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**FIELD NOTE**

**BREASTFEEDING PRACTICES IN JORDAN:  
PLANNING FOR THE FUTURE**

**Anne Roberts**



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University of Pennsylvania, Applied Communications Technology, Needham Porter Novelli, and PATH

Jordan, site of HEALTHCOM's first project in the Arab world, provides an interesting combination of a traditional society in a relatively developed country. Jordan has high income and educational levels, an effective social services infrastructure, and low infant mortality rate (45 per 1000 live births).<sup>1</sup> Cultural sensitivities and traditions remain strong in spite of the increasingly "modern" life-style of much of the population. A heavy emphasis on family values and roles and relatively conservative social views are supported by both religion (Islam and Christianity) and the political structure. What happens in Jordan with regard to various child and family health issues may therefore supply useful insights to other developing areas as they go through similar transitions.

A.I.D.'s Communication for Child Survival, or HEALTHCOM Project, was initiated in Jordan in mid-1987. The Noor Al Hussein Foundation, founded by Her Majesty the Queen, implemented the two-year program in collaboration with the Academy for Educational Development and a number of cooperating organizations: the Ministry of Health, the United Nations Relief and Works Agency (UNRWA), Save the Children, Catholic Relief Services, and several local universities. The project focused on interventions in two areas heavily influenced by family traditions and by political, religious, and personal sensitivities: effective breastfeeding and child spacing. Both interventions were to be presented under the umbrella theme, "For the health of the mother and the child."

### **PROMOTING "WHAT COMES NATURALLY"**

The original focus of the Jordan project was to be child spacing, with a lesser emphasis on breastfeeding. Jordan has one of the shortest intervals between births in the world despite higher education and social levels--qualities usually associated with longer birth intervals. It was felt that lengthening the average interval between births would provide substantial improvement in child and maternal health. Breastfeeding was seen as a natural form of child spacing that might be more acceptable to the traditional society and more accessible to women beyond the reach of contraceptive services. The

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consensus was that breastfeeding was popular and widely practiced but that the duration was growing shorter. It was felt that the problem was minor and would be addressed relatively easily by promoting the benefits of extended breastfeeding.

Upon closer study, however, we found the breastfeeding situation more complex than expected. Harmful practices had crept into the behavior of mothers and recommendations of health care workers. The emerging pattern of late initiation and early supplementation provides neither the contraceptive benefits women traditionally expected, nor the protection from infection needed by the child. Jordan's short birth interval was in part related, we felt, to these changes in breastfeeding practices.

We therefore decided to include in our breastfeeding promotion information and encouragement needed for those behaviors that would help mothers succeed at breastfeeding, already valued by them. This involved understanding a number of complex and interrelated behaviors within a sensitive cultural and communal context. As the complexity and importance of the issue became clearer, breastfeeding became the principal intervention for the project.

This field note presents a step-by-step summary of our breastfeeding communication program in Jordan--beginning with background research and ending with issues to be considered in the future. We followed a systematic model in planning and conducting the project: 1) formative research; 2) audience segmentation; 3) message planning; 4) consensus building in the medical community; 5) materials design and pretesting; 5) media launch; 6) program monitoring. Although our message strategy per se was designed specifically for the Jordanian target groups, we hope that our methodology and the lessons we learned will prove useful to others designing strategies for improving breastfeeding practices elsewhere.

## LESS THAN PERFECT PRACTICES

Because breastfeeding involves a complicated set of skills and behaviors and because a mother's choice and even ability to breastfeed can be profoundly affected by social and cultural factors, we conducted extensive research with our target audiences before planning any aspect of our intervention.

We began with a review of local literature. Among the most important studies which had already been conducted were the Jordan Child Health Study of 1987<sup>2</sup> and the Jordan Fertility and Family Health Survey of 1983<sup>3</sup>, two large-scale national studies. We also looked at data from Arab World Fertility Studies<sup>4</sup> ranging from 1976 to 1981 and a

Higher Institute of Nursing Hospital Survey, 1989. The available research quickly convinced us that generally positive attitudes in Jordan towards breastfeeding overlay a serious deficiency in skills and knowledge. Although the evidence suggested most children were in fact breastfed at some time, many practices made it difficult for the mother to continue breastfeeding as long as she would prefer, thereby denying the primary benefits of breastfeeding to both children and mothers. Moreover, the community knowledge (among family, friends, and health care providers) which can support new mothers or those facing new problems, was also lacking.

The studies revealed several serious problems: the practice of giving supplements before initiating breastfeeding; a shortened period of exclusive breastfeeding; low frequency of feeding; and sudden weaning. The data showed that 73 percent of mothers were giving supplements before initiating breastfeeding. In rural areas 55 percent, and in urban areas 48 percent of mothers waited to initiate breastfeeding until the second day; 18 percent waited from two to seven days. Glucose water was given most often (65 percent) as a supplement, but various teas, coffee, ground almond and sugar, and castor oil were also mentioned. Most mothers (92.8 percent) were aware of a special value in the first milk, or colostrum, despite their practices of delayed feeding and prelacteal supplements. The small urban/rural variation indicated that traditional midwives as well as hospitals were supporting prelacteal feeds. These practices have been shown to interfere with a child's receiving the special benefits of colostrum and with establishing breastfeeding properly.

Data from Arab countries comparing the average duration of exclusive breastfeeding showed a range of from 6.7 months in Sudan to 10.6 in Egypt. However, the average in Jordan was only three months, with almost half of children receiving supplements by the third month. Of those introducing milk substitutes, 88 percent used a bottle--a practice which undermines the acceptability of the breast to the child, and because of the difficulty in cleaning, has been shown to increase the incidence of illness. The most common reasons given for introducing supplements were lack of milk or weakness of milk and/or mother. These conditions may have been the result of poor breastfeeding practices, although it is also possible that "lack of milk" was a socially acceptable camouflage for other reasons including commitment costs of time and energy.

While six to twelve feedings a day is now thought necessary for breastfeeding to provide contraceptive protection to the mother, the studies showed that in Jordan the average was only 7.8 times/day in the first three months. One study suggested that low frequency could be related to the early supplementation practices. With

supplementation, suckling can become less intense as well as less frequent, forming a negative feedback loop in which one poor practice reinforces another.

Most respondents said that they did not wean a child suddenly. However, the methods they reported using (such as sending the child away, using unpleasant substances on the breast, or shaming the child) seemed in fact to be techniques for abrupt weaning.

Thus, although there has been a perception that breastfeeding is "common" in Jordan, actual behaviors have in fact endangered the critical child health benefits of breastfeeding. Moreover, breastfeeding has long been relied upon in Jordan for child spacing and as traditionally practiced probably did provide greater protection. The prevailing practices could not have been better designed to undermine contraceptive protection, however, leaving women vulnerable to short interval pregnancies in a society where other options are neither easily available nor acceptable. This may help to explain the surprisingly short birth interval in Jordan--the shortest interval among 45 developing countries.

#### **BEHAVIOR AS A REFLECTION OF BELIEFS, VALUES, AND INFLUENCES**

The literature review convinced us of the need to gain a better understanding of what Jordanian mothers believed and felt about breastfeeding, as well as how those around them--primarily health care workers--influenced their practices. We knew that any attempt to change behaviors would have to be carried out in the context of the perspectives and concerns of these two groups. We planned a formative research program which consisted of both quantitative and qualitative studies. Our research included:

- interviews with key informants with experience in working with mothers on breastfeeding or child feeding issues. In particular, we tried to find projects that take a client-centered or community development approach, since their insights are more relevant to our needs;
- individual interviews with 144 mothers, fathers, in-laws, community leaders, and health providers to explore the beliefs and values that surround breastfeeding and to determine what information and influence mothers were receiving from others (1987);

- four focus groups with six to ten mothers each and 20 individual interviews with mothers to learn about their beliefs and practices with respect to breastfeeding (1988). This research was designed to focus on inconsistencies and constraints identified in earlier research;
- a survey of 930 urban and rural women (each with a child under two years old) to study knowledge, attitudes, and practices related to breastfeeding and child spacing, sources of information on these subjects, media use, and demographic characteristics; the study also included 33 in-depth interviews with mothers regarding their beliefs and practices (1989).<sup>5</sup>

The quantitative survey was conducted by the Annenberg School for Communication, HEALTHCOM subcontractor, with assistance from Yarmouk University and the Jordanian Department of Statistics. Although the survey was designed chiefly as a baseline study against which to measure eventual program effects, the results were available rapidly, and we were able to use the information for formative purposes.

