

4. The role of mother support groups

Abstract

Mother support groups (MSGs) provide individual counselling, information, support, and group discussions to enable women to practise breast-feeding and child care well. These groups have a special role, different from, but complementary to, the role of health services and health professionals. The key to the best breast-feeding practices is continued day-to-day support for the breast-feeding mother within her home and community. Mother support groups attempt to fill the void for a mother when breast-feeding is not the cultural norm and when she lacks extended family and peer support. MSGs are thus a vital link between the breast-feeding woman and the health care system.

The goal of MSGs is to help mothers to breast-feed by: (a) providing the practical and scientific information on which a woman can base her decision to breast-feed; and (b) giving women the moral support they need, whenever they need it, to carry out their decisions and to feel good about their experiences. Mother support groups accomplish these goals through group meetings, home and hospital visits, phone calls, correspondence, the distribution of breast-feeding literature, talks at breast-feeding seminars and conferences, and in schools, churches, clubs, community organizations, health service locations, and hospitals.

Many MSG members act as advocates for breast-feeding, in addition to providing direct counselling on breast-feeding to mothers. This advocacy includes working with health professionals to change hospital or maternity practices that obstruct breast-feeding, and promoting practices such as rooming-in for newborn infants and their mothers to facilitate breast-feeding. Many of these programmes develop affiliations with the formal health system to some extent. Often institutions can support and encourage the development of community support groups. Conversely, MSGs are often responsible for institutional changes. If these alliances and material support are encouraged, MSGs may be able to attract financial support from the health services.

Mother support groups began in the 1950s, and have been growing rapidly since then. In 1989, there were 48 mother support groups in more than 40 countries, with over 70 000 members and 15 000 qualified breast-feeding counsellors. La Leche League International is the oldest and largest. Whereas most MSGs are based on the "experienced mother helping the new mother" concept, many groups, especially those in areas where there are few experi-

enced mothers, have embraced trained, but not necessarily experienced, peer counselling as acceptable and appropriate. The development of a cadre of certified "lactation consultants" is an expansion of this concept.

Technical overview

The many benefits of breast-feeding have been documented all over the world. Exclusively breast-fed infants are protected against death from diarrhoea, acute respiratory infections, and other infectious diseases. Unfortunately, in many countries relatively few women breast-feed their babies exclusively for the first 4–6 months. Many problems contribute to this erosion of breast-feeding practices: misinformation, traditional practices, and misconceptions. Perhaps one of the most detrimental changes is the fragmentation of the traditional extended families, especially in urban areas.

Mothers all over the world find themselves in a situation where the health services are not supportive and where cultural norms are hostile to breast-feeding. This situation is made worse when they have no family members or others to give them advice about initiating or maintaining breast-feeding. This problem has led to the creation of mother support groups (MSGs), organizations that provide mother-to-mother or peer-to-mother support to enable the mother to breast-feed successfully.

Two premises underlie mother support groups. The first recognizes that breast-feeding is a positive health decision, not just a life-style choice. The second recognizes that most of the problems a breast-feeding mother faces are not medical in nature and can be solved by another experienced mother. At the core of a mother support group (MSG) is a trained counsellor, herself a breast-feeding mother, who volunteers her time to help other women to breast-feed successfully. These counsellors do not make decisions for mothers, but instead help them to gain confidence to do what they consider best for themselves and their children. Through MSGs, women are able to strengthen their own mothering capabilities.

There are three basic models of mother support: mother-to-mother, peer counselling, and certified consultants. Mother-to-mother support often follows the example of the La Leche League International, and includes the training of experienced mothers, especially in counselling and support skills. These mothers are generally volunteers. Peer counselling has emerged primarily in areas where there are few mothers with the time, resources, or experience necessary to assume the role. Here, special training is provided in mothering and breast-feeding skills, as well as in counselling and support techniques. Certified lactation con-

sultants are drawn from many walks of life: they may be mother-to-mother counsellors or health professionals. Their training is generally more intensive, with mandatory certification and continuing education.

The effectiveness of mother support groups depends greatly on the training of the counsellors and their leaders. In fact, the main distinction between breast-feeding promotion groups without a direct mother-to-mother service and direct-to-mother support groups is the existence within the group of individuals specially trained in breast-feeding management and equipped with skills to provide a one-to-one service.

Direct-to-mother support groups have systematized training programmes for counsellors and group leaders. The La Leche League has a training curriculum that has been modified for use by other organizations and can be adapted to local situations. Typically, training covers physiology and anatomy; breast-feeding techniques; management of medical breast-feeding problems; the advantages of breast-feeding to both the mother and the child; organizational and leadership skills; and other areas such as interpersonal communication and counselling skills.

The Nursing Mothers Association of Australia provides training that takes between 6 and 12 months, and sometimes longer, to complete. The selection of leaders is strict. Many women may join and become members and/or utilize the services, but not all are encouraged to apply for leadership training.

Once identified and accepted by the organization, the mothers (potential leaders) are trained through reading, observation, and on the job training discussions. The mother has access to literature and audiovisual aids. The trainee-mother is encouraged to participate in meetings, conferences, and group meetings. She is then examined and eventually certified. By the time she is certified, she has acquired skills in management, communication, fund-raising, empathy, and observation. The organization supports this mother with continuing education. These qualities and skills enable the woman to practise a desirable style of child care. The skills acquired are also applied in other areas of the lives of these women.

Another group, "Breast is Best" (Belize), provides its counsellors with 20 hours of initial training, followed by monthly meetings. Other groups combine different training approaches and develop innovative training materials.

There is strong movement, therefore, to elevate group leaders from being "just mothers" to being health professionals. Because of parallel developments in state legislation in the USA, such as a New York State requirement for every hospital to have a paid lactation consultant, this field has grown quickly. In the USA, the La Leche League International set up a board to certify lactation consultants. Originally, these consul-

tants were to be practising, experienced leaders who wanted proof of their knowledge and skills and to have a qualified say in mother/infant care on an equal basis with other colleagues. Counsellors who have not breastfed a child themselves are now also to be certified; these people are searching for a new career, and once certified promptly set up a private practice or apply for jobs. Some certified LLLI leaders have decided to follow suit, and groups such as the International Lactation Consultants Association are growing in membership and visibility.

The growth of MSGs has been characterized, and immensely strengthened, by apprenticeship training of mothers to be breast-feeding counsellors. The founding members of LLLI taught themselves about the art of breast-feeding, about mothering, and about behaviour of the infant and mother after birth. During this learning process, they encountered resistance from many medical practitioners, were accused of interfering, and had to learn how to deal with a generally unsupportive medical community, identify the supportive few, and win over others.

Some physicians were supportive and they learned from mothers and their own experiences, and started to write, publish, and conduct research on breast-feeding. But the MSGs also set up committees to ensure that all those representing the group had access to the latest scientific information. LLLI calls it the professional liaison department.

Programme implementation

The main objectives of programmes focusing on mother-to-mother support are breast-feeding education and counselling. These activities can take the form of group and individual support, group meetings for group leaders/counsellors and supervisors concerning publications and the media, advocacy, child survival, and other matters.

Some MSGs have exported their influence to developing countries only through expatriates living abroad, while other groups have sprung up among the local population. Whether the presence of a La Leche League leader is material in the formation of a local group depends largely on the individual's personality, perseverance, and ability to adapt to the local culture. The growth of MSGs in developed countries has been helped by: members that can support (financially) the group, high literacy, access to scientific research, and ability to interpret and disseminate information. Unfortunately, most groups in developing countries cannot support themselves financially.

Two basic things are needed for a skilled MSG to be effective: (a) administrative support (paid coordinators who are qualified as counsellors) and office space; and (b) a supply of literature and up-to-date

audiovisual aids. Grants enable these groups to purchase from parent organizations and others, and to adapt to local needs, including the translation and printing of materials. Some groups sell products to raise funds.

Successful mother support groups

Some of the successful mother support groups are described below.

The La Leche League International (LLLI) was founded by seven women in 1956 to help all mothers who wanted to breast-feed their babies to be able to do so successfully. Subsequently, 23 000 La Leche League leaders have followed the original founders in providing information, encouragement, and support. The cornerstone of the organization has been personal mother-to-mother warmth and caring.

Originally predominantly middle-class, LLLI has set up various programmes to reach poor and migrant populations in the USA, although they do not impose themselves on groups that do not ask for help. They now provide their services in hospital, and also through telephone “hotlines” and peer-counselling programmes to train women who, perhaps, do not have personal breast-feeding experience.

LLLI has grown into a worldwide, internationally recognized authority on breast-feeding, with more than 3500 groups in 46 countries. The La Leche League has official relations with the United Nations as a nongovernmental organization, is a registered private voluntary organization for the US Agency for International Development and an accredited member of the United States Healthy Mothers, Healthy Babies National Coalition. The international LLLI headquarters is located in Illinois and is staffed by 40 employees. The organization is non-profit-making and is entirely supported by donations, memberships, and sales of materials.

The organization’s Health Advisory Council is comprised of doctors and health professionals from all over the world. The basic La Leche League manual, *The womanly art of breast-feeding*, is available in six languages and Braille. Other publications are available in more than 30 languages. With 332 resource centres throughout the world and a computerized centre for breast-feeding information (which charges a fee for each search), La Leche League is the world’s largest resource for breast-feeding information.

Leaders are primarily mothers who have breast-fed their own babies and have all completed a specific application and accreditation process before being considered qualified to act as an official representative of the La Leche League International.

Lactation consultant organizations have been set up in the USA (International Lactation Consultants Association, ILCA) and in Australia (Australia Lactation Consultant Association).

The La Leche League International works in collaboration with LLL groups in several countries, including Bolivia, Brazil, Ecuador, France, Guatemala, Germany, Mexico, and Zambia.

LLL/Bolivia was founded in 1982. The group's meetings, which are announced in the local press, are held every two weeks and are attended by at least 10 mothers. There are two offices and three leaders who try to see women prenatally and postnatally to avoid, rather than treat, problems where possible. Women are then followed up at home. Food is supplied for mothers judged to be in most need (according to an application form) and this has allowed LLL to follow them up and encourage breast-feeding for more than a year. A new clinic has been started by Wellstart-trained¹ physicians who asked LLL to help, recognizing that mother-to-mother counselling works better than physician-to-mother. LLL/Bolivia also sponsors radio call-in shows. LLL has expanded into two new cities outside of La Paz and provides courses to health professional students. The Ministry of Health is considering some support and LLL hopes that breast-feeding will be incorporated into health curricula.

LLL/Brazil is one of the few groups that has conducted a thorough evaluation of its first 8 years' activities. The group has studied what contributes to breast-feeding success during three vital periods: first hospital days, first 15 days at home, and the return to work at 3–4 months.

LLL/Ecuador began in the period from 1983 to 1987, with individual efforts to promote breast-feeding. Two women helped create a core LLL group that now has more than 10 leaders. Recent work has focused on the maternity hospitals, where there are 14 000 deliveries per year. Mothers who are ill or removed for tests receive considerable mother-to-child breast-feeding support: their infants are often wet-nursed.

LLL/France was founded in 1978 and works with other breast-feeding promotion groups on national issues, such as the code of marketing of breast-milk substitutes. There are now 45 leaders, and each has created a new centre. Work has concentrated on referrals and one group responds by mail to requests for information. There also have been health professional seminars. LLL has registered as a training organization for health professionals and is being funded to carry out in-service training.

