

# Promotion of Breast-Feeding

Through  
MCH Services and  
Primary Health Care



**United Nations  
Children's Fund**  
Islamic  
Republic of Iran



**World Health  
Organization**  
Regional Office  
for the  
Eastern Mediterranean

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Primary Health Care

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# FOREWORD

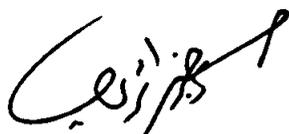
Promotion and protection of breast-feeding is an important responsibility of a maternal and child health programme. Breast-feeding is a unique means of providing ideal food for the healthy growth and development of infants and has a remarkable biological and emotional influence on the health of both mother and child.

In most countries of the Eastern Mediterranean Region, prolonged breast-feeding is the usual practice, quite often up to the end of the second year of a child's life. However, for a number of reasons, there has been a noticeable erosion of breast-feeding practices, especially among urban populations. Clearly, all possible action must be taken to reverse this trend.

WHO and UNICEF have been extremely active in sponsoring various measures for the protection and promotion of breast-feeding. The Baby-friendly Hospital Initiative and the adoption of the International Code of Marketing of Breast-milk Substitutes are two recent measures being actively sponsored in most countries in this Region, with remarkable results.

The national health care system in every country has to initiate most measures for the promotion of breast-feeding. The maternal and child health (MCH) programme, which has the major responsibility for the health care of all women—before, during and after childbirth—has the unique opportunity of preparing and assisting every mother to undertake this important responsibility. In fact, the countries of the Region have included this activity in the job description of MCH workers at all operational levels. Since the promotion of the health of the mother and child is an important component of primary health care, promotion and protection of breast-feeding should logically be an important task of all primary health care workers.

This document is based on the deliberations of a consultation in which UNICEF, Islamic Republic of Iran, very actively collaborated. I am confident that it will be found extremely useful for all MCH and primary health care managers in organizing their strategy for the promotion and protection of breast-feeding.



Hussein A. Gezairy, M.D., F.R.C.S.  
Regional Director for the Eastern Mediterranean



# **Background to the unique practice of breast-feeding**

## **Introduction**

Breast-feeding is as old as the evolution of the mammalian species. The unique qualities of human milk and the value and the benefits of breast-feeding for both mothers and their offspring are being gradually unravelled in more scientific and technical terms. Pregnancy and lactation are two sequential stages of a reproductive cycle. A considerable amount of physiological and biochemical changes occur in the body of the pregnant woman to make her able to undertake lactation. To a very large extent, the recent realization regarding the unique qualities of breast-feeding and the dangers of artificial feeding have halted the dangerous decline in breast-feeding observed first in the industrialized world, followed by the same trend in the developing countries. It has to be remembered that this unfortunate decline in the 1960s and 1970s in the developing world, especially among low socioeconomic groups living in urban areas, led to a steep rise in infant and child morbidity and mortality, predominately due to malnutrition and diarrhoeal disorders. Today, international and national efforts are designed to enable every mother of any age in any socioeconomic level to breast-feed her baby exclusively for the initial four to five months of the baby's life. Thereafter, mothers are expected to continue breast-feeding for as long as possible, preferably for two years, along with giving complementary foods. This is now considered as a basic human right of every newborn infant, as well as of its mother.

Since 1978, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), in close collaboration with Member States and a number of nongovernmental organizations (NGOs), have taken a large number of measures of far-reaching importance to promote, protect, and support breast-feeding. The implementation of the International Code of Marketing of Breast-milk Substitutes and the Baby-Friendly Hospital Initiative are two recent measures being vigorously pursued to promote and protect breast-feeding practices.

## **Background**

The International Conference on Nutrition (ICN), held in Rome in 1992, adopted the "World Declaration and Plan of Action for Nutrition". The ICN identified nine strategies

and actions. In view of its importance, promotion of breast-feeding was included as one of the strategies.

Breast-feeding provides infants and young children with ideal nutrition. Together with its many beneficial effects, such as those on child-spacing and the prevention of disease, it is the most inexpensive form of infant feeding. All women should be able to breast-feed their babies exclusively for the first four to six months, and, while giving appropriate complementary foods, to continue breast-feeding for up to two years or more. The state, community, NGOs, and individuals should:

- Support and encourage mothers to breast-feed and adequately care for their children, whether the mothers are formally or informally employed or doing unpaid work.
- Make every effort to promote breast-feeding at maternity facilities and home deliveries.
- Encourage and support collaboration between health care systems and mother-support networks, including the family and the community.
- Take action to give effect to the principles and aims of the International Code of Marketing of Breast-milk Substitutes.
- Ensure that health providers and other carers receive high quality training in breast-feeding issues, using updated training materials, and that they are informed about relevant national marketing regulations or policies.
- Ensure, as far as possible, that information disseminated on the feeding of infants and young children is consistent and in line with current scientific knowledge and take steps to counteract misinformation on infant feeding.
- Consider, with utmost care, issues regarding breast-feeding and the human immunodeficiency virus (HIV) infection on the basis of the most up-to-date authoritative scientific advice and referring to the latest WHO/UNICEF guidelines. Also request that WHO, in close cooperation with UNICEF and breast-feeding and other experts, convenes technical meetings on a regular basis to review the latest scientific publications on these issues and update the guidelines.

The ICN also affirmed the year 2000 “Goal of the World Summit for Children”, i.e. empowerment of all women to breast-feed their children exclusively for four to six months and to continue breast-feeding, with complementary feeding, well into the second year.

The Forty-sixth World Health Assembly of May 1993 considered the Director-General’s report on the ICN-adopted resolution (WHA46.7) and endorsed in its entirety the “World Declaration and Plan of Action for Nutrition”. In the resolution, Member States are urged to reduce social and other impediments to optimal breast-feeding.

All countries have pledged to prepare, before the end of 1995, a national plan of action for nutrition, which should be complementary to the national action plans prepared as a follow-up of the World Summit for Children. Thus, the countries have to translate the ICN strategy on breast-feeding into country-specific actions. When considering the seven areas for action in the ICN plan for promotion of breast-feeding, all participants can see their role in the total picture.

The plan of action, as it deals with breast-feeding, should outline the activities which will be carried out, with a clear description of who will be responsible for what activity and a timetable of when activities will take place. All those involved in breast-feeding promotion will have to work together closely to develop and implement the plan.

## **The consultation**

The intercountry consultation on the promotion of breast-feeding within the framework of maternal and child health (MCH) and primary health care (PHC) was held at the Lactation Management Centre, Teheran, Islamic Republic of Iran, between 9 and 11 April, 1994. The consultation was hosted by the Islamic Republic of Iran.

The objectives of the consultation were to:

- Review the existing situation regarding promotion and protection of, and support to, breast-feeding through national health care systems.
- Identify areas of weakness and strength in such a system and to develop collectively measures which could make the strategy for the promotion of breast-feeding through MCH and PHC more forceful and effective.
- Develop guidelines for assisting countries in developing a strategy for this purpose.

The consultation lasted three days. The first day's programme included the Inaugural Session and plenary sessions presenting background and basic information. The remaining two days of the consultation were reserved for group sessions in which the participants were divided into three groups, each responsible for discussing different facets of the subject. Group A discussed national policies for breast-feeding and their implementation; Group B discussed training of health workers at different operational levels; and Group C discussed educational messages for mothers for promotion of breast-feeding.

While inaugurating the consultation, H.E. Dr Alireza Marandi, Minister of Health and Medical Education, the Islamic Republic of Iran, stressed the importance of breast-feeding for the health of mothers and their children. He stated that breast-feeding is one of the key strategies for attaining numerous goals of child survival and development such as appropriate nutrition, control of diarrhoeal diseases, child-spacing, and

improving mother's health. A healthy life, appropriate nutrition, and the provision of better opportunities for children's survival are desired by all people worldwide and they are of special priority in government policies.

Surveys in the Islamic Republic of Iran have revealed that if a greater number of mothers breast-fed their children and continued to do so for a long time and if this appropriate method of feeding were supported by policy-makers, fewer infants would die, mothers and children would be healthier, and less money would be required for health care and family planning programmes. Breast-feeding is mentioned five times in the Koran, re-emphasizing the virtues and goodness of mother's milk. Thus, there is religious and cultural commitment to this fundamental human tradition. The Islamic Republic of Iran is proud of having attained spectacular success in promoting health, reducing maternal and child mortality rates, raising life expectancy, and taking steps in encouraging breast-feeding through the inspiration of Islamic teachings.

The global movement of breast-feeding promotion is not a new development in the Islamic Republic of Iran. The Ministry of Health and Medical Education took initial steps for the promotion of breast-feeding in 1988. It undertook such action as establishing a commission on infant food to impose restrictions on the imported varieties of infant formulae, to provide a single label on the containers of all infant formulae, to prohibit any kind of advertisement, and to give directives for rooming-in. A national committee was set up for the promotion and protection of breast-feeding, consisting of specialists in paediatrics, obstetrics and gynaecology, nutrition, and neonatology. Its aim was to develop a national strategy, in collaboration with UNICEF, to plan specific steps, monitor progress, and develop guidelines for adoption by governmental and nongovernmental institutions.

Dr Hussein A. Gezairy, WHO's Regional Director for the Eastern Mediterranean, welcomed the participants by stating at the outset that human milk has no substitute and this fact needs no debate. Breast-feeding is now universally recognized as the basic human right of all newborn infants and their mothers. In spite of the unique qualities of breast-feeding there has been a steep decline of this practice since the 1950s. The trend to replace breast-feeding by artificial feeding in the industrially developed countries, using breast-milk substitutes manufactured in these countries, rapidly spread to the developing world, with tragic results. During the 1960s and 1970s, artificial feeding among economically disadvantaged groups living in unhygienic circumstances, especially in urban slums, brought about a steep increase in infant and childhood morbidity and mortality, with gastroenteritis and malnutrition being the major killers.

In 1978, WHO, in collaboration with UNICEF, several NGOs, and all the Member States, developed a global strategy not only to halt this decline but to promote, protect, and support breast-feeding and, thus, to ensure adequate and balanced infant nutrition. Several innovative approaches have been taken towards the attaining of these objectives,

of which the International Code of Marketing of Breast-milk Substitutes and the Baby-Friendly Hospital Initiative (BFHI), spearheaded by UNICEF, are two important approaches. Countries in both the developed and developing world, assisted by NGOs, have also taken numerous measures to create mass awareness through mass media.

While the MCH programme provides adequate support during prenatal, intranatal, and postnatal periods, promotion of lactation is more or less perfunctory dissemination of some messages on dietary needs in lactation and advantages of breast-feeding. Properly trained and oriented MCH workers have great potential in the promotion of breast-feeding, a practice which, unfortunately, is not widespread. At the national level, the MCH programme is responsible for growth-monitoring of children, control of diarrhoeal disorders, immunization of infants and children, and education of mothers for better child care. All these vital measures are individually and collectively linked to breast-feeding. In fact, promotion of breast-feeding is a vital component of each of these measures. It is logical that the MCH programme should, therefore, bear the major responsibility for the promotion of breast-feeding. What is needed is a careful review of the weaknesses and shortcomings of the existing programme and the development of a strengthened strategy. It is precisely for this reason that the intercountry consultation was convened.