### **A Positive Foundation**

The baseline study confirmed the common perception that "women in Jordan breastfeed their children." A majority of women surveyed (91 percent) breastfed their children at some time. This practice is supported by broad positive views in the society about breastfeeding. All of the health care workers and mothers we interviewed in the qualitative studies asserted the importance of breastfeeding and breast milk. Moreover society and religion extol the breastfeeding mother. Women want to breastfeed their children and associate the practice with highly valued closeness, feelings of tenderness, and creation of a lifetime bond.

We found some evidence that early supplementation of breast milk was more likely among urban, better educated, and wealthier women. There are several possible reasons for this, one of which may be that these mothers are experiencing social pressures to be "modern" and to use supplements such as formula. Our survey found that less than ten percent of these women were working so this was not likely to be the reason. However, we found strong links among most mothers between their levels of knowledge about breastfeeding and their actual practices. We also found evidence that negative practices were associated with the influence of health care providers and the

locations in which mothers gave birth. These links provided clear directions for our message strategies.

### **Obstacles to Early Initiation**

The Annenberg baseline study confirmed the results of other surveys which had shown a pattern of delayed breastfeeding initiation. Among our sample, only 63 percent of women reported beginning breastfeeding on the day of the child's birth and only 38 percent within the first six hours.

We discovered considerable confusion about the nature of colostrum. According to results of our focus groups, many women and health care providers understood the importance of colostrum, laban ilaba, in providing the child with nutrition and protection against disease. (The term is familiar for other reasons too, because the "first milk" of a goat or cow is reputed to produce the best cheese.) However, many women also believed that this milk does not arrive or let down for several days. When mothers were asked when they gave the colostrum, some said after two days--when it became available. Hospital staff stated that immediate breastfeeding helps to contract the uterus and encourages bonding, but also said that glucose is given in the first days because there is no milk.

Mothers and some health care providers stated that glucose or other fluids are needed to "cleanse the infants' intestines and bowels," and some believed that glucose is needed to provide nutrition until the mother has the "good milk." Mothers reported hearing this from a variety of sources--older women, traditional midwives, and in some cases health care professionals.

Women who were familiar with the concept and value of colostrum spoke of their knowledge with pride, as something they received from "older women," from "family heritage," or from a mother-in-law who had "ten successors (children)." Some said simply, "We Arabs know." This knowledge seemed traditional rather than modern, suggesting a possible conflict with the conventional wisdom that use of prelacteal feeds and delayed initiation are old village custom.

Although most of the women in our survey said a baby should begin breastfeeding within the first 24 hours of birth, some of these same women did not follow this rule. Some mothers who did not initiate early said they knew the importance of doing so but that they were "tired" (a word that can also mean "feeling poorly") after delivery, and another caretaker (midwife, mother-in-law, physician, nurse) took the infant and gave it

glucose, etc., until the mother was rested. Women who knew that nursing helps them recover at birth knew so from their own experience, not because it was general knowledge or because they had been told. Informants with field experience told us that many nurses, midwives, and TBAs did not accept or know of this benefit of early initiation.

We found evidence that hospital practices and health provider attitudes may create constraints to a mother's adopting or sustaining correct behaviors. A survey (1989)<sup>6</sup> of six larger capital hospitals showed that all gave glucose, often even after the mother had started nursing. Only one hospital permitted nursing in the delivery room. Other practices that can interfere with the mother's ability to initiate early, including routinely giving enemas, withholding food and liquids from mothers, and using intravenous therapy, were common to almost all hospitals and in most cases were obligatory. In the baseline study, location of a child's birth was associated with delayed initiation of breastfeeding: 35 percent of those who gave birth in a private hospital initiated more than 24 hours after the birth; 28 percent of those who gave birth in a public hospital did so. However, there was strong evidence that traditional midwives and family members were equally committed to prelacteal feeds. -

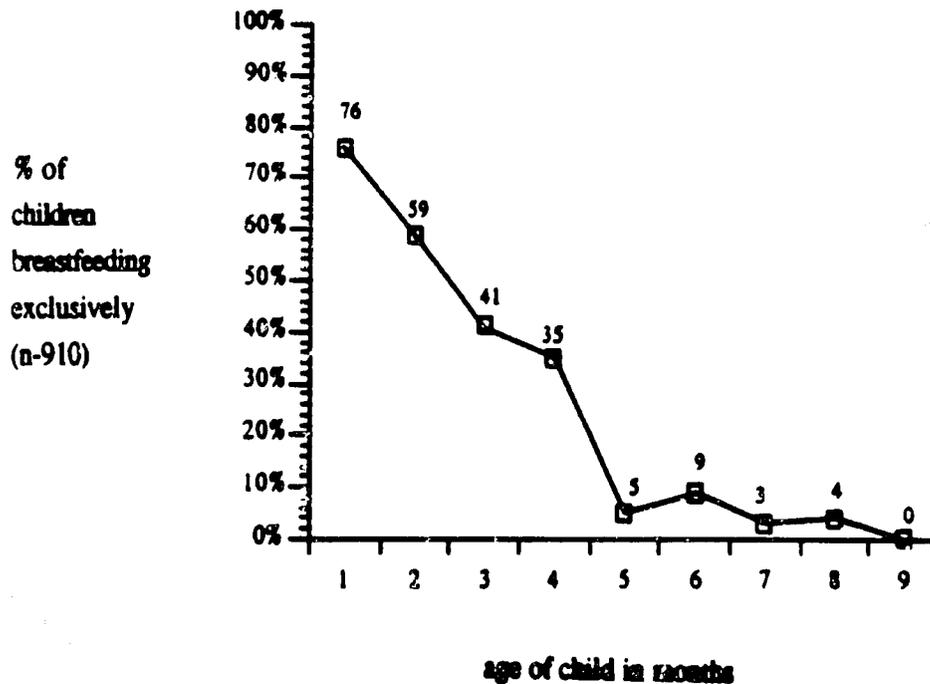
Initiating breastfeeding is demanding at an uncomfortable time when the already tired mother needs counseling and confidence. If older women and health care professionals are offering glucose water rather than help and support, it will be hard for her to adopt a new and seemingly difficult behavior.

### **Reasons for Early Supplementation**

The baseline study showed that a majority of children who were breastfed at the time of the survey had received some kind of supplements before four months of age. Figure 1 demonstrates the precipitous drop in exclusive breastfeeding among Jordanian children in their first months of life.

Figure 1

Percent of ever-breastfed babies who were breastfeeding exclusively at different ages



SOURCE: Annenberg School for Communication

In our qualitative studies, mothers said they supplemented their breast milk in early months because they "did not have enough milk" or the baby "was not growing bigger." Size and growth of child and strength (of milk, mother, or child) were mentioned frequently. In addition, interviews with mothers indicated that they were significantly affected by the opinions of others (family members, friends, and health care providers) about when to begin supplementing breast milk. Our studies with health care providers revealed that if a mother felt her milk was not enough, they would recommend she give supplements. Many believed that the child needs water in addition to breast milk and needs vitamin C in the second month, or iron in the first three months.

The baseline survey showed a clear connection between knowledge about the correct time to begin supplementation and correct practice. This connection was not clear for women of high socioeconomic status, however. We were therefore confident that an intervention to increase knowledge about supplementation would have an effect upon behavior, but perhaps only among certain groups of women.