LLL/Guatemala works with the National Committee for Breast-feeding (NCBF) and a USAID Child Survival Project on the part of LLLI.

¹For the Wellstart education programme, see pp. 31–32.

LLL/Guatemala now has 14 leaders and, through LLLI, is teaching mothers in marginal urban areas. Breast-feeding counsellors work with lactating and pregnant women in their communities through group meetings. The counsellors also arrange referral to other child survival programmes.

LLL/Germany is located in Bonn which has a large diplomatic and refugee community. The group was founded in the 1960s among the English-speaking women. The personnel change frequently, but 25 counsellors are in place. LLL/Germany collects and disseminates materials in several languages.

LLL/Mexico was founded in 1972. There are 36 leaders and approximately 50–60 physicians involved in the group, and they have trained 750 breast-feeding promoters, who provide information to mothers and hospitals. The General Hospital now has a project funded by USAID, the Population Council, and the Ministry of Health which began with four people who attended Wellstart training.

LLL/Zambia holds monthly support meetings on selected topics, provides training, and has a library available to its members.

Other mother support groups include the following groups or projects: Amigos de Peito and Grupo Mamen/Brazil are conferring with LLL/Brazil to discuss pooling their resources; the Association of German Breast-feeding Mothers (AFS); the Breast-feeding Information Group (BIG) in Kenya runs a rural project, funded by Oxfam, in Kakamega, with breast-feeding as a starting point into a community based health development project; the “Breast is Best” League in Belize has been supported recently by USAID and CARE and has devoted much effort to the development of appropriate weaning foods; the FEMAP¹ project in Mexico was conducted together with the staff of IISNFP² and was a community based direct-to-mother support programme; the International Baby Food Action Network (IBFAN) works in 16 countries in Africa, receiving funding from UNICEF, NORAD, SIDA and others; the Nursing Mothers Group (NMG) of Australia has 16 000 paid members and 1600 counsellors in 566 groups.

Research and evaluation

There is a need to evaluate the work of mother support groups, primarily to convince others, including donors, of their effectiveness. Direct-to-mother support groups often are not formally evaluated for a number of reasons: (a) baseline and follow-up surveys are expensive and

¹ Federación Mexicana de Asociaciones Privada de Salud y Desarrollo Comunitario.

² Institute for International Studies in Natural Family Planning—now, the Institute for Reproductive Health, Georgetown University, Washington, DC.

time-consuming; (b) projects are not often designed with a project evaluation component; (c) project staff are not usually skilled in research or evaluation; and (d) results may be biased because members of MSGs may be those more likely to breast-feed than non-members.

However, research can be used to show the impact of mother support groups; but unless there is very careful attention to terminology used, research techniques, and interpretation of findings, research has the potential to be misunderstood and may be misleading. Basic definitions for breast-feeding behaviours have recently been developed and are designed to reflect biologically known factors and allow comparability between studies to assure improved policy development (Labbok & Krasovec, 1990).

MSGs that wish to carry out a study of their impact on the mothers or on the community, should pay special attention to the following: (a) self-selection bias; (b) observer bias; and (c) interpretation of reported perceptions. Women who seek out MSGs are self-selected and generally have a bias in attitude and behaviour that will tend to be associated with "success". This clearly is not negative, but in doing research, it is important to show that it is the intervention of the MSG that makes the difference, not just the self-selection. This can be controlled in a research project by (a) collecting data on a control population before MSG support services begin; or (b) randomly assigning those seeking assistance to whatever support is currently available or the MSG. Cases and controls must be selected from the same, equally motivated population of women. The second approach may pose ethical problems for some, depending on how many people can actually be served.

Observer bias and interpretation pose additional problems. "Observers" wish to succeed and unwittingly may lend interpretation to the findings or responses. This bias may be controlled by having all persons interviewed in the same manner by an "uninterested" observer, preferably one who does not know in advance if the mother has MSG support, other support, or none. It is also important to have a set questionnaire with quantitative questions for comparison purposes. Whenever possible, interview questions should be quantitative and not reliant on perceptions that may themselves be changed by the intervention. An example of this is women who may report that they had less milk as their let-down reflex changed. These same women who have support can be educated to realize there was no real decline in the amount of milk. With the education, they would not report less milk. Questions should be very carefully developed and pretested.

MSGs may wish to study their effect on the mother-child pairs, on the community as a whole, and/or on local policy. In general, three types of studies might be considered:

Descriptive studies are designed for individuals, communities, or policy-makers. Such studies describe numbers, percentages, costs, and impacts; they may be case-studies or problem-oriented assessments describing problems and approaches, using specific examples. Data may be gathered from simple contacts and follow-up cards.

Experimental studies study effects on individuals. These studies demand random assignment of individuals to control or to intervention groupings as described above; they lend themselves to statistical analysis. Data must be gathered by questionnaire or unbiased observation.

Quasi-experimental studies assess the effect on communities or groups. These studies do not demand random assignment, but do demand special data gathering; they can be used to follow up women who are all observed at the same point (e.g., pregnancy, immediate post-partum) or for a cross-section of women in a community. Three examples of quasi-experimental studies include:

- (a) A time-series study, where the community is “observed” at several points in time and an assessment is made of percentage of women breast-feeding, percentage exclusive at each month, percentage with menses return, etc. Then an “intervention” takes place, such as the start of an MSG. Thereafter, more “observations” are made and trends after the intervention can be assessed.
- (b) In a nonequivalent control study two similar groups (or cities, or areas) are selected and data are collected in each area. An MSG begins to work in one area only and both areas are “observed” again. This design is similar to that of experimental studies, but does not randomly assign individuals; and
- (c) A study with separate samples pre-test and post-test involves a sample of one area or group being interviewed prior to the intervention. After a period of time, a different sample is statistically chosen for a second interview.

Ideally, future research in this area would assess both the process and the impact of mother support groups on breast-feeding practices.

Cost issues

Mother support groups depend on the fund-raising abilities of their leaders and members. Although most groups operate through volunteers, some level of funding is required to carry out activities.

Some groups raise funds by selling literature, lactation aids, promotional materials, and membership subscriptions, and others receive funding from their local governments or international donors.

A recent evaluation of a Federación Mexicana de Asociaciones Privadas de Salud Y Desarrollo Comunitario (FEMAP) Project in Mexico has provided cost information on direct-to-mother support (Rodriguez-Garcia et al., 1988). Three areas were involved in the intervention, with a fourth area serving as a control. In Area 1, community promoters were trained to perform one-to-one counselling on breast-feeding. In Area 2, social workers were trained to teach groups of mothers about breast-feeding. In Area 3, both individual and group counselling was provided.

The cost per user was US\$124 in Area 1 and US\$110 in Areas 2 and 3. Calculating the cost according to the number of beneficiaries who participated until 6 months post-partum increased the cost per user in Areas 1, 2, and 3 to \$239, \$396, and \$450, respectively.

In the future, cost-effectiveness studies should investigate whether having long-term, paid counsellors is better than using volunteers who require frequent training courses because of high drop-out rate.

Recommendations

In the early 1980s, the international donor community was expressing a great deal of interest in the question of why women were not breast-feeding. However, the expected commitment did not follow at that time. Mother support groups began to address the plateauing of interest in breast-feeding. They have found that there are other competing social and nutritional interests, but that these other programmes can also "buy into" breast-feeding. For example, one important positive change includes the recognition on the part of child survival programmes providing oral rehydration therapy (ORT) that breast-feeding must be promoted in addition to ORT. Mother support groups should continue their efforts to overcome the plateauing of interest in breast-feeding through development of new groups, promoting and networking, and emphasizing the role of direct-to-mother groups in national and international political efforts.

The health sector needs to acknowledge the unique and vital role of mother support groups. Health workers, however well trained in lactation management, cannot give mothers the day-to-day support they need. Mother support groups provide this support and deserve recognition and acknowledgement by the health care system. Success in serving breast-feeding mothers and their children will be enhanced by the close cooperation between mother support groups and the health care system, and a positive recognition and appreciation of each other's role. The need for this cooperation is spelled out in the WHO/UNICEF Joint

Statement, Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services, 1989; and the Ten Steps to Successful Breast-feeding, in which the tenth step is to “foster the establishment of breast-feeding support groups and refer mothers to them after discharge from the hospital or clinic.”

- Established mother support groups and newer groups need to foster linkages. Expanding their services requires that the larger, older, and more established groups (largely in developed countries) adapt their organizational structures and their services to the needs of women in developing countries. To start new groups where none exist requires the identification of a person willing to start a group or a request for assistance from an existing group, such as La Leche League International.
- Qualifications and training programmes for counsellors must be carefully defined. Training of a breast-feeding counsellor involves 6 to 18 months and is largely accomplished through apprenticeship.
- An international resource centre for breast-feeding information should be developed. Such a centre would include, but not be limited to, information and materials on mother support groups. It would serve to disseminate information, enhance the formation of new groups, and strengthen the operations of existing groups.
- Although mother support groups are primarily voluntary, they need financial support for publicity, training materials, transport, and communications. Financial support is also necessary for salaried administrators who coordinate the activities of the volunteers. Inasmuch as the use of volunteers counsellors is an integral part of mother support groups, financial support of their activities is very cost effective.
- International organizations should be searching for experienced and certified breast-feeding counsellors to help advance the activities of MSG in developing countries. Certified counsellors will be able to set up groups of mothers but also of health professionals.
- As the breast-feeding initiative advances, education and training of health professionals are bound to attract more funding and support than MSGs and they will attract funding and support faster: it is easy to “see” results of reeducated health workers as hospital practices improve. Rates of initiation with breast-feeding and exclusive breast-feeding at discharge increase. Wellstart graduates have proven that hospital practices can improve, but hospital care initiatives cannot be expected to result in increased exclusive breast-feeding through 4 months without follow-up home support. Support should be concentrated on expanding the activities of MSG.

Many kinds of support can be provided to expand MSG activities. For example, grants can be provided to existing MSGs in developing countries to establish administrative structures, including the hiring of “retired counsellors” as coordinators. IBFAN Africa initiated groups with seed grants of around \$1,000 without the cost of hiring coordinators. On the other hand, the Breastfeeding Information Group flourished faster when a paid coordinator was engaged.

Support to existing lactation and/or breastfeeding resource centres in developed countries will enable them to provide MSGs in developing countries with regular, up-to-date information. In addition, education, training, and advocacy for community based mother support groups should include support for breastfeeding in their activities.

Mother support groups have addressed the needs of mothers for over 30 years and have a strong commitment to enlighten and empower women to decide to breastfeed their children. The expected outcome—the reduction of infant morbidity and infant mortality—will therefore improve the lives of mothers, babies, and children all over the world.

Meetings and discussions in the past have supported the theme that no matter how much in-hospital programming or how many information campaigns there may be, community-based support is essential to producing sustainable change. Any effective strategy must go beyond educating health personnel and must bring all groups together in a global, coordinated effort.

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5. Information, education, and communication in support of breast-feeding

Abstract

Information, education, and communication (IEC) is the component of programmes concerned with changing knowledge, attitudes and behaviours of key target groups. 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 urbanization or economic transition with the associated breakdown in traditional support systems that have altered families' attitudes towards breast-feeding.

