IMCI Bulletin #7 - Breastfeeding

Breastfeeding in the Americas

Evidence shows that breastmilk protects against infant diarrheal and respiratory infections, has positive effects on the motor and cognitive development of preschool and school aged children, and protects against chronic diseases such as diabetes mellitus, obesity and high blood pressure in the adolescent and adult years.

Breastmilk also has a positive effect on family economics since it provides all the energy and nutrients that an infant needs for the first 6 months of life, half of all energy and nutrients between 6 and 12 months and one-third of all energy and nutrients from 12 to 24 months. Breastfeeding has been associated with reduced risk of maternal breast and ovarian cancers, and faster return to pre-pregnancy weight. Women who exclusively breastfeed for 6 months and who have not yet resumed menstruation are also protected from pregnancy.

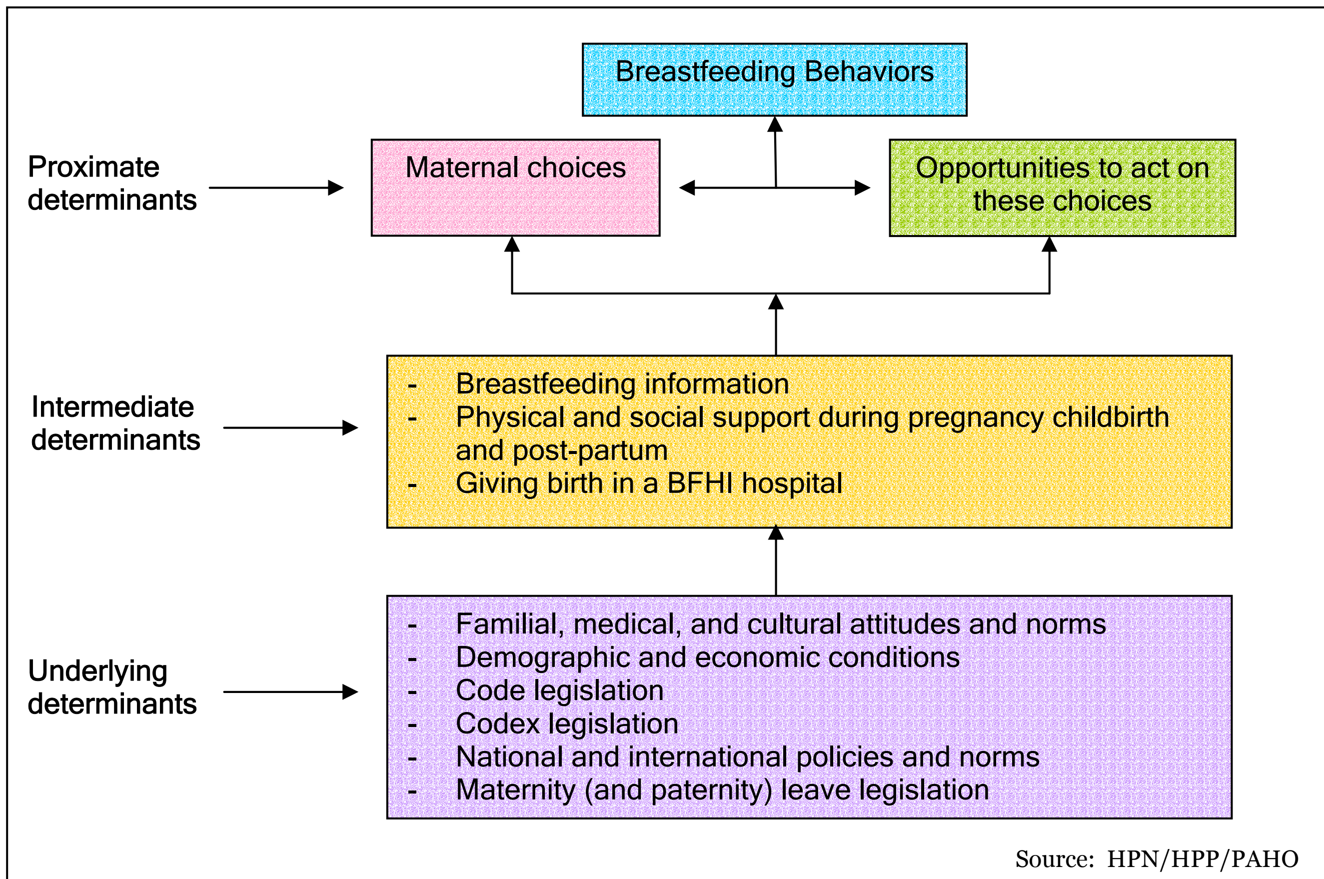
In spite of all the benefits and although the initiation of breastfeeding in Latin America is high (above 95%), the vast majority of women do not practice exclusive breastfeeding (EBF). Exclusive breastfeeding, defined as breastmilk being the only source of infant food and liquid, is more protective of health than partial breastfeeding and is critical to the health and survival of younger highly vulnerable infants. **The WHO/PAHO recommendation is to exclusively breastfeed infants for the first 6 months of life and, after this age, introduce complementary foods and continue breastfeeding until their second birthday or beyond (WHA54.2, 2001)**.