Mr A. Roberfroid, UNICEF representative in the Islamic Republic of Iran, addressed the participants and briefly described the achievements in the Islamic Republic of Iran towards the objective of promoting and protecting breast-feeding. The National Plan of Action, launched in 1993, has the target to increase the number of breast-fed infants for up to two years from 65% to 85% by 1994. Thousands of infants and children in the Islamic Republic of Iran die every year as a result of malnutrition, infectious diseases, and dehydration as a result of diarrhoea, and this tragic situation could be prevented by breast-feeding and timely introduction of complementary foods.

Mr Roberfroid listed the recent global events emphasizing the promotion of breast-feeding as a right of infants and their mothers. In 1990, the Convention on the Rights of the Child emphasized the legal obligation of states to provide mothers with the knowledge of and support to breast-feeding. The Innocenti Declaration framed by policy-makers in a meeting convened by WHO/UNICEF with representatives of many countries, including the Islamic Republic of Iran, strongly recommended promotion and protection of, and support to, breast-feeding. The World Summit for Children, while adopting the Innocenti Declaration, strongly recommended "empowerment of all women to breast-feed their children exclusively for four to six months and to continue breast-feeding with complementary food well into the second year". The BFHI is a remarkable step towards promotion of breast-feeding.

# The unique qualities of breast-feeding

## Breast-feeding in Islam

The Koran mentions rules governing breast-feeding and even governing the relationship between the infant and the wet-nurse (i.e. when a mother is unable for a certain reason to breast-feed her child and hires a wet-nurse to breast-feed it). For example, it says:

*The mothers shall give suck to their offspring for two complete years, for those who desire to complete the term. Sura II, Al-Baqarah, verse 233*

From the previous verse, it is apparent that it is the duty of the mother to breast-feed her child and not to deny it the right of benefiting from and enjoying breast milk, and for those who wish to complete the term, the breast-feeding period is two complete years.

It is also mentioned in the Koran:

*If they both decide on weaning, by mutual consent and after due consultation, there is no blame. Sura II, Al-Baqarah, verse 233*

Thus, weaning is allowed before completing the term (two years) on condition that this decision takes place by mutual consent between the father and mother and after they have both discussed the advantages and disadvantages of taking such a decision and how to provide good care for their child.

The father also should assist the lactating mother and provide the suitable atmosphere that she needs to be able to breast-feed her child. This demonstrates that Islam considers breast-feeding to be a major duty on the part of the mother and it should not be hindered by any additional work. Thus, it is evident how the rights of the lactating mother are specifically outlined in the Koran.

## Uniqueness of human milk

The uniqueness of human milk for babies has been known since time immemorial and its virtues in most developing countries are still untainted. The steady decline of breast-feeding in the developed world is indeed a major human tragedy. Unfortunately, this decline has also been observed among certain sections of populations, mostly urbanized, in the developing countries with disastrous results, especially concerning infant morbidity and mortality. While in developed countries breast-feeding is generally viewed as the aftermath of human reproduction, “an optional extra tacked on at the end

like the credits of a motion picture”<sup>1</sup>, in the developing world it is a way of life for the survival of the human species. However, breast-feeding has declined in the developing world due to two major reasons:

- The aggressive marketing strategies of multinational food industries
- An increasing number of women in urbanized societies joining the workforce.

Since 1978, the vigorous measures adopted by international agencies, notably WHO and UNICEF, in collaboration with countries and several NGOs have indeed been successful in halting this trend, most remarkably in the developed world. However, sustained action is still needed by the health sectors of all developing countries to stop the erosion of this practice. While discussing the relative merits of human milk and processed milk substitutes, Paul Gyorgi, Nobel Laureate paediatrician, once remarked that, “the two cerebral lobes of the brain of the most outstanding scientist in the world will never be able to produce a fluid, the virtues of which could be compared with the milk secreted by two mammary glands of the most ordinary woman.” The statement, made almost 40 years ago, still stands.

What is most important for health workers to do is to make mothers aware of the steps through which the special values of breast-feeding can be fully utilized for the benefit of the baby. It should, however, be noted that there are numerous misconceptions and lack of information about certain facets of infant feeding with mother’s milk, e.g. the duration of exclusive breast-feeding, timing and type of food supplements, and frequency of feeding. The entire spectrum of breast-feeding behaviour varies widely from one country to another, and even from one culture to another in the same country. It is important to collect reliable information about breast-feeding behaviour before appropriate messages can be developed for dissemination to mothers. Information is generally available about the overall pattern of breast-feeding, duration of breast-feeding, and the time at which food supplementation starts. However, equally important are the duration of exclusive and partial breast-feeding, time intervals between feeds, actual duration of individual feeding, pattern of night-time feeding, and details of the introduction of food supplements to replace breast-feeding.

## Advantages of breast-feeding

The human baby, like the offspring of other mammals, is born with a ready-made food supply and, therefore, breast-feeding is natural and instinctive. The milk of different animals is uniquely species-specific and its composition is adapted to the needs of the offspring. The low protein content of human milk is in keeping with the slow rate of growth of human infants as compared to other mammals.

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<sup>1</sup> Short RV. Breast-feeding. *Scientific American*, 1984, 250(4).

Breast milk is free from contamination and adulteration, is available at the desired temperature, and is easily digestible and, thus, suited to the needs of the infant. It is convenient, especially at night. By virtue of its anti-infective properties and freedom from contamination, breast-fed babies have a lower incidence of diarrhoea, respiratory infections, necrotizing enterocolitis, and consequent mortality. There is reduced risk of eczema and milk allergy in breast-fed babies. There is evidence to suggest that breast-fed babies are less likely to develop obesity, hypertension, and atherosclerosis in later life. Late-onset tetany, metabolic acidosis, and acrodermatitis enteropathica are limited to formula-fed babies. Breast-feeding ensures better postpartum involution of reproductive organs and affords some protection to the mother against breast cancer. As opposed to the conventionally held view, breast-feeding enables the mother to regain her pre-pregnancy figure because fat reserves laid down during pregnancy are consumed during lactation. Breast-feeding fosters close physical and emotional contact between the child and its mother. It gives satisfaction to the mother and generates a feeling of importance, indispensability, and motherliness. The economic benefits of breast-feeding to a developing country are obvious. A non-working mother, especially from a low socioeconomic group, should be encouraged to breast-feed her baby for additional economic and hygiene related reasons.

In summary, reviews of the recent literature show that breast-feeding can save more infant lives and prevent more morbidity than any other intervention strategy. Breast-feeding currently saves six million infant lives each year by preventing diarrhoea and acute respiratory infections alone, is responsible for between a quarter and a third of the observed fertility suppression, and can provide high quality nutrition at a fraction of the cost of high-risk substitutes. Breast-feeding is a natural resource that is too valuable to lose; to ignore it is to promote mortality, suffering, and personal and national economic stress.

## **Biochemical and physiological characteristics of human milk**

There are several biochemical, nutritional, and physiological differences between human milk and cows' milk. The whey protein in human milk is easily digestible and human milk lipase promotes fat digestion. The higher content of certain amino acids (cystine and taurine), galactolipids, and lactose in human milk promote faster development, maturation, and myelination of the human brain. The nutrients in human milk are more readily absorbed and better utilized due to higher biological efficiency.

## **Immunobiology of breast milk**

Human milk is not only best suited and specific for nutritional needs, it also boosts the host defences of the newborn. It is replete with immunoglobulin, cellular elements,

and non-specific humoral protective factors. Breast milk contains large quantities of IgA and IgM antibodies which are not otherwise available to a newborn baby because they do not cross the placenta. Some IgG immunoglobulins are also present in breast milk. The highest concentration of secretory IgA in any body fluid is found in colostrum. The high titre of antibodies present in the colostrum drops sharply over the first few days after delivery. By virtue of its composition, colostrum is best suited for the nutritional and protective needs of the baby. Thus, the baby should not be deprived of colostrum. Milk immunoglobulins provide the passive immunity to the sucking infant. Secretory IgA binds microorganisms and prevents their penetration into intestinal mucosa. IgA can also lyse certain enteric bacteria in the presence of complement and lysozyme. In addition to specific antibodies, human milk also contains non-specific humoral factors such as lysozyme, lactoferrin, and lactoperoxidase.

Human milk contains live cells to the extent of 1-2 million leukocytes/ml. Macrophages make up to 90% of the white cells while 10% are lymphocytes with equal distribution of B and T cells. Macrophages offer a primary line of defence against many pathogens. The majority of colostrum B cells differentiates into IgA-secreting plasma cells similar to B cells of mucosal sites and most of the antibodies elaborated by them are directed against enteric and respiratory pathogens. There is evidence to suggest that cell-mediated immune response following BCG vaccination is better in breast-fed babies as compared to top fed infants. Breast-fed babies have also been shown to have reduced risk of lymphoreticular malignancy in later life.

## **Breast-feeding and the HIV status of the mother**

Recently, concern has been expressed regarding the risk of transmitting HIV from an infected mother to her child via breast milk. WHO held a consultation on this issue in June 1987 in which all the scientific evidence was reviewed and it was recommended that, generally, breast-feeding should continue to be the feeding method of choice, irrespective of the mother's HIV status. The benefits to the baby outweigh the risk of becoming infected from a virus excreted in breast milk. However, the US Centers for Disease Control and Prevention and the UK Department of Social Security have recommended that HIV-positive women should not breast-feed.

## **Duration of exclusive breast-feeding**

Clinical, epidemiological, biochemical, and metabolic studies have provided conclusive evidence that an infant's nutritional requirements can be fully met by mother's milk for up to four to six months after birth. To introduce any supplements within this period is not only unnecessary but also risky since food in an unhygienic environment can introduce gastrointestinal infection. The best way to check whether

the mother's milk is meeting the nutritional needs of the infant is to follow, by regular weighing of the infant, its growth curve on a growth chart. Food and personal hygiene are of utmost importance in this period of the infant's life.

It is advisable to get the full benefits of mother's milk for as long as possible. For this purpose, additional foods should be offered to the infant only after full suckling at the breast. In other words, **additional foods should not replace breast-feeding**. With the passage of time, as the secretion of breast milk gets gradually reduced, an increasing amount of additional foods will be consumed by the infant.

Continued breast-feeding and gradual weaning with appropriate foods will have a three-fold effect:

- The infant will continue to get mother's milk for as long as the mother can secrete. The milk, containing protein of high biological value, will complement the protein of staple foods, e.g. cereals, pulses and tubers, even when the quantity of milk is small.
- The transition foods could be mainly cereals, beans, and tubers with high energy density which the infant will need in increasing amounts. This is the usual food supplements of socially and economically deprived populations.
- Continuation of full and frequent suckling for at least six months will induce a longer period of lactational amenorrhoea.

## Breast-feeding and fertility

The role of breast-feeding in controlling female fertility in the postpartum period, though commonly mentioned in all cultures since antiquity, does not get adequate recognition and is commonly regarded as old-fashioned advice. Recent renewed interest in this particular role of breast-feeding has led to a large volume of epidemiological and demographic studies which clearly indicate that breast-feeding in developing countries, especially among the lower economic groups, has a much greater role in preventing conception than any artificial contraceptive. **Globally, breast-feeding prevents more conception than that prevented by all other forms of contraceptives together.** Its role is particularly important in populations which have no access to any type of family planning methods or which have an objection to the use of artificial contraceptives.

