Mother-Friendly Childbirth – Highlights of the Evidence

The Evidence Basis for the Ten Steps of Mother Friendly Care (*Journal of Perinatal Education*, Vol. 16, Supplement 1, Winter 2007), published in Lamaze International's peer-reviewed professional journal, is the result of an extensive review of the research behind today's maternity care practices by the **Coalition for Improving Maternity Services (CIMS) Expert Work Group**. Citizens for Midwifery and BirthNetwork National have developed this summary of the research findings regarding the Ten Steps of Mother-Friendly Care as defined in the CIMS' **Mother-Friendly Childbirth Initiative (MFCI)**, as well as an Appendix examining out of hospital birth.

STEP 1: Offers all birthing mothers unrestricted access to birth companions, labor support, professional midwifery care.

UNRESTRICTED ACCESS TO BIRTH COMPANIONS

Perception of support during labor was a key ingredient in a woman's ultimate satisfaction with her birth experience and was more important in determining satisfaction than experience of pain or satisfaction with pain relief. More satisfaction was reported with birth support when provided by a partner or doula, compared to a doctor or nurse.

Access to Labor Support

Using labor support reduced likelihood of requesting pain relief in labor, reduced likelihood of severe postpartum pain, increased likelihood of spontaneous birth (vaginal birth without the use of forceps or vacuum extraction), increased satisfaction with the birth experience, and resulted in fewer cesareans and less oxytocin during labor.

Access to MIDWIFERY CARE - Use of midwives was associated with:

- Increased length of prenatal visits, more education and counseling during prenatal care, and fewer hospital admissions.
- Less need for analgesia and/or epidural anesthesia and increased use of alternative pain relief methods, as well as more freedom of movement in labor and intake of food and drink.
- Decreased use of amniotomy (membrane rupture), IVs, electronic fetal monitoring; fewer inductions and augmentations of labor; and fewer injuries of the perineum (tissue between vagina and anus) as shown by fewer episiotomies, fewer rectal tears, and more intact perineums.
- Fewer cesareans overall, including fewer emergency cesareans for fetal distress or for inadequate progress in labor, and more vaginal births after cesareans (VBACs). Fewer infants born preterm, low birthweight or with complications such as birth injury or requiring resuscitation after birth, and more infants exclusively breastfeeding at 2-4 months after birth.

STEP 2: Provides accurate, descriptive, statistical information about birth care practices.

The only study on this topic found that providing evidence-based information does not cause harm. The concept of "informed consent" is widely recognized as a fundamental human right, including the federal HIPAA law. Integral to these rights are discussions of benefits/risks of treatment or non-treatment, informed consent and informed refusal, as well as the basic human right to personal autonomy.

STEP 3: Provides culturally competent care.

Culturally competent care was associated with improved communication, avoidance of medical errors, and increased patient/client satisfaction and confidence in health provider.

STEP 4: Provides the birthing woman with freedom of movement to walk, move, assume positions of her choice.

No evidence of harm found when restriction is not required to correct a complication. Walking, movement, and changes of position may shorten first and second-stage labor, were effective forms of pain relief, led to fewer nonreassuring fetal heart rate patterns, fewer perineal injuries, and less blood loss. Walking during first stage of labor decreased the likelihood of delivery by surgery, forceps or vacuum extraction.

STEP 5: Has clearly defined policies, procedures for collaboration, consultation, links to community resources.

Benefits for both mothers and babies were associated with continuity of care and collaborative care approaches, including more spontaneous vaginal births, less frequent use of epidural anesthesia, babies less likely to need resuscitation, and improved breastfeeding. Women who did not receive continuity of care were less likely to feel supported during labor, feel prepared for parenthood, or discuss pregnancy and postpartum concerns and problems with their caregiver(s).

STEP 6: Does not routinely employ practices, procedures unsupported by scientific evidence.

Examples of frequently used interventions that are not supported by evidence:

- Routine *amniotomy* (rupture of membranes) failed to reduce the cesarean rate, may increase the risk of nonreassuring fetal heart rate, may increase the maternal and neonatal infection rate, and can lead to umbilical cord prolapse.
- Routine continuous electronic fetal monitoring (EFM), compared with intermittent auscultation, increased the likelihood of instrumental vaginal delivery and cesarean section and failed to reduce rates of low Apgar scores, stillbirth and newborn death rates, admissions to special care nursery, or the incidence of cerebral palsy. Neonatal seizures associated with high-dose oxytocin were reduced with EFM.
- Elective (without medical indication) *labor induction* was associated with an increase in the use of analgesia and epidural anesthesia, and in the incidence of nonreassuring fetal heart rate patterns, shoulder dystocia (stuck shoulders at birth), instrumental vaginal delivery, and cesarean surgery.
- Episiotomy did not improve neonatal outcomes and resulted in more pain, more rectal tears, poor healing, weaker pelvic floor muscles, and worse sexual functioning.
- Cesarean surgery increased the likelihood of infection, anesthesia complications, surgical injury, hysterectomy, need for blood transfusion, chronic pain, breastfeeding failure, poor physical or mental health, infertility and life-threatening placental attachment problems in future pregnancies, in addition to increased likelihood of increasingly risky repeat cesarean surgery for future pregnancies.