## Difficulties in Increasing Milk

Drs. Derek and Pattie Jelliffes, international specialists in infant nutrition, have identified two principle determinants in unintended weaning. These are a lack of rest and relaxation for the mother, and a failure to understand the principles of demand and supply in breastfeeding. Jordanian women of all areas and backgrounds seemed unfamiliar with the idea that an infant's increasing need is the result of his or her growth rather than a failure/lessening of the mother's milk and were uncertain of ways to increase their milk. Health care providers do not routinely counsel mothers in their potential for increasing milk or in techniques for doing so and are often unaware that this is a possibility. The combination of poor techniques and poor advice undermines the mother's efforts.

While most mothers agreed with the statement "increased feeding increases milk," most failed to mention this spontaneously when they were asked for ways to increase milk. When women in the baseline study were asked whether there was anything they could do to increase their milk, 14 percent said there was nothing they could do; of those who thought something could be done, only seven percent mentioned breastfeeding more often. However, in focus groups, mothers who had breastfed exclusively for four to six months knew that increased feeding and food, liquids, and rest for themselves were essential to increasing milk. They stated that, "When you give one portion to your child another comes to take its place." Mothers who supplemented early did not make this connection.

We speculated that two other factors might be responsible for a mother's milk drying up and leading her to supplement breast milk: 1) she might not know that a child should be breastfed on demand, rather than according to a schedule; and 2) she might not know that breastfeeding should be continued when a child had diarrhea or other illnesses. However, the baseline study showed that neither of these areas were problems.

Mothers in focus groups were well aware of the emotional benefits of breastfeeding, saying it establishes a "bond that lasts forever." They said "breast milk comes with love and tenderness," and it "creates good/warm feeling." However, the same women who valued the closeness of breastfeeding explained that they supplemented because their milk was inadequate. Increasing milk flow through increased and intensified suckling is hard, uncomfortable work and requires confidence in the outcome. Many mothers in Jordan have had the experience of milk failure, so they need both information and assurances to counter these experiences.

## **IDENTIFYING AUDIENCES AND STRATEGIES**

Our formative research pointed clearly to two important facts: that a program to increase knowledge among mothers about correct breastfeeding practices would be likely to increase correct practices among most groups; and that mothers need assurance and reliable information from those who care for them during birth and afterwards in order to sustain correct practices.

The mother's environment during the early months of her child's life is one of complex influences. During what is a vulnerable time for her, she may receive advice from a physician, a nurse, a midwife or other health care provider, from female relatives (especially her mother and mother-in law), from her friends and neighbors. She will be affected by the views and needs of her husband and other children. To reach the mother effectively as a "target audience," she must be addressed within the context of this community.

Because the mother is particularly reliant upon the advice of health care providers--and because our research showed that this advice was not always accurate or supportive--we also planned special activities to increase awareness among the medical community.

### **Selecting Target Messages**

Based on our findings we defined a list of five important behaviors which Jordanian mothers did not adequately understand and which health care providers seemed not to support. Our basic messages were to:

- Take advantage of colostrum by initiating breastfeeding in the first hours after an infant's birth.
- Avoid all liquids other than breast milk, including glucose, water, and teas, in the period immediately after birth.
- Increase milk by breastfeeding whenever the infant is hungry rather than on schedule, and by assuring adequate food and liquid for the mother.

- Delay all supplements, including milk products and juices, during the first four months of the infant's life.
- Use correct weaning practices, including gradual weaning, appropriate introduction of complementary foods, and delaying of complete weaning for as long as possible (up to two years).

We believed these points could be succinctly and successfully conveyed through appropriate mass media channels.

In addition, we developed a comprehensive list of ten points which cover a more complete range of breastfeeding skills/behaviors. (See Annex.) These "ten golden rules of breastfeeding" served as a foundation for discussions with the medical community and the press. They provided the more extensive scientific background for our message strategy.

### **Seminar for the Medical Community**

Although it was not part of our mandate to provide training or information to the medical community, nor did we have funds for such activity, we knew that health worker support would be vital to the success of our intervention with mothers. We therefore decided to carry out one important event to increase interest and consensus at the policy level. This was a National Seminar on Breastfeeding for Health Care Professionals, developed with the support of A.I.D.'s Nutrition Communication Project. The extensive research conducted in planning our project proved interesting to two leading international infant nutrition specialists (Drs. Derek and Pattie Jelliffe) who agreed to attend. Her Majesty Queen Noor, founder and patron of the HEALTHCOM Project's collaborating organization, sponsored the seminar. These dignitaries gave the event enormous prestige, and we were able to attract 130 high level health care professionals and influential community, religious, and media professionals to the two-day conference.

We positioned the conference as a discussion of cutting-edge research on breastfeeding in Jordan. Our overriding theme was that breastfeeding is a complex practice which needs to be explained and supported by the medical community. The seminar presented breastfeeding as a modern child survival intervention and provided participants with the latest medical knowledge gathered by experts on the subject. We knew that one of our tasks was to "elevate" breastfeeding in the minds of our audience to a level deserving the attention of the medical profession. We also wanted to motivate

them to take an active role in counseling. Up until now, there has been little role in Jordan for the physician in preventive medicine or patient education. Health care providers often held the conviction that successful breastfeeding comes naturally to women who therefore need no counseling or interference.

HEALTHCOM's list of basic messages became the focal point of discussion. At the end of the seminar, the group adopted the proposed messages in the form of National Recommendations for Breastfeeding Policies. That act provided our efforts with an enormously valuable stamp of scientific and political validity.

### **Formation of a Technical Committee**

To open the planning of the Seminar to local pediatric and obstetric organizations as well as the MOH, a key organizing component for the Seminar was a Technical Advisory Committee who developed the agenda, participants list, speakers, and the final recommendations. This group included representatives of the Medical and Public Health Schools, Schools of Communication, directors of the Ministry of Health's MCH, Primary Health Services, and Health Education Departments, the head of pediatrics at the largest public hospital, instructors from the Higher Institute of Nurse Training, and medical association members.

In order to retain the involvement of these policy and decision makers in our process as well as to provide technical input into our messages, we continued to work with the technical review team--with additions and losses as the content or the situation required. The communication strategy, television, and radio messages were reviewed with these groups at several steps in the process, and their advice incorporated into our messages. This enabled us to share studies and reports on international standards for breastfeeding practices and to enlist their support of our messages, as well as to avoid controversy over what were often relatively new (to this audience) approaches to breastfeeding practice.

At each phase of the project we called this group together to review HEALTHCOM's strategy or messages. They provided useful advice for gaining support of the wider medical community, and were enlisted on the side of the project.

### **Dissemination to Opinion Leaders**

Before launching the campaign, the Foundation held a press briefing for heads of family and health programming at local radio and television stations, for press and print

media, and for political and religious community leaders. Press packets included information on the relationship of breastfeeding to infant health, the "new" science of breastfeeding, and the breastfeeding problems we had discovered during our program research. This enabled us to provide needed information to these media and community spokespersons and encouraged them to report accurately and supportively when the program was launched. In fact, they prepared a number of special articles in print and other media, displaying widespread support and helping to clarify the issues. The producer of the popular national health program adopted our ten golden rules as his norm and insisted that all participants discussing breastfeeding follow these guidelines.

## **MOTHERS AND MEDIA MESSAGES**

Our formative research included an investigation into media prevalence in our target audiences. In the Annenberg baseline survey, we learned that 93 percent of households studied owned televisions and 86 percent had radios. These media were therefore obvious choices for reaching mothers. The Ministry of Health also agreed to revise the breastfeeding materials displayed in health centers. Their new graphics will advocate delaying of supplementation until after a child is four months old rather than, as current, during the second month. It will be printed on a large clinic-size poster and on a flyer for mothers to take home. Information will be included on expected weight gain and development stages of the child, as well as monthly feeding recommendations.