# Breast-feeding trends

## Global breast-feeding trends

The decline in breast-feeding started in most industrialized societies in the 1930s. Certainly some women deliberately choose not to breast-feed, for a variety of reasons, psychological as well as practical, but many give up despite an early desire to breast-feed. Many others are undecided when they give birth, but are discouraged when difficulties arise. If they receive inappropriate advice and inadequate support (or none at all), they give up the attempt. The decline is partly due to the change from home to hospital delivery and, to a certain extent, the fault lies in the routine of the maternity wards. Infants are separated from their mothers from between several hours and a couple of days. Delay in rooming-in has negative effects on initiation of breast-feeding, as well as on sustaining the process. In addition, many mothers may lose confidence in their ability to breast-feed after initial difficulties. Infants are often given to their mothers to feed at fixed intervals from three to six times a day, depending on the particular routine and staffing of each ward. Normal infants are highly individual in their requirements and scheduled feeding greatly upsets their dietary pattern and intake. In the first weeks of life especially, they may need anything from between 4 and 16 feeds a day. However, it has now been clearly demonstrated that if mothers are taught about this, many more will breast-feed their infants.

During the last three decades, intensive campaigns have been mounted at global and national levels promoting breast-feeding and highlighting the dangers of artificial feeding. These campaigns have been vigorously put into force in the developed world, creating numerous NGOs in support of these movements.

Recent data from several industrialized countries show an encouraging trend. Both the percentage of mothers who are breast-feeding at different times after delivery and the average duration of breast-feeding are significantly increasing. In Uppsala, Sweden, for instance, the number of mothers breast-feeding for six months or more has risen from 2% in 1972 to 34% in 1978. In Australia, Scandinavian countries, the United States, and in many developing countries, mothers have formed groups, members of which support and advise each other about practical matters related to breast-feeding. As yet, most of the women who join these groups are from the educated elite, where the increase in breast-feeding has been most marked. However, the trickle down effect is now becoming perceptible among other socioeconomic groups in these countries.

The causes of the decline in breast-feeding in developing countries are not the same as in industrialized societies, although there are parallels. In many developing countries,

the decline is more acute. Here, bottle-feeding has been adopted first by elite urban women, whose education and lifestyle are similar to those of women in industrialized societies. Many poor women change to bottle-feeding, encouraged by the example of the elite, but with disastrous consequences.

With the present dramatic increase in urbanization all over the developing world, millions of people are giving up their traditional rural way of life. Societies are experiencing profound cultural upheavals with changes in attitudes toward the family and in the traditional support system available in the family milieu. Traditional knowledge about solving breast-feeding problems is often lost and feeding bottles and powdered milk are readily available. A number of other factors have also contributed to the decline in breast-feeding. Important ones include:

- Commercial pressures (techniques of marketing baby foods)
- Practical problem for working women who cannot fit urban working schedules around the demands of breast-feeding
- Women's confidence to breast-feed is being eroded and their attitudes about the quality, quantity, and virtues of breast milk are not being strengthened in the urbanized way of life
- Health personnel are ill-informed about breast-feeding and, hence, unable to support mothers.

### **Present status of breast-feeding: prevalence and trends**

Scientific studies confirm the importance of breast-feeding for MCH and infant survival. In order to launch a global effort in support of breast-feeding, it is necessary to understand the current prevalence and trends, as well as implications of creating change. Essentially, there are three issues related to breast-feeding and weaning: duration of exclusive breast-feeding, total duration of breast-feeding, and the age at which appropriate complementary foods are introduced.

Results from WHO studies in different periods and the 1986-89 demographic and health surveys (DHSs) show that the percentage of babies who have been breast-fed at some point is high in all WHO Regions studied: 98% in Africa, 96% in Asia, and 90% in South America. However, although there is relatively little geographical variation in the initiation of breast-feeding, large variations are apparent in its duration. Breast-feeding is continued longest in Africa and South-East Asia but there are substantial variations within countries and Regions. In South-East Asia, the average duration of breast-feeding is 14 months but many women stop as early as three months. DHS and World Fertility Survey (WFS) data from 11 countries show that, although most babies are breast-fed for some part of their life, the duration of breast-feeding has not increased

overall. However, the median duration is still longest in the African and South-East Asian Regions and lowest in the American and European Regions.

While data on the total duration of breast-feeding may appear favourable, they do not necessarily reflect the duration of optimal feeding, which is full or exclusive breast-feeding through the first four to six months, the pattern most relevant to child survival. Suboptimal breast-feeding, i.e. partial or token breast-feeding with early weaning to formula milk, is still the norm in most countries. DHS data obtained between 1986 and 1989 in 24 developing countries clearly show that optimal behaviour, i.e. exclusive breast-feeding up to four months of age, is often rare.

The prevalence of breast-feeding in the EMR is similar to that reported for the African Region. Initiation of breast-feeding is high, but there is decline in breast-feeding prevalence with a marked shift from exclusive to partial breast-feeding in the first three months. Various data from Morocco, Pakistan, and Tunisia show that only 46%, 12%, and 13% of infants respectively were receiving exclusive breast-feeding at four months although initiation was at birth in almost all cases.

Data from the European Region show an overall trend towards an increase in breast-feeding, beginning in the mid-1970s. The incidence of breast-feeding varies from between 95% in the Scandinavian countries to 35% in Ireland. However, the percentages fall quickly after birth. On average, not more than half of the infants initially breast-fed are still being breast-fed at six months. Breast-feeding prevalence at six to twelve months is also very low in this Region.

Breast milk constitutes an important source of infants' food in the South-East Asia Region. The duration of breast-feeding seems to be similar to that observed in the African Region, frequently 20 months or longer. However, some studies show the median duration has declined by about two months over the past 10 years, but varies significantly with place of residence. More recent studies from Bangladesh, India, and Thailand indicate that bottle-feeding is increasing and exclusive breast-feeding is decreasing in both urban and rural areas, but more so in the former.

Generally, in developing countries, the proportion of breast-fed infants is higher in rural areas and among the low income urban groups than among high and middle income groups in urban areas. However, socioeconomic, rural, and urban differences in breast-feeding initiation and duration have narrowed slightly over the last two decades. In the 1970s, breast-feeding was more common in rural than in urban areas, but by the mid-1980s this difference was less obvious.

Failure to give newborn infants colostrum is another common example of suboptimal breast-feeding practices. Colostrum is high in immunoglobulins and a number of other protective factors of great benefit to newborn infants and even to the pre-term infant.

However, in many countries, colostrum is discarded or pre-empted by glucose water, breast-milk substitutes, or traditional mixtures.

There has been a noticeable improvement in the prevalence and duration of breast-feeding in a number of industrialized countries where a combination of public education, social support, and a greater awareness on the part of health care workers has made breast-feeding both more attractive and more feasible. However, these increases started from a very low baseline in the 1950s and 1960s. In contrast to developing countries, in industrialized countries extended breast-feeding is more common among educated, economically advantaged mothers. Breast-feeding prevalence is higher in cities than in rural areas in many developed countries. This increase may simply be due to more access to breast-feeding information in general, and lactation management in particular.

In many developing countries, a large proportion of the population is becoming urbanized, the traditional family structures are breaking down, and an increasing number of women are entering the labour force. All of these circumstances seem to result in a decline in breast-feeding similar to that observed in industrialized countries earlier this century. The overall trend is towards bottle-feeding with early supplementation and a slight decline in the total duration of breast-feeding.

In summary, global trends show reasonably high initiation rates of breast-feeding in all regions of the world. However, there is a uniform trend of decline in optimal breast-feeding practices among the disadvantaged in the developing world, for whom breast-feeding can make a difference of life and death. Exclusive breast-feeding, which is considered the optimal breast-feeding pattern for the first six months of life, is rarely practised. In fact, it has actually declined in four countries where comparison is feasible on the basis of DHS and WFS data (Ghana, Kenya, Senegal, and Tunisia). In these countries, the vast majority of infants receive supplements far too early, with risks of exposure to pathogens, poor nutritional content of the supplement, increased maternal fertility, and reduced breast milk supply. Such suboptimal practices have negative consequences for the immediate and long-term health of both mother and child.

# The leading role of the health care system

The major obstacles to breast-feeding to be addressed include: a mother's lack of confidence in her ability to breast-feed and the lack of practical skills to do it successfully; cultural beliefs and taboos surrounding breast-feeding; the poverty image surrounding breast-feeding and the belief that bottle-feeding is modern and a mark of social status; availability and marketing of breast-milk substitutes and bottles and their misrepresentation as a desirable alternative to breast-feeding; and the urbanization and economic transition with the associated breakdown in the traditional support system that has altered families attitudes towards breast-feeding.

From the situational analysis given previously it is obvious that there is a uniform trend of decline in optimal breast-feeding practices among the disadvantaged in the developing world. To break the barriers mentioned above, there is a need for aggressive measures to protect, promote, and support breast-feeding.

Traditionally, the health care system is considered the main participant in issues related to breast-feeding. However, the role of other partners has now become increasingly important to promote, protect, and support breast-feeding, especially when maintenance of breast-feeding behaviour is required. Breast-feeding as an issue has social as well as individual implications. In fact, experiences from countries around the globe amply indicate the relevance of making intersectoral alliances to protect, promote, and support breast-feeding.

## The health sector's special approaches

The following approaches are being tried through the health sector to promote, protect, and support breast-feeding:

- MCH and PHC programmes through the health care system
- The Baby-friendly Hospital Initiative
- The International Code of Marketing of Breast-milk Substitutes.

While, for administrative purpose, various components of MCH programmes are quite often placed under different programmes, e.g. immunization, control of diarrhoeal disorders (CDDs), breast-feeding promotion is actively sponsored by these components. In fact, promotion of exclusive breast-feeding is an important objective of a CDDs programme, as is intensive training of health workers for the promotion of breast-feeding.

The PHC programme, which is an all-embracing programme at the most peripheral level, has already accepted breast-feeding promotion as a priority task of all workers, especially female workers.

### **Promotion of breast-feeding through the health care system, particularly the MCH programme**

The organized maternity care system has a vital role in the initiation and maintenance of behaviour related to infant care. Although women report that discussions regarding infant feeding are usually made prior to a pregnancy and are generally based on advice from family or peer women, the extent to which hospital personnel and hospital routines foster or discourage breast-feeding among new mothers is one of the principal determinants of the rate of initiation of breast-feeding. Although in many countries only a minority of births may occur in a medical centre, the direct and indirect messages given to the mothers in this setting and the mode of feeding there will be highly regarded and frequently emulated. In the present programme organization, MCH personnel provide support during the prenatal, natal, and postnatal periods. The measures for the promotion of lactation are more or less perfunctory, consisting of disseminating some vague messages.

Successful maintenance of breast-feeding is most likely to occur when optimal breast-feeding is a socially and medically supported norm, or when there is support to overcome any obstacle to this behaviour. Postpartum health care practices are also known to influence the duration of breast-feeding.

To effectively utilize the protective, promotive, and supportive potential of MCH workers in breast-feeding, changes are necessary in maternity services and subsequent MCH care services. The changes that are necessary for a health care service to become "breast-feeding friendly" may vary according to the geographical and cultural setting, the type of service provided, and the skills of the health care workers. In settings where good breast-feeding practices are still prevalent, the changes needed are primarily those that eliminate obstacles. Where breast-feeding practices are rare, the intervention must not only eliminate obstacles, but also restore the support system. Universally, exclusive breast-feeding behaviour must be reinforced and supported.

