

IMPLEMENTATION OF BREAST-FEEDING PRACTICES IN BRAZIL: FROM INTERNATIONAL RECOMMENDATIONS TO LOCAL POLICY

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SUMMARY

Recent breast-feeding statistics from Brazil,³ indicating high rates of breast-feeding (a median duration of nearly 10 months), are both encouraging and impressive, especially when compared to 1975 national census figures showing that one out of every two Brazilian women who breast-fed had completely discontinued this practice by the second or third month after their child's birth. Similarly, the 1986 Demographic and Health Survey revealed a breast-feeding rate in this country of only around 4%—the lowest exclusive breast-feeding rate from 0 to 4 months in all of Latin America.

This chapter focuses on the evolution of Brazil's national breast-feeding program, emphasizing the role played by international policy recommendations of the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) in transforming the status of breast-feeding in a country that is not only Latin America's largest in geographical terms, but also one that is characterized by dynamic cultural, ethnic, and socioeconomic diversity. This chapter will also explore how the formulation of policies and interventions adopted in Brazil might serve as a basis for the development and/or review of new international policies and how

these, in turn, may be adapted within national and community frameworks.

In Brazil, the studies providing data on breast-feeding make it possible to divide this chapter's analysis into four periods: the 1970s, the beginnings of reactions for and against breast-feeding, which also coincided with peak use of infant formulas; the 1980s, when large-scale campaigns in promotion of breast-feeding received wide coverage in the mass media; the 1990s, when policies in defense of breast-feeding, and planning and training activities to promote it, began to take root; and, finally, the twenty-first century. The challenge for this initial phase of the new century is the need to promote ex-

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³Data on breast-feeding interventions cited for the most recent period described in this chapter, particularly the late 1990s and the 2000–2002 period, were taken partially from documents and presentations; these were modified and analyzed under the sole responsibility of the authors.

clusive breast-feeding through the sixth month of life and continued breast-feeding thereafter with appropriate complementary foods until at least 2 years of age (a WHO decision adopted in 2001, supported by Brazilian leadership at the Fifty-fourth WHO World Health Assembly), while taking into account special groups, pursuant to the WHO/UNICEF Global Strategy for Infant and Young Child Feeding. The network of human-milk banks—an area in which Brazil has demonstrated global leadership—may be the best alternative for these special groups, such as babies with HIV-positive mothers who cannot breast-feed them. The human-milk bank initiative, as well as other innovative actions, challenges, and possible solutions which draw on Brazil's experience, will also be described in this chapter.

INTRODUCTION

The three principal challenges facing breast-feeding promotion programs in the twenty-first century may be summarized as follows:

- (1) how to ensure exclusive breast-feeding from birth through the first six months of life;
- (2) how to introduce safe and adequate complementary foods into the diet without interrupting breast-feeding from 6 months up to 2 years of age or beyond; and
- (3) how to promote adequate child nutrition for groups whose special needs are not addressed within the framework of breast-feeding recommendations targeted toward the general population, as is the case of HIV-positive mothers, women with infants without legal protection in the workplace, mothers in emergency situations (i.e., victims of natural disasters, civil war, or famine; living in refugee settings), and others whose unique circumstances warrant a

specialized application of breast-feeding recommendations.

In May 2001, ministers of health attending the Fifty-fourth WHO World Health Assembly recommended that all children receive breast milk exclusively until approximately six months after birth and that breast-feeding continue thereafter for a period of at least up to age 2 years (1). This policy decision was adopted following a careful review of the scientific literature (2) and years of debate involving commercial interests that have not always been favorable to the goals of public health. The document notes that the global recommendation is intended as a guide for infant and young child feeding practices and that in applying it, public health authorities should take into account local circumstances, including environmental, cultural, and other risk factors. On the other hand, it stresses that in order to achieve exclusive breast-feeding during the first six months of life, mothers need breast-feeding protection and support for lactation, a reality that is achieved only through clear national policies and legislation regarding maternal and child health.

In 1984, the first meta-analysis was published showing that exclusive breast-feeding from birth through 4 to 6 months of age protects children against death by infectious diseases (3). This analysis was followed by a case-control study in Porto Alegre and Pelotas, resulting in data that today are cited exhaustively in the literature. These data quantify and give meaning to such protection; i.e., the greater the degree to which children are exclusively breast-fed, the lesser the risk of their dying from diarrhea or other prevalent childhood infections, especially during the first two months of life (4).

For reasons that remain unclear, scientific validation of this type has not always been used to promote breast-feeding, however. Despite this, the knowledge accumulating over the last decade and a half on this topic has been nothing short of revolutionary: it

has clearly demonstrated that several diseases or conditions may actually become significantly worse when breast-feeding does not occur, including necrotizing enterocolitis (5), diabetes (6), allergies (7), and pneumonia (8). Breast-feeding is very important for preterm and low-birthweight babies, resulting in greater rates of intelligence (9), visual acuity (10), and lower blood pressure among 13- to 16-year-olds (11). Today we also know that breast milk, in addition to providing its adequate and vital dose of immunoglobulin at the beginning of life, continues to be an important source of proteins (some unique and irreplaceable) and calories, as well as micronutrients, such as vitamin A, during the second year of a child's life; moreover, it provides one-third of the energy necessary for child growth (12).

Infant formula was prescribed for many years, given the lack of knowledge and understanding regarding the nutritional and immunological value of breast milk, the importance of breast-feeding in terms of its physiological and emotional benefits, and its role in the reduction of infant morbidity and mortality. Women also incur the benefits of breast-feeding, as evidenced in decreased rates of ovarian (13–15) and breast (16–20) cancers and of coxofemoral subluxation due to osteoporosis (21–23), as well as in the extended postpartum infertility it provides, thereby enabling greater spacing between pregnancies (24–26).

Until the late 1970s, programs and/or activities to promote breast-feeding were designed without very much coordination, analysis, or criteria. The considerations influencing the decision to stop breast-feeding—i.e., the cultural and socioeconomic determinants, the marketing of breast-milk substitutes, and inadequate counseling and inaccurate information given by health care professionals on breast-related problems during the immediate postpartum period—continued to take their toll. Consequently, these factors, taken together with poorly designed breast-feeding programs and services, may have been responsible for the in-

creased rates of early weaning and use of artificial milk and feeding bottles during this period.

Toward the end of the 1970s and throughout the 1980s, a number of breast-feeding promotional activities elsewhere in the world, however, began to show promise in expanding the practice of breast-feeding. The most successful of these were well structured, but above all, multisectoral in their approach and well coordinated among the participating partners. In 1975, the Baguio Hospital in the Philippines was an important precursor (27). Infant mortality dropped 95% at this facility following implementation of a series of activities directly or indirectly promoting breast-feeding, such as prohibiting the use of feeding bottles, allowing "rooming-in" of infants with their mothers, using breast milk for ill or premature newborns, and providing instructional training for the health care team. In the hospitals and clinics where women were provided with prenatal and puerperium care, the children received postpartum care and the mothers adequate counseling and support for exclusive and supplemental breast-feeding, health professionals were able to increase breast-feeding rates.

This type of support should include, inter alia, information on the best time to initiate breast-feeding; how to properly position and latch the baby onto the breast; the advantages gained from breast-feeding; the need for feeding on demand; the drawbacks of using pacifiers, artificial nipples, and feeding bottles; and instruction on how to extract breast milk manually (28).