Face-to-face counseling for mothers, improvement in health worker training, and community support for breastfeeding are also vital components of a successful breastfeeding program. Because of HEALTHCOM's limited resources and short time period (16 months) we were unable to include health worker training. However, given the comprehensive nature of the changes we were attempting to bring about, the project consistently sought collaboration with other agencies involved in training and face-to-face counseling. Some of these efforts are described below under "Issues for the Future."

### **Creating as a Group**

Because of the small staff at HEALTHCOM and the limited time they could allot to the project, and in order to rely on a structure that would support future activities after project end, efforts were made to create a "creative team" to help with message development. This was an "ad hoc" group whose membership varied according to the abilities needed at a given time. Team members were identified during an early "Message Development Workshop," led by Dr. El Kamel and the HEALTHCOM staff.

Representatives of all organizations working in communications were invited, and those who showed the most enthusiasm and talent for our approach were incorporated in future activities. In fact, the production company we chose was selected during this workshop. Included were members of the technical team, production specialists and writers, and communication professionals.

The process of designing actual messages began with discussions among some of our collaborating organizations. In particular, we met with UNRWA nutrition counselors working with low income women, with nutrition staff of Save the Children, and staff of the Higher Institute for Nurse Training. At that time, the Institute was in the process of reviewing breastfeeding practices and problems as part of their midwife training curriculum. These discussions helped all of the groups in reaching consensus on the status of breastfeeding practices in Jordan and also gave us additional perspective on the priorities of messages.

### **Emphasis on Broadcast**

Our creative team met to plan the basic broadcast design--number of spots and distribution of themes, sequencing of messages, length of spots, and integration of media.

For our broadcast strategy we decided on a two-pronged approach: 1) television spots that are appealing and motivational and that cover the essential messages and clear benefits of the suggested practices; 2) radio messages with the greater detail needed by mothers to carry out the new behaviors successfully. Radio spots would also address prevention and management of common problems that our studies showed might interfere with breastfeeding, such as stopping feeding during illness of the mother or child, engorgement, sore nipples, and so forth. We decided on a total of nine television spots and seven radio spots.

Working with communication specialist Dr. Farag El Kamel, we decided that the radio and television campaign would cover an initial three month-period, with two television and three radio spots each day. The spots were presented in generally chronological order, that is beginning with birth through the fourth month, but with several "summative" spots that reviewed all of the main messages in various formats. After monitoring audience exposure, comprehension, and acceptance of the messages, we would air a second series of messages including new messages to clarify information as necessary. This wave was to cover approximately six weeks.

## **Tone, Mood, and Information**

Because our focus groups confirmed that Jordanians generally value breastfeeding and the bond it creates, we chose a vigorous and emphatic presentation of information and correct practices, rather than an awareness campaign. It was our sense that women wanted to breastfeed, were eager to do it better, and were hungry for information that would help them if the "price" were not too high. We planned messages which were as specific as possible given the media we had chosen.

We knew that some of our recommendations would seem difficult and potentially challenging to mothers. We therefore created "sources" for our messages which would give them credibility and created "environments" which suggested community support--both familial and religious. In addition, we knew from our research that the best tone for our messages would be one which reflected their own values regarding breastfeeding. They valued the emotional bond created by these practices, and they valued the image of the loving and generous mother. We therefore strove to achieve a sense of great warmth and compassion throughout our spots.

The conservatism we found in our target audience also determined to a large extent our aesthetic approach. Whereas our words would be specific, our images could not be. Although we could show women breastfeeding, we could in no way be explicit. We portrayed a range of women--rural, urban, modern, wealthy, conservative, poor. However, all of them were presented with uniform modesty. The power of our messages was often conveyed through the expression on a child or a mother's face, or the small gestures between mother and child which indicate their unique and naturally touching bond. Although our mothers were often actors, the infants were always their own.

## **Learning by Doing**

Working with Dr. El Kamel, the team agreed on the actions, appeals, and tone of the messages. The production team then wrote scripts for these messages, which were reviewed by the team and Dr. El Kamel, and revised. Tapes were then made of the scripts for pretesting, and each was revised several times as a result of the pretests.

Storyboards were less successful. The original efforts were too elaborate for easy revision and were soon left hopelessly behind by the revised scripts. Rather than having new frame-by-frame storyboards done, we had the artist produce drawings of women from various ethnic and income groups, with different interior backgrounds, clothing, and relationships to the infant. One problem was that the artist was under subcontract to the

production team and required money up front, while the patient production team was readier to wait for long delayed payment through our project.

It was quickly obvious that our audience preferred dramas to other formats, but competent actors in Jordan were rare, busy, and costly. We therefore planned only one drama, and otherwise used a series of stills with voice-over, or "women in the street" interviews.

We had other problems with the script writers and producers. They made a constant effort to show only the most opulent interiors and clothing and the most western life-styles because this is what producers felt sold other products, i.e., chocolates, perfumes, and the like. It was difficult to generate vocabularies and images that were consistent with our research findings.

In order to correct the problem and increase the skills of local writers, we organized a "Script Writers Workshop," with experienced writer, Esta de Fossard, for 21 script writers and producers from radio and television, health educators from the MOH, and various PVOs, UNRWA, and UNFPA. This was a hands-on practical session that proved a great success, with more private sector participants in the final days than in the beginning, as word spread of the workshop's practical value. This workshop was an eye-opener in a country where most writers and producers are self-taught or learn on the job. Few if any have had any professional training. Scriptwriting is a "gift of God," one prominent writer explained, not a skill one can improve.

### **Pretesting Process**

Because our messages were complex and our topic sensitive, pretesting was a crucial step in our design of both television and radio spots. We tested the spots with three audience segments: urban, rural, and refugee women in the south, central, and northern regions. Our participants were women who had at least one child or (in two cases) were expecting their first. We sought women who had breastfed their children as well as those who had not. We hired female discussion leaders from a local university who had assisted in conducting interviews during our baseline survey. It was a great advantage to us that these facilitators were already familiar with the subject of our intervention. In addition several organizations assisted us in organizing groups to test the messages. The Ministry of Health set up groups in the urban and rural areas and UNRWA organized groups in several refugee camps. Also Catholic Relief Agency set up groups in rural and Save the Children in urban areas. Pretesting extended over several months and involved approximately twenty-seven groups.

Our moderators received additional training by the project in a workshop held during our formative research. (See also field note entitled "Adapting Tools to the Field: Training in the Use of Focus Groups.") However, since these facilitators were still improving their skills, we monitored the process closely and held follow-up discussions after each field visit in order to share experiences, problems, and solutions. We developed a generic focus group guide asking about credibility, clarity, and acceptability of the messages and included a special section relevant to each set of draft messages. We discussed problems or misunderstandings which we anticipated might occur for each of the messages we had devised and were able to highlight specific words, phrases, images, etc., that we feared might be difficult to understand or accept. Our group leaders were alerted to pay special attention to discussion around these points.

We initially conducted three focus groups with each audience segment to pretest the song and the nine messages. Extra groups were scheduled for each segment as they were needed. TV drafts were pretested with storyboards and cassettes and final versions with videos. Radio tests used cassettes. The following section describes our series of television spots and how they evolved into their final form as a result of pretesting.

## **TELEVISION STRATEGY**

One central element of our broadcast strategy was a "theme song" to introduce each spot--television and radio alike. We had noted that many busy mothers have the television on without paying much attention and we wanted to create a signature tune that was memorable and would give them a few seconds to come from another room, if necessary. We wanted something upbeat--a good mood setter for behavior change messages. Our song was entitled, "Mother's Milk is Health, Strength, and Immunity," emphasizing the range of benefits to a breastfed child. The song was written by one production company, using traditional Arab styles.

## Television Spot No. 1

### Song

Mother's milk is the symbol of well being;  
Your infant's health is the most beautiful smile;  
    Mother's milk is health, strength, and immunity.

Let your milk with breastfeeding  
Make the child's body grow and give immunity.  
    Mother's milk is health, strength, and immunity,  
    health, strength, and immunity.