PHC for infants during the early months generally includes control of infectious diseases, especially diarrhoea. During the same period, the mother may come in contact with family planning services. Each of these contacts carries with it the opportunity to protect, promote, and support breast-feeding. Promotion of exclusive breast-feeding for prevention of diarrhoeal disorders, a major killer of infants, is an activity of highest priority for workers responsible for CDDs.

To promote breast-feeding and to counteract practices that discourage breast-feeding in hospitals, some aspects of hospital care require modification. Similarly, in the PHC setting, prospective mothers require support and encouragement from health workers to breast-feed. These can be effectively achieved by personnel training, rooming-in instead of separation of mother and infant, and elimination of bottle-feeding.

## **The Baby-friendly Hospital Initiative**

Two recent steps have been taken by WHO and UNICEF in assisting countries in the promotion of breast-feeding, the BFHI is one of them.

UNICEF is working towards the mid-decade goals of achieving protection, promotion, and support of breast-feeding and the BFHI. The mid-decade goals are:

- Ending and preventing distribution of free and/or low-cost supplies of breast-milk substitutes in all hospitals and maternity facilities
- Having target hospitals and maternity facilities achieve baby-friendly status in accordance with BFHI global criteria.

The strategy to end the distribution of breast-milk substitutes in all hospitals and health care facilities is through advocacy, legislation, monitoring, surveillance, and medicalization. In order to make target hospitals baby-friendly, it is necessary to target:

- All hospitals and maternity facilities that have a substantial number of deliveries
- All hospitals with a teaching role, e.g. university hospitals
- All government-controlled hospitals, representing the most popular health facility in the area, providing both obstetric and paediatric care.

The BFHI ensures that all hospitals, maternity centres, and health centres are prevented from promoting artificial feeding with the use of breast-milk substitutes and, at the same time, ensures comprehensive training of all institutional staff in breast-feeding promotion.

The joint UNICEF/WHO statement on breast-feeding (WHO, 1989) lists 10 steps to successful breast-feeding, of which at least six are relevant to personnel development. These steps state that each maternity unit should:

- Have a written breast-feeding policy
- Train all staff
- Inform all pregnant women about the benefits and management of breast-feeding
- Help mothers to initiate breast-feeding within half-an-hour of birth
- Show mothers how to breast-feed
- Foster establishment of breast-feeding support groups.

The 10 steps also include two directives related to rooming-in:

- Practise 24 hour rooming-in
- Encourage breast-feeding on demand.

There are two steps related to alternate suckling:

- Give newborn infants no other food or drink, unless medically indicated
- Use no artificial teats.

The Innocenti Declaration on the BFHI states that, as a global goal for optimal MCH and nutrition, all women should be enabled to practice exclusive breast-feeding and all infants should be fed exclusively on breast milk from birth to four to six months of age. The attainment of the Innocenti Declaration goals and the achievement of the BFHI objectives require commitment and advocacy for social welfare at the highest level and unstinted support of political, community, and religious leaders.

There is, however, a need to ensure that health facilities accepting BFHI designation continue to take steps to promote, protect, and support breast-feeding. In addition, several health care professionals caring for children feel that the title of the initiative gives the impression that facilities without BFHI designation are unfriendly to babies, although in reality they take care of the babies just as well as BFHI facilities.

## **The International Code of Marketing of Breast-milk Substitutes**

The International Code of Marketing of Breast-milk Substitutes was adopted by the World Health Assembly in 1983. The main objective of the Code is the protection and promotion of breast-feeding (Article 1 of the Code). Breast-feeding provides the ideal food for the healthy growth and development of infants, and the anti-infection properties of breast milk help to protect infants against disease. The Code recognizes that the use of breast-milk substitutes may become necessary when mothers cannot breast-feed or only do so partially, though it warns about the health hazards of unnecessary or improper use of such substitutes.

In order to achieve its objective, the Code contains the following principles:

### **1. Prohibition of advertising and promotion of breast-milk substitutes**

The Code does not permit the advertising and any other form of promotion of breast-milk substitutes and other products covered by it to the public (Article 5.1). This prohibition is general and applies to advertising through television, newspapers, and other mass media. The reason for this prohibition is to prevent the temptation to use breast-milk substitutes and to remove anxiety and doubt in mothers, which undermine the production of human milk.

## **2. Prohibition of giving samples**

The Code bans the giving of samples of breast-milk substitutes and other products covered by it, directly or indirectly, to pregnant women, mothers, or members of their families (Articles 5.2 and 3). The rationale for this ban is to discourage the prevalent practice of giving samples to induce mothers to use such products for feeding their infants, instead of breast-feeding them.

## **3. Ban on giving gifts and other inducements**

This principle covers several aspects, such as the ban on gifts of articles or utensils (Article 5.4); the restriction on donations or low-price sales of supplies of breast-milk substitutes to institutions or organizations (Article 6.6); the offering of financial and material inducements to health workers or members of their families (Article 7.3) e.g. the giving of money, medical equipment, paying for conference attendance or giving travel funds; and disallowing the use of bonuses as sales incentives for the marketing personnel of manufacturers and distributors of breast-milk substitutes (Article 8.1). These marketing practices have often been used to promote the use of breast-milk substitutes. Article 2 lists the products covered by the Code. Resolution WHA47.5, adopted by the World Health Assembly on 9 May 1994, disallows donations of free or subsidized supplies of products covered by the Code to any part of the health care system (paragraph 2.2 of the resolution).

## **4. Information and education**

The Code puts the responsibility for the provision of consistent and objective information on infant and young child feeding on the shoulders of governments (Article 4.1). It also requires that certain items are included on any informational and educational materials, whether they are written, audio, or visual, such as the benefits and superiority of breast-feeding and the difficulty of reversing the decision not to breast-feed (Article 4.2). The Code aims at independent and objective information, so that the mother, or mother-to-be, can decide, without influence, how to feed her infant.

## **5. Encouragement and promotion of breast-feeding by health authorities**

The Code enjoins the health authorities in Member States to take appropriate measures to encourage and protect breast-feeding (Article 6.1). It is for Member States to define those measures. When the Islamic Republic of Iran, Iraq, Morocco, and the Syrian Arab Republic prepared national legislation to implement the Code, they provided for the training of health workers on breast-feeding, maternity leave, and breast-feeding facilities at the work place as part of these measures. The Code also bans the use of health care facilities for the promotion of products covered by it (Article 6.2). Moreover, health workers are called upon to encourage and protect breast-feeding (Article 7.1). This may take the form, for example, of encouragement by gynaecologists to pregnant women to breast-feed and warnings about health risks from the improper use of breast-milk substitutes.

## 6. Consumer protection

The Code recognizes that breast-milk substitutes may be necessary in certain situations. Therefore, it insists on a degree of protection for the consumer through labelling requirements (Article 9.2), which include the composition, storage conditions, and the date of expiry of breast-milk substitutes, (Article 9.4), and the requirements of the Codex Alimentarius Commission's standards (Article 10.2).

## 7. Implementation of the Code

This is the responsibility of Member States and could be achieved by the adoption of legislation, regulations, or other appropriate methods, in the light of the social and legislative framework of the State concerned (Article 11.1). Any implementation of the Code should be as "a minimum requirement", and it should be "in its entirety" (Resolution WHA34.22, tenth preambular paragraph). The most important condition for the implementation of the Code by a Member State is the political commitment to protect, promote, and support breast-feeding. The political commitment could be started, stimulated, and advanced by professional groups, women's organizations, consumers' organizations, NGOs, and individuals.

The implementation of the Code is a very important measure for the promotion and protection of breast-feeding. It requires an appropriate monitoring system (Article 11.2) and adequate sanctions, in order to ensure compliance with the national legal instrument giving effect to it.

The Code is a set of recommendations for industry, health workers, and governments to regulate the marketing practices used to sell products for artificial feeding that compete with breast-feeding. The Code includes 10 important provisions:

- No advertising of any of these products to the public
- No free samples to mothers
- No promotion of products in health care facilities, including the distribution of free or low-cost supplies
- No company sales representatives to advise mothers
- No gifts or personal samples to health workers
- No words or pictures idealizing artificial feeding or pictures of infants on labels of infant milk containers
- Information to health workers should be scientific and factual
- All information on artificial infant feeding, including that on labels, should explain the benefits of breast-feeding and the costs and hazards associated with artificial feeding
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies

- Manufacturers and distributors should comply with the Code's provisions even if countries have not adopted laws or other measures.

## **Other partners**

Intersectoral alliance-building to encourage and support breast-feeding includes political and legal support, partnership between government, NGOs, and professional bodies, education and human resources development, and participation of the ministries of agriculture and social welfare. There are many examples from countries demonstrating intersectoral alliance-building to promote breast-feeding and some NGOs and community support groups have achieved spectacular success in the promotion of breast-feeding. Member States, in many instances, have enacted legislation and established intersectoral groups or committees to overview and monitor progress. As part of a national programme for breast-feeding and promotion, there are examples from many countries in which an NGO or a national committee publishes newsletters ("Letters to Mothers") which are widely disseminated to create general awareness.

These are some of the examples of intersectoral alliance-building to promote, protect, and support breast-feeding. It is obvious that without a high priority widespread national movement, it will be difficult to reverse the damaging trend of the past. No government sector or any particular agency or organization by itself can succeed in this movement unless a national well-planned strategy is enforced. The health sector has indeed a spearheading role in advocacy of breast-feeding and in its implementation through a number of approaches.

# **National policy on breast-feeding**

## **The need for a national policy**

Due to the uniqueness of mother's milk for the survival and development of a newborn infant and the singular advantages of breast-feeding, governments in both developing and the developed world have taken ad hoc measures for the promotion of breast-feeding. As mentioned earlier, various factors which have caused a rapid decline in breast-feeding throughout the world are now being tackled and there is universal acceptance of breast-feeding. By and large, the health sector has been responsible for this promotive approach in which international and bilateral NGOs have provided unique support. To effectively address the issue, partnerships have to be forged and strengthened with other partners, mother's and women's groups, women and child welfare sectors, professional bodies, communication and media professionals, parliamentarians, decision-makers and administrators, and those involved in education, agriculture, NGOs, social service clubs etc. It should be noted that each sector has a specific role in promotive measures. A common occurrence is the duplication of efforts.

There is a general consensus that there should be a national policy for the promotion of breast-feeding without which these ad hoc measures will remain uncoordinated and might cease at any moment due to pressures of other activities and setting of other priorities. For this goal to be realized, all partners need an opportunity to come together, confer, collaborate, and coordinate activities so that their combined efforts lead to sustained success. In addition, there is a need to expand the network to include newer sectors and different disciplines, which, with a fresh approach and different insights, can together help realize the goal of universal exclusive breast-feeding for the first four to six months, followed by optimum weaning practices.

A national policy of breast-feeding promotion, which clearly sets out the role of the different sectors of the government and NGOs in such promotive action, should be formulated at the highest administrative level. The policy should establish the major objectives and indicate targets on a time frame which could be monitored on a continuing basis. Experience over the years has shown that national policy remains a government document unless it is put into practice. There should be an overseeing body to monitor policy implementation, as well as providing directives to the different partners. The policy should be supported by a national coordinating body with representatives from various government sectors, including those from NGOs, and political, religious, and social organizations.