Within a more comprehensive framework, Canada provides perhaps the best example with which to illustrate the evolution of a national policy to promote breast-feeding (29). In that country between 1965 and 1971, only 25% of mothers breast-fed their children. In 1978, upon realizing the importance of securing the broad-based support of physicians before initiating any breast-feeding program, the respected *Canadian Journal of Public Health* published a position paper. This was the cat-

alyst for initiating a national policy to promote breast-feeding. In the first phase of policy development, which focused on health professionals, policy planners analyzed the factors behind the pharmaceutical industry's success in securing the endorsement and use of its products by physicians and their patients. Thus, in order to "sell" the product—in this case breast-feeding—an attractive kit was developed which included background on the scientific basis for breast-feeding, information on its clinical management, a poster which could be displayed in maternal and child health care facilities, and letters of endorsement from leading scientific professional associations and the country's minister of health. Some 62,000 kits were distributed. The impact of the kit was subsequently evaluated, utilizing a sample of 3,000 professionals, who indicated that the kit was useful for purposes of self-knowledge and that the poster was effective in stimulating greater interest in breast-feeding issues on the part of their patients.

The second phase targeted first-time mothers with a booklet entitled *How Breast-feeding Works*, published by the Canadian Academy of Pediatrics, La Leche League-Canada, and Health Canada. After distributing some 850,000 copies, the impact of the booklet was tested on a sample of 500 mothers, with a high percentage reporting that the information presented was new to them and that they considered it useful. In a third phase of the program, films on breast-feeding were shown at group workshops, reaching a combined audience of some 150,000 people. In the fourth phase, a survey was conducted to determine the number nationwide of children under age 2 being breast-fed. Accordingly, it was found that the 25% rate of breast-feeding between 1965 and 1971 had jumped to 69% by 1982. This survey also included questions about the distribution of infant formula samples in maternity wards and revealed that mothers who reported receiving these samples were nearly three times more likely to discontinue breast-

feeding during the first month postpartum than mothers who did not receive the samples. Among the mothers who received samples, 80% to 90% continued to give their babies the same brand of infant formula as the samples they had received in the hospital. The fifth phase of the policy development program was Canada's endorsement of the International Code of Marketing of Breast-milk Substitutes (ICMBMS), which will be described later on in this chapter, and hospital-wide support for a policy to promote breast-feeding.

Papua New Guinea is another country that has long recognized the need for breast-feeding promotion interventions to be supported by clear policies (30). There, a school-based breast-feeding promotion campaign was launched in response to low breast-feeding rates. Teachers were provided breast-feeding information kits that included audiovisual aids and descriptions of suggested activities. The campaign also included radio spots and articles in the print media and enjoyed support from the business community, whose members were urged to limit the sales of feeding bottles. As a result of the campaign, it became clear that enacting legislation in support of the interventions in progress could help increase breast-feeding rates in the country. Consequently, a ban on commercial advertising of breast-milk substitutes was enacted, as well as regulations on the sale of feeding bottles, pacifiers, and artificial nipples. Accordingly, feeding bottles were only sold when prescribed by a health professional. Once the law had been in effect for some time, it was observed that feeding bottles were used only when prescribed and that breast-feeding rates indeed increased.

The experiences of Canada and Papua New Guinea offer somewhat unique glimpses into the effectiveness of various strategies designed to increase breast-feeding rates, given that, for whatever reason, very few studies conducted to date have attempted to evaluate the impact of specific breast-feeding promotion actions

and/or programs. In order to do this in Brazil, one such survey was administered in the metropolitan areas of São Paulo, in the country's southeast, and Recife, in the northeast, both prior to (1981) and six years following (1986) the launching of the country's national breast-feeding program (PNIAM) (31). More studies of this type are needed, for reasons we will discuss later on in this chapter.

Reflecting on the circumstances surrounding the PNIAM, both before the program existed and after it was formed, and also having had the opportunity to experience several such moments in the history of breast-feeding both from within and outside the country, the authors of this chapter will attempt to present a historical perspective on how Brazil was able to achieve the dramatic improvements in its national breast-feeding rates as described at the beginning of this chapter. We recognize, however, that some elements might be lacking due to incomplete documentation. Consequently, the use of research that includes interviews with the actors involved in the various phases, records searches in small cities, and unpublished dissertations and/or theses would be quite useful in order to shed light on unanswered questions regarding what was done up until 1989 (32).

Following a presentation of the historical perspective, the authors will discuss the rethinking of policies and actions to promote, protect, and support breast-feeding—policies and interventions which are currently being developed at the national and international levels—beginning with whether they have or have not been implemented, and if not, we describe some of the difficulties and possible obstacles to their full implementation. The influence of Brazilian policy and experiences on the decisions taken at international conferences and, likewise, the implementation of international recommendations in Brazil, is a subject that merits further debate and study by scientists and health managers. For the purposes of this chapter, as mentioned earlier, the discussion of the

process in Brazil will be divided chronologically into the 1970s and before, the 1980s, the 1990s, and the twenty-first century.

THE 1970s AND BEFORE: CREATING AWARENESS OF BREAST-FEEDING BENEFITS

While there are no national population studies that document breast-feeding rates in the decades prior to the 1970s, isolated studies suggest that the practice of breast-feeding in Brazil reached an all-time low during the 1970s. A review of the National Household Survey corroborates this point, indicating that in 1975 the median breast-feeding rate for Brazilian women was 2.5 months (33).

A number of forces were in play during this period which either overtly or subtly discouraged the adoption of breast-feeding practices. These included:

(1) *Pediatricians with little knowledge of lactation management* (34): In previous decades, pediatricians routinely encouraged the use of feeding bottles and individualized infant formulas, fixed breast-feeding schedules, and the administration of water and tea between feedings, and they would especially prescribe the feeding bottle if they believed a child was not gaining weight as fast as it should, diagnosing the problem as “hypogalactia.”

(2) *Commercial promotion of breast-milk substitutes*: At the time, unethical advertising of infant milk and baby products (including baby bottles and pacifiers) were regularly featured in the global mass media, and the demand for these products was in part created through the use of clever labels featuring attractive, well-fed babies in pleasant surroundings. Breast-milk substitutes (at the time advertised as “like mother’s own milk”) were also marketed, using a variety of tactics including baby beauty contests, appealing advertising photographs, and the practice of supplying free milk products to the children

of pediatricians. Moreover, there was no incentive for pediatricians to promote the practice of breast-feeding at learning institutions specializing in childhood diseases and abnormalities, inasmuch as infant formula representatives had ready access to professors and students at these schools, a situation which proved its worth over time as a highly efficient and sustainable marketing technique (35).

(3) *Free distribution of powdered milk*: This practice was almost always carried out by the Government through what were known as supplemental food programs, in which mothers were entitled to receive powdered infant formula or whole milk beginning with the birth of the child. In 1979, there were nine such programs operating in the country (36). Distribution also took the form of surplus milk donations from producer countries—this practice was particularly widespread in the country's northeastern states and had the effect of causing the poorest sectors of the population to become dependent on the use of *mingau* (a kind of gruel-like substance prepared with flour and powdered milk) to feed babies; this phenomenon is well documented in an anthropological study by Nancy Scheper-Hughes (37). The question arises whether this "*mingau* culture" that became established in the 1970s is responsible for the low indicators of exclusive breast-feeding that continue to persist today in northeastern Brazil.