The effectiveness of IEC campaigns for promoting breast-feeding has been demonstrated in Brazil, Indonesia, and the Islamic Republic of Iran, among other countries. Information used in the development of such campaigns is best obtained through qualitative research on women's beliefs and practices, the reasons for such practices, and the obstacles they face related to breast-feeding. Similar qualitative research is required among health care providers and other individuals who influence a mother, such as her husband or another family member. Indeed, the success of any IEC campaign lies in the identification of key target groups, not only among women, but also among health care workers, and of tailoring messages to each group. The success of these campaigns also results from the use of marketing strategies traditionally used in the private sector, and linking market research and advertising techniques with health education.

The timing of IEC campaigns is critical and must not precede other strategies to remove obstacles to breast-feeding, or the provision of on-site skilled support personnel to respond to the increased demand for services. IEC campaigns cannot be expected to be effective unless support is available within the health care system, the family and community, and the workplace to enable a woman to act upon the information received through IEC.

A decade of experience in IEC activities in breast-feeding promotion has shown that the scope of such activities needs to be widened to encompass advocacy to ensure political commitment and the mobilization of international, national, and community resources in support of breast-feeding programmes.

Technical overview

Information, education and communication (IEC) are the terms used to describe the component of programmes concerned with changing knowledge, and attitudes, and behaviours of key target groups. Although sometimes inappropriately equated with “health education” or with use of the mass media, IEC activities for breast-feeding promotion are far more diverse, encompassing a wide variety of efforts. Not only, for example, is the development of training materials for hospital staff and culturally appropriate educational booklets for mothers considered part of IEC, but information collection and dissemination programmes, research to assess cultural perspectives, curriculum design, and development efforts, and the production of national-level television and radio campaigns, among others, are also important.

There is overlap between IEC and other breast-feeding initiatives such as lactation management training, with its emphasis on education, and mother support groups, with their emphasis on interpersonal or small group counselling. Typically, any activities that address information and educational needs at the policy, health professional, community, and individual levels, fall under the rubric of breast-feeding IEC. In very general terms, IEC provides the tools and techniques, messages, and materials that are necessary to address the various obstacles affecting breast-feeding, including: (a) negative cultural beliefs and practices; (b) social norms that tend to create stigma against breast-feeding; (c) lack of current information on or knowledge of specific breast-feeding issues and skills, such as correct positioning and techniques for increasing milk production; and (d) the pervasive availability and marketing of breast-milk substitutes and bottles, and their misrepresentation as a desirable alternative to breast-feeding.

Effective IEC can also be used as part of an overall strategy to protect, promote, and support breast-feeding by identifying key partners who are actively involved at various levels of society, in order to ensure political commitment and the dedication of international, national, and community resources for breast-feeding-related activities. This becomes especially important with the growth of urbanization. The traditional community and extended family network of support and information related to breast-feeding have often been lost at the individual level. Consequently, in order to initiate and continue successful breast-feeding, many expectant women and mothers need new and positive role models, information, motivation, encouragement, and confidence in their own ability to breast-feed.

In many countries, the impetus for breast-feeding promotion of any kind came in the wake of the infant formula controversy of the late 1970s

and early 1980s. The coalition organized during the international boycott of infant formula manufacturers may have been the first concerted IEC-related breast-feeding initiative, and the first success story of social mobilization for health. The successful outcome of the boycott was heavily dependent on the skilful use of a variety of IEC and community organization techniques. Extensive media coverage, for example, underscored the dangers of bottle-feeding and the many benefits of breast-feeding. The mass media dramatically exposed unethical promotional practices on the part of industry, and thousands of informed citizens around the world rallied in defence of infants and young children. The antecedents for many of the national level breast-feeding initiatives can be directly attributed to this approach including:

- 1) creation of an international awareness of the problem;
- 2) development of consensus around the issues;
- 3) commitment to action on the part of governments;
- 4) motivation of community involvement and monitoring of industry practices, and
- 5) establishment of unprecedented alliances in the health sector.

Continued IEC and social mobilization campaigns are needed to stimulate an action-oriented commitment by health care providers and policy-makers to the adoption, implementation, and monitoring of the International Code of Marketing of Breast-Milk Substitutes and to the translation of advocacy into on-going, sustainable, multisectoral breast-feeding programmes. Since high visibility of the issues appears to be a catalyst for policy change, IEC and social mobilization should ideally continue to play a pivotal role in current and future initiatives.

Programme implementation

The following are considered to be key examples of successful breast-feeding IEC programmes launched during this decade, representing a wide variety of activities at the national level. Each example highlights a distinct approach to the successful use of information dissemination, education, and communication (both interpersonal and mass media), and social mobilization. Other private, nongovernmental initiatives are also presented to illustrate the pivotal role of IEC in the effective promotion of breast-feeding.

Brazil

The National Breast-feeding Programme of Brazil was one of the largest ever launched (1981–84), and is noted for its major innovations in

communication. Its objective was to increase the prevalence and duration of breast-feeding, as well as to complement breast-feeding with supplementation, for as long as possible thereafter. It also promoted an adequate dietary intake by the pregnant and nursing mother, as well as the weanling child.

Many factors contributed to its success. At first, a comprehensive multifaceted strategy was developed, starting with an analysis of obstacles and forces and a mapping of the various "allies" and "enemies". Specific target groups were identified (health staff, infant food industry, the officials, the community, and the mothers, including working mothers). It is interesting to note that the health sector was further segmented into various interests and skills: from the private practitioner and specialists, to the staff of health services and administrators of hospitals. In the informal sector, middle-class employers of housemaids were also targeted.

Active advocacy was targeted at government officials and the media establishment to launch the campaign and mobilize resources. A professional-quality slide-set and video were designed and widely used to that end. The advocacy effort and other mobilization activities were paralleled by the development and expansion of support systems. These included changes in hospital practices, legislation for working women, monitoring of maternity benefits, and changes in curricula of medical and primary schools. Health staff were not only trained but also motivated through professional-quality information kits, newsletters, and video shows, timed to coincide with the changes in hospital practices.

Another factor that contributed to its success was the development of a comprehensive two-year plan that included the organization of multi-sectoral collaboration, with a provision for decentralization at state and community levels. Multisectoral groups encompassed health care providers, social welfare, education, interior, labour, paediatricians and nutrition associations, and donors (UNICEF, WHO). Qualitative research was used to design messages that went beyond the "Breast is Best" slogans, and reassured mothers of their ability to breast-feed, by the use of role models and credible, popular individuals (soccer stars, women television and film personalities, a leading doctor, etc.). Prominent themes included: the promotion of exclusive breast-feeding for 6 months; exposure of the "macho" attitude of men towards breasts as sexual objects rather than as a source of infant nourishment; successful management of breast-feeding by working women; and reducing some women's anxiety over small breast size.

Multimedia and multiple channels of communication were used extensively throughout the campaign. During the 45-day launching

period, 100 television stations and 600 radio stations carried advertisements at a minimal cost. Direct marketing was used through the mailing of printed materials with bank, electricity, and telephone bills. Churches, students, and street corner singers were active in the distribution of printed materials. Photographic contests, lotteries, mothers' quizzes, competitions, and street animations were held at the community level. And finally, mother support groups were organized and/or strengthened. Additionally, the private sector contributed technical assistance in the development of a high quality social marketing strategy and advocacy materials, and also donated free air-time during prime viewing and listening hours. Nongovernmental organizations involved with the literacy movement—the Brazilian Charity Legion, the Catholic church, and paediatric and obstetric associations—all agreed to support the campaign.

Evaluations carried out in two major metropolitan areas showed significant changes in the duration and prevalence of exclusive breast-feeding, with better results achieved when the programme was at its peak. Major drawbacks in sustaining the efforts occurred when the Executive Working Group (which was coordinating the campaign) suspended activities in 1984. Another issue identified by the evaluations was the poor timing of some of the interventions. For instance, media launching and saturation preceded the training of health staff and changes in hospital practices. The result was increased demand but no adequately trained support. This resulted in some backlash from medical complications and frustration. The campaign also preceded the adoption of a clear-cut policy on breast-feeding. Therefore, rather than supporting these essential measures, expectations were raised and, too often, subsequently dashed.

Islamic Republic of Iran

IEC activities for the promotion of breast-feeding in the Islamic Republic of Iran were part of an overall child survival and development campaign on immunization, oral rehydration, supplementary food, and breast-feeding launched in 1988. The primary objectives of the breast-feeding initiative were to increase awareness about the need for exclusive and sustained breast-feeding, to advocate for changes in legislation in favour of maternity leave for working women, to ban imports of infant formulas, and to promote the universal adoption of rooming-in and other supportive maternity practices. The major target groups identified by the campaign organizers were family members, with a specific focus on women, primary health care (PHC) workers, and religious leaders.

The success of this programme was due to many factors. The campaign had high-level political commitment. The Head of the State launched the campaign, which was relayed by the Prime Minister, the Minister of Health (a paediatrician and an active advocate of breast-feeding), and various religious leaders. A decree to elicit support for the campaign was sent to all ministers, state governors, and heads of universities. Advocacy was preceded by the establishment of support systems, such as: training of health staff, adoption of rooming-in practices, banning of free supplies of infant formula in hospitals. In addition, infant formula was included in the list of essential drugs, thus, brand names could not be used and no advertisements, were allowed on containers or on television, printed advocacy material (flyers, posters, street banners) were mass produced prior to media launching, and religious leaders received orientation and literature.

Multisectoral collaboration was organized through central and provincial steering committees, including the religious affairs committee, the education and information sectors, all divisions of the Ministry of Health concerned with primary health care, the universities and medical schools, and UNICEF. Nongovernmental organizations were also enrolled and supportive (e.g., the Literacy Foundation, the Foundation for the Deprived, Red Crescent, and the Institute for Intellectual Development).

Face-to-face communication occurred during the Imams' Friday prayers. Door-to-door canvassing and other contacts were made through a large network of primary health care staff. Media programmes, which were broadcast at prime time, used various formats, including quizzes, children's programmes, comedies with famous actors, and literacy programmes.

The breast-feeding theme received unconditional approval from the religious teachings in a homogeneously religious society. Sustained breast-feeding for 2 years had the additional advantage of already being advocated in the Koran. Financial support was mostly drawn from national, public, and nongovernmental sources, such as the Ministry of Planning and Budget, pharmaceutical companies, the Foundation of the Deprived, and UNICEF. State-owned media donated free airtime and space, and consequently production costs were minimized.

Perhaps the major drawback of the campaign was the fact that not enough time was dedicated initially to formative research on women's resistance to breast-feeding. Even though research on knowledge, attitudes, and practices showed significant differences among rural/urban women and literate/illiterate women, and also disparities according to the infant's gender, it is not clear how standardized messages on the general benefits of breast-feeding addressed these differences.

Three additional problems also weakened the initiative. First, the timing of the breast-feeding campaign was dependent upon the three rounds of the immunization campaign. Secondly, owing to the war situation, a "black market" for ration cards allowed citizens to obtain infant formula without prescriptions. And finally, the evaluation was delayed, not allowing an opportunity to improve the communication strategy before the campaign ended, as originally planned.

Nevertheless, the Iranian initiative has demonstrated the value of high-level political commitment for the creation of favourable policies to protect breast-feeding; the importance of using electronic mass media, coupled with the establishment of alliances with religious leaders for support and leadership; and the advantage of a cohesive society, prepared to reinforce a behaviour that was already culturally well accepted. Prospects for sustainability are good since the breast-feeding steering committee which developed the campaign was not abolished after the campaign ended, the government controls the distribution of infant formula, and the adoption of a national marketing code is currently under study and awaiting legislation.