## **Nongovernmental organizations**

NGOs deserve a priority position among all those engaged in the promotion of breast-feeding. In fact, the dangerous decline of breast-feeding in the developing world and its disastrous impact on child health was brought to public attention by NGOs. Since 1978, they have been at the forefront of the global struggle to bring breast-feeding to its logical place in the mother-baby relationship and to resist all “invasions” to reverse this situation. In fact, globally, NGOs have made spectacular achievements in creating awareness among mothers regarding the uniqueness of breast-feeding, dangers of artificial feeding with breast-milk substitutes, and undesirable advice of medical and influencing professions in the promotion of artificial feeding through hospital and maternity centres. NGOs are also acting as global monitors for the implementation of the International Code of Marketing of Breast-milk Substitutes. Any effort by governments in the promotion of breast-feeding will be incomplete unless the efforts of active NGOs are included.

## **Sectoral responsibilities**

These sectors include:

- Health
- Commerce and industry
- Social welfare
- Education
- Legal affairs
- Parliamentarians and politicians
- Women’s organizations
- Religious affairs
- Labour
- International organizations.

## **Health sector**

The overall role of the health sector has been described in the previous section. Its specific responsibility is to promote breast-feeding through the MCH programme in the national health care system. In this approach, the PHC system should play an essential part among the vast rural population, especially in developing countries.

The spearheading role of the health sector will be that of advocacy and sensitizing other government sectors which are vitally concerned with the trends of declining breast-feeding prevalence, e.g. production and role of breast-milk substitutes being the concern of commerce and industry, advertisement of such products in the mass media sector,

enforcement of the provisions of the Code through the legal affairs sector and other areas, some of which are stated hereafter.

The other responsibility of the health sector is to impart training to all health care workers in order to create awareness among mothers and mothers-to-be about the advantages of breast-feeding and the dangers of artificial feeding.

### **Commerce and industry**

The International Code of Marketing of Breast-milk Substitutes, initiated by WHO, is specifically geared towards any promotive measures for the marketing of breast-milk substitutes, including its advertisement through various media.

### **Social welfare**

There is a constant need to inform people and those who can influence policy-makers of the potential damage that lack of breast-feeding can cause to the health of infants. The roles of women's groups, communication experts, and the media become very important. In addition, professional organizations which work with children can be the most powerful and credible advocates in this cause.

### **Education**

Schools and colleges also have a role in creating early awareness of the virtues of exclusive breast-feeding and the dangers of artificial feeding. Appropriate curricula for all students in schools and colleges have to be made.

### **Legal affairs**

The formulation of a code to regulate the marketing of breast-milk substitutes needs close collaboration with the sector dealing with legal affairs. The health sector, responsible for the code, will have to closely interact with the legal affairs sector. The enforcing of the code will similarly need legal expertise. Promulgating appropriate maternity leave to enable breast-feeding for as long as possible needs legal assistance.

### **Parliamentarians and politicians**

Parliamentarians and politicians obviously have a great influence on government policy. They lend credibility and patronage, once associated with an issue like breast-feeding. Administrators can influence policy through strategic reiteration of the need for enabling laws to sustain breast-feeding.

## **Women's organizations**

Breast-feeding should be considered as a basic right of all mothers and, similarly, a fundamental right of every newborn infant to start life on mothers' milk and to continue to have it until it is mature enough to have other foods. Women's organizations, properly briefed by the health sector, can play an important role in campaigns against artificial feeding. These organizations are also active partners with powerful NGOs in the country and can complement and supplement their efforts.

## **Religious affairs**

Mother's milk is recognized in all religions as essential for the survival of the infant. Similarly, prolonged breast-feeding is recommended for proper development of the infant. The Koran, for instance, recommends two years of breast-feeding. Enlisting religious leaders in campaigns for promotion and protection of breast-feeding will go a long way in obtaining public support. Their statements during religious meetings will create considerable impact in creating mass awareness.

## **Labour**

An increasing number of women are now working outside their homes. To provide facilities for bringing their infants to work sites and allowing them to breast-feed needs a clear-cut policy of the labour sector of the government.

## **International organizations**

Since 1978, WHO and UNICEF have taken numerous steps in collaboration with the countries to promote, protect, and support breast-feeding. The International Code of Marketing of Breast-milk Substitutes and the BFHI are two examples. In recent years, several patterns of training courses have been developed for the training of all levels of health workers, with special focus on lactation counselling.

## **Intersectoral steering committee for the promotion of breast-feeding**

Any policy statement of the government has to be put into operation otherwise it is just merely a document without any force. It is very often stated that it is easy to formulate a policy but what is difficult is its implementation, which needs simultaneous coordinated action by several sectors of the government and NGOs. Implementation is only possible if the government establishes an intersectoral coordinating body for this purpose. It is absolutely essential that all concerned sectors of the government, NGOs,

representatives of major political bodies, religious leaders, and representatives of professional organizations of doctors and nurses should be represented in the intersectoral coordinating body.

The location of the coordinating body is also of great importance since the level of representation of the sectors very often depends on the location of the secretariat of an intersectoral coordinating committee. To cite an example, if the coordinating body for breast-feeding is located in the office of an NGO, the representation from the government sectors will not be at a high level. There are many examples to indicate that such national coordinating bodies function effectively with a high level of representation from concerned sectors, if the chair and the secretariat are held by members of an important ministry of the government, or even better, by the prime minister's secretariat. The ministry of health or the ministry of social or women's welfare can be extremely effective in taking the responsibility of coordinating the activities of all concerned. The first lady of the country can also be very effective in holding the chair of a national coordinating committee for breast-feeding.

It is obvious that the coordinating committee will have several specific functions. It will:

- Exchange information regarding the responsibility of each sector in the promotion and protection of breast-feeding
- Formulate a plan of action specifying what each sector, NGOs, and other representatives can do
- Prepare for each sector a set of targets with a time frame
- Set up a monitoring process through which the coordinating committee can monitor how the responsibilities of each sector are being undertaken
- Formulate a mechanism through which the policy implementation could be evaluated at intervals, in order to make any modifications.

## **Public opinion**

Public opinion is the most important requirement in making positive changes towards breast-feeding. While there is a feeling among some mothers that breast-feeding is a natural and desirable process, other mothers feel no compulsion to feed the baby exclusively with mother's milk since there are good alternatives. Numerous surveys have been done among mothers in many cities and towns in the world which indicate that mothers in such situations do not regard artificial feeding dangerous if done with hygienic precautions.

The most important requirement in promoting and protecting breast-feeding is to create awareness among women and to strengthen this awareness with scientific facts in

simple terms. A number of NGOs are active in such mass awareness campaigns and they should be involved in the implementation of the government policy. For most developing countries, where female literacy is at a very low level, audiovisual media, e.g. television, are the best approach for mass awareness. In the EMR, several countries have already taken this approach. Well-prepared posters and other types of visual media have been made in some countries to create sustained interest among women about the unique character of human milk.

# Breast-feeding promotion through the MCH programme

## The unique opportunity of MCH workers in promoting breast-feeding

MCH workers can play a key role in the protection, promotion, and support of breast-feeding. Their presence at the time of delivery and their subsequent contact with mothers and infants provide them with unique opportunities to help mother and child establish and maintain lactation. Various studies have shown that if health workers' attitudes and practices are supportive, it is more likely that the mother will breast-feed successfully and for a longer period.

MCH programmes provide adequate support to the mother during prenatal, intranatal, and postnatal periods. At the national level, the MCH programme is responsible for growth-monitoring of children, control of diarrhoeal disorders, immunization of infants and children, and education of mothers for better child care. All these vital measures are individually and collectively linked with breast-feeding and, in fact, promotion of breast-feeding is an important component of each of these measures. In addition, the MCH worker is in a unique position to come into repeated contact with three important links in the chain of events leading to successful breast-feeding: the primary target, namely the mother-infant duo; family opinion leaders; and local community leaders. At each of these contacts, the MCH workers and other health workers can greatly encourage and strengthen breast-feeding practices. It is logical that MCH programmes should, therefore, bear the major responsibility for the promotion of breast-feeding.

Unfortunately, breast-feeding has been neglected in the training of most health workers, leaving a serious gap in both their knowledge and skills. Strengthening of training is urgently needed at all levels in up-to-date and effective breast-feeding management.

Orientation and training curricula for all MCH workers should include the following aspects:

- The uniqueness of human milk
- The importance of breast-feeding for survival and development of infants
- Dangers of artificial feeding
- The need for curbing use of breast-milk substitutes (the Code)

- Common causes of discontinuation of breast-feeding and measures to overcome these.

In addition, it should be stressed to all MCH workers that they communicate the following educational messages to all pregnant women during ante- and postnatal sessions:

- Importance of adequate dietary intake during pregnancy and lactation
- Unique qualities of breast-feeding
- Value of colostrum for initiating breast-feeding
- Value of exclusive breast-feeding
- Dangers of gastroenteritis resulting from the introduction of contaminated foods during partial or artificial feeding
- Value of prolonged breast-feeding, in spite of the quantity of milk being very little after 12 months of lactation.

## **Breast-feeding in maternity care services**

The MCH programme has a vital role in the initiation and maintenance of behaviour related to infant care. The extent to which health workers emphasize breast-feeding behaviour among prospective mothers is one of the principal determinants of initiation of breast-feeding and its continuation. Direct and indirect messages given to the mothers in this setting concerning methods of feeding will be highly regarded and frequently emulated.

Rooming-in arrangements in a maternity unit of a health centre, wherever they exist, have an important influence on breast-feeding. Separation of mother and infant for as short a period as six to twelve hours influences the initiation of breast-feeding and its continuity after discharge. In certain places, personnel may give different or even conflicting advice, which results in both mother and infant becoming confused or frustrated.

The use of bottles in nursing, or during the administrative separations, can create confusion for the infant; the infant's suckling position becomes variable and inefficient. The distribution of infant formula, often provided free of charge by hospital personnel or industry representatives, also conveys clear messages that it is the preferred method of feeding. Fortunately, free distribution of infant formula to peripheral health centres seems to have declined substantially during the last five to seven years, following the more effective implementation of the International Code of Marketing of Breast-milk Substitutes.

## **Breast-feeding in postnatal care of mother and infant**

Breast-feeding protection, promotion, and support must continue after maternity care if there is to be a continuation or augmentation of breast-feeding practices. There are several additional crucial periods during lactation when the health care system can serve as a positive or negative influence. Six crucial periods have been identified during lactation: antepartum, first 24 hours, 1-2 weeks, 6-8 weeks, 4-6 months, and up to 1 year. A seventh period, pre-conception, is also proposed. Key variables associated with lactation and maintenance have been identified for each of these periods. In each period, both the promotive and the curative services of the health care sector can play vital roles in giving support to and maintenance of breast-feeding. The health sector in its present position also has the potential to create obstacles.