WHO/PAHO recommends that:

1. Infants be **exclusively breastfed for the first 6 months of life**.
2. Infants be **put to the breast within the first hour after birth**.
3. Women **give colostrum** (the first milk of the breast, which a different texture and color and numerous immunological and developmental properties).
4. **Complementary foods be introduced starting at 6 months** of age.
5. **Breastfeeding be continued into the second year of life and beyond**.

Successful breastfeeding results from the interplay of a complex series of physiological and behavioral interactions between a mother and her infant (Figure 1). However, whether or not an infant is put to the breast and breastfed in a manner considered optimal depends on the interaction between two factors, a woman's choice to breastfeed and her ability to act upon this choice. Maternal choice is influenced by the breastfeeding information the woman receives, as well as by the physical and social support provided to her during pregnancy, childbirth, and post-partum. Familial, medical and cultural attitudes and norms, demographic and economical conditions, legislation regarding infant and young child feeding and maternal/paternal employment, and national and international policies and norms are other factors that influence breastfeeding behavior.

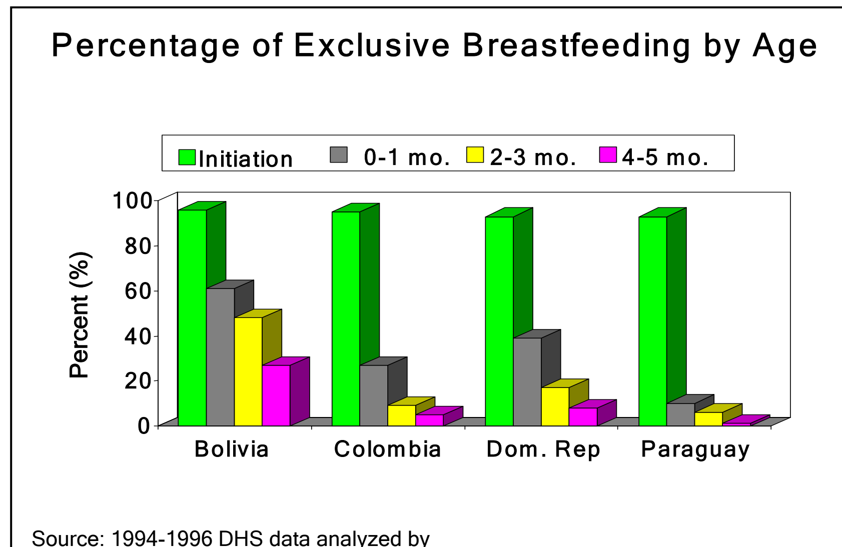
Figure 1. Model of Breastfeeding Behaviors



Source: HPN/HPP/PAHO

The first month of life is the time when the protective effects of EBF on infant health and survival are the greatest; however, it is during this time that women are most likely to discontinue EBF. Although breastfeeding is a natural event, it is also a learned behavior, and unfortunately, in Latin America exclusive breastfeeding is not a cultural norm. Women who exclusively breastfeed their infants for 6 months have little support from their families and/or communities and are exposed to contradicting health system messages, and commercial and media messages. This, coupled with the challenges of everyday urban life, which often separate mothers from their infants within the first months after birth, limit their ability and discourage them from exclusively breastfeeding. As a result, the vast majority of women introduce liquids and/or other foods prior to 6 months (Figure 2).