(4) *Rigid routines in maternity wards*: Newborns were kept in the nurseries (or neonatal intensive care units), and mothers were taken to these facilities to breast-feed their babies at specific times of the day. Nighttime feedings were not allowed. Maternity ward routines also included the use of feeding pauses after the birth of the newborn and the introduction of pre-lacteal fluids, the use of feeding bottles in the nursery, inadequate or inaccurate instructions, an excessive concern with hygiene of the nipples, and no guidance on how to latch and hold the baby for breast-feeding (38, 39).

In 1974, concern over premature weaning and the role of products that interfere with breast-feeding led Pernambuco's Minister of Health Fernando Figueira to ban feeding bottles and free milk in the state's health units and maternity hospitals.⁴

The first study to document improper marketing practices of breast-milk substitutes in Brazil appeared in 1977 (35). It described advertising techniques in use in lay journals dating back to 1916, as well as those which appeared in respected scientific journals such as *Pediatria Prática* and the *Jornal de Pediatria*. This study clearly demonstrates how mothers and pediatricians were being progressively influenced by subliminal messages idealizing the use of feeding bottles as easy and convenient—a practice pediatricians could manipulate to their own advantage by creating and then prolonging dependency by mothers on the feeding bottle's use.

By the mid-1970s, international attention had focused on a controversial report by South African journalist Mike Muller entitled *The Baby Killer* (40), which denounced the unethical promotion and sale of powdered milk products for infants in the Third World, particularly in poor rural African communities where high rates of child malnutrition and mortality presented a grave public health concern. This report was translated into Portuguese and was widely circulated in Brazil. Consequently, as part of the WHO Collaborative Study on Breast-feeding, the World Health Organization evaluated 15 companies, including Abbott-Ross, American Home Products, Wyeth, Borden, Carnation, Gerber, and Nestlé (41), who were believed to be engaging in deceptive promotional practices targeting physicians, retail businesses, and mothers of newborn children. The study shows conclusively that the majority of the companies wished to sidestep altogether the allegations placed before them, denied any wrongdoing, and in

⁴Decree No. 99, published 12 March 1974 in the *Diário Oficial de Pernambuco*.

many cases blamed the mothers themselves for misunderstanding and/or incorrectly using their products. Many company representatives also denied an interest in competing with or encouraging the substitution of their products for the practice of breast-feeding, noting that their marketing efforts stressed the use of their products only when breast milk was insufficient, and emphasizing, in their own defense, that as a response to the WHO study, these messages were further modified to stress that "breast milk is better but . . . when breast-feeding is not possible, [product X or Y] may be used with effective results if instructions are properly followed."

The information uncovered by this study served as a wake-up call and led international organizations to revisit their decision-making processes. For example, data collected in Ethiopia, India, Nigeria, and the Philippines shed light on the enormous availability of breast-milk substitutes marketed to mothers (e.g., 54 such substitutes were sold in the Philippines alone) and the high cost of these products (15 to 30% of per capita GDP in this same country).

In 1979, the Joint Meeting of WHO and UNICEF on Infant and Young Child Feeding was held, which included presentations on breast-feeding activities by participants and discussions among the international actors in the field who were already concerned with the widespread practice of early weaning. One of the recommendations from this event called for the drafting of a code of ethical behavior to guide the marketing of products which interfere with breast-feeding and encourage early weaning. The Brazilian delegation at the Joint Meeting was headed by the president of the National Food and Nutrition Institute (INAN), which collaborated on the preparation of such a code. The authors of this chapter feel that INAN's contribution to the drafting process greatly facilitated the launching in Brazil of its own national breast-feeding program, known as the PNIAM (*Programa Nacional de Incentivo ao Aleitamento Materno*), only two years later.

The work of the INAN team in preparing background material and preliminary documents which were eventually incorporated into the International Code of Marketing of Breast-milk Substitutes (ICMBMS) also had internal consequences, in the sense that it led the team to discuss wider strategies for addressing the country's own problem of early weaning. In 1980 INAN sought assistance from the Pan American Health Organization (PAHO) and UNICEF in the development of a breast-feeding promotional video designed to raise awareness and stimulate support among key actors, including politicians, public health authorities, the mass media, community leaders, and the church. The video included witness testimonies from well-known pediatricians and a special message by the country's president, João Baptista de Oliveira Figueiredo, and placed the value of breast milk within an economic context, appealing to viewers to consider the country's vast size and population, and the economic burden placed both on mothers and the country of artificial milk products. The video was shown in locales throughout the country, including to a gathering of Brazil's state ministers of health and social security, who pledged their collective support to the decision to implement the PNIAM.

The experiences of Brazil during this period strongly indicate that the emergence of a national political conscience in favor of breast-feeding, supported by arguments put forth at the international level by participants at the 1979 WHO/UNICEF Joint Meeting, provided an essential foundation in support of local programming activities (42). In this sense, the policy decision taken by Brazilian authorities in 1981 to launch the PNIAM—administered through cooperation among several government ministries and related agencies—might be viewed as a strategy that successfully capitalized on an international climate increasingly favorable to the promotion of breast-feeding. At the same time, the policy directly addressed the public health sector's concern with the country's

high early weaning rates and offered concrete scientific and economic evidence of the need for Brazilian mothers to return to the practice of breast-feeding.

THE 1980s: BUILDING SUPPORT FOR A NATIONAL PROGRAM

A 1981 evaluation of breast-feeding conducted in the metropolitan areas of São Paulo and Recife revealed that the median duration of breast-feeding was 2.8 months and 2.4 months, respectively, which means that 50% of women breast-fed for less than three months (31). Given the earlier-presented 1975 census data finding that the median breast-feeding rate was 2.5 months, it became clear that breast-feeding rates in Brazil had changed little or not at all in the intervening six years.

In February 1981, the Government mandated INAN, through a specially named management team and technical work group, to coordinate the PNIAM.⁵ The most salient activities undertaken during this time were: (1) the provision of national coordination and support for state- and community-level initiatives, (2) a mobilization of all key actors working in the field of breast-feeding, and (3) ensuring well-organized media campaigns. Consequently, an evaluation of the PNIAM conducted in 1986 found that in São Paulo the duration of breast-feeding had increased from 2.8 to 4.2 months, while in Recife it went from 2.4 to 3.5 months. And in Recife, exclusive breast-feeding, which had been extremely low in duration—only 15 days—climbed to an average duration of 32 days (31) when measured against comparable populations and instruments of data collection and analysis.

The social mobilization process, which began with nationwide presentations of the

video described in the previous section, was followed up with the first media campaign, with coverage by nearly 100 television channels reaching some 15.5 million families and 600 radio stations with a listening audience of approximately 20 million households. Four print media campaigns were also launched with the objective of attracting the support of well-known personalities with the ability to influence public opinion. In addition, over a period of 45 days, the slogan “Breast-feed your child for at least the first six months of life” was featured on some 10 million sports lottery tickets; household water, electricity, and telephone bills; personal bank account statements; and other similar types of commercial documents. Seventeen radio spots, each focusing on a different aspect of the disadvantages of early weaning, were developed and disseminated, and the scripts of these were also recorded for distribution via some 9,000 public address systems in use at formal and informal community gatherings. This phase of the campaign also included the printing of some 1.5 million instructional brochures for mothers and 400,000 pamphlets for health professionals, in addition to an illustrated breast-feeding training manual targeted to this latter group.