## **Breast-feeding and diarrhoeal disease control programmes**

Surveys in a large number of countries in the developing world show that exclusive breast-feeding during the first four to six months is an infrequent practice. Water and tea are frequently offered to young infants from the first week of life. The intake of such supplementary fluids in young infants is associated with an increased risk of disease and in shortening the duration of breast-feeding. For example, the incidence and prevalence rates of diarrhoea in infants under six months of age in a poor urban community doubled with the addition of these fluids. A case control study of infant mortality in another country showed that infants who received water, tea, or juice in addition to breast milk were at increased risk of diarrhoeal death. Each additional feed with these fluids substantially increases the risk of death. Breast-fed children have reduced exposure to contaminated foods and fluids, thus protecting the infant in poor environmental conditions and among families with a low income and with other manifestations of poverty, e.g. literacy level or poor environmental sanitation.

Diarrhoeal disease control programmes have directed their activities aimed at protection, promotion, and support of breast-feeding as a major strategy to reduce diarrhoeal morbidity. These activities also contribute to the efforts of various infant care programmes that play a key role in promoting adequate nutrition among young children.

## **Breast-feeding, growth-monitoring, and nutrition**

Growth-monitoring at regular intervals is an essential task of the MCH worker. This is an excellent opportunity to interact with the mother regarding breast-feeding behaviour. Whenever two consecutive weights show a faltering or downward trend in growth, the mother should receive reinforced messages about breast-feeding and the

introduction of complementary foods. The following are the major points that the MCH should emphasize:

- For at least six months, breast-feed frequently, day and night, keeping the baby with the mother at night
- For infants over six months, breast-feeding should precede each supplemental feed
- The mother should take care of her own dietary intake and take sufficient quantities of fluid.

## **Breast-feeding and family planning**

Breast-feeding is recognized by demographers as one of the main determinants of fertility levels and is a principal factor influencing the length of the birth interval for couples in developing countries who do not use modern forms of contraceptive. Exclusive breast-feeding during the first six months after birth offers 98% protection against another pregnancy, as long as menstruation has not recommenced. After six months, the suppression of fertility is maintained as long as suckling is continued throughout day and night and without introduction of food supplements.

## **Advocacy role of MCH workers**

MCH workers get unique and repeated opportunities to interact and communicate with the primary target group, the mother-infant duo. The health sector must recognize that such an opportunity exists and ensure that all health facilities and workers are mobilized to promote breast-feeding during such interaction.

Decentralization is almost a prerequisite for achieving a sustainable impact of a public health programme. In this manner, priorities at the local level are expected to reflect local needs and their solutions. Health workers have a major role to play in their own community. They can participate in initiating contact between the community and other partners in issues related to breast-feeding. Local resources can be tapped efficiently. For example, the health workers can involve the village or tribe headman, the local religious leader, and women's groups to coordinate regular and periodic communication with families on breast-feeding.

## **Increased interaction between beneficiaries and the community**

The existing MCH services generally have high accessibility to the community. In order to make best use of this high accessibility, there is a need to redefine the role of

health workers and their institution, initiate dialogue, and start learning from the community.

PHC has identified the home and family as important partners in the achievement of its various goals. The more the families are involved in health affairs, the more they own it and it becomes sustainable. Knowledge available in homes concerning breast-feeding can be substantial. It has to be explained and matched with cultural and religious beliefs. Traditional birth attendants, community health workers, NGOs, and volunteers can all participate in ensuring the promotive role of homes and families in the breast-feeding issue.

## **Social preparation**

The first step is to start with sensitization of different participants, i.e. consumers (the mothers) and providers (MCH workers), to issues related to breast-feeding. Emphasis is laid in line with local traditions and the cultural setting. Orientation through continuous dialogue and a series of briefings may be necessary to complement the sensitization effort. MCH workers, as already pointed out, have this unique advantage of repeated contact with the consumers. Continuous dialogue initiates the process of community participation which is sustained and permanent in nature. Undoubtedly, social preparation is a time-consuming process. The time period needed may vary from one locality to another, depending on factors related to socioeconomic circumstances.

## **Consensus-building**

The process of social preparation is crucial for identifying the appropriate entry points and for putting these into action. Active partners have to be involved in this step of consensus-building for the programme to succeed. However, institutionalization of breast-feeding will require committed approval of all the partners, whether they are health workers (medical professionals, community health workers, traditional birth attendants, or other development workers), media personnel, or local and national political leaders. They all need to be trained, reoriented, and informed so that they become a constant resource to protect, promote, and support breast-feeding in their communities.

## **Training in lactation management**

### **The need for a fresh look at training**

A major reason for the decline of breast-feeding and the spread of artificial feeding is that the personnel engaged in both formal and informal health care have not received

adequate training in the practical aspects of lactation management and do not understand the needs of lactating women. Therefore, it is essential to develop and reorient professional training appropriately for health workers at all levels.

Advances in obstetric care have reduced obstetric risks but the associated medicalization of childbirth has led to the arbitrary adoption of practices such as separating the baby from the mother, scheduling feeding times, and giving the baby prelacteal formula feeds and glucose water. These practices were initially assumed to be beneficial but a large amount of data now exists that demonstrates, without doubt, the detrimental effects of these practices and shows them to be definite obstacles to optimal breast-feeding behaviour.

Lack of information and lack of support from health professionals, particularly physicians and nurses, for mothers who are considering, who wish to, or who are breast-feeding have been identified as major obstacles to successful breast-feeding. Although health professionals generally have positive attitudes towards breast-feeding, they are often misinformed about basic physiology and lack the skills necessary for the management of lactation. Health workers find it too easy to recommend bottle-feeding methods, even for trivial breast-feeding problems.

In most traditional societies, the traditional patterns and cultural behaviour relating to health and nutrition are deeply ingrained in the societal structure. Where so-called "modern" practices are thrust upon these traditional societies, the consumer (the mother in this case) gets confused and the result is often a detrimental influence on a beneficial practice. Traditional midwives, older women, and cultural practices regarding breast-feeding have a lot of wisdom that can be emulated and utilized effectively in MCH curricula. Unfortunately, the skills that promote and support breast-feeding in mothers have never been formally documented or taught. Efforts are necessary to collate this knowledge and incorporate it in the training manuals of MCH personnel at all levels. This will have the additional advantage of being based upon relevant region- and area-specific behaviour patterns.

To determine the focus and strategy of imparting lactation management training for health workers and mothers alike, behavioural studies to recognize women's beliefs and practices and the obstacles they face related to breast-feeding have to be carried out. Qualitative research is also required among health care providers and other individuals who influence a mother, such as her husband, another family member, or a neighbour. Indeed, the success of the whole reorientation process in training and communication of breast-feeding messages to mothers will be in the identification of key target groups, not only among women, but also among health care workers, and the tailoring of messages to each group. Success is unlikely if geographical variations are forgotten and region-specific guidelines not prepared.

A global outline of training curricula for health workers needs to be drawn up but the specific contents with regards to messages on breast-feeding, clinical skills to support optimal breast-feeding practices, and other subject-specific content have to be drawn from the knowledge gained from local studies.

### **National review of training for lactation management**

The establishment of both international and national programmes will give impetus to the development of a strategy for education and training in lactation management (based on the elements noted above) and will help to motivate governments or responsible organizations within countries to adopt such a strategy. At present, breast-feeding is only a peripheral concern of several other programmes and activities are uncoordinated and rarely go beyond health education messages advising mothers of the advantages of breast-feeding.

At the national level, each country should be urged to develop a national breast-feeding training programme. If there is a national breast-feeding coordinating committee, appropriate members of the committee should form an education and training task force to work with the national coordinator in developing a national strategy for education and training in lactation management. Groups and individuals who are already interested in and committed to breast-feeding should be identified and their endeavours encouraged and supported.

Training should be a priority within an overall breast-feeding programme and multilateral and bilateral agencies should be asked to collaborate with and support the planning and implementation of a training programme appropriate to the country's needs. The strategy would involve the training of groups at different levels.

Training at all levels is of the highest priority. The curricula for such training will differ considerably from one group of trainees to another. Senior administrators and policy-makers will need advocacy through visual and audiovisual media. This will be similar to sensitization. Each country's focal point will have to prepare such "briefs" with audiovisual materials. Obviously, these are to be short and to the point, with convincing data.

Training courses for mid-level medical and health workers are urgently needed. The curricula for these in-service courses are to be carefully prepared, ascertaining how much threshold knowledge and practical/counselling skills will be needed for a specific group of trainees. On the other hand, a training course for trainers will naturally include the basics of training methodology. Fortunately, a number of excellent training courses have been recently designed and their prototypes are available for adaptation or direct adoption. The two prepared jointly by UNICEF and WHO with a duration of 40 hours and 18 hours for different categories of trainee can indeed cover all types of trainee with

appropriate modifications. There are other courses conducted by NGOs, designed specifically for lactation management.

Similarly, information, education, and communication campaigns for mothers have to be structured after extensive regional behavioural studies. Repeatedly, the lessons emerging from studies all over the world, both in industrialized and non-industrialized countries, point to the obstacles in continuing optimal breast-feeding practices after high initiation rates at birth. No doubt, there may be common obstacles, thanks to some “modern” obstetric routines practised uniformly, but equally important are other situations in the mother’s environment that are perceived as obstacles or detrimental to the continuation of optimal breast-feeding.

In the fast-changing socioeconomic scenario of several developing countries, women are entering the workforce in large numbers. It is a common observation in these mothers that although they are inclined to breast-feed, formula feed is introduced as early as at birth. The reason forwarded is that the baby should be used to artificial feeding in case the mother is delayed with some economic chores. Such apprehensions are perceived or assumed. These can be recognized only through qualitative research. These studies need to be area-specific. Based on the results, appropriate intervention can then be designed and implemented.

Medical and health professionals have, and will continue to have, the major responsibility for promoting breast-feeding. However, it is vital to recognize the role of other equal partners in collaborative efforts to have sustainable programmes that protect, promote, and support breast-feeding practices.

## Annex 1

# Group discussion questions

### **Group A: A national policy for breast-feeding and its implementation**

The following questions are given to stimulate participants in the discussion during the group session. The participants are requested to pose any questions, in addition to these questions, which they feel have relevance to the topic for discussion. The group is expected to prepare a report consolidating the entire discussion which has taken place during the group session.

1. Do you think promotion of breast-feeding is such a high priority issue that it deserves a national policy? If so, which government sector will take the leadership in developing the policy and why?
2. In developing a policy, which are the sectors that should be specifically requested to collaborate? Presumably, health, women and child welfare, social welfare, and information are the sectors which have important parts to play. Please outline the task of each sector in relation to the policy.
3. Do you think NGOs have important roles to play in the promotion of breast-feeding in the country? If so, what would be their specific role?
4. A government policy without being implemented is just one more official document. Give your comments as to how a policy could be put into operation.
5. For the implementation of any government policy, the concerned sectors should be clear as to the objectives, targets, and the time frame, e.g. five years. Can you define these in a national policy for the major sectors concerned with breast-feeding?
6. In the implementation of a government policy, it is always necessary to have an overseeing body to monitor the implementation process. What do you suggest should be the structure of this overseeing body and its composition?
7. What should be the major components of a national policy for breast-feeding? Presumably, promotion of breast-feeding could be done through various approaches, of which the major approaches are promotion through the MCH programme, implementation of the International Code of Marketing of Breast-milk Substitutes, the BFHI and other approaches. Give your specific suggestions regarding the major approaches for promotion of breast-feeding to be outlined in the national policy.