Pretesting with focus groups showed that women liked the music and the words, which they said made them feel good about being mothers. They said the song would "bring them from the kitchen" when they heard it, and that their children would learn to sing it, clearly an important point for the women. Pretesting revised it somewhat. One phrase "feed your baby all the time" was interpreted as "at all hours," and the substitute phrase "each hour" suggested "on schedule," so both were removed.

Our first television spot consisted only of the song accompanied by brief shots of infants and mothers with infants. The images are short but very tender--focusing on a baby's smiling face, or on women from a variety of social or cultural backgrounds (indicated by their styles of dress) holding their babies. A few show a mother breastfeeding but she is always well covered and only the child's face and the mother's hand, for example, might appear on the screen. The spot freezes with the text, "breastfeeding is best." Succeeding television spots begin with the music of this song and images of infants.

## Television Spot No. 2

The second television spot begins our chronological presentation of messages. It shows a pregnant woman visiting the health center and talking to her physician (who is a woman). The physician gives her a pamphlet to read on breastfeeding. The message, spoken by a woman narrator, is:

Are you pregnant? Start preparing to breastfeed now....Consult your doctor or the Ministry of Health Center to provide you with the correct information.

The spot freezes on the image of the woman with her pamphlet and the text, "Breastfeeding is best."

### Television Spot No. 3

This spot emphasizes care of the mother during pregnancy and afterwards for effective breastfeeding. It shows a woman and her husband sitting at the table with a variety of inexpensive foods spread on it. The man offers his wife something special. The young son also comes by and puts his arm around his mother. The narrator (a man) says:

Taking good care of the pregnant mother, along with good nutrition, are essential for a successful pregnancy....Taking good care of the mother after childbirth provides her the strength she needs to breastfeed her newborn baby....Nutritious food and liquids increase the mother's milk and help her to continue breastfeeding her baby for the longest period possible.

The pregnant mother and the breastfeeding mother deserve all the care we can provide them.

The spot has two target audiences--the mother and those who are closest to her during and after pregnancy. It clearly takes the point of view of the family, especially the husband and son, and conveys the importance of their role in caring for the mother. However, it also includes the important message, "helping her to continue breastfeeding for the longest period possible."

Discussions about this spot centered on two issues. The first of these was the specific foods we would show on the table. Our point was not to suggest special food, so much as special attention. Although most Jordanian women know increased nutrition and liquids help, there is a strong feeling that mothers deny themselves in favor of their families. The diet in Jordan is generally excellent and well balanced. We wanted to show nutritious food but everyday fare which people could afford, including low-cost proteins. Because much information provided by local agencies includes Western (and

therefore unrealistic for the country) recommendations for meat, milk, and fish protein, we showed women eating popular low-cost proteins such as lentils, beans, and rice. We stressed "nutritious liquids" to contrast with the newly popular carbonated drinks.

Our second issue had to do with the importance of "rest after child birth." Our research had shown that few mothers understood the role of rest in increasing their milk. We had lengthy debates about the amount of work done by women in the home, and whether it was possible for them to reduce this load or if such a message would simply be an added burden. The message was finally dropped in favor of the more generic but firm advice to "care" for mothers.

#### Television Spot No. 4

The second television spot shows a woman who has just delivered her child. A nurse weighs the baby and gives it immediately to the happy mother. The narrator says:

Breastfeed your baby colostrum milk during the first hours after child birth. It is nutritious and healthy, cleans your baby's stomach, and gives him immunity. Breastfeed your baby colostrum milk.

In our initial script for this spot we said, "Breastfeed your baby colostrum milk immediately." Pretesting revealed that mothers did not understand the word immediately to mean in the first few hours after birth, so we made this explicit. Pretesting also revealed some confusion about the "yellow milk" which was thought not to be colostrum, and about the empty feeling mothers had in their breasts at a child's birth. We decided these two points would be addressed in the radio messages.

#### Television Spot No. 5

The fifth spot uses the same film as the previous one, but the message emphasizes benefits to the mother in initiating breastfeeding immediately. We had found that the most common reason for not starting at once was that the mother was "tired." We decided therefore to present a special message about breastfeeding helping a mother's recovery.

Colostrum is the best start for a newborn's life. It increases your milk supply and relaxes you after childbirth.

The spot, like the previous one, ends with a freeze frame on the woman with her child and the text, "Breastfeed your baby colostrum milk." Initially we thought all of the benefits of colostrum and early initiation could be included in one spot; however, we decided the viewer would probably focus on just one "beneficiary" if we did so.

#### Television Spot No. 6

This spot is one of the central messages of the intervention: "Your milk alone is sufficient for your baby until the end of the fourth month." It opens with a baby lying in his crib, and the narrator says,

"Your baby has not reached the end of his fourth month yet, he needs your breast milk. There is no need for any other food or drink."

The scene then shifts to a mother in the kitchen stirring something in a little dish. She looks up at the camera and the female narrator says: "Remember, your milk alone is all that your baby will need to grow normally, up until the end of his fourth month." The mother then goes and picks up the child from the crib and begins to breastfeed him. The narrator says, "Breastfeed him, breastfeeding is the best..."

Pretesting showed that mothers consistently understood the phrase "no other food" to mean solids, and did not include formulas, milk products, or juices. Clarity is important because milk and juice supplementation are extremely common and often recommended by health professionals. We therefore changed the phrase to "any other food or drink."

#### Television Spot No. 7

It was important for us to follow spot number 6 with messages about how a mother could continue to breastfeed her child as he or she grows and needs more milk. We needed to counter the common idea that a growing child eventually needs more than the woman could supply. The spot opens with the image of a woman breastfeeding. The narrator (a woman) says: "The more you breastfeed your baby, the more your milk supply will increase." Succeeding images show four women drinking and eating nutritious foods. The narrator says,

In order to increase your milk supply, drink more nutritious liquids and eat more healthy foods. Breastfeed your baby more often because increased breastfeeding will increase your milk supply.

It ends with the images of four women on the screen together, showing different ways to increase milk supply. The last message we showed on the screen, which our research showed was the women were least aware of, is "the more you breastfeed your baby, the more your milk supply will increase."

We initially included a message to "rest after delivery," but pretesting showed that this interfered with an other important message, to "begin breastfeeding immediately." Mothers thought the spot meant they should rest two days, two weeks, etc., after childbirth. We therefore deleted the message.

### **Television Spot No. 8**

We decided to create one spot as a "review" of the different messages and also to emphasize that women of all kinds (whether conservative or modern, wealthy or poor) value breastfeeding and practice it. The spot provides "testimonials" in colloquial language. Four women say briefly what they value about breastfeeding. The first woman is shown standing outside in a rural area, in the field where she works. The next woman is quite modern, the next two more conservative. Two of them have their babies on their laps and the camera focuses on their happy faces. The spot ends with a male physician who speaks into the camera and says a woman should breastfeed her child for the longest time possible. We thought the voice of a physician would add credibility to the opinions of the mothers. The camera freezes on the image of a smiling baby, and the narrator says, "Mother's milk is health, nutrition, and immunity."

Pretesting of several "testimonials" helped us determine which ones mothers found most appealing and convincing. It also helped us gauge how many interviews could be effectively included in one spot.

### **Television Spot No. 9**

Our longest spot was a mini-drama between a woman and her mother. We created it to address women's fears that they cannot satisfy a growing infant's needs with breast milk alone. Our survey had shown that women did not understand how to increase milk or the importance of doing so. We sought a way to reinforce these facts through a "voice"

which is both authoritative and supportive. We also hoped to motivate one of our major secondary audiences--older women--to provide such support to young mothers.

The spot opens with a young mother and her baby boy sitting in a living room with the grandmother. The older woman gives advice to the younger one.

Mother: Ahmad's health is perfect. You see how beneficial it is to breastfeed him.

Daughter:But mother, I feel that my milk might not be enough for him.