By the end of 1981, the goal of setting up an office in each of the Brazilian states, which could in turn coordinate the work of locally based agencies and other groups involved in the program, had been achieved. This success was largely attributable to the high profile role played by the Catholic Church, the literacy movement, mothers’ groups, and professional associations such as the Brazilian Federation of Gynecology and Obstetrics and the Brazilian Society of Pediatrics, the latter of which secured a place for the issue of breast-feeding on the agendas of its scientific congresses and related events, provided free space in the Society’s journal and other publications, and utilized its professional network to distribute more than 70,000 copies of print materials to its members.

⁵Established by Decree 10/02/1981, published in the *Diário Oficial da União*.

The exact number of events held during the social mobilization process, as well as the number of participants involved in their organization and mothers and other family members who directly benefited from them, will perhaps never be known. What is known is that prior to the social mobilization campaigns, uniform standards and methodologies related to breast-feeding were basically nonexistent, as were reliable instructional materials. Among the very few texts existing in Portuguese (albeit not formally published until a while later) was one by Murahovski et al. (43) based on a pioneering teaching project on breast-feeding in Santos.

With support from UNICEF, two national surveys were conducted. The quantitative survey provided the PNIAM with basic data—some of which have already been cited in this chapter—on the situation of breast-feeding in Brazil (34), and the qualitative survey sought to determine the most effective ways in which awareness campaigns in the future could reach mothers and health professionals with well-designed messages to counter early weaning practices.⁶

Following the PNIAM's launching, the Ministry of Social Security instituted a series of changes in hospital and delivery care policies, including that of a "rooming-in" policy which would allow mothers and their newborns to stay in the same room together. As noted earlier, prior to this time, maternity wards generally observed rigid routines which included physically separating the mother and child during postpartum care, using serum dextrose as a routine prelacteal food product, imposing specific times for breast-feeding, and other similar measures indicative of inadequate clinical lactation management (34). Thus, for its time, the adoption of a mother-child rooming-in policy represented an enormous departure from traditional health care practices.

Policies designed to protect breast-feeding practices began to emerge during the 1980s,

supported and strengthened by Brazil's approval of the ICMBMS at WHO's Thirty-fourth World Health Assembly in May 1981 and the Government's adoption of the Code as official law. Of particular concern were the problems of working mothers and the tangible benefits they and their young children could reap as the result of national regulations safeguarding their health.

Even prior to the national Code's adoption, and certainly more systematically once it took effect, infant milk product companies had fallen under intense pressure from advocates of the International Baby Food Action Network (IBFAN)⁷ to modify infant formula labels and to halt their unethical marketing practices. The membership of the initial Brazilian IBFAN chapter, which began its activities in 1983, was small and perhaps for this reason, it was difficult for the group to monitor marketing practices in any comprehensive fashion. On the other hand, in light of IBFAN's international boycott on Nestlé infant milk products and the fact that this company held a virtual monopoly on sales of infant formula in Brazil, the country reaped indirect benefits, since Nestlé formula labels and its advertising techniques were modified here as well (44). Initially, this boycott was called off following a 1984 meeting in Mexico after Nestlé agreed to abide by the Code's requirements and was monitored closely for a period of six months by the International Nestlé Boycott Committee in eight different regions around the world.

Between 1982 and 1983, a second mass media breast-feeding promotion campaign was launched in Brazil. Building on the experiences of the 1981 campaign and mindful of findings emanating from the quantitative and qualitative surveys conducted that same year, the campaign included a strategic planning

⁶Unpublished data.

⁷A network of NGOs and individuals formed in 1979 in Geneva, Switzerland, for the purpose of defending breast-feeding from abusive marketing practices by manufacturers of breast-milk substitutes.

component.⁸ Since the quantitative survey had shown that some 85%–90% of mothers initiated breast-feeding (34), the campaign was able to design well-targeted messages which, instead of urging women to merely breast-feed their newborns (such as would have been the case, for example, in the United States, where less than 60% of mothers initiated breast-feeding), encouraged women to *support the practice* in general, and, specifically, its *continuation*, through such slogans as “Breast-feeding: Keep it up; every woman can!” At the same time, in addressing the causes of early weaning, the campaign relied on information gathered from the qualitative survey, which revealed that women who believe their milk to be “weak” were prone to anxiety and thus to introduce early complementary feeding with the feeding bottle; other women feared their breasts would sag as a consequence of breast-feeding; while still others felt that working outside the home would preclude the possibility of being able to continue breast-feeding; and finally, some women believed in following the instructions of their pediatricians, whose formal training during this period had focused more on how to prescribe infant formula than on clinical lactation management and imparting this knowledge to their patients. Special messages responding to these concerns were incorporated into five television and radio public service announcements presented by popular Brazilian personalities of the entertainment industry, all of whom donated their time and fees to the campaign.

The country’s top three television networks ran these promotional spots during commercial breaks; they were also featured prominently in conjunction with Brazil’s most-watched television soap opera. This coverage reached an approximate viewing audience of half a billion in São Paulo and

169 million in Recife,⁹ as well as similarly large numbers in other Brazilian cities. It is worth noting that during this period, there was no advertising of infant formula; on the other hand, commercials for Nestlé baby food were frequently broadcast, as were those for a variety of feeding bottles and artificial nipples; also seen sporadically were commercials for the locally produced Ninho brand of fluid milk used in the preparation of homemade infant formula.

Campaign planning activities also included the distribution of a breast-feeding promotional background kit to print journalists, whose interest in the topic resulted in the publication of 78 articles in popular magazines between 13 February and 27 March 1983 in 25 Brazilian cities.¹⁰

In the months following the second campaign, a series of events occurred. In December 1983, weakened coordination prompted the Ministry of Health to rescind the program status of breast-feeding promotion interventions, including them instead as activities within the *Ações Integradas de Saúde* (Integrated Health Actions) structure. On the other hand, between 1984 and 1986, a number of breast-feeding promotional activities continued to be organized at the level of the individual Brazilian states. During this same period, UNICEF also began shifting its priorities toward the GOBI (Growth, Oral Rehydration, Breast-feeding, and Immunization) primary child health interventions.

In 1985, INAN and the Fernandes Figueira Institute of Rio de Janeiro worked together to found a number of human-milk banks (HMBs), which prior to this time, had existed in only a handful of the country’s hospitals.

At the international level, a milestone in the history of breast-feeding took place in 1986, when the Thirty-ninth World Health Assembly issued a resolution to clarify Article 6 of the ICMBMS. It stated that “Since the

⁸Erica Witte, member of the public relations team responsible for the campaign, in a videotaped speech entitled “Breast-feeding: Who Wins, Who Loses” (IBFAN, Brazil, 1989, directed by S. Afran).

⁹Castelo Branco Media Department, undated document.

¹⁰Jelliffe EFP, Jelliffe DB. The Brazilian National Breast-feeding Program. 1983 trip report.

large majority of infants born in maternity wards and hospitals are full term, they require no nourishment other than colostrum during their first 24–48 hours of life . . .” and that “only small quantities of breast-milk substitutes are ordinarily required to meet the needs of a minority of infants in these facilities, and they should be available in ways that do not interfere with the protection and promotion of breast-feeding for the majority.” The resolution urged WHO Member States to “ensure that the small amounts of breast-milk substitutes needed for the minority of infants who require them . . . are made available through the normal procurement channels and not through free or subsidized supplies.” Finally, in reference to formulas then being marketed for children over 6 months of age, the resolution noted: “the practice being introduced in some countries of providing infants with specially formulated milks (so-called ‘follow-up milks’) is not necessary.”