Guatemala

Beginning in the late 1970s, a strong advocacy movement in Guatemala alerted health officials and government leaders about the declining trend of breast-feeding among poor urban women, the unsupportiveness of health care practices, the negative impact of aggressive marketing of infant formula, and the changing role models of the urban elite women. A variety of social mobilization actions were undertaken over the last decade, beginning with the 1979 WHO/UNICEF Workshop for the Promotion of Breast-feeding, which recommended the establishment of a multisectoral effort to reverse the declining trends.

The success of the Guatemalan initiative was attributed to several activities. A multisectoral National Commission for the Promotion of Breast-feeding (CONAPLAM) was organized following the 1979 workshop, and subsequently became a legal entity by presidential decree in 1981. The Commission, which plays an essential technical and co-ordination role for breast-feeding-related activities throughout the country, boasts 13 permanent members including the various ministries of the government, the Secretary of Social Welfare, the Guatemalan Social Security Institute, the Paediatric Association, the Obstetrics and Gynaecology Association, and La Leche League of Guatemala. There are also four nonvoting advisory members, including INCAP, UNICEF, WHO, and La Leche League International.

Guatemala's multifaceted IEC approach specifically targeted health care professionals and associations, health institutions, professional schools, religious institutions, primary schools, the private and informal sector, industry, and the media. Face-to-face and mass-media channels were used in a phased manner, combining the training of health care providers at all levels, the development of printed educational materials for mothers and the delivery of motivational messages to target audiences through audiovisual presentations at clinics and over the media. In addition, specific social mobilization activities successfully targeted policy-makers, including government officials, legislators, religious leaders, medical professionals, community leaders, national institutions, and international donors, and encouraged their participation in endorsement of supportive programmes and policies.

An active fund-raising strategy was developed in Guatemala which resulted in the private sector mobilizing resources, mostly in kind, to support: (a) the production and broadcast of media materials; (b) the provision of technical assistance and funds for training; (c) the production of printed materials; and (d) the provision of transport and supplies at discounted prices.

Australia

The Nursing Mothers Association of Australia (NMAA) has the overall objectives of encouraging, and giving confidence and moral support to, mothers who wish to breast-feed their babies, to motivate mothers to take an interest in breast-feeding, to create awareness in the community of the importance of breast-feeding and nurturing, and of the need for community support for the nursing mother and her baby.

The IEC and advocacy activities of NMAA are very comprehensive and complementary, combining interpersonal communication with printed materials, publicity and networking. Their methods are adapted to seasonal fluctuations in the birth rate and encompass face-to-face and telephone counselling; group discussions with members; community education through talks at hospitals, schools, and medical schools; and an information service through newsletters, a library, audiovisual aids, and mothers' literature.

Kenya

The Kenya Breast-feeding Information Group (BIG) provides three types of breast-feeding services throughout Kenya: counselling, education and health in-service training, and information and publication.

BIG provides individual counselling and breast-feeding talks to mothers in maternity hospitals and MCH clinics in Nairobi and corresponds with mothers outside the capital city. The Group is also involved with the development and production of audiovisual aids targeted predominantly at husbands and families (i.e., “Help your wife to breast-feed”), and health care staff (through a regular newsletter).

Problems in implementation

Given the various IEC “successes” outlined in the previous section, one is compelled to ask why the majority of these promotional efforts have not been continued and built upon; why they have not been duplicated or replicated elsewhere; and why they have not resulted in a greater measurable impact on breast-feeding. The following discussion outlines 11 key issues that have weakened initiatives, have presented obstacles to the successful implementation, duplication, and replication of a range of IEC efforts, or have caused reversals or erosion of earlier accomplishments.

Linkage to complementary efforts

As seen clearly in the Brazilian and Iranian campaigns outlined above, massive informational efforts must be carefully linked to the availability of skilled breast-feeding support. This support may be in the public or private sector or in the health professional or lay sector. However, when women begin to ask questions, there must be resources to answer them. When the necessary skills are not available, frustration and lack of confidence in the ability to breastfeed often result. Cognitive and behavioural learning theories remind us that success is the strongest positive reinforcement. Conversely, repeated failure sends a strong negative message. Therefore, media efforts must be carefully linked to support systems and training of support staff.

Public education campaigns

The selection of priority target audiences is the key to the success of any communication strategy. In public education campaigns for the promotion of breast-feeding, the target audience is not always clearly defined, as it is in the case of commercial or social marketing. Typically breast-feeding promotion programmes target pregnant women and new mothers and ignore other key audiences, such as family members and

health professionals. Many initiatives that focus on women fail to identify critical differences among them. While a distinction is often made between rural and urban, other risk factors and key characteristics have been found to have a substantial influence on the decision to initiate and continue breast-feeding, and these should be addressed. Some of these characteristics include: (a) the place of birth and the type of delivery; (b) the woman's intention to return to work outside the home; (c) the decision to adopt modern family planning methods; and (d) the types of social and physical support available at home from other family members.

Public education campaign strategies must address who are "allies" or "influentials" in the decision and facilitation of breast-feeding, and who are the "enemies". One of the marketing strategies of Nestlé during the boycott was to assess and monitor "allies" and "enemies," as well as "opportunities" and "constraints". Marketing research firms conduct this type of assessment and monitoring on behalf of infant-food manufacturers very successfully, but very few government agencies have the skills or time to do this type of critical analysis for a breast-feeding campaign.

Other target groups—mostly "influentials"—have not received attention because they have not been systematically identified and targeted within an integrated IEC strategy. Some of these influentials include: donors, politicians and legislators, employers and unions, women's organizations, the media and advertising establishments, pharmacists and retailers of infant food products, health service providers, husbands, and mothers-in-law.

A study of social support, social influence, ethnicity, and the breast-feeding decision in the USA showed the differences in sources of support among Afro-american, Mexican-american, and Anglo-american mothers. These results have important implications for the targeting of IEC and social mobilization strategies and the identification of key influentials and allies for social support among various ethnic groups.

IEC messages

Most messages have been general, simply emphasizing the benefits of breast-feeding, but rarely addressing the points of resistance to breast-feeding. All too many IEC programmes reiterate the benefits of breast-feeding without knowing whether women are already convinced of the benefits or whether other issues might be of greater consequence to them. In addition, the tone of the messages has often been normative and moralistic.

In designing any mass media intervention, programme managers must first analyse the specific problems that need corrective action. Thus, programme planners need to understand why mothers do not breast-feed, or engage in less than optimum breast-feeding practices. Formative and summative research is needed prior to the design of messages in order to learn which behavioural, attitudinal and socio-economic factors influence the decision to initiate and continue breast-feeding.

Knowledgeable mothers may have many unanswered questions that need to be addressed. While the nutrition benefits of breast-feeding are often well covered, not enough information is presented about the health benefits of breast-feeding, women's health problems associated with breast-feeding, difficulties in initiating and maintaining a good milk supply, the milk insufficiency syndrome, and which family planning method to choose while breast-feeding.

KAP studies have shown that mothers are still unclear about a considerable number of points, including how many times a day a child should be breast-fed, how long a child should be breast-fed, and how to wean the child from the breast.

Messages should also be developed to address the larger institutional audiences. Groups other than women need to be reached through targeted messages on, for instance, advocacy for legislation concerning working women, the promotion of existing services for women, the importance of social support from family and community, the need to monitor implementation of the Code, the need to fund breast-feeding education programmes, etc.

Choice of channel

The full potential of the mass media is still unrealized. Most use of the media has been either too short to successfully counteract decades of aggressive marketing of infant formulas, or unfocused, relying on the goodwill of the news media to air public service announcements.

The interest groups that could take the lead in lobbying for, and organizing, media coverage, such as NGOs, women's groups, and professional medical associations, do not always have enough funds to pay for media time, or to contract professional advertising services for advocacy and the promotion of their information and support services.

The "small media" (also called reminder media, such as posters, brochures, slides) are often of too poor quality to compete successfully with the glossy materials and photographs on infant formula supplied by commercial companies. Poor-quality materials may inadvertently contribute to a poverty image of breast-feeding .

Interpersonal communication

The personnel available in health institutions to give advice may not all be well trained as breast-feeding counsellors and promoters.

Competing and sometimes conflicting messages and priorities from other public health interventions have weakened breast-feeding initiatives. Health care providers often send competing and conflicting messages to parents and child care providers in the context of other child survival interventions. Examples of such distorted communication, by omission, misconception, the provision of wrong models, and false rumours, are as follows:

By omission

- Missing the opportunity to promote optimum breast-feeding during contacts with the health centres for immunization, growth monitoring, family planning, and other services.
- Missing the opportunity to promote the role of colostrum in enhancing the infant immune system.
- Emphasis on the administration of Oral Rehydration Solutions (ORS) during diarrhoea leads health workers and mothers to forget the importance of continued breast-feeding for both the nutritional well-being of the child and for maintenance of breast-milk production by the mother.
- The negative effects of certain estrogen-containing family planning methods on breast-feeding are often ignored by family planning workers.

By misconception

- Mothers are still advised by insufficiently trained health workers to stop breast-feeding during diarrhoea episodes.
- Use of a family planning method is often discouraged until breast-feeding stops, or at least until lactational amenorrhoea ends.
- ORS is also given for cases of diarrhoea without dehydration, and this early administration can disrupt breast-feeding.

By providing wrong models

- Mothers and children in inpatient and outpatient wards are sometimes separated during treatment of diarrhoea episodes.
- Bottles and nipples are sometimes used to administer ORS to infants, which often undermines the breast-feeding relationship because it leads to “nipple confusion,” and gives the message that the use of bottles and nipples is sanctioned by the health care system.

By spreading false rumours

- The on-going research about possible transmission through breast-milk of pesticides, HIV, and drugs that mothers need to take for various illnesses may have contributed to a diffusion of rumours about the risks of breast-milk.

Collection and dissemination of information

There is a vast amount of information about breast-feeding that people need, but do not have access to. Appropriate information is critical if breast-feeding promotion and support are to be integrated into the community's long-term efforts to improve the health of women and children and continue after any individual campaign or project is completed. The development of publication, library, and media capabilities helps to ensure access to information and should include monitoring new research and learning about the experiences of other projects.

The Clearinghouse on Infant Feeding and Maternal Nutrition of the American Public Health Association has one of the most extensive collections of breast-feeding-related information and has been providing information to a multifaceted audience with a variety of information needs since 1979. Their target audience includes developing country health providers, nongovernmental organizations, policy-makers, and related sectors. Based on their experience, information needs have been identified in a number of areas, including: (a) information about existing projects and programmes; (b) technical information related to new research, etc., for use in revising curricula, changing hospital practices, developing education and training materials, and planning future research; (c) training and education materials on lactation management and sample curricula; and (d) information about policies and legislation that support breast-feeding.

Several newsletters and numerous libraries and information centres already exist but people do not know about them. Local newsletters can report information adapted to local needs, by: (a) synthesizing new information from other sources; (b) covering current programmes; (c) focusing on the practical applications of research and technical information; and (d) tailoring their contents to the specific needs of their audience.

Strategic planning

Strategic planning must precede IEC interventions. Awareness-raising of the general public is often done too early, before audience research

has identified the key resistance points, and before significant changes in the industry, the health system, and in the workplace have taken place to counterbalance the structural barriers to breast-feeding.

