sup>
  - A. No restrictions will be placed on the frequency or length of feeding (crying is a late feeding cue).<sup>21</sup>
  - B. Mothers will be taught that:
    - Infants need at least breastfeed eight times per day, and, many need more frequent feedings.
    - It is important to offer both breasts at each feeding, but if the infant gets satiated only with one breast, the opposite side should be offered at the next feed.
    - Cluster feedings (several feeds close together) are common in the first 24–36 hours and may stimulate breast milk production. They are not a sign of insufficient milk neither is supplementation required.<sup>30</sup> Later, they may signal insufficient milk transfer<sup>160</sup> (5).
  - C. While rooming in, parents of LBW, preterm or early term newborns, and newborns who are losing excess weight, will be instructed to feed the infant at early feeding cues and awaken them if necessary, so that the infant receives at least 8 feeds per 24 hours.<sup>56</sup> Whenever separation occurs, staff will bring infants to mothers for feeding, every time staff notice feeding cues.<sup>21</sup>
- 22. Pacifiers, artificial nipples, or teats will not *routinely* be used nor routinely offered to healthy-term breast-feeding infants<sup>161,162</sup> (1)<sup>155,163</sup> (2)<sup>164,165</sup> (3).<sup>54</sup>
  - A. If a mother requests that her infant be given a bottle or teat, staff will explore reasons for the request, address concerns, and educate on the risks of their use, with emphasis on the effects on suckling. Breastfeeding will be assessed to rule out breastfeeding difficulties<sup>165</sup> (3).<sup>21</sup>
  - B. Staff will not routinely give pacifiers to breastfeeding infants. If a mother requests a pacifier, the staff will explore the reasons for the request, address the mother's concerns, and educate her on potential problems with pacifier use and the education will be documented. Informed mother deci-

sions on teats or pacifier use will be honored and documented in the medical record.<sup>54</sup>

- C. Preterm or sick infants in the Neonatal Intensive Care or Special Care Unit may have pacifiers indicated for non-nutritive sucking.<sup>21,50,163</sup>
- D. Nipple shields (or bottle nipples) will be only used on recommendation by a lactation specialist and after other attempts to correct the difficulty have failed<sup>166</sup> (1)<sup>167</sup> (2).<sup>50</sup>
- E. Breastfeeding will be the preferred soothing method for any breastfed infant undergoing a painful procedure<sup>145</sup> (2). Pacifiers will be given for pain soothing during a procedure, only if breastfeeding is not possible and will be discarded after the procedure.
- 23. This institution will use evidence-based sources for medication safe use with lactating mothers, such as LactMed,<sup>168</sup> InfantRisk,<sup>169</sup> the Lactation Study Center,<sup>170</sup> or APILAM webpage: www.e-lactancia.org.<sup>171</sup> Pharmacological inhibition of lactation will not be offered routinely to inhibit lactation.<sup>172,173</sup> Nonpharmacological measures, such as ice and mild analgesics to alleviate discomfort, breast expression to comfort, and breast support to avoid engorgement, will be advised<sup>174</sup> (1).<sup>172</sup> In birthing individuals, where inhibition of lactation may be necessary for medical or psychological reasons, and after the birthing individual has made an informed decision<sup>173</sup> (5), lisuride and cabergoline may be used<sup>175</sup> (1).

## Continuum of care/going home.

- 24. This institution offers coordinated care with clear, accurate information exchange between relevant health and social care professionals<sup>63</sup> for all mothers, infants, and family.
  - A. Before discharge, the health care team will ensure that there is effective breastfeeding that breastfeeding mothers are able to efficiently breastfeed their infants and that continuity of care is guaranteed, either by follow-up visits (including home visits) or by arranging qualified primary care providers and/or lactation specialists visits and/or support groups or peer counseling contacts<sup>21,28,62,1,176</sup> (1).
  - B. If the infant is still not latching or feeding well at the time of discharge, an individualized feeding plan will be devised and depending on the dyad's clinical situation and resources, the infant's discharge may be delayed.<sup>53,54</sup> A healthy infant will not be discharged without his mother if she needs to stay for any clinical reason, unless staying together is impossible (e.g., mother in the medical intensive care unit).
  - C. Education written material on breastfeeding will be facilitated and discussed with mothers and partners<sup>177</sup> (2) as appropriate, but will not be substituted for person-centered, proactive personal support<sup>178</sup> (1)<sup>46</sup> (H). Efforts will be made to include family in educational activities. Before leaving the hospital, staff will make sure that birthing individuals have certain knowledge and skills (Table 4).

- 25. This institution collaborates with community-based programs to coordinate breastfeeding messages and offer continuity of care.
  - A. Before discharge, contacts with local support groups or other breastfeeding support community resources will be provided for all dyads<sup>1</sup> (1).
  - B. A visit with a health care provider will be secured for every mother–infant dyad to assess the mother and infant's general well-being, feeding situation, presence of infant jaundice, 2–4 days after birth and again in the next week.<sup>21</sup>
  - C. Whenever needed, a visit for specifically following up on feeding issues will be arranged. Home visits may be planned or arranged as they have demonstrated importance to extend breastfeeding duration<sup>1</sup> (1).

# Application

All birthing individuals.

#### Other related ABM Protocols

Protocols #1, #2, #3, #5, #8, #10, #14, #19, #21, #26, #28.

# **Research Needs**

While researching for evidence to build this protocol, certain issues have arisen as lacking enough or at all evidence, such as effective strategies to increase implementation of BFHI practices in the hospital setting or best ways to monitor staff adherence to a hospital's breastfeeding policy. There is need for controlled studies of prenatal and early hand expression in mothers of term infants at risk for delayed lactogenesis II; and its effect on the timing of lactogenesis II, milk volume, and duration of breastfeeding should be better determined. On-demand feeding, best positions for breastfeeding, SSC with nonfather parents and other relatives (if mother is not available), best treatment to inhibit lactation when needed and, transgender parents' chest-feeding experiences and how to support them, are other issues where adequate research or any research at all is lacking.

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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 five years or sooner if there are significant changes in the evidence.

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