The final years of the 1980s represented a period of renewed program coordination and the final stages of activity implementation by various technical committees whose work had focused on specific breast-feeding issues since the PNAM’s inception. Accordingly, in 1987, primary emphasis was placed on the ICMBMS Committee, the Human-milk Bank Committee, the Committee on Working Women, the Education Committee, and the Community Committee. The results were decisive and in 1988 laid the foundation for at least four breast-feeding promotion policies: in December, Brazil approved its own version of the ICMBMS, known as the Marketing Regulations for Infant Feeding Products (NBCAL), and issued a comprehensive government directive establishing the operating requirements for the country’s HMBs. Another landmark achievement for the breast-feeding promotion movement was the incorporation into the new Brazilian Constitution of two new benefits in support of breast-feeding: the right of workers to four months of maternity

leave in order to facilitate exclusive breast-feeding, and the right of fathers to five days of paternity leave in order to provide support during the critical period following the mother and child’s release from the health care facility and return home.

In May 1988, the Ministry of Health issued a series of regulations regarding health standards for HMBs and providing for technical training of staff at these facilities. The regulations also transformed the first of the country’s HMBs, established at Rio de Janeiro in 1943, into a national reference center responsible for coordinating the development and surveillance of HMBs. It is also worth noting that the coordinating team, beyond merely establishing HMBs for local collection, processing, and storage of breast milk for distribution to needy newborns, also utilized these facilities as centers for breast-feeding promotional activities. Over time, many of the HMBs came to be known as Breast-feeding Promotion Centers and continue to operate under this name until today, utilizing and reinforcing the same philosophy under which they were originally created.

In 1989, WHO and UNICEF drafted a document that today plays a crucial role in all programming activities for work in the areas of prenatal care and the initiation and continuation of breast-feeding. The Joint WHO/UNICEF Statement on Protecting, Promoting, and Supporting Breast-feeding: The Special Role of Maternity Services (45) set out a series of recommendations entitled “Ten Steps to Successful Breast-feeding,” which together summarize the essential measures to be taken by health care facilities. These include the preparation of a written breast-feeding policy and training of all staff for the policy’s implementation. Following this training, health care providers would be responsible for informing all pregnant women about the benefits and management of breast-feeding; helping mothers to initiate breast-feeding within half an hour of birth; showing them how to breast-feed and how to maintain lactation even if they should

be separated from their infants; facilitating 24-hour rooming-in of mother and child; encouraging breast-feeding on demand; discouraging the use of bottles, artificial nipples, and pacifiers; and fostering the establishment of breast-feeding support groups and referral of mothers to these following their hospital or clinic discharge. Inasmuch as there were no international guidelines in place during this period for the training of personnel on breast-feeding practices and prenatal and delivery routines, the WHO/UNICEF initiative filled a very important vacuum in the community of public and private health care professionals.

THE 1990s: GLOBAL POLICY FUELS LOCAL ACTION

The earlier-cited meta-analysis conducted by Feachem and Koblinsky in 1984 (3), as well as the Victora et al. study (4), both clearly demonstrating the significant boost to health afforded to children by mothers who had exclusively breast-fed them during the initial months of life, had been widely disseminated in Brazil by the early 1990s. By this time, the message regarding the benefits of breast-feeding was very clear: exclusive breast-feeding (i.e., feeding with breast milk exclusively and no other liquids, including water or tea) from birth through 4 to 6 months of age protected children against diarrheal diseases, respiratory infections, and other infectious diseases. This knowledge, as reflected in the literature of this period, could now be used as the fulcrum for creating new indicators, recommendations to physicians, messages to mothers and their families, and indeed for retooling the organic content of breast-feeding promotion programs themselves.

At the close of the 1980s, and armed with this new knowledge, authorities at WHO, UNICEF, and a variety of bilateral and technical organizations came together to formulate a strategy that would take stock of the various determining factors interfering in the

practice of exclusive breast-feeding and would revisit programs that had been particularly effective in promoting the practice. As a result of this effort, the Interagency Group on Action on Breast-feeding (IGAB) was created. The IGAB promoted a series of specific technical meetings with the objective of gaining better insight into how these determining factors function. Meetings were organized to focus on such topics as health services and hospitals; mothers' and community groups; training, communication, and education; the ICMBMS; and the situation of the working woman, the latter of which was held in Brazil in March 1990. This process culminated with the production and adoption of the Innocenti Declaration on the Protection, Promotion, and Support of Breast-feeding by participants at the WHO/UNICEF policymakers' meeting on "Breast-feeding in the 1990s: A Global Initiative" held in Florence, Italy, on 30 July–1 August 1990. Among those invited to share their experiences in the development of breast-feeding promotion programs were Brazil and the president of INAN.

Why is the Innocenti Declaration important? In contrast to previous international documents that had been produced by health authorities, it was the fruit of a long and highly participatory process of analysis and resulted in clearly defined goals and operational targets to be reached by the countries over the next five years. Essentially, the Declaration recommends supporting and promoting the decision of women to exclusively breast-feed during the first four to six months of the child's life and to continue breast-feeding with appropriate and adequate complementary foods for up to 2 years of age or beyond. The Declaration recommended four primary strategies to achieve these ends by the year 1995: (1) the appointment of a national breast-feeding coordinator of appropriate authority and the establishment of a multisectoral national breast-feeding committee composed of relevant government entities, NGOs, and health professional associations; (2) ensuring that every health facility providing maternity services fully practiced all

of the WHO/UNICEF-recommended “Ten Steps to Successful Breast-feeding”; (3) taking the necessary action to give effect to the principles and aim of all articles of the ICMBMS and subsequent relevant World Health Assembly resolutions in their entirety; and (4) enacting “imaginative legislation” protecting the breast-feeding rights of working women and establishing the adequate means for its enforcement.

It is important to note that at the time of the Declaration, exclusive breast-feeding was recommended for the first four to six months of life, as there had been no well-developed studies conducted to document the effects of an exclusive diet of breast milk during the entire first six months of life in terms of adequate child growth and nutrition, nor had the benefits of such breast-feeding been recognized in terms of child morbidity/mortality and the health of the mother. Or, said another way, the great majority of revolutionary research findings regarding the benefits of breast-feeding to the child (3–12) described in this chapter’s Introduction did not emerge until later on during the 1990s, and much of the information regarding the positive effect of breast-feeding on the mother’s health (13–26) is even more recent. For these reasons, the recommendation of exclusive breast-feeding for the first six months of life (i.e., versus four) came about only after a 2000–2001 literature review of over 3,000 references (2) and a WHO technical evaluation on the subject (1).

In September 1990, the World Summit for Children, attended by heads of state and government, representatives from a variety of United Nations agencies, and a large number of international NGOs, was held in New York City. In the area of nutrition, the goals established for the decade called on governments to guarantee the “empowerment of all women to breast-feed their children exclusively for four to six months and to continue breast-feeding, together with complementary food, well into the second year”; guarantee by 1995 that 50% of hospitals attending

1,000 or more childbirths per year receive Baby-friendly Hospital certification; and to end the practice of distributing breast-milk substitutes at health service facilities (46). These goals were also designed to facilitate work on reaching year-by-year targets, and this process, in turn, provided feedback on how well the PNIAM was working toward the achievement of all its goals and indicated areas requiring special efforts.