Management

Management of the IEC component of breast-feeding is rarely a priority within the health system. Leadership in breast-feeding promotion, even though it is recognized as a multi-institutional and multisectoral effort, is often provided by ministries of health. Chronically under-budgeted and understaffed health education units of ministries of health often lack the skills and financial resources to: (a) work with the media; (b) work with NGOs and other sectors; (c) organize fund-raising; (d) address policy-makers and think “advocacy”; (e) conduct or initiate audience research; (f) design appealing messages and materials; (g) monitor marketing practices; and (h) identify new opportunities and coordinate with other partners.

Breast-feeding promotion programmes need sustained funding for both production and distribution of materials. Simply producing a poster or a booklet does not guarantee that mothers, health workers, and other target audiences will ever see them, unless strategic thought is given to their appropriate and timely distribution.

Breast-feeding barriers

Societal and structural barriers to breast-feeding are not always successfully addressed and removed prior to launching IEC efforts, thus creating conflicts that can negate long-term impact.

Supportive breast-feeding-related legislation for working women is rarely enforced—if it exists at all. In Brazil, for instance, it has been demonstrated recently that most companies in São Paulo do not comply with existing legislation supporting women, by giving them time off the job to nurse their infants and providing nurseries for child care.

The continuing impact of industry

The impact of manufacturers of breast-milk substitutes remains significant despite the adoption of the International Code in 1981. The mobilization of forces to compete with industry on behalf of breast-feeding seems to have been more successful than efforts to ensure the Code’s implementation.

The strategy of monitoring the marketing practices of the infant-formula industry is more defensive than proactive and health workers are not yet fully trained in monitoring their own or other institutions' actions in keeping with their responsibilities under the Code.

Actively monitoring the Code requires, among other skills, the ability to make a content analysis of the hidden persuasion conveyed in the glossy materials and other promotional devices employed by the infant-formula industry.

- Such materials often omit important information or reflect, both verbally and graphically, misleading information.
- Messages emphasizing medical contraindications to breast-feeding and other exceptional circumstances are used to promote the use of breast-milk substitutes.
- Magazines and brochures initially targeted to health professionals are often left in doctors' waiting-rooms and read by the general public.
- In some cases, information packets produced by infant-formula manufacturers are in fact designed to be given to parents by health workers.
- Since the adoption of the International Code, the bulk of promotion budgets for infant formula has gone into providing gifts and other incentives to health professionals and institutions in the form of donated supplies, equipment, travel grants, etc.

Evaluation

It is difficult to assess the respective roles of various media versus face to face activities.

Quantitative evaluations describing the prevalence of breast-feeding at a given moment in time are not always useful for monitoring and evaluating an IEC initiative or communication strategies. Measuring an increase or decrease in prevalence will not always allow one to understand why changes did or did not occur. Consequently, appropriate periodic adjustments in a communication strategy cannot be made. Instead of prevalence data, it is necessary to identify the resistance points, the why, the how, and the when of decision-making on infant feeding practices, and the mother's sources of information, influences, and social support.

The paucity of systematic cost-benefit analysis related to breast-feeding promotion campaigns, materials development, and other IEC activities, and the overall lack of programme evaluations have apparently discouraged many donors and government officials from allocating additional funds to this area. It has also resulted in a lack of continued

commitment on the part of policy makers and health workers. Where information is available, it only covers the costs of using television or radio for a public service announcement (PSA). There is even less information on size of audience.

Recommendations

Through an analysis of the IEC components of breast-feeding initiatives, a wide variety of policy and programme issues were identified during the 1990 UNICEF/WHO Technical Meeting in Geneva. Based on this analysis, five key recommendations were formulated for consideration in the development and execution of future efforts/campaigns, as follows:

1. Widen the scope of the IEC component of breast-feeding programmes to encompass early and continued advocacy and alliance building, through social mobilization activities and the identification of all key target audiences. Conduct an initial and periodic analysis of programme constraints and opportunities, and regularly monitor and assess the strengths and weakness of potential “allies”, “partners”, and “enemies”.
2. Use IEC to encourage the establishment of national committees, institutions, or other structures that will permanently promote breast-feeding at the national level. Provide such entities with effective leadership, a strong technical base, a designated IEC director with appropriate communication skills, and sufficient funds to execute responsibilities.
3. Move the focus of breast-feeding promotion from being defensive in nature (e.g., trying to counter years of formula promotion) to being more proactive. Develop a comprehensive communication strategy before beginning a campaign, based on a social marketing approach that emphasizes the segmentation of the audience, the identification of obstacles, the development of appropriate messages, and the optimal use of all available channels. Moreover, ensure the availability of skilled service providers and support in areas where IEC messages are being transmitted.
4. Pay attention to the critical timing of IEC and social mobilization activities. IEC campaigns, for example, must not precede other strategies to remove obstacles to breast-feeding. IEC campaigns cannot be expected to be effective unless support is available within the health care system, the family and community, and the workplace to enable a woman to act upon the information received through IEC. Changes in health care practices, in legislation for

working women, and in other supportive measures should be well established before accelerating the creation of demand through mass communication channels.

5. Improve the availability of materials and information. It is imperative that the information support for service delivery staff be improved if sustainable programmes are to be built. A number of options for improving access to information about breast-feeding and/or lactation management have been suggested, including: (a) use existing libraries and information centres to achieve the optimum multiplier effect in distributing information and materials; (b) support the translation of key materials and subsidize distribution to appropriate target groups; (c) ensure that materials are written, or that information is presented, in a way that is both understandable and usable at community level; (d) strengthen the information activities of local organizations through financial support, technical assistance and training; and (e) where existing materials on breast-feeding are inappropriate or unavailable, the development of new materials should be supported.

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6. Women, work, and breast-feeding

Abstract

The integration of women's productive and reproductive roles is a basis for strengthening both child survival and economic development. The rights of a mother to breast-feed, a father's right to assist the mother of his children to breast-feed, and a child's right to be breast-fed should not conflict with the right of all human beings to earn their living in order to maintain life and health for themselves and their dependents. In all parts of the world, a woman's income is increasingly necessary to the economic survival of her family.

Employed women can be classified into two groups: those in the formal sector who may be covered by maternity support entitlements and those in the informal sector who are not. However, many women are denied their legal entitlements by employers, and these entitlements are not enforced by labour unions and the government.

Furthermore, neither women employed in the informal sector nor rural women who work in agriculture are protected by maternity entitlements. Because these women are generally poor, their infants are most at risk as regards morbidity, malnutrition, and mortality by not being breast-fed. Because the money they earn is critical to their families' welfare, strategies to enable these women to perform both their productive and reproductive activities are essential.

It is a common misconception that breast-feeding and paid work are incompatible. In fact, reports from several countries show that breast-feeding can be successfully integrated with work; examples are quoted from Botswana, Finland, Honduras, Israel, Mali, and Nigeria.

Two recent meetings have concluded that employment outside the home did not necessarily influence the initiation or the continuation of breast-feeding. Experience in Sweden shows that even with generous maternity benefits, mothers will not necessarily breast-feed exclusively unless they are motivated to do so, have the necessary skills and receive adequate support from their families, their employer, and the health sector.

To date the problem has not been addressed directly for a number of practical reasons. First, it is not a single problem that can be resolved through a single intervention. Second, many of the allies who should be supporting action on employment and breast-feeding are not yet aware of how their interests overlap with the interests of those who are actively pressing for new breast-feeding initiatives.

Technical overview

The successful integration of women's productive and reproductive lives is the basis for child survival. Every woman has the right to breast-feed. Every infant has the right to be breast-fed. All human beings have the right to earn their living in order to maintain life and health for themselves and their dependents. These rights should not be jeopardized by conflict between economic survival and the decision to breast-feed.

To date, the problem has not been tackled head-on for a number of practical reasons. First, it is not a simple problem or one that can be resolved through a single intervention. Instead, the topic invites controversy and contradictions. Second, many of the allies who should be supporting action on employment and breast-feeding—gender and development programmes, environmental groups, even family planning programmes—are not yet aware of how similar their interests are to the interests of those who are actively pressing for new breast-feeding initiatives. In fact, some potential allies are indifferent or even hostile to this topic. To address the various ideas on this subject coming from the various different groups presents special challenges.

For example:

- Women workers seldom raise issues of breast-feeding rights in workers' groups or unions.
- Employers want women away from work for the least possible time, and they want to minimize the costs of benefits to them.
- Child care advocates argue that women want child care located near their home, not their work.
- Women's groups who work for more male involvement in child care, view breast-feeding as counterproductive to a renegotiated sexual division of labour.
- Policy-makers need cost-benefit analyses to support breast-feeding programmes, but the economic benefits of breast-feeding are difficult to quantify.
- The infant-formula industry has targeted employed women as one of their special markets.
- Breast-feeding advocates may overstress a woman's duty to breast-feed and promote the image of employed women who breast-feed as "super-women" pursuing demanding careers and raising perfect children.
- Health professionals may "blame" a woman for going out to work and "neglecting" her children.
- Feminist groups usually avoid the topic because discussions of breast-feeding are easily twisted into arguments of biological determinism.

The topic of breast-feeding and women's work is a particular challenge because it requires the combination of different dimensions of women's lives that are usually kept separate by both academic disciplines and policy-makers. Women who work and breast-feed continually deplete their own energy and resources for their children, or conceal their breast-feeding by quietly expressing milk in an executive wash-room without disturbing the day's business.

It is critical that the question be seriously addressed now because more women are entering the labour force under worsening conditions, and child survival initiatives seem to be focusing on interventions other than breast-feeding. At the same time, evidence has been accumulating about the importance of exclusive breast-feeding, and how rarely it is practised.

This section reviews the evidence available, with particular emphasis on the wide range of contexts in which work and breast-feeding are combined, and considers reasons why the topic has not been fully addressed. Mothers' coping strategies and the very few examples of workplace strategies are discussed and possible policy options are considered.

The Women in Development (WID) literature of the 1970s and 1980s brought to light the degree to which women's work was undervalued. In most economic surveys, work is still defined as an activity that produces cash income, and women are classified as either economically active or inactive. Further refinement in defining work as it is used in studies of infant feeding and employment include distinctions between full- or part-time, more or less than 40 hours per week, work year round or seasonally, work at home or away from home (Leslie & Paolisso, 1989). Even in time-budget studies, child care and breast-feeding are either ignored, considered as leisure activities, or considered joint production (occupying the same time and space as other tasks). In the following discussion, the term work refers to human energy and effort expended for a purpose; the task, and activities accomplished, may or may not require separation between mother and child. Similarly some work is remunerated with cash, and other work is not remunerated. However, all these activities are considered work. Employment refers to opportunities to earn money by labour.

Women combine breast-feeding with other kinds of work in a variety of contexts, ranging from the less industrialized communal societies and rural peasants, to the more industrialized informal and formal types of urban employment. The integration of breast-feeding and other work always requires some kind of trade-off or adjustment, there is no one simple, natural way to reconcile these tasks.

The relation between productive and reproductive spheres of women's lives can be seen most clearly in small-scale societies such as the hunting

and gathering people of northern Botswana, the Kung San. In this society, breast-feeding continues into the third or fourth year, is frequent, on demand, and spaced throughout the day and night; this regime results in child-spacing of about 4 years. A woman who ranges widely to forage for food and whose children are spaced 4 years apart can successfully integrate these two activities. However, a shift to settled village life can upset this delicate balance between productive and reproductive work (Lee, 1980).