Figure 2. Decline in exclusive breastfeeding after initiation



Obstacles to Exclusive Breastfeeding (EBF)

Although breastfeeding is a cultural norm in Latin America, exclusive breastfeeding is not. As a result, women who choose to exclusively breastfeed for the recommended 6 months of life are faced with numerous obstacles.

Some of the most **common erroneous beliefs** that negatively affect the duration of exclusive breastfeeding are:

- That a ***woman does not have enough milk*** to exclusively breastfeed for this amount of time. Breastmilk is produced on demand, that is, the more an infant is put to the breast to suckle, the more milk a woman will produce. The production of breastmilk is influenced by the stimulus from the suckling action as well as by a series of hormonal activities that take place when an infant is put to the breast. Women who do not have adequate production of breastmilk are most likely having problems with the latching-on process, not the milk production itself.

- That ***other liquids and foods*** need to be given in addition to breastmilk. Breastmilk provides all the nutritional requirements that infants aged 0-6 months need for proper growth and development. From 6-12 months breastmilk provides half of the nutritional requirements and from 12-24 months breastmilk provides one-third of the necessary nutrition. For this reason, no food or liquid other than breastmilk should be given before 6 months of age and complementary feeding should be introduced beginning at 6 months with continued breastfeeding until the second birthday.

- That infants ***living in hot and humid climates*** need to receive water. Even in hot and humid climates, breastmilk should be the only source of food and liquid for the first six months of life. This not only provides infants with the necessary liquids, even in the hottest and most humid climates, but also protects them from infections diseases caused by contaminated water.

Some of the most common problems that shorten the duration of exclusive breastfeeding include: mastitis and other infections; inverted, sore and/or cracked nipples; and breast engorgement. Women experiencing any of these conditions should visit the health care center and get advise (and medication if necessary) from trained personnel. These problems should not go unattended.

Other factors that negatively influence exclusive (and partial) breastfeeding include:

- Maternity clinics/hospitals that ***do not follow the Ten Steps of the "Baby Friendly Hospital Initiative"*** and give formula as "birthing gifts" to mothers upon discharge or who do not practice rooming-in.

- Baby food manufacturers who ***do not respect the Code legislation*** and promote infant formula, drinks or foods during the first 6 months of life, giving mothers and health care providers the message that breastmilk is not enough to feed infants.

- Employers who do not give women ***maternity leave*** or breastfeeding breaks to allow women to continue breastfeeding while at work.

Obstacles to BF/EBF:	
Cultural beliefs - Insufficient milk - Need to give liquids or other foods - In hot climates need to give water Breastfeeding problems - Mastitis/other infections - Inverted/sore/cracked nipples - Breast engorgement	Other - Lack of implementation/enforcement of 10 Steps of BFHI in maternity clinics/hospitals - Lack of implementation/enforcement of Code legislation - Lack of maternity (paternity) leave

Policy Action

Various international organizations, including the WHO/PAHO, UNICEF, and others, have joined efforts and resources with the goal of promoting and protecting breastfeeding and ensuring proper infant and young child feeding.

The most important results of these joined efforts include:

- The **International Code of Marketing of Breast-milk Substitutes** (known as **The Code**) adopted by the World Health Assembly (WHA) in 1981, provides guidelines for the marketing of breast-milk substitutes, bottles, and teats and aims at restricting the way in which formula is advertised and marketed, including its direct promotion to the public.[1] WHA Resolutions 39.28, passed in 1986, and 47.5, passed in 1994, urge no part of the health care system support the donations of free or subsidized supplies of breast-milk substitutes and other products covered by the Code.

- The **Innocenti Declaration**, signed by more than 30 countries in 1989, focuses on the need to protect, promote, and support breastfeeding. This declaration, which includes the Ten Steps to Successful Breastfeeding, is the basis of the WHO/UNICEF Baby Friendly Hospital Initiative (BFHI) and was adopted by the 54th World Health Assembly in 1992.[2] Through the "Baby Friendly" certification, this initiative has influenced the routines and norms of hospitals

[1] WHO, The International Code of Marketing of Breast-milk Substitutes. 1981. Geneva, Switzerland.
[2] WHO, Baby Friendly Hospital Initiative. 1992. Geneva, Switzerland.

throughout the world and is not being extended to clinics, private practice and community health centers.

