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## THE LACTATIONAL AMENORRHEA METHOD (LAM): A Postpartum Contraceptive Choice for Women Who Breastfeed

The purpose of this brief is to guide health care service providers in offering quality LAM services within their maternal and child health, reproductive health or family planning programs.

The **Lactational Amenorrhea Method (LAM)** is a modern, temporary contraceptive method based on natural infertility resulting from certain patterns of breastfeeding.

**Lactational** = related to **breastfeeding**

**Amenorrhea** = **no vaginal bleeding** (after two months postpartum)

**Method** = a modern, temporary (up to six months postpartum) contraceptive **method**

All postpartum women who meet the following **three criteria** can use LAM:

1. Menstrual periods have not resumed; **AND**
2. The infant is fully<sup>1</sup> or nearly fully<sup>2</sup> breastfed frequently, day and night<sup>3</sup>; **AND**
3. The infant is under six months of age.

Because LAM is a short-term, temporary contraceptive method, an essential component of LAM services is the timely introduction and ongoing use of another contraceptive method when any one of the three criteria is not met, **or** the woman no longer wishes to rely on LAM for family planning.

### Key Elements of LAM Services

Key programmatic elements of quality LAM services for postpartum women who breastfeed include:

- Counseling on the criteria for effective LAM use,
- Offering encouragement and support to maintain exclusive breastfeeding for six months,
- Educating about return to fertility,
- Discussing reproductive goals/fertility intentions for spacing or limiting,
- Counseling about appropriate contraceptive methods, and
- Assisting in transition from LAM to another method by providing or linking to family planning services.

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<sup>1</sup> A woman is said to be **fully breastfeeding** when she breastfeeds her infant:

- *exclusively*—meaning no water, other liquid or solid is given to infant; or
- *almost exclusively*—meaning vitamins, mineral water, juice or ritualistic feeds are given infrequently (i.e., NOT a regular part of the infant's diet) in addition to breastfeeds.

<sup>2</sup> A woman is said to be **nearly fully breastfeeding** when the vast majority of feeds given to her infant are breastfeeds (i.e., no other kind of feeding replaces a breastfeed).

<sup>3</sup> In this context, **frequently** means whenever the infant is hungry, both day and night. This concept is explained in more detail in the "Optimal Breastfeeding Behaviors" textbox below.

The following table summarizes the content of each of these elements.

ELEMENT	CONTENT DESCRIPTION
<b>LAM criteria</b>	<ul style="list-style-type: none"> <li>▪ The three criteria for LAM use and what each means for ensuring contraceptive protection</li> <li>▪ All three criteria must be met.</li> </ul>
<b>Breastfeeding support</b>	<ul style="list-style-type: none"> <li>▪ The optimal breastfeeding behaviors that help maximize the contraceptive effect of LAM (textbox below)</li> <li>▪ When to contact a provider for support or management of breastfeeding difficulties</li> </ul>
<b>Return to fertility</b>	<ul style="list-style-type: none"> <li>▪ Chances of becoming pregnant during the postpartum period change according to breastfeeding status, intensity of breastfeeding and length of time postpartum</li> <li>▪ If any one of the three criteria for LAM use is not met, pregnancy can occur even without the return of menses.</li> </ul>
<b>Reproductive goals/ fertility intentions</b>	<ul style="list-style-type: none"> <li>▪ The woman's or couple's desire for more children and for spacing or limiting births</li> </ul>
<b>Healthy timing and spacing of pregnancies</b>	<ul style="list-style-type: none"> <li>▪ Women/couples desiring another child should wait at least two years after a live birth before trying to get pregnant again.</li> </ul>
<b>Contraceptive choices</b>	<ul style="list-style-type: none"> <li>▪ The range of available contraceptive methods to consider for use by breastfeeding women</li> <li>▪ Which methods are appropriate, depending on the timing of their use and the woman's need for protection from sexually transmitted infections and pregnancy</li> <li>▪ Provide contraceptive methods or referrals as indicated.</li> </ul>
<b>Transition to another modern method</b>	<ul style="list-style-type: none"> <li>▪ The conditions that indicate a need to use, or transition to, another contraceptive method</li> </ul>

<b>OPTIMAL BREASTFEEDING BEHAVIORS</b>
<ol style="list-style-type: none"> <li>1. Allow the newborn to breastfeed as soon as possible after birth, and to remain with the mother for at least several hours following delivery.</li> <li>2. Breastfeed exclusively for the first six months: no water, other liquids or solid foods.</li> <li>3. Position and attach the infant correctly at the breast.</li> <li>4. Breastfeed frequently, whenever the infant is hungry, both day and night. (As a counseling guideline for women using LAM, daytime feedings should occur at intervals of no longer than four hours. There should be at least one nighttime feeding at an interval of no longer than six hours.)</li> <li>5. Offer the second breast after the infant releases the first.</li> <li>6. Continue breastfeeding even if the mother or infant becomes ill.</li> <li>7. Avoid using bottles, pacifiers (dummies) or other artificial nipples.</li> <li>8. The lactating mother should eat and drink more than usual.</li> <li>9. Breastfeeding mothers may need family or social support for continued exclusive breastfeeding for six months.</li> <li>10. After the first six months, when complementary foods are introduced, breastfeed before each complementary feeding during the first year.</li> <li>11. Continue to breastfeed for up to two years and beyond.</li> </ol>

**Timing and frequency of counseling for LAM:** While LAM counseling during the antenatal period is highly desirable, there is evidence that two client visits during the postpartum period can bring about good LAM acceptance and compliance on the part of postpartum women, and can help ensure the effectiveness of the method.<sup>4</sup> Program experience indicates that the correct timing of these two visits is critical: one should take place during the immediate postpartum, the other at the time of transition (i.e., when a woman no longer meets all three LAM criteria **or** when she wants to transition to another family planning method). The purpose of the first visit is to determine whether breastfeeding has been well established and is sufficient for LAM to be effective. The purpose of the second visit is: to facilitate the transition to another modern contraceptive method, by helping the woman choose an appropriate method based on her fertility intentions; and to discuss the importance of exclusive breastfeeding for six months, child feeding after six months and continued breastfeeding for up to two years and beyond.