Among rural Mexican peasant families, mothers view breast-feeding as requiring a conscious effort on the part of the mother, with support from family and friends. When infants are carried on the mother's chest, the infant has easy access to the breast. Older infants are bound on the mother's backs, limiting access. The carrying techniques, in addition to the requirements of mothers' activities, structure the timing of breast-feeding. Thus, the term "demand feeding" may be misleading, even when women's activities do not require separation from their infants. Rural Mexican village women were observed to breast-feed about 12 times per day, spending about 200 minutes per day suckling.

Examples from rural peasant communities suggest that our assumptions that women engaged in agricultural labour have no difficulty in integrating work and breast-feeding are inaccurate, or oversimplified at best. In fact, rural women often face greater difficulties than urban women because there are seldom any day-care facilities available. Therefore, policies concerning the integration of work with breast-feeding should also address the concerns of rural agricultural workers.

For urban women engaged in the informal sector, arranging infant care and feeding can be a particularly complex task. Whenever temporary, casual work is available, women will take advantage of it, but it is the lack of preparation for work opportunities and the inability to plan ahead that causes disruption in child care patterns for these women. Work opportunities often take priority over the needs of infants and young children. Although these work opportunities cannot be anticipated, many of the activities can be carried out at or near home sometimes allowing mothers to adapt their work schedules to the needs of their infants. In these cases, work and care of infants are compatible.

Hoodfar's (1986) intensive ethnographic research in the low-income neighbourhoods in Cairo revealed the extent to which the ideology of breast-feeding had been transformed, in spite of the fact that all mothers insisted that breast-feeding was best for the child. The few mothers who were employed away from home stopped breast-feeding by 6 weeks, although they did not return to work until 3 months after giving birth. Investigations showed that women resented breast-feeding like other situations that women have to put up with because of their sex, such as

menstruation. Hoodfar's analysis shows how inappropriate promotional strategies based on ideas that breast-feeding is beautiful would be in Egypt.

The pressure on women in developing countries to work is often triggered by the need to offset any drop in earnings of other household members. Working decreases the amount of time mothers can allot to child care. Yet conditions often make it increasingly difficult for women to arrange adequate child care. UNICEF has estimated that the lack of adequate child care has resulted in the death of 650 000 children under the age of 5 in the 16 countries most affected by international debt. The structural adjustments imposed on these countries by the World Bank and the International Monetary Fund discouraged further government expenditure on social services, health, and education (Cornia et al., 1987).

Thus, the evidence presented here concerns what is probably just the beginning of a global trend that will make it increasingly difficult for mothers in developing countries to combine breast-feeding and work, unless a very concerted effort is made to address these conditions.

Van Esterik & Greiner (1981) reviewed studies that cited women's work as being influential in the mother's infant feeding decision—starting the bottle, or stopping breast-feeding. They concluded that employment outside the home was not the major, or even a major, reason for not initiating breast-feeding, starting bottle-feeding, or terminating breast-feeding. In fact, breast-feeding rates for working women did not show that employment and breast-feeding were incompatible. In Finland, there is no significant difference between the duration of breast-feeding among employed and non-employed women at 1 month (78% at home, 80% employed), 3 months (29% at home, 32% employed), or 6 months (8% at home, 7% employed). Similarly in Ibadan, Nigeria, employed mothers were found to be more likely to breast-feed than non-employed mothers, although mixed feeding patterns were also common. A study conducted in Bohol Province, Philippines, also found that women who had ever worked for pay since marriage had a slightly higher mean length of breast-feeding than women who had not worked (Van Esterik, 1990).

Other studies have found maternal employment to be associated with a longer duration of breast-feeding. It is possible that working women tend to practise mixed feeding for longer periods of time. Some authors find an increase in the duration of breast-feeding only among women with higher status jobs (Van Esterik & Greiner, 1981).

Van Esterik & Greiner offer the following recommendations that might allow women to reconcile their productive and reproductive lives: (a) shared domestic labour; (b) changes in obstetric practices to accommodate breast-feeding mothers; (c) enforcement of laws, such as matern-

ity leave and benefits, nursing breaks, and reasonable child care facilities; and (d) appropriate household food distribution.

In 1989, Berg & Brems reviewed recent studies on women's time, employment, and breast-feeding, and concluded that there was little empirical evidence that women's employment need necessarily affect breast-feeding. In most situations, modification of the work environment would increase women's options regarding infant feeding, so that women who wish to breast-feed would not incur a high opportunity-cost for that decision.

Auerbach (1984) notes that few studies question the assumption that breast-feeding combines poorly with employment. She surveyed breast-feeding mothers employed outside their homes and found that most of their difficulties were problems common to all parents, or minor annoyances common to most breast-feeding mothers. While employed mothers who breast-feed may experience problems as a result of their employment, most of the problems are not different from the difficulties faced by unemployed breast-feeding mothers.

Kurini et al. (1989) examined how maternal employment affected breast-feeding. They found that both black and white women returning to professional occupations had a longer duration of breast-feeding than women in sales or technical positions. Women who worked in professional or technical occupations during pregnancy were more likely to breast-feed than women in other occupations, or those not employed. The authors concluded that the findings of this study emphasized that women employed as professionals appeared to have more control over their work environment and could structure a more satisfactory relationship between the demands of employment and infant feeding.

Using the Ross Laboratories Mothers Survey, a national probability sample of new mothers in the USA, Ryan et al. (1990) examined factors influencing the duration of breast-feeding patterns established in hospitals. They found that employment status was significantly associated with partial breast-feeding: only about 27% of mothers who exclusively breast-fed their infants were employed at the time they received the survey questionnaire. Almost half (48%) of the mothers who started partial breast-feeding in the hospital worked full- or part-time at the time of the survey. They also found that formal work did not influence the incidence of breast-feeding, but did influence its duration. Martinez & Dodd (1983) showed that only 20% of mothers whose infants were 6 months old breast-fed if they were fully employed, compared with 50% of mothers who were not employed. Most of these employed women who were breast-feeding used a supplemental bottle.

Few breast-feeding studies pay close attention to the nature or pattern of the breast-feeding experience. One exception of this is the work of

Knauer (1988) who studied the breast-feeding and weaning practices of 57 Toronto mothers who were practising "natural mothering": this was defined as breast-feeding on demand, for nourishment as well as comfort, nursing through the night, no introduction of solid, supplementary foods until at least 6 months, and little or no use of bottle or pacifiers. She found that women working outside the home supplemented with solid foods earlier, and used bottles more, without affecting the duration of breast-feeding. The working women felt that what altered for them was the time of day when nursing took place; that is, there were more evening and night feeds. Knauer's research suggests that lengthy separations of mother-infant pairs may be more detrimental to the maintenance of lactational amenorrhoea than to the duration of lactation.

Schlossman (1986) investigated the allocation of time by employed and non-employed Boston mothers with respect to infant feeding. She paid particular attention to the strategies mothers used to integrate work and infant feedings, including delegating tasks, reducing the time spent on an activity, eliminating it altogether, or fragmenting the task. While infant feeding choice did not affect the rates of return to work, more mothers who breast-fed in hospital returned to work on a part-time basis at first. These American women cited supportive employers with flexible work policies, and trustworthy day-care providers, as factors enabling them to continue breast-feeding after returning to work.

Few studies have investigated the breast-feeding patterns of employed women in non-Western or developing countries. Birenbaum & Reichman (1983) examined the demographic factors influencing the initiation of breast-feeding in Tel Aviv, Israel, and found a higher rate of breast-feeding among those of orthodox religious belief, high educational level, working in the academic and para-academic professions, non-smokers, those who worked outside the home during pregnancy, those who had previous breast-feeding success, and those whose husbands' attitudes toward breast-feeding were positive. They stressed the importance of the timing of the return to work, the availability of part-time work, and facilities at the place of work as factors influencing mother's breast-feeding experiences. All employed mothers in Israel receive 3 months paid maternity leave with a legal option of a further 9 months unpaid leave.

O'Gara (1989) showed, in urban Honduras, that employed women breast-feed as successfully as non-employed women. At almost all ages, a greater percentage of employed mothers breast-fed than did non-employed mothers, but introduced supplements earlier than non-employed women. When mothers were assisted during the first 40 days post-partum, it was possible to sustain breast-feeding even for women who worked full-time outside the home.

The International Union of Nutritional Scientists (IUNS) study on infant nutrition policies under changing socioeconomic conditions in São Paulo, Dar es Salaam, and Colombo found that employment status did not diminish breast-feeding initiation rates, but appeared to shorten the duration of exclusive breast-feeding when the mother was formally employed. A large proportion of women who were not separated from their infants during the day still did not take advantage of their opportunities to breast-feed. In São Paulo, for example, house-working mothers initiated breast-feeding less often than did formally employed women (Marchione & Helsing 1984).

Among the urban poor and middle-class inhabitants of Bangkok, Semarang (Indonesia), Nairobi, and Bogota, the hours of separation and not the fact of working for pay was the factor that resulted in reliance on bottle-feeding (Winikoff et al., 1983).

Cross-cultural analysis of 202 traditional societies confirmed that in most societies maternal work activity was restricted post-partum, although in a few societies usual work duties were suspended for prolonged periods, ranging from 1 day to 6 weeks, with a few as long as 8 weeks (Jimenez & Newton, 1979).

While most of the literature reviewed stressed the difficulties of combining breast-feeding with formal work, Dettwyler (1988) demonstrated, in urban Mali, that when breast-feeding was highly valued, and not viewed as a burden or an inconvenience, it was not an activity that significantly constrained a woman's activities. Because women and their infants were allowed to travel everywhere together, the mother did not have to stay at home to nurse her infant. The infant was simply taken along wherever the mother cared to go and was welcome in almost any situation. Even in the formal sector, there were few contexts requiring the presence of the mother in which the presence of the infant was not accepted. Thus, cultural definitions of when and where it was appropriate for infants to go and for mothers to nurse had at least as much impact on infant feeding choices as the conditions of women's work.

The Mali example is an excellent reminder that regardless of the material conditions provided to support working breast-feeding women, it is the cultural context that shapes what might be called the "breast-feeding style" (Van Esterik, 1982) in a country. In a context like Mali, adults tolerate infants everywhere, and breast-feeding is considered normal. When breast-feeding is socially valued, workplaces accommodate breast-feeding mothers. When breast-feeding is not socially valued, work-places do not accommodate breast-feeding mothers, and individual mothers succeed only through their determination to overcome obstacles.

In many societies, grandmothers are the preferred caretakers of infants and toddlers and they commonly assist their daughters after childbirth and provide the support necessary for successful breast-feeding. Yet in urban Bangkok, for example, grandmothers are equally likely to encourage the use of breast-milk substitutes to relieve the mother entirely of her responsibility for feeding the child. This may be one way an elderly member of the household, who no longer contributes financially to the household, can increase their influence and importance in the household. Infant-formula manufacturers often appeal to grandmothers in their booklets on infant feeding, suggesting that they may be given the opportunity to give a supplementary bottle.

In socialist countries the state usually assumes responsibility for child care or directs employers to take on this responsibility. In other economies, child care is beginning to be incorporated into the benefits packages of some corporations that need to retain their skilled women employees. Nevertheless, it is clear that in North America, this is not yet a priority. Many employers provide parking space for their employees' cars while few have day-care arrangements for their employees' children. In a survey by the Nurses Association of the American College of Obstetricians and Gynecologists, 60% of respondents expressed the opinion that it is possible for a mother to work and continue breast-feeding (Moore & Jansa, 1987). None of the companies surveyed offered on-site day-care for the infants of their employees. One company made arrangements for breast-feeding for their employees in Brazil, but had no policies to support breast-feeding for the employees in the USA.