Mother: No...no...Do not worry, your milk will be enough for him. Actually, your milk increases the more you breastfeed him. Listen to your experienced mother. You and your brothers grew on my breast milk alone and you must do the same with Ahmad.

Daughter:Mother, how can I increase my milk supply?

Mother: The best thing you did was to breastfeed him as soon as he was born, and now you must continue to breastfeed him and whenever he needs to, because this will increase your milk. And of course when you eat right and drink healthy liquids, this will also help to increase your supply of milk.

(Child cries, indicating he needs to nurse.)

Go ahead, he looks like he needs to nurse.

Daughter:Not yet mother, there is still one hour to go before his next feeding.

Mother: Breastfeeding is not by the hour, Leila. You should breastfeed him every time he wants to, just as I did with you.

(Leila starts to breastfeed her baby...Close-up of baby breastfeeding happily.)

The mini-drama ends with a freeze of the mother and child and the text, "Breastfeed your baby whenever he demands."

This television spot, like number 3, really has two target audiences--young mothers and the older women who influence them. While we hoped to change practices among the mothers themselves, we also hoped to affect the advice given to them by their support networks. An older woman who has the opportunity to share information and encouragement with a younger one might see herself in this spot and gain confidence in her own views and experiences. This spot originally involved three generations (great-grandmother, grandmother, and mother) but pretests showed it too confusing; we therefore limited it to two generations.

### **Television Spot No. 10**

This short spot focuses on the ultimate voice of authority behind the importance of breastfeeding. There are no actors, only the deep, dignified voice of a male narrator. The spot opens with a close-up of the Koran. A man's hand opens the book, and a voice reads the text enjoining mothers to breastfeed their child for a period of two years, if they can.

This spot aimed to reach all potential target audiences--including the wider community. Specific health messages are ultimately accepted by a group because they are recognized by society at large. We hoped this spot would establish in the minds of many people the legitimacy of breastfeeding as long as possible.

### **General Lessons Learned**

Pretesting helped us refine wording which proved confusing to women and helped us determine how to group messages and give them the appropriate weight in relation to one another. It also helped us understand more about what our target audiences considered credible. We discovered when trying to test the acceptability of various stylistic elements (e.g., the interiors of houses or the clothes or makeup of actresses) our interviewees often ignored these details entirely and were only aware of how the mother and child related to each other. Whenever we gave them choices between different artistic presentations, they always preferred the example in which a mother made eye contact with the child. We therefore gave special attention to the expressions on both actresses' and their infants' faces, and went to great lengths to show natural and tender interactions.

We also discovered how potent the voice of a compassionate, experienced woman is to our target group as a source of information. Our interviewees said an experienced woman would understand the emotions of breastfeeding and not "just the facts." This response heavily influenced the design of our radio messages. Most importantly, our pretesting revealed what the actual limits of television spots might be in conveying detailed information. We learned which messages were too complicated for short spots and which would require in-depth explanation. We learned which seemed to cause cultural discomfort. Most notable of these was the relation between a mother's getting sufficient rest and her ability to increase her supply of milk. This did not seem feasible for most mothers.

## **RADIO STRATEGY**

We designed our radio messages to achieve two goals: to provide specific instructions to mothers on how to carry out the new behaviors successfully, and to provide advice regarding prevention and management of problems our studies showed might interfere with breastfeeding. We needed to balance the delivery of very complex information with an appealing and motivating atmosphere. To do this, we made each radio spot a mini-drama.

Taking into consideration our target groups' preference for the "voice" of an experienced older woman, we created the fictional character, Doctora Huda (an Arabic word meaning "guide"). Doctora Huda is an older female physician who has seen many patients and has breastfed a number of children herself. In each spot, a young mother comes to Doctora Huda with a problem or question. The scenes take place in the clinic, in the hospital at the time of delivery, etc., according to the nature of the mother's problem. The mothers vary from spot to spot--some have a son, some have a daughter. Doctora Huda's tone is always encouraging. The mother, who comes to her lacking confidence, receives information as well as support and is assured she will be successful and her child will thrive.

Doctora Huda praises the mother for her good efforts and cites her own experience and that of "all women who have breastfed," as well as her medical knowledge. (Complete radio scripts are included in the appendix.) We developed spots on eight different themes:

1. The mother is able to increase the amount of her milk as the child grows by getting enough rest, additional nutrition, and by breastfeeding on demand.
2. A mother should continue to breastfeed even if she or her baby is a little ill (e.g., has diarrhea). Go to the doctor if you have questions. Children with diarrhea who are breastfed get well faster.
3. Do not wean a child before the end of his or her fourth month. Breastfeed as long as possible, then wean the child gradually. Let him or her take all the breast milk first, then give additional food. Do not use a bottle because it is difficult to keep clean and the child may come to prefer it to the breast, reducing the amount of breast milk a mother produces.
4. (Reinforcing the bottle messages. Breastfeed as long as possible.)
5. To avoid problems, start feeding the baby early and feed him or her whenever he wants it. Keep your breasts clean and do not pull the baby from the breast before he lets go. If you feel your breast begin to harden, give it to the child at once. If the problem does not go away, then go to the doctor.
6. A mother's milk is sufficient for the child in his or her first four months of life. To increase the amount of milk, breastfeed more often.
7. Breastfeeding will not tire the mother, but rather help her regain strength. Breastfeeding immediately after the birth and breastfeeding on demand help the womb return to normal condition and reduce complications of breast congestion.
8. A mother's milk is sufficient for a child until he or she reaches the end of the fourth month. A mother should look after her health and nutrition and let the child breastfeed on demand so that the milk will increase. Go to the clinic regularly to find out if the child is growing normally.

The mini-dramas reinforcing these messages were so successful that the project office began receiving letters and calls for Doctora Huda in the first week of broadcasting. In order to answer these inquiries we ran special radio talk shows at appropriate intervals. We also passed some of the questions on to the director of a long-running weekly television health talk show. The director agreed to have the points raised by our radio listeners discussed by his guests. He also agreed to use the ten golden rules to brief any guest who would discuss breastfeeding on his show.

## RESULTS

The first series of broadcasts were monitored by our interviewers to be certain that they appeared on time, and in the order specified.

Exposure and recall monitoring began during the second month of broadcast, and continued through the month following the campaign. The country-wide interviews, conducted by Foundation staff, found that over 90 percent of women of child-bearing age in Jordan's radio and television audience reported hearing recent HEALTHCOM mass media breastfeeding messages, and an average of 80-90 percent of these recalled the content.

These results are extremely high. In addition, we found good recall of specific messages:

- all mothers recalled correct information on how to increase milk;
- 90 percent recalled the benefits of colostrum (early initiation) for infants;
- 95 percent the importance of caring for breastfeeding and pregnant women;
- 84 percent recalled the importance of continuing breastfeeding during illness of both mother and child.

There were lower scores on correct recall on benefits of early initiation to mother (70 percent), the preferred length of exclusive breastfeeding (77 percent) and the more complex messages, such as good weaning practices (66 percent). Even these results were

encouraging, however. Revised radio and television messages were aired in June 1991 to reinforce understanding and acceptance of these behaviors.

Every woman interviewed recalled all or major portions of the breastfeeding song created for the campaign, and 96 percent expressed positive feelings toward "Dr. Huda," the fictional radio personality who provides breastfeeding information.

The Foundation conducted a nationwide impact evaluation in September of 1991 with technical assistance from the Annenberg School for Communication to measure attitudinal and behavior changes during the campaign. The data have not yet been released.

## **ISSUES FOR THE FUTURE**

### **Sustaining Messages and Behavior**

The second intervention was designed to further clarify messages which proved especially difficult or confusing in the first wave of broadcasts. These included messages relating "rest" to an increase in the amount of breast milk a mother produces, or stressing the benefits to mothers of early initiation.