8. What do you think should be the specific responsibility of the health sector in developing a national policy and its implementation?
9. The Code can be very effective in halting the decline in breast-feeding practices. Its implementation is of great importance but it needs collaboration from all quarters. How can MCH assist?

## **Group B: Training of health workers at different operational levels**

The following questions are given to stimulate participants in the discussion during the group session. The participants are requested to pose any questions, in addition to these questions, which they feel have relevance to the topic for discussion. The group is expected to prepare a report consolidating the entire discussion which has taken place during the group session.

1. It is generally recognised that health workers are not adequately trained for promotion of breast-feeding. The general pattern of their role in health centres is the routine instruction to mothers to breast-feed and to take care of their nutritional status. Give your general views about these statements.
2. In medical curricula, breast-feeding and complementary feeding should be important subjects in obstetrics and in paediatrics. Do you think this is the usual practice in medical curricula? If not, suggest what should be done.
3. The workers in the MCH programme are totally responsible for looking after women during pregnancy and lactation, and for the transition of infants to the family diet. Do you think they are properly trained to disseminate information to mothers regarding the uniqueness of breast-feeding, the common problems during lactation and how to overcome these, and the dangers of artificial feeding with breast-milk substitutes? If not, give your views regarding this issue.
4. The PHC workers, especially those for mother and child care, need proper training in breast-feeding and its promotion and promotion of infant nutrition. Give your views as to how this training could be done.
5. Lactation management is coming into sharper focus and there is a need for training courses for health workers in order for this important information to be disseminated to lactating women. What course of action do you suggest for this?
6. NGOs are, in some countries, taking a very active part in the promotion of breast-feeding and drawing attention of women to the dangers of artificial feeding. What steps do you suggest for supporting NGOs and, at the same time, utilizing them for the national strategy for the promotion of breast-feeding? NGOs can be very effective in enforcing the Code and monitoring any lapse in its enforcement.

## **Group C: Educational messages to mothers for promotion of breast-feeding**

The following questions are given to stimulate participants in the discussion during the group session. The participants are requested to pose any questions, in addition to these questions, which they feel have relevance to the topic for discussion. The group is expected to prepare a report consolidating the entire discussion which has taken place during the group session.

1. Do you think there is, in many countries and at many levels of society, an impression that breast-feeding could be replaced by artificial feeding? What steps would you take to create a general awareness throughout the country that breast-feeding has no substitutes?
2. Education sessions in MCH clinics are expected to convey messages to mothers for the promotion of breast-feeding. What do you think should be the main areas in which the messages should be developed?
3. In several countries, mass media like radio and television have been utilized to create awareness about the importance of breast-feeding. Suggest a plan of action to utilize the information sector of the government for this purpose. Can you think of any other approach to create mass awareness? A very large segment of working mothers cannot adopt breast-feeding due to lack of facilities and time. Mass awareness is also necessary to overcome this shortcoming; what do you suggest?
4. Is it necessary to create pressure groups in society through mass media to influence the government to provide working mothers with facilities to enable them to breast-feed their infants? Suggest suitable regulations in maternity leave to ensure that all mothers breast-feed their infants exclusively for at least four months.
5. How can public opinion help governments to enforce the ban on advertisements for breast-milk substitutes? Without public cooperation, the enforcement of the International Code of Marketing of Breast-milk Substitutes is not possible. Give your views as to how enforcement of the Code can be strengthened through cooperation and collaboration of all sectors of society, the NGOs, and the government. What will be the special role of the MCH workers in making mothers aware of the dangers of adopting artificial feeding?

## Annex 2

# The ten steps to successful breast-feeding

### A joint WHO/UNICEF statement (1989)

Every facility providing maternity services and care for newborn babies should:

1. Have a written breast-feeding policy that is routinely communicated to all health care staff.
2. Train all health care staff necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breast-feeding.
4. Help mothers initiate breast-feeding within half an hour of birth.
5. Show mothers how to breast-feed and how to maintain lactation, even if they are separated from their babies.
6. Give newborn babies no food or drink other than breast milk, unless medically indicated.
7. *Practise rooming-in: allow mothers and babies to remain together 24 hours a day.*
8. Encourage breast-feeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breast-feeding babies.
10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

## Annex 3

# The Innocenti Declaration

The Innocenti Declaration on the Protection, Promotion, and Support of Breast-feeding recognizes that breast-feeding is a unique process that:

- Provides ideal nutrition for infants and contributes to their healthy growth and development.
- Reduces incidence and severity of infectious diseases, thereby lowering infant morbidity and mortality.
- Contributes to women's health by reducing the risk of breast and ovarian cancer and by increasing the spacing between pregnancies.
- Provides most women with a sense of satisfaction when successfully carried out.
- According to recent research, these benefits increase with increased exclusiveness of breast-feeding during the first six months of life, and thereafter with increased duration of breast-feeding with complementary foods.
- Programme interventions can result in positive changes in breast-feeding behaviour.

We therefore declare that as a global goal for optimal MCH and nutrition, all women should be enabled to practice exclusive breast-feeding and all infants should be fed exclusively on breast milk from birth to four to six months of age. Thereafter, children should continue to be breast-fed while receiving appropriate and adequate complementary foods for up to two years of age or beyond. This child feeding ideal is to be achieved by creating an appropriate environment of awareness and support so that women can breast-feed in this manner.

Attainment of the goal requires, in many countries, the reinforcement of a "breast-feeding culture" and its vigorous defence against incursions of a "bottle-feeding culture". This requires commitment and advocacy for social welfare, utilizing to the full the prestige and authority of acknowledged leaders of society in all walks of life.

Efforts should be made to increase women's confidence in their ability to breast-feed. Such empowerment involves the removal of constraints and influences that manipulate perceptions and behaviour towards breast-feeding, often by subtle and indirect means. This requires sensitivity, continued vigilance, and a responsive and comprehensive communications strategy involving all media and addressed to all levels of society. Furthermore, obstacles to breast-feeding within the health system, the work place, and the community must be eliminated.

Measures should be taken to ensure that women are adequately nourished for both their optimal health and that of their families. Furthermore, ensuring that all women also have access to family planning information and services allows them to sustain breast-feeding and avoid shortened birth intervals that may compromise their health and nutritional status, and that of their children.

All governments should develop national breast-feeding policies and set appropriate national targets for the 1990s. They should establish a national system for monitoring the attainment of their targets and they should develop indicators, such as the prevalence of exclusively breast-fed infants at discharge from maternity services and the prevalence of exclusively breast-fed infants at four months of age.

National authorities are further urged to integrate their breast-feeding policies into their overall health and development policies. In so doing, they should reinforce all actions that protect, promote, and support breast-feeding within complementary programmes, such as prenatal and perinatal care, nutrition, family planning services, and prevention and treatment of common maternal and childhood diseases. All health care staff should be trained in the skills necessary to implement these breast-feeding policies.

## Operational targets

By the year 1995, all governments should have:

- Appointed a national breast-feeding coordinator of appropriate authority and established a multisectoral national breast-feeding committee composed of representatives from relevant government departments, nongovernmental organizations, and health professional associations.
- Ensured that every facility providing maternity services fully practises all 10 of the Ten Steps to Successful Breast-feeding set out in the joint WHO/UNICEF statement "Protecting, promoting and supporting breast-feeding: the special role of maternity services".
- Taken action to give effect to the principles and aim of all articles of the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly resolutions in their entirety.
- Enacted imaginative legislation protecting the breast-feeding rights of working women and established means for their enforcement.

We also call upon international organizations to:

- Draw up action strategies for protecting, promoting, and supporting breast-feeding, including global monitoring and evaluation of their strategies.

- Support national situation analyses and surveys and the development of national goals and targets for action.
- Encourage and support national authorities in planning, implementing, monitoring, and evaluating their breast-feeding policies.

## Annex 4

# **A handout<sup>1</sup> for all MCH workers for promoting breast-feeding and ensuring adequate infant nutrition**

### **Importance of breast-feeding**

Promotion of breast-feeding and infant nutrition is a major responsibility of the MCH programme of a national care system. In most developing countries, breast-feeding is the usual practice, especially among the rural population, and quite often is continued up to the second year of a child's life.

A decline in breast-feeding practices was first visible among the economically affluent urban population in most countries of the developing world. Along with this decline was the rapid increase in the practice of artificial feeding with breast-milk substitutes, aggressively promoted by baby food manufacturers. This practice of artificial feeding gradually permeated the middle and lower economic segments of urban and peri-urban populations. The dangers of artificial feeding, especially in non-hygienic environments, increased infant and child morbidity and mortality to alarming levels in most developing countries. Malnutrition and diarrhoea and other gastrointestinal disorders were the major killers of infants and children in most developing countries in the 1960s and 1970s.

During the last three decades, WHO and UNICEF, in collaboration with Member States, have taken unprecedented steps to focus global attention on the alarming decline of breast-feeding associated with an increase in infant and child morbidity and mortality and to undertake all possible measures to reverse such an undesirable situation. The International Code of Marketing of Breast-milk Substitutes and the BFHI are two important steps in the promotion of breast-feeding.

### **Role of MCH programme managers**

It is obvious that the MCH programme manager in the health sector has the important responsibility of coordinating all measures related to the promotion and protection of

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<sup>1</sup> This is a model handout for all MCH workers, which will serve as a reference document in their role as promoters of breast-feeding and infant nutrition.

breast-feeding and taking up a spearheading role at the national level. The programme manager's coordinating role falls distinctly into two categories:

1. Intersectoral collaboration and coordination with other programme managers in the health sector, e.g. CDD, immunization programmes, nutrition, and PHC. The training of all types of peripheral health workers in the unique qualities of breast-feeding, the possible dangers of artificial feeding, and how to overcome the common obstacles, should receive special attention. Similarly, promotion of breast-feeding should be one of the tasks of all health workers, both male and female, in the health care system, irrespective of the operational levels.
2. Intersectoral collaboration and coordination with other governmental sectors which are, or can be, effective promoters of breast-feeding, e.g. social welfare, women's welfare, information and broadcasting, and commerce. Close collaboration should also be established with active NGOs which, in some countries, are prominent in the campaign for promotion of breast-feeding.

### **Uniqueness of human milk – a reminder for all health workers**

1. Breast-feeding is a unique means of providing ideal nourishment for ensuring the survival and development of a newborn infant by providing a food which is specifically designed for its immature gut and digestive system. It also has a remarkable biological and emotional influence on both mother and infant.
2. The anti-infective properties of breast milk help to protect infants against disease. Breast-fed children have fewer infections.
3. Breast-feeding, especially exclusive breast-feeding, has a strong contraceptive action. Mothers who breast-feed exclusively for at least four to five months do not generally become pregnant again as quickly as those who do not.

### **Ten steps to successful breast-feeding**

WHO and UNICEF have been extremely active in suggesting various measures to protect, promote, and support breast-feeding. A joint WHO/UNICEF statement was published by WHO in 1989. All MCH programme managers should disseminate the contents of this statement to all health workers so that they can properly plan educational programmes for mothers and mothers-to-be.