In Brazil, the 1990s were a time characterized by the ongoing implementation and consolidation of actions that had been previously underway, but more importantly, by the large-scale training of health professionals and the initiation of other supporting and awareness-raising activities, such as the Baby-friendly Hospital Initiative (BFHI), commemoration of World Breast-feeding Week, the Friendly Postman Breast-feeding project (described later on in this section), the Firefighters for Life project (described in this chapter’s section on the twenty-first century), and a series of breast-feeding surveys.

In 1991, WHO and UNICEF launched the BFHI in an effort to transform practices in maternity hospitals worldwide and to facilitate breast-feeding by ensuring that women in maternity care have full information and support to breast-feed their infants in an environment free of commercial influences. Health facilities seeking BFHI accreditation were required to follow the organizations’ “Ten Steps to Successful Breast-feeding” guidelines, the most stringent of which was that they were “under no circumstances [to] provide breast-milk substitutes . . . free of charge or at low cost.” The Initiative created the very first international evaluation referent solely for hospitals, which contributed to the humanization of maternal and child public health care (47).

In March 1992, the Ministry of Health, working through the PNIAM/INAN and the *Grupo de Defesa da Saúde da Criança*, and with technical and financial support from UNICEF and PAHO, began taking the initial steps to implement the BFHI in Brazil.

In June 1994, the Ministry of Health¹¹ standardized the public hospital accreditation process for Baby-friendly Hospital (BFH) certification. In 1996, the PNIAM added five additional requirements for BFH hospital certification to be used as indicators to measure the quality of maternal and child health care at the given facility. To the best of the knowledge of the authors of this chapter, Brazil is the only country in the world that requires a pre-evaluation phase of compliance with the “Ten Steps to Successful Breast-feeding” guidelines, the fulfillment of additional requirements as part of the Baby-friendly Hospital certification, and is also the only country, as far as the authors have been able to ascertain, that provides financial incentives to certification as a Baby-friendly Hospital (48).

The certification process is relatively straightforward, yet thorough. A hospital seeking BFH status must first fill out a self-evaluation questionnaire, the request for which must be initiated by the pertinent health authorities. Immediately thereafter, these authorities send an evaluator certified by the Ministry of Health at the state level to conduct a pre-evaluation of the hospital and then present an analysis of the findings. When the results of the hospital’s pre-evaluation are deemed to be acceptable, the evaluator will recommend that the Ministry conduct a comprehensive evaluation of the hospital, to be carried out by two independent, certified evaluators from outside the area where the hospital is located. The results of the comprehensive evaluation are then forwarded to authorities at the Ministry of Health’s breast-feeding coordination unit for final analysis and dissemination of the results. As previously noted, hospitals wishing to receive BFH certification must first comply with all of the “Ten Steps to Successful Breast-feeding” by fulfilling at least 80% of the extended global criteria established by

WHO and UNICEF for each of the 10 steps. Once a hospital has completed the certification process and has satisfactorily met all the necessary criteria, it receives a placard bearing a reproduction of Pablo Picasso’s 1963 painting *Maternité*, which is the international symbol and logo of the BFHI. In most instances, a special commemorative ceremony is organized in which the placard is awarded by the pertinent local and federal authorities to the hospital (48, 49).

In the event that the institution in question does not meet the criteria of a given stage (i.e., the pre-evaluation or comprehensive evaluation), it is provided guidelines to assist it in achieving compliance with that stage, and a new timeframe is then established for the next evaluation.

In 1999, seven years after the BFHI’s implementation in Brazil, questions arose regarding the quality, effectiveness, and sustainability of this strategy. In response to this situation, the Ministry of Health reevaluated 137 Baby-friendly Hospitals, which accounted for 90% of the total 152 BFH-certified institutions operating in the country at the time (50). Given that no suitable standardized instrument for BFH reevaluation existed at the time, the hospital pre-evaluation instrument was used instead. The study identified some compliance-related difficulties regarding the BFHI “Ten Steps,” especially Step 5 (“Show mothers how to breast-feed and how to maintain lactation even if they should be separated from their infants”), followed by Step 10 (“Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic”) and Step 2 (“Train all health care staff in skills necessary to implement this policy”). The Ministry of Health’s BFHI reevaluation revealed that 92% of the 137 hospitals continued to comply with the “Ten Steps” at the desired level of quality, thus ensuring the right of children to have access to breast milk. The reevaluation process proved to be essential as a means for verifying the BFHI’s effectiveness and conti-

¹¹Decreets # 1.113 and 155.

nunity, thus guaranteeing that the actions taken were helping to achieve the expected results and objectives and were identifying areas requiring adjustment, which, in turn, helped health services further the PNIAM's overarching objectives.

In 1992, the Mother and Child Institute of Pernambuco, located in the city of Recife, was the first hospital to receive BFH certification. Subsequently, four hospitals were certified in 1993, followed by eight more in 1994—or double the number of the previous year. In 1995, the number of BFH-certified hospitals tripled to 26. In 1996, a total of 39 hospitals were certified, whereas in 1997 there were only 16, due to a sharp drop in applications for comprehensive hospital evaluations. In 1998, another 20 hospitals received BFH certification, followed by 26 more in 1999 (48). In that same year, the results of a hospital reevaluation caused one Baby-friendly Hospital in the state of Rio Grande do Norte to lose its accreditation. Perhaps Brazil's vast size and the BFH's strict evaluation criteria can help explain the slowdown in BFHI hospital certification, which fell off in 1997 after the addition of the five new certification requirements. A 1998 study conducted in 45 noncertified maternity hospitals located in São Paulo revealed that about one-quarter of the public hospitals and one-third of the private hospitals failed to comply with any of the BFHI's "Ten Steps." Only two public hospitals had adopted at least seven of the "Ten Steps." The study concluded that practices detrimental to the initiation and establishment of breast-feeding, such as separating the mother and baby after childbirth and the widespread use of infant prelacteal products and supplements, continued to be observed frequently—and at high levels—in São Paulo area hospitals (51).

If new maternity hospitals had continued to be certified at the rate seen in 1995, Brazil would have likely had on the order of 400 BFH-certified hospitals by 2000. At 1990s' World Summit for Children, the country had committed itself to the goal of BFHI certifica-

tion of up to 50% of its hospitals with obstetric beds and more than 1,000 births per year by 1995 (48). Yet, given the enormous number of maternity hospitals in Brazil, maternal and child health advocates knew even then, at the time of the Children's Summit, that the country, in realistic terms, would most likely achieve this goal for closer to 15%, versus 50%, of the hospitals in the country. Consequently, planning in this regard had to be readjusted, as will be discussed in the next section of this chapter.

Concerned that the policies agreed upon at the beginning of the 1990s and the crucially important goals related to them might not be implemented—not only in Brazil but in other countries around the world as well—UNICEF, various NGOs (IBFAN, La Leche League, the International Lactation Consultant Association, and Wellstart International, among others), and leading breast-feeding experts and maternal and child health advocates came together to create the World Alliance for Breast-feeding Action (WABA) in February 1992. This coalition proved instrumental in mobilizing the participation of key groups and individuals during World Breast-feeding Week (WBW), celebrated each year during the first week of August, who in turn utilized the opportunity to highlight and reinforce a variety of messages regarding such issues as the BFHI, the situation of working women, education on the importance of breast-feeding, and the ICMBMS. Today in Brazil, WBW is celebrated in communities large and small throughout the country, thereby fulfilling in letter and spirit the social mobilization role for which the commemoration was originally created (52).