### **Collaboration with Other Training Groups**

A continuing concern is the need for face-to-face counseling for mothers and effective training of health providers. Improved health worker skills and increased community support for breastfeeding are essential components in helping women to adopt these practices over the long term. Other organizations in Jordan have been and will continue to carry out some of these important activities. As a direct outcome of the National Breastfeeding Seminar, for example, the Ministry of Health, the new national hospital corporation, and USAID have been discussing a request to train lactation counselors in each of the MOH clinics and public hospitals. In addition, HEALTHCOM has reviewed its formative research findings on lactation management with RONCO Consulting Corporation, which has included promotion and management of breastfeeding in the child spacing training currently underway for some 1,200 Ministry health workers.

Save the Children and Catholic Relief Services, both of which have community health education projects in needy urban and rural areas, worked closely with us in developing and supporting our messages. UNFPA's project at the Queen Noor Foundation has developed a series of video kits for community discussions with women's

organizations. The kits include information on nutrition for the breastfeeding mother and other topics that support our messages. The Urban Development Department, which provides low-income housing for urban squatters, are interested in showing these videos to women in their community centers. Both groups have good community contacts and a developmental philosophy that augers well for acceptance of their efforts locally.

The PAC II project providing child spacing training collaborated with HEALTHCOM to provide breastfeeding information and motivation to counsel mothers on appropriate practices.

Discussions were also held with MOH, USAID and other collaborating agencies on the need for further training for health workers in both breastfeeding practices and IEC skills. The Ministry has agreed to train 450 health education and nursing staff, providing one for each MCH Clinic, and a number of TBAs, if initial training could be provided to their decentralized teams of trainers. MOH would also like technical assistance in preparing print materials for client education.

Because breastfeeding is a complex behavior that requires information and support at many different points in the process, we expect that interpersonal communication will be needed to confirm and assist in the behavioral changes advocated by the campaign. As the project had no resources to address this need, we attempted to involve other donors in the provision of breastfeeding training for the health care workers who are in contact with the mothers, as well as with local groups that can provide community support. We expect that consistency of messages from the MOH, the mass media, hospitals, and PVOs will contribute to increasing actual behavioral change. Jordanian women are motivated and quick to adopt behaviors that benefit their children, but will need ongoing support in specific behaviors and commitment if they are to succeed.

## **IMPLICATIONS FOR INSTITUTIONALIZATION**

Major strengths for continuation of project activities were the collaborative links forged with other compatible or influential organizations who gained facility with the vocabulary and familiarity with the methodology and who were available for support to the small counterpart staff during the project and for future activities. In addition, the counterpart staff quickly took increasing responsibility beyond the usual norm for project activities, designing and implementing the pretesting and monitoring of the first phase, revision of the second phase, and the impact survey. The Foundation staff are now using the health communications approach with their next intervention, focusing on prevention and care for "Accidents in the Home." Home and street accidents are a major threat for young children in Jordan.

## NOTES

1. State of the World's Children. Unicef, 1989
2. The Jordanian Child Study. (Amman, Jordan: Ministry of Social Development, 1984)
3. Jordan Fertility and Family Health Survey 1983- Report of Principal Findings. (Amman, Jordan: Department of Statistics; and Atlanta, Georgia: Centers for Disease Control, 1984.)
4. Arab World Fertility Studies. 1976-1981
5. Breastfeeding Knowledge and Practices in Jordan: A Summary Report of the Results of the HEALTHCOM Baseline Survey, August-September 1988, by Abulaban, Ayman, et al., University of Pennsylvania. -
6. Hospital Survey, 1989

## ANNEXES

## TEN GOLDEN RULES OF BREASTFEEDING

1. **Begin breastfeeding immediately after the child's birth.** The yellow milk that is present at birth is the colostrum, which contains special nutrition for your child. This first milk is like a vaccination; it provides immunization against disease and is the best way to cleanse the baby's stomach. Giving this milk immediately at birth also helps to relieve the mother and help her to recover after delivery. The earlier you begin to breastfeed, the easier it will be for you to breastfeed well later. Starting to breastfeed at birth has also been shown to create a special closeness between mother and child.
2. **Feed the baby often during the first days and weeks after birth.** Starting breastfeeding by feeding the baby every one and a half to three hours will help your milk to flow well and help to prevent many problems such as engorgement, or sore, cracked, or infected nipples.
3. **Increase your milk when the baby needs more by increasing the number of times you breastfeed and the amount of time you let the baby nurse each time.** Every two or three weeks during the first months, your child will start to need more milk because he is growing. This is a good sign and means he or she is growing well, but it may make you feel you no longer have enough milk. If you let the baby suckle more often, your body will know it is time to produce more milk. If you nurse until the baby is content every one or two hours for one or two days, your milk will increase to meet his needs. You must be confident that this will happen. The next time he needs more milk you only have to increase the amount of suckling again. Each time you do this it becomes easier.
4. **Avoid bottles or other supplementary foods until your child is four months old.** A child cannot really digest solid foods until he or she is four months or older. Giving these foods or bottles with liquids will only make him less hungry when he sucks from your breast and make it harder for you to increase your milk. No other food is as good for him as breast milk during this time. Babies who are fed only on breast milk for four months will be healthier and grow better than those who are given other milks or foods.
5. **Use both breasts each time you feed your child and continue to feed him or her at night as long as possible.** You can produce more milk and avoid problems such as engorgement and breast infections if you let the baby empty each breast each time he feeds, and if you let him breastfeed at night if he is hungry.
6. **You will breastfeed better if you are not too tired and if you are peaceful when you breastfeed.** Try not to become too exhausted especially during the first 40 days when you are still getting started at breastfeeding and recovering from the delivery. Our culture wisely makes this a special time for rest and caring for your child. When you breastfeed find a quiet place or lie down with the baby so you both can be relaxed and enjoy the special closeness of breastfeeding.

7. **Avoid rushed or "snack" feeds.** If you breastfeed in a hurry you will leave your baby hungry. He will not have a chance to empty your breasts to keep your milk production coming, and he will still be hungry. Breastfeeding takes time and patience each time.
8. **You need extra good food and liquids to breastfeed well.** Drink about twice as much liquid as you usually do and eat one and a half times the amount you did before you were pregnant. Choose nutritious foods and liquids. For example, drink juice or water rather than tea or soft drinks.
9. **Wean gradually and late.** When you start to give complementary foods after four months, always breastfeed first. You are adding these foods to breast milk, not substituting them for it. Breast milk is still the best food for your child, even though he or she needs extra food now. Gradually add more food until the child is easily able to give up breastfeeding. Abrupt weaning can cause illness and emotional problems for your child and should be avoided whenever possible.
10. **Feed your baby when he or she is hungry rather than on a schedule.** Nature has the best system for breastfeeding babies. God gave the mother feelings to know when her child is hungry. This is the only schedule you need to worry about.

## SAMPLE RADIO SPOTS—"ASK DOCTORA HUDA"

### Spot 1: Convincing mother she is able to increase the amount of her milk

(At the clinic)

- Mother: Doctor, what shall I do? I feel Khaled is not getting enough of my milk.
- Dr. Huda: No, no need to worry, believe me. With my experience as a doctor, and as a mother--and that of all mothers who have breastfed before you--I assure you that mother's milk increases the more she breastfeeds her child.
- Mother: But, Doctor, he demands to feed a lot, and there is only one hour between each feed.
- Dr. Huda: This is normal because his **body is growing and of course he needs more food. If you let him feed each time he wants to, you will have more milk in one or two days.**
- Mother: Well, what else can I do to make sure that my milk is enough for him?
- Dr. Huda: Very simple. You must try to **get enough rest** and reasonable nutrition. You must eat one and a half times your usual amount. Take a lot of nutritious liquids. The increase in your child's weight and his normal growth are the greatest proof that your milk is sufficient.
- Announcer: My dear mother: Breastfeed your child whenever he demands it, because you are able to provide the amount of milk he needs. But you must maintain proper nutrition and rest for yourself, and take nutritious liquids.