- The **Maternity Protection Conventions** of 1952 (No. 103) and 2000 (No. 183), along with an accompanying non-binding Recommendation (The Maternity Protection Recommendation, No. 95) build on over 80 years of the International Labor Organization's (ILO) attention to maternity protection. They provide for a basic level of protection entitling women to 12-14 weeks of maternity leave with cash benefits and health protection to ensure continuity of income, daily breaks for nursing and job security during leave. Most recently, protection from dismissal, although no longer absolute, now applies not only during maternity leave but also during the entire pregnancy and a certain period of time after return to work. Pregnant or breastfeeding women are not obliged to perform work that is prejudicial or establishes a significant risk to the mother's health, women are entitled to a daily reduction of hours of work for breastfeeding without losing any pay and paternity leave is encouraged.

- The **WHO/UNICEF Global Strategy on Infant and Young Child Feeding**, elaborated in 2000 and reviewed by Member States during 2001, provides a comprehensive strategy and plan of action to guide Member States and the international community on the subject of infant and young child feeding.[3] The strategy, which will be presented in May 2002 at the Fifty-fifth World Health Assembly, includes topics such as exclusive breastfeeding for the first 6 months of life with continued breastfeeding until the second birthday and beyond, introduction of complementary foods starting at 6 months of age, feeding in exceptionally difficult circumstances, low-cost locally-processed foods, fortified complementary foods, and issues around maternity employment and support for breastfeeding, and is directed to governments and the civil society, including NGO's, community-based support groups, commercial enterprises, international organizations and other health professional bodies.

Policies Supporting BF and EBF:

- The International Code of Marketing of Breast-milk Substitutes (known as The Code) of 1981 and its subsequent Resolutions of 1986 and 1994.
- The Innocenti Declaration of 1989
- The Baby Friendly Hospital Initiative of 1992
- Maternity (and paternity) Protection Conventions and Recommendations legislation
- The WHO/UNICEF Global Strategy of Infant and Young Child Feeding of 2000

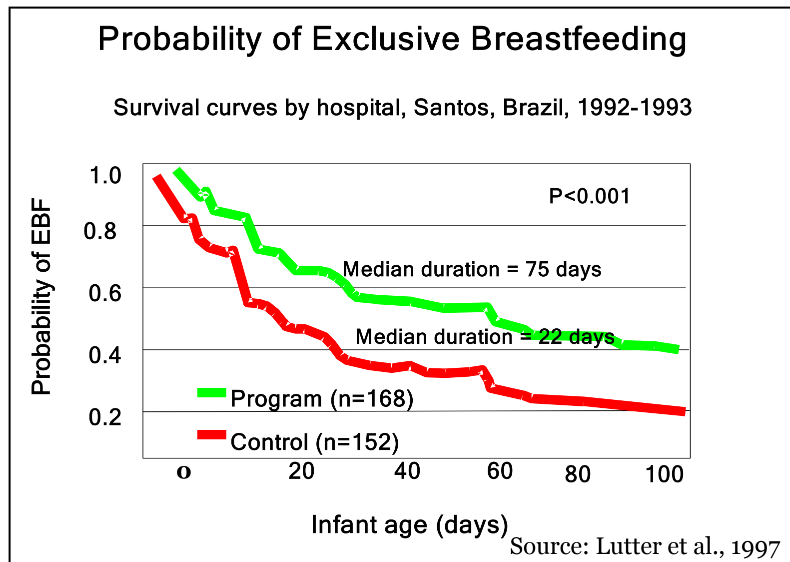
The Role of Counseling

Scientific evidence shows that exclusive breastfeeding can be increased through carefully target interventions. The WHO/PAHO "Breastfeeding counseling: A training course"[4] was designed to train health workers in the skills needed to both support and protect breastfeeding. This course, which can either be conducted intensively over 5 days or spread out over a longer period, includes training materials specifically designed to provide guidance in lactation management and counseling skills. Evidence shows that women who receive hospital-based breastfeeding counseling exclusively

[3] A53/INF.DOC./2
[4] WHO, Breastfeeding counseling: a training course. WHO/CDR/93.4. 1993. Geneva, Switzerland.

breastfeed their infants almost two months longer than women who do not get any counseling (Figure 3)[5].