Prior to 1995, WABA served as the coordinator of activities commemorating World Breast-feeding Week, after which time the Ministry of Health took over the production of all campaign materials, gearing them to adhere to WABA's specific international theme chosen for each year's observation. As part of the activities of the 1996 WBW, a part-

nership known as the Friendly Postman Breast-feeding project was established with the postal service, initially in the state of Ceará. By 1999, the Ministry had implemented this project in nine states of the northeast. As part of the initiative, letter carriers receive training from health units to enable them to answer basic questions related to breast-feeding. At the beginning of WBW and continuing throughout the entire month, they wear specially designed yellow vests emblazoned with promotional messages and distribute an informational booklet to the homes of expectant mothers and those with young children along their delivery routes (53).

In the mid-1990s, WHO and UNICEF launched a set of four training courses on breast-feeding targeting different populations: an 18-hour course on "Baby-friendly" certification for hospital teams; an 80-hour training course for facilitators of breast-feeding courses; a 40-hour counseling course for those who have direct interaction with mothers and babies; and a 12-hour awareness-raising course for health care managers and supervisors. All of these materials were translated into Portuguese at the initiative of the Brazilian IBFAN network and were subsequently used by the Ministry of Health.

By the late 1990s, human resources training had become one of the most important activities of the PNIAM. Stemming from management efforts initiated in 1998, planning was based on well-defined goals and resources, which included reevaluating the effectiveness of the various components supporting the PNIAM, including WBW, BFHI-related training, and compliance with ICMBMS, among others. Outgrowths of these activities included a training course for HMB personnel and another on NBCAL, the Brazilian version of the ICMBMS, offered by IBFAN members. This high level of activity resulted in the training of more professionals between 1998 and 2002 than at any other time previously in the history of the PNIAM.

Public health authorities responsible for the surveillance of proper food labeling and

advertising, personnel working in the field of consumer protection, and staff of the attorney generals' offices at the state level were all invited to undergo NBCAL training. These training courses were held between 1999 and 2000, and included a practical compliance monitoring component, which, for the first time, provided the Ministry of Health with data that would allow it to determine levels of compliance with NBCAL by the baby foods and products industry in its advertising and marketing of baby foods, pacifiers, artificial nipples, and feeding bottles.

The 1999 National Survey on the Prevalence of Breast-feeding, carried out by the Ministry of Health in all the Brazilian state capitals and in the Federal District, analyzed a sample of 48,845 children under 1 year of age. The results of this study showed that during the first month of life, 53.1% of children in the areas studied were breast-fed exclusively, whereas rates of exclusive breast-feeding fell off sharply thereafter, down to 9.7% in the interval between 151 and 180 days. With regard to the timely use of complementary feeding (breast milk with the addition of complementary foods between 6 and 9 months of age), 48.9% of the children studied received complementary feeding at the appropriate time. In the 9- to 12-month age group, only 44.2% of children continued to be breast-fed.¹²

THE TWENTY-FIRST CENTURY: RESPONDING TO THE REMAINING GAPS

Since 1999, and with support of a legal consultant from the Office of the Attorney General of the Federal District, the Ministry of Health has opened an ongoing dialogue with the baby foods and products industry and has established fines and other punitive measures to be applied to those companies found in violation of any of the articles of

¹²Ministry of Health, unpublished data, 1999.

NBCAL, which are considered as law. This coordination among governmental entities signified a critical juncture in and of itself, in the sense that it pointed out the need to revise the NBCAL a second time (its first revision had been in 1992). The Code was reformed between 2000 and 2001, and resulted in the publication of new, more comprehensive and detailed decrees. Following publication of the second revision of NBCAL, in 2002, the Ministry of Health, in conjunction with the IBFAN network, developed an updated course to prepare new trainers and to provide refresher training for food safety inspectors and public health professionals.

Baby-friendly Hospitals accreditation, which had fallen to its lowest point in 1997, perhaps due to the addition of the five new requirements, subsequently experienced a recovery and then an upward trend. In 2001 the Ministry of Health decided to implement a program of systematic reevaluations of Baby-friendly Hospitals¹³ every three years, to be performed by Ministry-certified external evaluators applying a reevaluation instrument that had been developed by UNICEF for this purpose.

Planning efforts designed to speed up BFH accreditation in Brazil included development of a 42-course intensive training program on the BFHI, in which 1,819 health administrators and unit managers from 859 hospitals and maternity wards in 24 states participated between 2000 and 2002 (50). The training series culminated with the drafting by trainees of a specific plan of action for the implementation of the BFHI at the hospitals under their responsibility. Approximately one year following the training, participants would then meet with local Ministry of Health personnel and technical experts to discuss and complete a special written form based on the "Ten Steps to Successful Breast-feeding" and the country's five additional BFH requirements. By ascertaining whether each of the steps and

requirements had been achieved, partially achieved, or not achieved, participants were better able to focus on specific compliance-related difficulties, which in turn facilitated a process of mutual support and joint problem-solving (50).

In 2002, an additional 57 hospitals received BFH certification, which by December of that year brought the total number to 258 Baby-friendly Hospitals distributed among 24 Brazilian states. That year also marked the highest number of BFH certifications secured to date, an achievement most likely due, at least in part, to the positive role played by the training and follow-up meetings between hospital administrators and unit managers with the BFHI review teams. Meetings of this type were held in 18 different states and proved their ability to help accelerate the BFH certification process by providing valuable feedback and support to hospital administrators and unit managers for overcoming the remaining obstacles in their path to official certification (50).

There is no uniform geographical distribution of Baby-friendly Hospitals in Brazil, perhaps due to varying degrees of motivation among the regional teams and their level of organizational capacity. However, according to a 2003 study, the highest concentration of BFHs is found in the country's northeast, where 48% of hospitals have received certification, followed by the southeast (17%), the south (17%), central-west (13%), and north (5%). Of these hospitals, 47% are public, 34% are philanthropic, 9% are private, 8% are teaching hospitals, and 2% are military (50).

The same study revealed that only 163 of the 630 hospitals with more than 1,000 child-births per year had BFH certification, equivalent to 26% of the goal set for 1995. Of Brazil's 27 states, only seven were able to meet that goal. The other states did not achieve certification of 50% of their hospitals with more than 1,000 childbirths per year until December 2002. This study underscored the need to rethink strategies and plan new types of interventions. Neverthe-

¹³Ministry of Health Decree No. 29 of 22 June 2001.

less, for a number of reasons that have not yet been sufficiently analyzed, certification dropped off in 2003 and 2004: only 290 hospitals had received BFH certification by the end of 2003, and only 300 by July 2004. In other words, considering that in 2004 there were more than 3,000 hospitals with maternity beds in the country, less than 10% of the country's maternity hospitals had received BFH certification.