In societies where work takes precedence over family responsibilities, it may be more difficult for mothers to respond to the changing demands of a growing infant when their workplaces are farther from home. In these cases, it is important for the child-minder to be prepared to cope with a hungry breast-fed baby whose mother is late from work. Samuals (1982) found that many minders did not want to accept breast-fed infants because of their dependency on their mothers. Several day-care centres also admitted their reluctance to accept breast-fed babies and their preference for bottle-fed infants.

The paucity of workplace efforts to support breast-feeding is striking, given the wide range of philanthropic projects supported by corporate profits. Many companies "invest" their profits in works of art, sponsorship of structural events, political donations, and grants and scholarships to academic institutions. They also spend vast sums on prestigious buildings, furnishings, and entertainment as well as large, well publicized gifts to "charity", often rewarded by generous tax concessions. Yet few businesses provide time off for their employees to breast-feed their babies

or provide a simple crèche for mothers who wish to feed their babies at work (Palmer, 1988).

Shepherd (1982) offers solutions to the problem of infant feeding in child-care centres, but they reflect the approach proposed by infant-formula manufacturers. Many of the formula companies have prefilled, ready-to-use bottles in a range of sizes. They are expensive, but do not need refrigeration, have a relatively long shelf-life, and are convenient to use in emergency situations when breast-milk is not available. Clearly, the manufacturers of infant formula are prepared to offer “solutions” to employed breast-feeding mothers, if other institutions and organizations are not prepared to do so.

The health advantages of breast-feeding have been well documented. Evidence on the morbidity and mortality advantages for breast-fed infants is of particular interest to employed women. While sick infants are always a concern to mothers, they are of even greater concern to mothers who must leave their workplace to care for sick children, or to take them to medical facilities. It would be useful to build on the evidence regarding the health consequences of breast-feeding, mixed feeding, and bottle-feeding, and to make use of this information for policy decisions regarding employment and breast-feeding.

Programme implementation: maternity and child-care entitlements

International level

Most research on women, work, and breast-feeding concludes with recommendations regarding the International Labour Office Maternity Protection Conventions established from 1919 onwards. The maternity protection convention No. 3 (1919) provided for a maternity leave of 12 weeks—6 prenatal and 6 postnatal—free medical care, and two half-hour nursing breaks for women employed in industry and commerce. In 1921, it was recommended that agricultural workers be extended the same protection; and in 1952, that women wage-earners at home, and domestics be similarly covered (Convention 103). This latter convention has only been ratified by 25 countries.

ILO Convention No. 89 (1948) requires that authorities must consult employers' and workers' organizations before prescribing women a work-shift after 23 h00, except for certain occupations such as health services. However, prohibiting night work for women may be an obstacle to women's employment equity. Since night-shift work may be part of a woman's strategy for combining family responsibilities and employment,

there are many worker's groups that do not want to see the convention enforced.

Although the Clearinghouse on Infant Feeding and Maternal Nutrition of the American Public Health Association, Washington DC, regularly reports on the existing legislation and policies to support breast-feeding mothers in the workplace, including information on maternity leave policy, salary during leave, provisions for nurseries, nursing breaks, and other considerations, it must be remembered that neither maternity entitlements nor lactation breaks are regularly implemented for formally employed women. Also, most working women are ineligible for these benefits because they work in subsistence agriculture, home-based production, or are self-employed in a wide range of activities in the informal economy.

Reviews of maternity legislation seldom specify how the laws are monitored or enforced at the local or national level. The International Labour Office is considering whether the best strategy is to revise the conventions or encourage more countries to ratify and implement them.

National level

In socialist countries, maternity entitlements are generally guaranteed and the competitive promotion of infant formula is discouraged; however, programmes vary. In the Soviet Union, there are publicly funded child-care facilities, but not enough for all children. Women workers receive 112 days paid maternity leave, which can be extended to partially paid leave for one year. They have the right to at least one half-hour breast-feeding break per 3-hour period, and it is forbidden to refuse to employ a woman because she is breast-feeding, or to reduce her earnings and responsibilities (Palmer 1988, Leahy 1986). In spite of these regulations in the Soviet Union, child care is still the main difficulty for both rural and urban working women (Croll, 1986).

Cuba also provides a network of child-care centres that are open 6 days a week, some offering 24-hour care. Women receive 6 weeks paid leave before birth and 3 months after, which may be extended up to 1 year without pay. Women receive 1 day per month for the child's medical care (Leahy, 1986).

In China, the following provisions are in place for working breast-feeding mothers; they are allowed half-hour breaks twice each day to feed their infants; a room near the nursery affords privacy for mothers and infants. In the farm communes, breast-feeding women are transferred to work near the nurseries where their infants are kept. Nourishing snacks, usually soya-bean milk, may also be given to the mother during the

breast-feeding periods. If the breast-fed infant is being cared for away from the factory, the mother may be given 1-hour periods for commuting to her infant by bus or by bicycle. Day-care and nursery facilities are available in factories and communes (Elder & Hsia, 1986).

In Sweden, the issue of working women and breast-feeding is particularly interesting because so many women work, and political decisions have been taken to encourage them to do so—including the provision of generous parental benefits and heavily subsidized child care. Sweden maintains unusually good statistics on its population: statistics on breast-feeding, for example, are not based on small studies, but are routinely kept by the National Board of Health and Welfare and are based on nearly all babies born in the country each year.

The Swedish system of maternity benefits began in 1934 with payments to mothers at the time of birth, which were higher for working women belonging to a national insurance scheme. In 1937, it was improved by increasing the amounts poor women could receive. In 1945, a law made it illegal to terminate a woman's employment on grounds that she was pregnant or had delivered a child. In 1955, the maternity leave for working women was extended to 6 months, 3 of them with pay. In 1974, the payment to working mothers was increased to 90% of the woman's salary, and a small amount was paid to non-working women. In 1975, another month of leave was added. In 1978, the total leave was increased to 9 months, with the first 6 months paid at 90% of salary. Since 1979, the total period of leave, intended to be shared between mother and father, was 18 months, and the portion of that for which 90% of salary is received has gradually increased to the current 15 months.

In spite of the generous benefits, the prevalence of breast-feeding declined rapidly and continuously in Sweden from the mid 1940s to the early 1970s. However, in the mid-1970s breast-feeding rates rose sharply and continued to increase slightly through the early 1980s. These changes and the current stagnation in rates of breast-feeding have all occurred independently of law-making and monetary incentives.

The experience of Swedish women demonstrates that breast-feeding in a society where most women work can continue to decline in spite of legislation that is implemented by employers and which, in principle, would allow them to breast-feed virtually as much as they would like to.

In conclusion, it is clear that women will not necessarily breast-feed exclusively, even with optimal maternity benefits, unless they are motivated to do so, have the necessary skills, and receive adequate support from their families, their employers, and the health sector.

Paid leave of 3–4 months would theoretically allow women to practise exclusive breast-feeding before returning to work. Ideally, this leave could be taken after the birth and not partially before delivery, and the

worker could then return to flexible or part-time employment for a few months. But this will only be effective if breast-feeding is already perceived by women to be superior to the alternatives. In Bangkok, women who received maternity leave were slightly less likely to have weaned the infant by 3 months and about 3.5 times more likely to have weaned by 6 months than those employed mothers who had no leave (Winikoff et al., 1988).

Few studies have reviewed how mothers actually use their maternity leave. One study of antenatal leave (Van Esterik, 1990) found that women in the United Kingdom in paid employment had fewer pre-term and low-birth-weight babies, fewer stillbirths, and fewer babies dying in the first week of life than full-time housewives. These results were explained by the beneficial effects of work outside the home, the husband's assistance with domestic work if the mother was at work, and the hazards in the home.

Child care in the workplace is rare except in certain socialist countries. Since many women work in the informal economy in irregular seasonal work, the idea of mobile child-care centres has been implemented in India. In Bangkok, mobile child-care centres have been set up at construction sites where the building projects will take at least 18 months to complete. The project was funded by ILO in an attempt to assist workers in the informal sector with child care. It is possible that these mobile centres could be modified to serve the needs of mothers with infants in a number of different work contexts.

In the USA, the national legislation does not grant any benefits for working mothers, except that pregnancy can be treated as though it were a short-term disability (Kammerman et al. 1983). Maternity leave is given in most developing countries, together with other legal provisions to support mothers in the workplace (Clearinghouse on Infant Feeding and Maternal Nutrition, 1989), as it is in nearly all industrialized countries.

Very few workplaces in the USA have provided facilities for breast-feeding. A few large corporations provide maternity benefits as part of their employee benefits package, refrigeration for breast milk, and some degree of support from health care professionals, but no policies specifically to support breast-feeding employees. Most workplace strategies have been initiated by individuals who approached their corporations with a plan of action (Moore & Jansa, 1987).

Community and individual level

Any practices that encourage a period of social seclusion, rest, and special foods for the first few weeks post-partum will probably assist in breast-feeding. When supported by religious texts, this period of seclusion is

usually around 40 days—the period necessary to establish lactation. However, in many parts of the world, the advent of western biomedical practice hastened the decline of these so-called traditional practices.

Wet-nursing has been practised through the ages to assist women to breast-feed and work. However, at the present time, even breast-feeding advocates express concern over the dangers of cross-infections, or the infant bonding to someone other than the mother.

In some places, health professionals have developed workplace strategies to facilitate the integration of breast-feeding into their own working schedules. In Papua New Guinea, for example, urban, public health nursing staff in Port Moresby are provided with satisfactory child-minding facilities near home or near work, and the nurses are allowed to transfer to clinics as near to their homes as possible, the young babies being allowed to remain in the back room of the clinic (Marshall, 1988).

In Lagos, Nigeria, it was found that women employees at a hospital with low salaries breast-fed their children for longer (8 months) than more senior professional women who breast-fed for 3–5 months (mean duration) (Bamisiaiye & Oyediran, 1983).

In the USA, when a New Jersey hospital provided facilities for breast-feeding, the mothers were able to combine breast-feeding and hospital employment successfully (Katcher & Lanese, 1985). The hospital provided 3 months maternity leave, and, on return, time during shifts for expression of breast milk. A refrigerator was made available for storing breast milk and a breast-feeding consultant was available for advice.

Cost issues

It has been difficult to prove the economic value of breast-feeding, since the savings are experienced at the individual, household, institutional, and national levels. While efforts have been made to estimate financial savings at the national and household levels, no comparable work has been done at places of employment. Policy-makers assume that breast-feeding adds to the costs of the employer, through the need to provide maternity leave, lactation breaks, or day-care facilities at the workplace. However, lactation breaks are the only costs to the employer related directly to breast-feeding. Maternity leave and day-care facilities are rights that employed women seek regardless of whether they are breast-feeding.

The problem of estimating the cost-effectiveness and cost-benefit of breast-feeding is the difficulty of putting a value on the strong synergistic effect it has on child survival. In attempting to pursue such an analysis, it is important to compare the cost-benefit of breast-feeding with the cost-benefit of various locally available alternatives to breast

milk. Stewart (1989) argued that for an accurate assessment, it is important to identify a fully vaccinated child in order to assess immunization programmes. Would it not be equally useful to identify a fully breast-fed child in order to calculate more accurately the full benefits of breast-feeding?

