Academy of Breastfeeding Medicine
Annotated Bibliography (five year update):
Peripartum breastfeeding management
for the healthy mother and infant at term
July 2007

Reference	Content	Level of Evidence*
Background/Hospital policies		
The Baby-Friendly way: the best breastfeeding start. Philipp BL - *Pediatr Clin North Am*, 01-JUN-2004; 51(3): 761-83	This article reviews the development of the BFHI, describes the components of the initiative, and evaluates current data that favor the universal implementation of the BFHI.	II-2
Intervening to promote early initiation of breastfeeding in the LDR. Komara C - *MCN Am J Matern Child Nurs* - 01-MAR-2007; 32(2): 117-21	Evaluates the effectiveness of an interventional protocol for the early initiation of breastfeeding that would remove barriers in the labor**,** delivery, recovery (LDR) unit.	III
Breastfeeding and the Use of Human Milk, Section on Breastfeeding, American Academy of Pediatrics, *Pediatrics* Vol. 115, No. 2, February 2005	Overall recommendations of the American Academy of Pediatrics Section on Breastfeeding. Recommends: 1. Peripartum policies and practices that optimize breastfeeding 2. Skin-to-skin contact immediately after delivery 3. Supplements should not be given unless ordered by physician 4. Pacifier use avoided during initiation of breastfeeding and used only after breastfeeding is well-established 5. Formal evaluation of breastfeeding by trained caregivers at least twice daily and fully documented in the record during each day in the hospital after birth	III

Prenatal Education		
Interventions to promote breast-feeding: applying the evidence in clinical practice. Palda VA - *CMAJ* - 16-MAR-2004; 170(6): 976-8	In this document, the Canadian Task Force on Preventive Health Care (CTFPHC) updates its earlier breast-feeding recommendations[] by presenting evidence on interventions that improve the initiation or duration of breast-feeding (or both). They found good evidence to recommend provision of structured antepartum educational programs as well as peer counseling.	I

Special Report from ACOG, Breastfeeding: Maternal and Infant Aspects, Committee on Health Care for Underserved Women, Committee on Obstetric Practice, ACOG Clinical Review, Volume 12 (1), January-February 2007	Special report from ACOG. Recommendations for prenatal education particularly from Ob/Gyn's regarding breastfeeding. "Advice and encouragement of the obstetrician-gynecologist are critical in making the decision to breastfeed." "Prenatal educational groups have been shown to be particularly effective in increasing duration of breastfeeding. "	III

Labor and Delivery		
Special Report from ACOG, Breastfeeding: Maternal and Infant Aspects, Committee on Health Care for Underserved Women, Committee on Obstetric Practice, ACOG Clinical Review, Volume 12 (1), January-February 2007	Special report from ACOG. Recommendation regarding labor and delivery practices that promote breastfeeding. "Certain pain management interventions in labor may decrease breastfeeding initiation. To support a mother's desire to breastfeed, pain management should be balanced to ensure pain relief for the mother while avoiding excessive amounts of medication, particularly narcotics that can adversely affect the infant's ability to breastfeed effectively."	III
Effect of labor **epidural analgesia with and without fentanyl on infant breast-feeding: a prospective, randomized, double-blind study**. Beilin Y - *Anesthesiology* - 01-DEC-2005; 103(6): 1211-7	Randomized double-blinded study of the impact of epidural fentanyl on breast-feeding. Women who previously breast-fed a child and who requested labor epidural analgesia were randomly assigned in a double-blinded manner to one of three groups: (1) no fentanyl group n=60, (2) intermediate-dose fentanyl group n=59 (intent to administer between 1 and 150 microg epidural fentanyl), or (3) high-dose epidural fentanyl group n=58 (intent to administer > 150 microg epidural fentanyl). CONCLUSIONS: Among women who breast-fed previously, those who were randomly assigned to receive high-dose labor epidural fentanyl were more likely to have stopped breast-feeding 6 weeks postpartum than woman who were randomly assigned to receive less fentanyl or no fentanyl.	I
The impact of intrapartum analgesia on infant feeding. Jordan S - *BJOG* - 01-JUL-2005; 112(7): 927-34	A random sample of 425 healthy primiparae delivering healthy singleton babies at term in 2000 in UK were studied to assess the impact of intrapartum analgesia on infant feeding. CONCLUSIONS: When well-established determinants of infant feeding are accounted for, intrapartum fentanyl may impede establishment of breastfeeding**,** particularly at higher doses.	I