The joint WHO/UNICEF statement suggests the following 10 steps for successful breast-feeding and recommends that every health facility providing maternity services and care for newborn infants should:

1. Have a written breast-feeding policy that is routinely communicated to all health care staff.
2. Train all health care staff necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breast-feeding.
4. Help mothers initiate breast-feeding within half an hour of birth.
5. Show mothers how to breast-feed and how to maintain lactation, even if they are separated from their babies.
6. Give newborn babies no food or drink other than breast milk, unless medically indicated.
7. Practise rooming-in: allow mothers and babies to remain together 24 hours a day.
8. Encourage breast-feeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breast-feeding babies.
10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

### **Administrative requirements for the promotion of breast-feeding**

1. All countries should develop a breast-feeding policy with clear cut guidelines relating to the care of pregnant and newly confined mothers and newborn infants. They should ensure that these guidelines are followed by all institutions and programmes concerned and are periodically evaluated for their effectiveness. The policy should be issued by the administrative head of the health ministry or, if possible, under the signature of the health minister. The MCH programme manager should spearhead the formulation of such a policy.
2. Institutions and programmes providing MCH should ensure that essential messages about breast-feeding are communicated to all staff concerned. A simple handout should be prepared and circulated to all staff concerned, clearly stating salient advantages of breast-feeding and what each health worker should do.
3. The technical staff of maternity wards in hospitals and of MCH centres and services should receive appropriate pre-service and orientation training on the health benefits of breast-feeding and lactation management. All other health workers should be made fully aware of the importance of breast-feeding. In addition to appropriate training, carefully prepared handouts should be given to all health workers.

4. Managers of health institutions should ensure that employment policies, physical facilities, and work schedules enable staff to breast-feed their own infants as a role model for others. Health workers should take the lead in preserving or re-establishing a breast-feeding culture by promoting a positive attitude towards breast-feeding in society as a whole.
5. All senior health administrators, especially the MCH programme managers, should determine which aspects of the structure and functioning of their services facilitate or interfere with what their staff can do to protect, promote, and support breast-feeding.
6. Educational and instructional materials should be prepared, adopted, and disseminated to ensure that every expectant mother is fully informed of the health and nutritional benefits of breast-feeding. All pregnant and lactating women should be aware that there is no substitute for mother's milk. Artificial feeding with substitutes is not only giving infants an inferior quality of nourishment but also the possibility of introducing infection through foods and water.
7. An adequate maternal diet is the most important requirement to ensure good lactation. An adequate diet in pregnancy not only helps the baby to grow in the uterus of the mother but helps in the depositing of nutrients in the mother's body which will be utilized during lactation. Women should be discouraged from using alcohol, tobacco, excessive caffeine, and drugs during pregnancy and lactation. They should also avoid unnecessary medication.
8. The birth weight of every infant should be entered on a growth chart. Close contact between mother and infant should be facilitated immediately following birth. Rooming-in should be the practice of all healthy newborn infants and mothers should be encouraged to feed their infants on demand, even during the night. Exclusive breast-feeding should be promoted, and infants should not be provided with any other food or drink, unless medically indicated.
9. By the time of their discharge from the hospital or clinic, mothers should be told about the process of lactation, the difficulties which might occur, and how to overcome these difficulties, so that they are confident about their ability to breast-feed.
10. A message, which is quite often overlooked, is to convince the mother that she will not be able to produce the right quantity and quality of milk if she does not get her nutritional requirements, which are much higher than those of non-pregnant, and even pregnant women. She should be assisted to formulate an appropriate diet during her lactation.

## From mother's milk to family food

Ideally, breast-feeding should be prolonged, preferably up to the end of the second year of the child's life. One should, however, remember that, in most mothers, the quantity of milk begins to get gradually reduced from the sixth month of lactation. Along with this, the nutritional need of the rapidly growing infant, especially for energy and protein, cannot be met by mother's milk alone. This is precisely the reason why locally available foods, properly prepared, should be introduced to the infants as complementary foods. This process has long been known as "weaning" and foods used for complementing are known as weaning, complementary, or transitional foods. Most often, these complementary foods, rich in energy, are cereals, legumes, some vegetables, eggs, and foods like fish and chicken. Even when this transition is going on, mother's milk, even in the second year of lactation, can definitely improve the quality of the mixed diet.

Prolonged lactation, usually up to two years, without adequate complementary foods is no guarantee against malnutrition. In a large majority of cases, the mother adopting this approach feels that, since mother's milk is the best, her baby will not need any additional foods, and these transitional foods are either not given or given in inadequate amounts.

The following information should be conveyed to all mothers and mothers-to-be:

1. Mother's milk is the best food for the baby. If the mother is healthy and is breast-feeding the baby on demand, then the baby does not need any other food or drink for the first four or five months of life.
2. After the first four or five months, the increasing nutritional needs of the rapidly growing baby cannot be met by mother's milk alone, however well she is lactating. The infant has to be introduced in gradual stages to appropriately prepared locally available foods, e.g. soft mashed cereal-legume mixtures.
3. The mother should be aware of the process through which the baby gradually is introduced to the foods in the family diet. Contrary to the belief among some mothers that good weaning needs expensive processed weaning food, a phenomenon commonly observed in the affluent countries of the Region, foods available in most "family pots" can be judiciously used for weaning.
4. The end of this transitional process is when the young child starts sharing the family diet with a few precautions, e.g. avoidance of spices, condiments, and fibrous food. Usually, a healthy infant should start sharing food from the family diet at about one

year of age. The important rule is to give small frequent meals but continue breast-feeding, always starting with breast-feeding and then giving the complementary food.

## **Golden rules for introducing complementary foods**

The following essential facts should be conveyed to all mothers in nutrition and health education sessions:

1. A baby needs small amounts of food at first. Have patience since the baby will be initially inclined to reject a new food. Slowly increase the amount of food a baby is given and try to introduce a variety of foods. Small frequent feeds is the golden rule.
2. A baby cannot chew and has a small stomach. Food preparations should be properly selected.
3. Prepare mixtures of nutritious foods. These mixtures increase the nutritive value of the food. Thus, a cereal with peas or beans is a well-known weaning food mixture. Mixing foods of animal origin (e.g. milk, egg, or fish) with cereal or starchy food is a good food mixture.
4. Weigh the baby regularly and record the weight on a growth chart. A steady upward directed growth line is the best indication that everything is going well. Growth-monitoring is the best way to find out if the baby's diet is adequate.
5. Select foods that are high in energy (calories) and concentrated in nutrients. The small stomach of the baby needs foods which are not bulky but are concentrated in nutrients. A little fat or oil increases the energy value of the weaning food which the growing baby desperately needs.
6. Make sure that all foods and the utensils used to prepare them are clean. Remember, infections can be introduced into the baby very easily during the weaning process. Diarrhoea is the earliest manifestation of infections.
7. Breast-feeding should be continued as long as possible. Even when the mother is secreting a very small quantity of milk, it will supplement the nutritive value of weaning foods. For the majority of infants in developing countries, the complementary foods usually come from the vegetable kingdom, e.g. cereals, legumes, and vegetables, and mother's milk can greatly improve the quality of the diet.
8. Do not stop feeding during or after illness. The baby, in fact, needs more nutrients at this time.

## Annex 5

# **The International Code of Marketing of Breast-milk Substitutes and the promotion of breast-feeding: a brief summary**

The International Code of Marketing of Breast-milk Substitutes was adopted by the World Health Assembly in 1981. The main objective of the Code is the protection and promotion of breast-feeding (Article 1). The Code recognizes that the use of breast-milk substitutes may become necessary when mothers cannot breast-feed or only do so partially, though it warns about the health hazards of the unnecessary or improper use of such products. Moreover, the financial implications of the use of breast-milk substitutes should always be remembered.

## **The principles of the International Code**

In order to achieve its objective, the Code contains the following principles:

### **1. The prohibition of advertising and promotion of breast-milk substitutes**

The Code does not permit advertising or any other form of promotion of breast-milk substitutes and other products covered by it, to the public. This prohibition is general and applies to advertising through television, newspapers, and other mass media (Article 5.1). The reason for this prohibition is to prevent the temptation to use breast-milk substitutes and to remove anxiety and doubt among mothers, regarding their ability to breast-feed their babies satisfactorily.

### **2. Prohibition of giving samples**

The Code bans the giving of samples of breast-milk substitutes and other products covered by it, directly or indirectly, to pregnant women, mothers, and members of their families or to the consumer (Article 5.2 and 3). The rationale for this ban is to discourage the prevalent practice of giving samples to induce mothers to use such products for feeding their infants, instead of breast-feeding them.

### **3. The ban on giving gifts and other inducements**

This principle covers several aspects, such as the ban on gifts of articles or utensils (Article 5.4); the offering of financial and material inducements to health workers or members of their families (Article 7.3), e.g. the giving of money and medical equipment, paying for conference attendance, giving travel funds; disallowing the use of bonuses and quotas as sales incentives for the marketing personnel of manufacturers and distributors of breast-milk substitutes (Article 8.1); and the restriction on donations or low-price sales of supplies of breast-milk substitutes to institutions or organizations (Article 6.6). These marketing practices are commonly used to promote the use of breast-milk substitutes.

### **4. Information and education**

The Code puts on the shoulders of governments the responsibility for the provision of consistent and objective information on infant and young child feeding for use by families and those involved in the field of infant and young child nutrition (Article 4.1). It also requires certain items to be included on any informational and educational materials, be they written, audio or visual, such as the benefits and superiority of breast-feeding (Article 4.2). The Code aims at independent and objective information, so that mothers or mothers-to-be can decide, without influence, how to feed their infants.

### **5. Encouragement and promotion of breast-feeding by health authorities**

The Code enjoins the health authorities in Member States to take appropriate measures to encourage and protect breast-feeding (Article 6.1). It is for Member States to define those measures. When the Islamic Republic of Iran, Iraq, Morocco, and the Syrian Arab Republic prepared national legislation to implement the Code, they provided for the training of health workers on breast-feeding, maternity leave, and breast-feeding facilities at the work place, as part of these measures. The Code also bans the use of health care facilities for the promotion of products covered by it (Article 6.2). Moreover, health workers are called upon to encourage and protect breast-feeding (Article 7.1). This may take the form, for example, of encouragement by gynaecologists to pregnant women to breast-feed and warning about health risks from the improper use of breast-milk substitutes.

### **6. Consumer protection**

The Code recognizes that breast-milk substitutes may be necessary in certain situations. Therefore, it insists on a degree of protection for the consumer through

labelling requirements (Article 9.2) which include the composition, storage conditions, and the date of expiry of breast-milk substitutes (Article 9.4), and the requirements of the Codex Alimentarius Commission's standards (Article 10.2).

## **7. Implementation of the International Code**

This is the responsibility of Member States and could be achieved by the adoption of legislation, regulations, or other appropriate methods, in the light of the social and legislative framework of the State concerned (Article 11.1). Any implementation of the Code should use it as a "minimum requirement", and it should be given effect to "in its entirety" (Resolution WHA34.22, tenth preambular paragraph). The most important condition for the implementation of the Code by a Member State is the political commitment to protect, promote, and support breast-feeding. The political commitment could be started, stimulated, and advanced by professional groups, women's organizations, consumers' organizations, NGOs, or individuals.

The implementation of the Code is a very important measure for the promotion and protection of breast-feeding. It requires an appropriate monitoring system (Article 11.2) and adequate sanctions in order to ensure compliance with the national legal instrument giving effect to it.

## Annex 6

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