Recommendations

Four specific recommendations to support working women who breast-feed emerged from the May 1990 Technical Meeting in Geneva.

1. An analysis should be conducted of the situation of employed women with infants and young children. Such an analysis could examine whether material constraints, lack of knowledge and awareness, or lack of lactation management skills are the major obstacles to breast-feeding while in paid work. It could also examine current strategies and analyse the extent to which they could be expanded or altered to meet the needs of breast-feeding women who are also employed.
2. The marketing and distribution of subsidized or free breast-milk substitutes and other infant foods to employed women must be stopped.
3. Issues relevant to employed women should be integrated in all types of breast-feeding promotion activities. Advice on lactation management skills should include those relevant to working women, such as breast-milk expression and storage, and the use of a cup rather than a bottle for feeding infants when they cannot be breast-fed.
4. A task force on women, work, and breast-feeding should be established within national advisory groups on breast-feeding with the object of improving legally mandated maternity entitlements. This task force should include representatives from the health care system, professional organizations, labour unions, the ministry of labour, mother support groups, and the communication sector.

In addition, four broad recommendations were outlined and their rationalization discussed:

1. Research priorities should be linked to action strategies. For example, it would be useful to have more information on topics such as the following: (a) what are the energy costs of combining work and breast-feeding (with particular focus on seasonal work); (b) what are the effects of paternity benefits on breast-feeding rates and duration; (c) what do we know about night-feeds and "reverse rhythm" feeding; and (d) how does maternity leave relate to breast-feeding rates?

2. Linkages should be made with other development programmes. For example, breast-feeding promotion and consumer advocacy groups are often viewed as acting in isolation from other programmes. The environmental movement and advocates for sustainable development should be natural allies for breast-feeding, and they should be shown how breast-feeding furthers their interests and encouraged to link breast-feeding into their strategies. Linkage to any projects where women's activity patterns are fully considered and where community women have a say in designing the project should provide potential opportunities for integrating work and breast-feeding. Similarly, projects that support micro-enterprises for women might facilitate combining breast-feeding with work if they are located close to women's homes and allow flexible work schedules.
3. Women's organizations should be encouraged to support breast-feeding as a priority. Breast-feeding is too often treated as a process that is unrelated to other processes and concerns of women. The issue of breast-feeding and women's work is invisible in the women's movement, either because it is taken for granted in some parts of the world, or totally out of women's consciousness in other parts of the world. Breast-feeding issues should be integrated with other concerns of women. Women's organizations need to be informed of how breast-feeding entitlements will further their other policy objectives, and mobilized to support breast-feeding policies.
4. Information, education, and communication activities related to breast-feeding should address the needs of working women. To assist working women with breast-feeding, the following special target groups should be considered: child-care workers, occupational health nurses, and women's unions. The mass media could be used to publicize existing policies affecting employed breast-feeding mothers and by showing elite professional women breast-feeding.

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ANNEX 1

Innocenti Declaration¹

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 social and economic benefits to the family and the nation;
- provides most women with a sense of satisfaction when successfully carried out; and that
- recent research has found that 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; and
- programme interventions can result in positive changes in breast-feeding behaviour; and

We Therefore Declare that:

As a global goal for optimal maternal and child health 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 4 to 6 months of age. Thereafter, children should continue to be breast-fed, while receiving appropriate and adequate complementary foods for up to 2 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.

¹ This declaration was adopted by the participants at the WHO/UNICEF meeting on "Breastfeeding in the 1990s: a global initiative", cosponsored by the United States Agency for International Development (USAID) and the Swedish International Development Authority (SIDA), held at the Spedale degli Innocenti, Florence, Italy, on 30 July –1 August 1990.

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 mobilization, 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 workplace and the community must be eliminated.

Measures should be taken to ensure that women are adequately nourished for 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 4 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 pre-natal 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

All governments by the year 1995 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 ten 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; and
- enacted imaginative legislation protecting the breast-feeding rights of working women and established means for its 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; and
- encourage and support national authorities in planning, implementing, monitoring and evaluating their breast-feeding policies.

ANNEX 2

Appendix 2: Schema for the development of breastfeeding definitions

A meeting on definitions of breastfeeding was held on April 28, 1988 under the auspices of the Interagency Group for Action on Breastfeeding. The meeting was attended by representatives from A.I.D., UNICEF, International Lactation Consultants Association (ILCA), Population Council, Wellstart, and Family Health International and was moderated by a representative from the Institute for International Studies in Natural Family Planning/Georgetown. Additional input was received from Johns Hopkins and IBFAN.

The objective of the meeting was to develop a recommended set of definitions which (a) was limited to breastfeeding (not infant feeding), (b) used biological input in the development of definitions, (c) especially addressed “full” and “partial”, and (d) were not to be used in isolation as definitions but rather to be guidelines used in describing behaviours, dynamics, and guidelines.

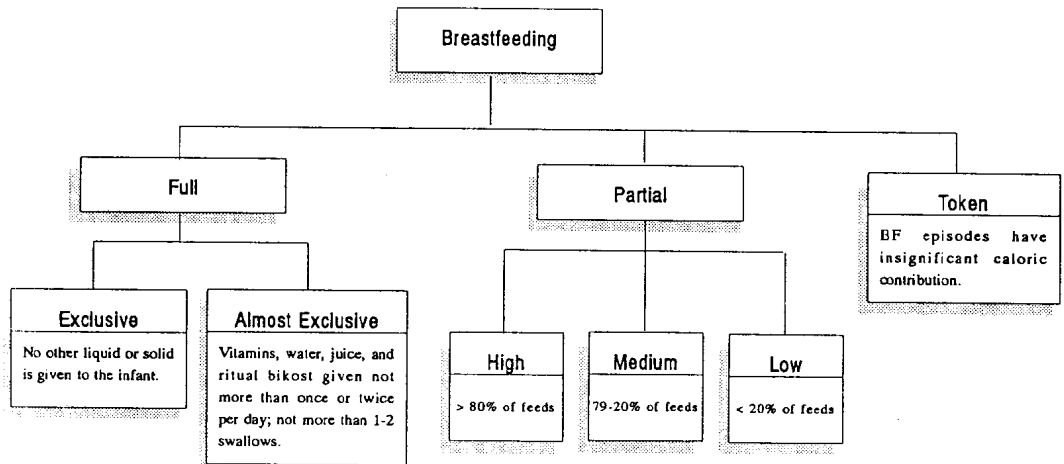
The schema shown in Fig. 1 was developed through shared experience and discussion with consensus. A subsequent meeting on June 28 included complete description of a behaviour pattern would include (1) one of these terms, (2) a time parameter (e.g. frequency, intervals), and (3) a statement of alternative nipple or pacifier use.

Hence, the description of breastfeeding behaviour might be “exclusive, no intervals of > 4 h, no other nipples or pacifiers” or “medium level of partial breastfeeding, one 8 h interval daily and breastmilk and formula given by bottle with ‘brand name’ nipple,” etc. A guideline for optimal breastfeeding might then be defined as “exclusive, no intervals greater than 4–6 h, and no bottle or pacifiers for the first six months, changing to partial progressing from high to low over many months.” Please note that these are presented only as examples of the use of the definitions.

(Further discussion at the Bellagio Consensus Meeting on Breastfeeding, interchange with colleagues and research that has subsequently become available has led to minor additional presentation changes. It may be noted that this schema expands on the definitions under “partial”

and could easily be expanded to be in concert with definitions under “full” presented in “Infant Morbidity – Infant Feeding: Recommendations for Research” WHO/EUR/HFA Target 7, ICP/NUT 102/s03, 5906L, 1987. A complete report on this meeting is available from the Breastfeeding Division, Institute for International Studies in Natural Family Planning, Georgetown.)

FIGURE 1: SCHEMA FOR BREASTFEEDING DEFINITION



Eight behaviours for optimal infant feeding

An additional outcome suggested at the 1988 IGAB meeting on health care practices related to breastfeeding is the "Eight Behaviours for Optimal Infant Feeding." They have been developed in tabular form and appear in M. Labbok et al. (1990) Guidelines for breastfeeding in family planning and child survival programs. Institute for Reproductive Health, Georgetown University, Washington, DC. They may serve as a non-maternity based complement to the Ten Steps.

EIGHT BEHAVIOURS

1. Begin breastfeeding as soon as possible after the child is born, preferably immediately after delivery. Colostrum, the early milk present in the breast during the first few days following birth, provides necessary nutrients and immunological protection for the infant and should be given to the infant. Early and frequent stimulation of the breast proper latch on and good breast-feeding technique aid in uterine contraction and also assures the establishment and maintenance of an adequate milk supply.
2. Breastfeed frequently, whenever the infant is hungry, both day and night. This pattern is sometimes called "on demand." This may be as often as every 1–2 hours (or more), especially in the early weeks. A rigid feeding schedule dictating lengths of time at the breast, or specific intervals, should not be followed, and long intervals (4–6 hours or more) between breastfeeds should be avoided. A placid infant may need to be encouraged to breastfeed more frequently. Frequent suckling stimulates milk production and has child spacing effects.
3. Breastfeed exclusively through the first 4 to 6 months. Do not give the infant other foods, liquids or water before the age of 4 to 6 months. Full breastfeeding (exclusive, or almost exclusive which includes occasional tastes of ritual foods or water) or nearly full

- breastfeeding (with 1–2 nonbreastfeeds daily) are common patterns, but exclusive breastfeeding is the pattern that yields optimal health through babies first 6 months and provides nearly 100% protection against an unplanned pregnancy during amenorrhea.
4. After the first 4 to 6 months, when supplemental foods are introduced, breastfeeding should precede supplemental feedings. Breastfeed before offering other foods, if possible, so that the infant's hunger is satisfied first by breastmilk and secondly, by other foods. This pattern will ensure that the nutrients contained in breastmilk are consumed by the infant, encourage continued adequate breastmilk production and prolong the child spacing effects.
 5. Continue to breastfeed into the second year and beyond. Breastmilk remains an excellent source of both calories and protein for the older infant and toddler. Breastfeeding also continues to afford immunological protection, which is especially important once supplementary foods are introduced into the infant's diet. Frequent breastfeeding assures an adequate milk supply and, depending on the pattern of breastfeeding, may continue to have some child spacing effect. A complementary form of family planning must be added after menses return or when regular supplementation begins, to ensure continued breast-feeding of this child.
 6. Continue to breastfeed, even if the mother or the baby become ill. The nutrients and immunological protection afforded by breastfeeding are particularly important to the infant when the mother or the baby is ill. If the infant is suckling poorly, milk expression may be necessary to assure maintenance of breastmilk supply. If the mother has any transmittable potentially lethal disease, the advice of local health workers should be sought for the most current recommendations.
 7. Avoid using a bottle, pacifiers (dummies) or other artificial nipples. Use of artificial nipples may decrease an infant's ability and desire to suckle at the breast. When a baby is given food or liquids, a spoon or cup should be used in order to reduce the possible introduction of contaminants (due to improper hygiene or handling) and to reduce nipple confusion (especially during the early months).
 8. Eat and drink sufficient quantities to satisfy the mother's hunger. No one special food or diet for the mother is required to provide an adequate quantity and quality of breastmilk. However, mothers' caloric needs are elevated while breastfeeding, and women should be encouraged to consume additional calorically dense foods. No foods are forbidden.