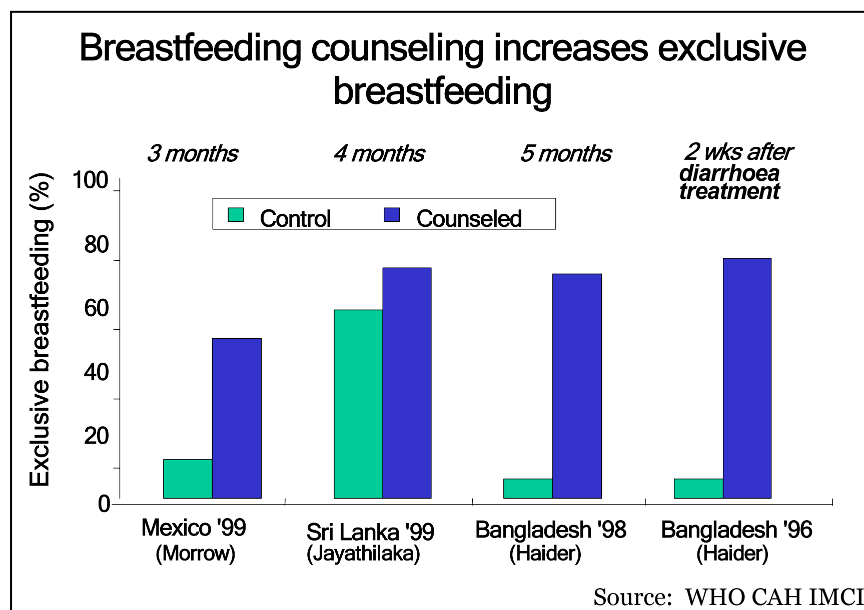
Figure 3. Effect of exclusive breastfeeding promotion



Source: Lutter et al., 1997

Breastfeeding counseling programs delivered by peer counselors through pre- and post-natal home visits are also highly effective in extending the duration of exclusive breastfeeding. The adoption of the Ten Steps in the "Baby Friendly Hospital Initiative" have resulted in significant improvements in the duration of both exclusive and partial breastfeeding and in a decline in diarrhea (Figure 4).

Figure 4. Increasing breastfeeding through home visits



Source: WHO CAH IMCI

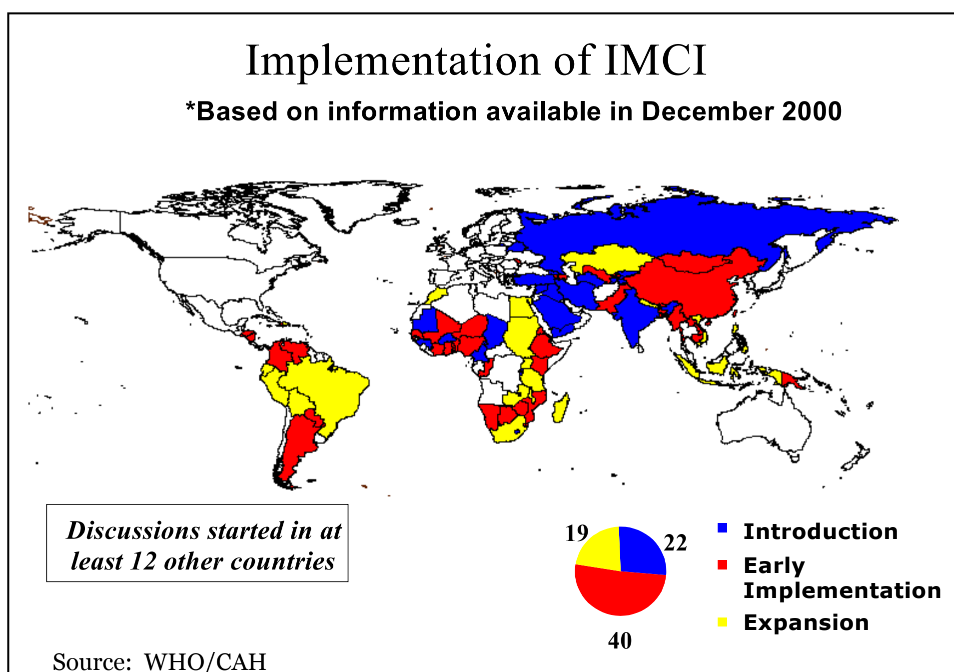
[5] Lutter et al., Effectiveness of a hospital-based breastfeeding promotion program among low-income women in Brazil. Am J Public Health 87;(4):659-663.