The growth of the network of HMBs, which currently number 160, has been remarkable in recent years, especially due to team monitoring and training in all parts of the country. Each year, there are approximately 44,500 preterm and 187,000 low-birthweight babies born in Brazil (i.e., more than 230,000 babies), in addition to those born with various other types of conditions, including children of HIV-infected mothers (the latter currently representing less than 1% in Brazil). During 1999 alone, the HMBs benefited approximately 100,000 children, while in 2000 some 60,000 registered donors gave on the order of 79,000 liters of breast milk. Despite these numbers, this network still has much work to do in order to meet ongoing demand, even though home collection of donations of surplus milk has increased significantly in states where the Firefighters for Life project has been implemented. In this project, firefighters receive training to encourage the donation of surplus breast milk, answer basic questions, and offer advice to donor mothers on problems associated with breast-feeding, such as proper hygiene for the extraction and storage of breast milk donated to HMBs. In 1997, of the 12,203 liters of breast milk collected in one Brazilian state, 8,242 liters were collected by local fire stations (50). In 2002, the Ministry of Health organized the first-ever nationwide seminar for Firefighters for Life, which included the participation of firefighting managers from every corner of the country. One objective of the gathering was to raise awareness among firefighters and encourage firehouses in every state and com-

munity to adopt and participate in the project. Just as the popularity of these community partnerships increases, there is a growing need to evaluate their impact at the local, state, and national levels.

Premature or low-birthweight babies born to HIV-infected mothers can receive pasteurized milk from the HMBs; however, due to current supply constraints, no pasteurized breast milk is available for such babies when they are of normal birthweight or born to term. Consequently, Brazil's HIV/AIDS policy on the feeding of these newborns recommends no breast-feeding and the use of infant formula distributed by the Government free of charge through the first six months of the child's life and thereafter the use of distributed whole milk.

Since 2001, efforts have been stepped up to encourage countrywide participation by local branches of the national postal service in activities held in conjunction with World Breast-feeding Week. In 2002, nearly 23,400 letter carriers received training on how to effectively communicate basic messages regarding the importance and advantages of breast-feeding to family households along their regular mail routes. As in the case of the initiatives utilizing the country's firefighters, the impact and scope of those involving the postal service remain unevaluated to date (53), even though these activities have shown promising initial results. During 2002 it was estimated that some 3.4 million expectant mothers and children under 1 year of age benefited from them.

Between 2001 and 2002, the Ministry of Health launched a new breast-feeding promotion project, entitled the *Iniciativa Unidade Básica Amiga da Amamentação* (Friends of Breast-feeding Health Units Initiative) or IUBAAM, as a means of promoting, protecting, and supporting breast-feeding through the country's basic health units, with the end-goal of each adopting the precepts of the BFHI's "Ten Steps to Successful Breast-feeding." This initiative is yet another activity that the basic health units, in conjunction

with hospitals, can undertake to consolidate breast-feeding as a universal practice, and at the same time it enables them to make their own significant contribution to the health and well-being of the mothers and babies under their care. The "Ten Steps to Successful Breast-feeding of the IUBAAM" were developed on the basis of a systematic review (54) that included experimental and quasi-experimental interventions conducted as part of prenatal care and during the monitoring of the mother and baby, and proved to be an effective tool for extending the duration of breast-feeding. While based on the BFHI "Ten Steps," the IUBAAM version substitutes Step 4's hospital version ("Help mothers initiate breast-feeding within half an hour of birth") with "Listen to the concerns, experiences, and doubts of pregnant women and mothers regarding the practice of breast-feeding, and strengthen their self-reliance," and Step 7's 24-hour rooming-in hospital practice with "Instruct nursing mothers on the lactation amenorrhea method and other contraceptive methods compatible with breast-feeding."

IUBAAM implementation, in addition to providing benefits for mothers and children accessing care from the basic health care network, will also strengthen Brazil's BFH-certified hospitals, inasmuch as basic health units with "Friends of Breast-feeding" certification can become references for the hospitals, in terms of complying with Steps 3 ("Inform all pregnant women about the benefits and management of breast-feeding") and 10 ("Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic") of the BFHI. As earlier mentioned in this chapter, the 1999 BFH reevaluation brought to light difficulties in compliance by hospitals with several of the steps. If implemented properly as an official Government program, the Ministry of Health and breast-feeding consultants feel that the IUBAAM initiative (operating in only one Brazilian state as of the writing of this chapter) and the ongoing BFH

certification process can serve as mutually beneficial reinforcing agents in consolidating the achievements to date of Brazil's PNIAM.

THE FUTURE OF BREAST-FEEDING

As the world approached a new millennium and the Innocenti Declaration its 10th anniversary, the international organizations community recognized the need to revisit the goals of the Declaration and, in 2002, to rethink what became known as the Global Strategy for Infant and Young Child Feeding.¹⁴ The foundation of this strategy is the reaffirmation of the Declaration's basic tenets; i.e., the need to promote, protect, and support exclusive breast-feeding for six months as a global public health recommendation and to seek optimal ways in which to introduce safe and appropriate complementary feeding, without interruption of breast-feeding, until at least the second year of life or beyond. The strategy also encompasses the great challenge of the first years of this century, which is how to implement these two recommendations for groups with special needs, including HIV-infected mothers; families living in emergency situations, such as natural disasters, famine, and civil unrest; families living in refugee settings; and mothers and their children facing other types of exceptionally difficult circumstances.

Some organizations have already stepped up to this challenge: WHO and UNICEF have developed a counseling course on infant feeding for HIV-infected mothers; whereas UNAIDS, WHO, and UNICEF have prepared materials on HIV and infant feeding, how to approach breast-feeding and breast-milk substitutes in emergency situations, and practical advice and tips on complementary feeding.

In Brazil, messages and policies to promote exclusive breast-feeding for the first six

¹⁴Approved as Resolution 25 at the Fifty-fifth WHO World Health Assembly, May 2002.

months of life have been available and in force for more than 10 years. Consequently, the Brazilian Government was able to take decisive action to help ensure adoption of a WHO resolution urging countries to protect, promote, and support exclusive breast-feeding for six months as a global public health recommendation at the Fifty-fourth World Health Assembly in 2001, inasmuch as the country had proven conclusively that the prevalence of exclusive breast-feeding can be increased. National surveys confirmed an increase of nearly 10 times in the prevalence of exclusive breast-feeding from 0 to 4 months of age, which was approximately 3.8% in 1986 and had increased nearly 10 times by 1996 (55), with rates reaching 35.6% in the country's state capital cities during 1999.¹⁵

Taking into account the successes and shortcomings of the national breast-feeding program over the last few years and the need to continue to improve exclusive breast-feeding rates, the thrusts of the PNIAM in the immediate and medium-term future will include: to continue to support and strengthen the numerous breast-feeding advocacy and promotional initiatives underway at the community, state, and national levels; to transform the focus in professional health training and practice toward baby-friendly care of newborn infants and to encourage still-uncertified hospitals to strive to achieve BFH status as soon as possible; to provide support to ensure that all current BFHs maintain their certification in the future; and to improve support for breast-feeding programs at the primary care level through efforts oriented toward universal implementation by basic health units of the IUBAAM initiative. As family health teams and community health promoters, our challenge will also be to evaluate the role of the numerous interventions discussed in this chapter in achieving the dramatic tenfold improvement in exclusive breast-feeding rates over the past two decades, as well as to mea-

sure the relative impact of each on the national rates of child morbidity, mortality, and physical and mental development. The authors of this chapter believe that an evaluation of this type is long overdue and one that would, at the same time, yield a clear blueprint for future actions, validating the extensive efforts carried out by different individuals and institutions on this issue to date and providing clear answers to those who still question the crucial role of breast-feeding in protecting and improving integral maternal and child health.

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