Immediate postpartum period		
Effect of early skin-to-skin contact after delivery on duration of breastfeeding: a prospective cohort study. Mikiel-Kostyra K - *Acta Paediatr* - 01-JAN-2002; 91(12): 1301-6	N=1250 A prospective cohort study of Polish children to study the influence on breastfeeding of skin-to-skin contact after birth. 3 year follow-up RESULTS: The implementation of the practice significantly increased mean duration of exclusive breastfeeding by 0.39 mo and overall breastfeeding duration by 1.43 mo. The infants kept with the mothers for at least 20 min were exclusively breastfed for 1.35 mo longer and weaned 2.10 mo later than those who had no skin-to-skin contact after delivery. The skin-to-skin contact after birth significantly coexisted with the other hospital practices supportive to breastfeeding, especially rooming-in without separation longer than 1 h per 24 h [relative risk (RR) = 3.18, 95% confidence interval (95% CI): 2.34-4.31] and first breastfeeding within 2 h after birth (RR = 2.94, 95% CI: 2.36-3.67. CONCLUSION: The results indicate that extensive mother-infant skin-to-skin contact lasting for longer than 20 min after birth increases the duration of exclusive breastfeeding.	II-2
Postpartum positioning and attachment education for increasing breastfeeding: a randomized trial. Henderson A, Stamp G, Pincombe J. Birth 2001;28:236-242.	n=150. Primiparous subjects with healthy singleton infants were randomized to receive intervention or assignment to control group, 75 in each group. Background characteristics of the two groups were similar. The intervention group received "hands off" instruction/education regarding breastfeeding basics of anatomy, positioning, attachment and suckling. Each woman received assistance, instruction and feedback on each day she was in the hospital. There were no statistically significant differences between the study groups for breastfeeding duration at any of the three endpoints: 6 weeks, 3 months and 6 months. Fewer women in the experimental group reported nipple pain in the hospital than the control group (39% vs 62%, $p<0.01$ on day 2 and 51% vs 68% on day 3, $p<0.05$). These differences did not persist at any other time point. At 3 months postpartum, women in the experimental group	I

	were significantly less satisfied with breastfeeding than the control group (p=0.03). The authors concluded that not only was the intervention ineffective, it may have caused negative effects of lower breastfeeding rates and less satisfaction with breastfeeding.	
The effect of Russian Maternity Home routines on breastfeeding and neonatal weight loss with special reference to swaddling. Bystrova K - *Early Hum Dev* - 01-JAN-2007; 83(1): 29-39	N= 176 Randomized trial with factorial design with four treatment groups to study the effect of different ward routines in respect to proximity to mother and type of infant apparel, on breastfeeding parameters (amount of ingested milk, volume of supplements, number of breastfeeds, total duration of breastfeeding time) on day 4 after birth as well as recovery from neonatal weight loss and infant's weight on day 5. Mother-infant dyads were studied 25-120 min after birth. CONCLUSION: Supplements given to the infants in the nursery had a negative influence on the amount of milk ingested. In addition, supplement feeding or a short separation after birth when combined with swaddling was shown to have a negative consequence to infant weight gain.	I
Clinical Practice Guideline Subcommittee on Hyperbilirubinemia Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation *Pediatrics* Vol. 114 No. 1 July 2004, 297-316	The AAP in this clinical practice guideline recommends the following as it relates to breastfeeding: 1. -In numerous policy statements, the AAP recommends breastfeeding for all healthy term and near-term newborns. This guideline strongly supports this general recommendation. 2. *-Clinicians should advise mothers to nurse their infants at least 8 to 12 times per day for the first several days (evidence quality C: benefits exceed harms)*. 3. *-The AAP recommends against routine supplementation of nondehydrated breastfed infants with water or dextrose water (evidence quality B and C: harms exceed benefits)*. 4. *-In breastfed infants who require phototherapy , the AAP recommends that, if possible, breastfeeding should be continued*	III

	(evidence quality C: benefits exceed harms). It is also an option to interrupt temporarily breastfeeding and substitute formula. This can reduce bilirubin levels and/or enhance the efficacy of phototherapy (evidence quality B: benefits exceed harms). In breastfed infants receiving phototherapy, supplementation with expressed breast milk or formula is appropriate if the infant's intake seems inadequate, weight loss is excessive, or the infant seems dehydrated.	
Discharge policies		
Efficacy of breastfeeding support provided by trained clinicians during an early routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs. Labarere J - *Pediatrics* - 01-FEB-2005; 115(2): e139-46	N=226 Randomized open trial studying the effect of an early preventive visit within 2 weeks after birth with trained primary care physicians (5-hour training program on breastfeeding. This study provides preliminary evidence of the efficacy of breastfeeding support through an early, routine, preventive visit in the offices of trained primary care physicians.	I
Expressing Breastmilk		
Electric breast pump use increases maternal milk volume in African nurseries. Slusher T - *J Trop Pediatr* - 01-APR-2007; 53(2): 125-30	N=65 Randomized trial in Africa where mothers of sick or preterm infants were assigned to one of three milk expression groups at birth (electric pump, pedal pump or hand pump.) Findings revealed greater MMV (maternal milk volume) with electric breast pumps than hand-expression for mothers of infants in African nurseries. This data has important implications for international policy if exclusive OMM (own mothers' milk) feeding is to be achieved for the vulnerable infant	I