### Spot 2: Breastfeeding during illness

(At the clinic)

- Mother: I feel a little tired, Doctor, and I am afraid this might affect my breastfeeding my daughter.
- Dr. Huda: All you have is a slight cold. You must never stop breastfeeding your child at all.
- Mother: It's good that I asked you.
- Dr. Huda: It's good you came to me before you stopped breastfeeding. Every woman who breastfeeds should go to her doctor if she feels unwell and is thinking of stopping breastfeeding.
- Mother: What should I do if she gets sick?

Dr. Huda: This also doesn't mean that you should stop breastfeeding. You must see your doctor who will advise you on what you should do, according to the baby's condition. For example, if she has diarrhea, you must continue breastfeeding. **A child who is sick needs nutrition more than ever, and mother's milk is best. Children with diarrhea who breastfeed get well faster.**

Announcer: Madam, if you feel slightly unwell or if your baby becomes ill, don't rush and stop breastfeeding. We advise you to continue breastfeeding and to see your doctor.

### Spot 3: Weaning (part A)

(At the clinic)

Dr. Huda: His health is excellent. Is he already three months old?

Mother: Yes, Doctor.

Dr. Huda: And I hope you are still breastfeeding him?

Mother: I do, but I feel I have little milk. I am thinking of weaning him, What do you think?

Dr. Huda: No, no. I don't agree with you. Your own milk is the best nutrition for your child. The more you delay weaning him, the better it is for him. And when you do intend to wean him, it must be done gradually because abrupt weaning is bad for the child physically and psychologically.

Mother: How do you mean weaning him gradually, Doctor?

Dr. Huda: At the end of the fourth month, you must begin to give him food and drink in addition to your milk, while you continue to breastfeed him for the longest possible time.

Mother: Well, then when it is time to feed him, which should I give him first, breast milk, or additional food?

Dr. Huda: Breastfeed him until he has **taken all of** your milk first, because your milk is the best nutrition for your baby. Then, give him the additional food you have prepared for him. As I told you, you will then gradually start increasing the amount of food according to what he accepts.

Mother: What do you think, shall I give him a bottle?

Dr. Huda: No, because it is difficult to keep clean, and its contamination may cause him to become ill. He may then also come to prefer it to your breast, which would make the amount of your milk less. It is best to use a clean cup and spoon while continuing to breastfeed for the longest possible time, and remember that God Almighty said: "Mothers breastfeed their babies for two whole years for those who want to complete it."

Announcer: My dear mother: Gradual weaning ensures bodily and spiritual comfort for your child. Begin by gradually giving the child additional meals at the end of the fourth month and continue to breastfeed him for as long as possible.

#### Spot 4: Weaning (part B)

Mother: Doctor, I am now gradually weaning my son, as you told me to. But about additional meals...what do you think of my giving him a bottle?

Dr. Huda: No, no, because it is difficult to keep the bottle clean, and its pollution may cause **diarrhea and other illnesses**. It is better to use a clean cup and spoon for the additional meals and continue to breastfeed him as long as possible.

Announcer: In the name of God the Merciful,  
Mothers breastfeed their children.  
God the Great has told the truth.

#### Spot 5: Prevention

(At the clinic)

Dr. Huda: Thank God your pregnancy is normal. One more week and you will be a mother.

Mother: Dr. Huda, this will be my first birth and I wish you would advise me, especially about breastfeeding.

Dr. Huda: The most important thing is that you must breastfeed the newborn child immediately after birth, and you must care for your breasts beginning from the first day. They must always be clean. Use a special cream and be careful not to pull the baby from your breasts before he lets go himself.

Dr. Huda: (You must start taking care of your breasts today...they must always remain **dry and clean**. You may want to use a special cream to prevent cracking of the nipple.)

Mother: But they say that sometimes the breast becomes hard and engorged after the birth.

**Dr. Huda:** If you follow my advice this rarely happens, so don't worry at all. **to avoid problems, start breastfeeding early and feed him whenever he wants it.** If you feel your breast is beginning to harden, give it to the child **at once.** If the problem is not solved this way, then go to your doctor.

**Announcer:** Madam, caring for your breast from the beginning of pregnancy, and **immediate and continuous** breastfeeding is the best way to avoid problems.

**Spot 6: Convincing the mother that her milk is sufficient for the child in his first four months**

(At the clinic)

**Mother:** I don't know what happened to him, Doctor. I am not satisfied with his weight.

**Dr. Huda:** Let me weigh him and compare it to his age. (The movement of weighing...baby's voice) How old is he?

**Mother:** Nearly three months.

**Dr. Huda:** His weight is excellent compared to his age. He is not in need of additional food and drink until he completes his fourth month.

**Mother:** You mean he would not benefit from anything else I give him during the first four months, not even juice?

**Dr. Huda:** Mother's milk is the basic food and is enough for the child's nutrition.

**Mother:** But, Dr. Huda, I wish you would prescribe a milk that would help me.

**Dr. Huda:** But your milk is plenty. At this age the child does not need additional meals.

**Mother:** Are you sure my milk alone is enough for him?

**Dr. Huda:** Of course I'm sure, mother's milk alone is enough for her child until the end of the fourth month. And if you would like the amount of your milk to increase, then you can be sure that the more you breastfeed your son, the more milk you will have. It is necessary not to give the child any substitute for mother's milk in the first four months because he cannot digest any food in a normal way--except mother's milk. It has been proven that the health of children who breastfeed from their mothers is better than others and they are less prone to illness.

**Announcer:** My lady mother: Be sure to breastfeed your child and keep away from giving him additional meals until the end of his fourth month, because mother's milk is complete and best.

**Spot 7: The effect of breastfeeding on the child—"first milk"**

(At the hospital on the delivery table)

- Dr. Huda: Thank God for your safe delivery. You must now begin to breastfeed him.
- Mother: Breastfeed him? There is no milk yet in my breast.
- Dr. Huda: (Laughing) There is first milk, which is the most important for the child.
- Mother: First milk...
- Dr. Huda: Yes, first milk, which God Almighty granted to your child to cleanse his stomach and give him immunity against many diseases.
- Mother: Will the baby accept this milk?
- Dr. Huda: Of course he will. Come on, put him to your breast and try once, twice. Let him benefit from the first milk.

**Spot 8: The effect of breastfeeding on the mother**

(At the clinic)

- Mother: Doctor, Khaled is breastfeeding a lot and I am afraid of getting tired.
- Dr. Huda: On the contrary, breastfeeding your baby often helps you regain your health and your strength and your figure.
- Mother: What do you mean, Doctor?
- Dr. Huda: Breastfeeding **immediately after birth** is very beneficial for the mother because it helps the womb return to its normal condition after birth and reduces the complication of breast congestion. Breastfeeding **on demand** helps the baby to feel secure, and you will feel tenderness. Your milk will increase and your child will get more nutrition and will grow.
- Announcer: Breastfeeding is better for both mother and child.

### **Spot 9: Intensive breastfeeding**

(At the clinic)

(The voice of a newly born baby crying in the background)

**Dr. Huda:** God be praised, he is two months old now.

**Mother:** And a few days. That is why I came to you, Dr. Huda, because he demands to feed often, even at night.

**Dr. Huda:** This is normal because his body is developing and growing, and of course he requires more food.

**Mother:** Do you think my milk would be enough for him?

**Dr. Huda:** The milk of every mother who breastfeeds her child is enough until the end of the fourth month. All you have to do is to look after your health and your nutrition. And any time your son wants to breastfeed, let him, because each time you breastfeed him your milk will increase. As long as he is growing normally, then your milk is enough for him.

**Mother:** And how can I be sure he is growing normally?

**Dr. Huda:** You must visit the mother and child clinic regularly to know the weight and height of your child. We can find out if the child is growing normally from the information we record on his health card.

**Announcer:** Madam Mother: Breastfeed your child whenever he demands it. The requirement of the child for mother's milk increases as he grows older, and rest assured that the more you breastfeed your child, the more milk you will have.