STEP 7: Educates staff in nondrug methods of pain relief and does not promote use of analgesic, anesthetic drugs.

- Massage and encouraging touch was associated with reduced maternal pain, stress and anxiety, and helped women cope with labor.
- Hypnotherapy was associated with reduced need for analgesia and for oxytocin augmentation of labor, increased maternal satisfaction with pain relief, and shortened labor duration.
- Hydrotherapy (warm-water immersion in a tub) was associated with reduced maternal blood pressure, decreased pain during the dilation phase of labor, reduced need for analgesia or anesthesia, reduced need for augmentation for slow labors, decreased fetal malpresentations, and increased maternal satisfaction with pushing efforts.
- Epidural anesthesia complications included severe itching (narcotic epidural), longer labor, increased use of oxytocin, more malpositioned babies, increased use of instrumental vaginal delivery (forceps or vacuum extraction), more rectal tears, and possibly more cesarean surgeries, especially when anesthesia is initiated in early labor.
- When opioids (morphine derivatives) were used, newborns were more likely to experience respiratory distress and delayed breastfeeding.

STEP 8: Encourages all mothers, families to touch, hold, breastfeed, care for their babies.

Touching, holding and caring for infants was associated with enhanced attachment between mothers and babies, whether the baby was healthy, sick, premature or had a congenital birth defect. Eliminating or minimizing separation of mothers and babies for procedures whenever possible reduced distress in healthy and sick infants. Unimpeded early skin-to-skin contact increased breastfeeding initiation and duration in mothers with healthy infants.

STEP 9: Discourages nonreligious circumcision of the newborn.

Circumcision performed in the newborn period did not prevent problems that occur in adolescence or adulthood. Assuming a 2% complication rate, circumcising 1,000 male infants would prevent 9 cases of infant urinary tract infection, but would cause complications in 20 babies. No-risk or lower-risk alternatives may achieve the same benefits ascribed to routine infant circumcision.

STEP 10: Strives to achieve the WHO/UNICEF Ten Steps of the Baby-Friendly Hospital Initiative to promote successful breastfeeding.

Hospital-based breastfeeding promotions can extend duration of exclusive breastfeeding.. Infants born in facilities that adhere to the Baby-Friendly Hospital Initiative's (BFHI) Ten Steps to Successful Breastfeeding were significantly more likely to be breastfeeding at 12 months than those who were not, were more likely to be exclusively breastfed at 3 and 6 months, and had significantly fewer gastrointestinal tract infections.

APPENDIX: Birth can safely take place at home and in birthing centers.

Summarizes evidence regarding both home birth (low risk women planning to give birth at home with a gualified provider) and birth in freestanding birth centers (independent facilities that provide care to low risk women and their newborns). Reviewers found:

- Lower rates of labor induction and augmentation, less use of amniotomy, IV fluids, continuous electronic fetal monitoring.
- Less need for analgesia or epidural or spinal anesthesia, more freedom of movement in labor (home birth).
- More effective pain management in labor; more freedom of movement and intake of food and liquid in labor (freestanding birth centers).
- Fewer cesarean surgeries, vacuum extractions, forceps deliveries and episiotomies.
- Similar outcomes compared with babies of low-risk women planning hospital birth.

"Because of its inherently noninterventive and more intimate nature, out-of-hospital birth facilitates mother-friendly care."

To read the review in its entirety, including methodology, rationales for including and excluding studies, the evidence regarding each of the steps, discussion, commentary, and a complete listing of all of the members of the CIMS Expert Work Group, see The Evidence Basis for the Ten Steps of Mother Friendly Care published by Lamaze International as a Supplement to the Journal of Perinatal Education, Vol. 16, Supplement 1, Winter 2007.

To get a free downloadable copy of The Evidence Basis for the Ten Steps of Mother-Friendly Care in its entirety go to the Coalition for Improving Maternity Services at: http://www.motherfriendly.org or Lamaze International at: http://www.ingentaconnect.com/content/ lamaze/jpe/2007/00000016/a0010151

To order a limited edition print copy of The Evidence Basis for the Ten Steps of Mother-Friendly Care (\$15 per copy, plus shipping), or to place a bulk order, contact the Academy of Childbirth Educators at: 1-800-444-8223 or order online at: http://www.acbe.com/products5.html

The original Mother-Friendly Childbirth **Initiative (MFCI)** which includes the *Ten* Steps of Mother-Friendly Care is available for free download from the Coalition for Improving Maternity Services (CIMS) at: http://www.motherfriendly.org

For more information, call CIMS: 1-888-282-2467

This summary was developed by BirthNetwork National and Citizens for Midwifery. Permission granted to reprint in full with attribution.



1-888-45BIRTH (1-888-452-4784) www.birthnetwork.org



Learn, Connect and Take Action

1-888-CfM-4880 (1-888-236-4880) www.cfmidwifery.org