The Role of IMCI

The Integrated Management of Childhood Illness (IMCI) strategy includes a basic set of prevention, early diagnosis, and treatment measures that covers the illnesses and health problems that most frequently affect the health of children under 5. This strategy not only includes actions to be carried out through the health structure, but also a community component aimed at improving the capacity of families and the community to care for children at home (Figure 5). Community IMCI offers a unique opportunity to reach women and provide support for exclusive breastfeeding to them and their families during the critical early post-partum period.

By looking into the health problems of children and their families, the IMCI strategy can reach more pregnant women, give them access to prenatal check-ups, advise them on the most appropriate place for delivery and give them guidance on exclusive breast-feeding during the first six months and proper feeding thereafter. It thus contributes to the improvement of coverage and quality of perinatal care and can reduce the number of cases and deaths from malnutrition in children.

Figure 5. IMCI implementation around the world

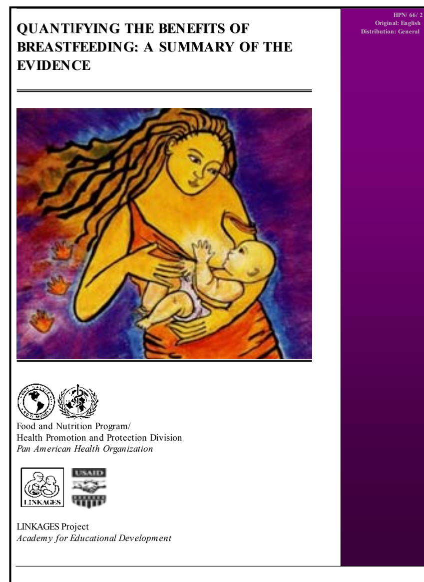


Scientific Evidence

Ample scientific evidence demonstrates the life-saving benefits of breastfeeding as well as its effect in ensuring optimal cognitive and physical development. This evidence is summarized by a recent PAHO/LINKAGES (a USAID supported project) publication entitled "Benefits of Breastfeeding: A Summary of the Evidence".[6] This publication summarizes the effect of breastfeeding by the following topics: 1) infant morbidity and mortality, focused mainly on diarrheal and respiratory infections; 2) chronic diseases, particularly obesity and diabetes; 3) child development and adult outcomes as they relate to intellectual development, risk of cancer and other adult outcomes; 4) maternal health effects with special emphasis on breast and ovarian cancers; 5) economic benefits, and; 6) environmental benefits (Figure 6).

[6] León-Cava, 2002, Washington, D.C.: PAHO. ISBN 92 75 12397 7, NLM WS 125.L582

Figure 6. Benefits of Breastfeeding



Recommendations

To extend the duration of EBF in a sustainable manner requires a shift in cultural and societal norms that are strongly supportive of breastfeeding but have not yet embraced the concept of exclusive breastfeeding. This includes, but is not limited to improving intervening factors, such as early initiation, elimination of pre-lacteal feeds (except in the few medically indicated cases), and skilled support for breastfeeding problems. In addition, multiple, consistent, and simple messages about the reasons why EBF is best for maternal and infant health are needed at the familial, community, health-service, and political levels to create social context and grass-roots movement supported by political and religious leaders for the desired behavior.

Virtually all women can breastfeed provided they have adequate information and support, and, if needed, skilled practical help, for example from breastfeeding counsellors, who can help build mothers' confidence, improve technique, and prevent or resolve difficulties.

Resourceful links:

- http://www.paho.org
- http://www.who.org
- http://www.unicef.org
- http://www.linkagesproject.org
- http://www.lalecheleague.org
- http://www.breastfeeding.com
- http://www.waba.org.br
- http://www.breastfeedingbasics.com
- http://www.cdc.gov/breastfeeding
- http://www.bfmed.org
- http://www.fmed.uba.ar/ibfan
- http://www.babycenter.com