**Transition from LAM to another modern contraceptive method:** Transition from LAM to another modern contraceptive method is a critical aspect of effective programming for LAM—helping to ensure that every woman using LAM is able to achieve her reproductive goals for spacing or limiting. Recent research has indicated that a woman’s understanding of LAM criteria may facilitate her transition to other modern methods at six months. It is also very important to counsel the woman on continuing to breastfeed her infant when she switches to another method.

### **Addressing Perceived Limitations**

A common rationale for not offering LAM is that it is a temporary method and represents a missed opportunity for women who might otherwise initiate another modern method in the first few months postpartum. However, 38% of women in the first 12 months postpartum who intend to use contraception are not doing so.<sup>5</sup> Moreover, a study in Jordan measured the transition rate from LAM to another modern method at one year postpartum and suggests that LAM attracts previous non-users to the modern method mix.<sup>6</sup>

Another concern is that LAM has decreased efficacy if mother and child are separated for extended periods. One study measured the efficacy of LAM among working women who were separated from their infants for about eight hours per day, but who expressed their breast milk at least every four hours. The six-month pregnancy rate among those working women who were amenorrheic, who expressed their breast milk every four hours and whose babies were under six months of age was 5.2%.<sup>7</sup> While less effective than typical or ideal LAM use (98% and 99.5%, respectively), this compares favorably to a 25–30% pregnancy rate for non-breastfeeding women not using contraception during the same period.<sup>8</sup>

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<sup>4</sup> Peterson, A. 2000. Multicenter study of the lactational amenorrhea method (LAM) III: Effectiveness, duration, and satisfaction with reduced client-provider contact. *Contraception* 62: 221–230.

<sup>5</sup> Ross, J. A., Winfrey, W. L. 2001. Contraceptive use, intention to use and unmet need in the postpartum period. *International Family Planning Perspectives* 27(1): 20–28.

<sup>6</sup> Bongiovanni, A. et al. 2005. Promoting the Lactational Amenorrhea Method (LAM) in Jordan Increases Modern Contraception Use in the Extended Postpartum Period. The LINKAGES Project, Academy for Educational Development.

<sup>7</sup> Valdes, V. et al. 2000. The efficacy of the Lactational Amenorrhea Method (LAM) among working women. *Contraception* 62: 217–219.

<sup>8</sup> Gray, R. et al. 1987. Postpartum return of ovarian activity in nonbreastfeeding women monitored by urinary assays. *Journal of Endocrinology* 64(4).

## Rationale for Including LAM in Maternal and Child Health, Reproductive Health and Family Planning Programs

- LAM effectiveness has been proven repeatedly in prospective clinical trials over the past two decades; LAM effectiveness is 99.5% for ideal use and 98% for typical use.<sup>9</sup>
- To promote informed choice, the contraceptive method mix should include LAM. LAM is simple to use and readily accessible, but requires effective counseling.
- LAM has child survival benefits. It supports exclusive breastfeeding for the first six months, which provides nutrients and immunological protection to the infant, as well as prevents pregnancies during the critical first months postpartum.
- LAM reaches the sub-population of women who have not been using modern contraception. Evidence suggests that LAM users within this group transition to become new acceptors of other modern methods.
- In countries with high fertility and low contraceptive prevalence, including LAM in the method mix can serve as an “entry point” for stimulating the use of other modern methods.
- Infant immunization visits provide opportunities to inquire about LAM criteria and counsel on the need to transition to other methods.

### ADVANTAGES OF USING LAM

- Is more than 98% effective as a contraceptive
- Is provided and controlled by the woman
- Can be started immediately postpartum
- Motivates users to exclusively breastfeed throughout the first six months postpartum
- Facilitates transition by allowing time for decision to use/adoption of another modern contraceptive method during the postpartum period
- Facilitates modern contraceptive method use by previous non-users
- Prevents birth-to-pregnancy intervals of less than six months
- Supports and builds on newborn and infant feeding recommendations for exclusive breastfeeding for the first six months
- Provides health benefits for the mother:
  - Suckling action in the immediate postpartum stimulates uterine contractions
  - Less iron depletion due to no menses
  - Mother–baby relationship enhanced
- Provides health benefits for infant:
  - Provides the complete nutritional needs of the infant for up to six months
  - Improves infant growth and development
  - Enhances infant’s immune system (less diarrhea and acute respiratory infections)
  - Is a source of Vitamin A, proteins, iron, minerals and essential fatty acids
- Builds on established cultural and religious practices
- Is non-invasive; does not require a gynecological exam
- Has no side effects

**For more information about LAM, see the ACCESS-FP Web site: [www.accesstohealth.org](http://www.accesstohealth.org)**

The ACCESS-FP Program is a five-year, USAID-sponsored global program with the goal of responding to the significant unmet needs for family planning among postpartum women. As an Associate Award through the ACCESS Program, ACCESS-FP is implemented by JHPIEGO in partnership with Save the Children, Constella/Futures, the Academy for Educational Development, the American College of Nurse-Midwives and IMA World Health.

<sup>9</sup>World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communications Programs (CCP), INFO Project. *Family Planning: A Global Handbook for Providers*. Baltimore and Geneva: CCP and WHO, 2007.