

Country Case Study No 3

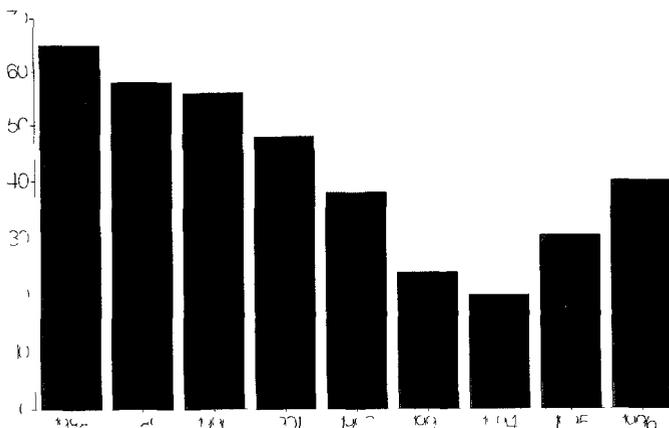
Armenia: The Effect of a Multifaceted Approach to Breastfeeding Promotion

The prevalence of breastfeeding in the Republic of Armenia declined abruptly in the early 1990s. In 1988, 64% of all infants were fully breastfed at the age of four months, but by 1993 this figure had dropped to 23%. This drastic decline was blamed on the shortage of food, economic hardship, and continuous stress that had endured since the collapse of the Soviet Union and during Nagorno Karabakh's armed conflict with Azerbaijan, in which Armenia was involved. The majority of mothers of infants aged 0 to 6 months were reporting insufficient breastmilk, and were requesting infant formula because they lacked confidence in their breastfeeding capabilities under such hard living conditions.

Other barriers to breastfeeding also contributed to this decline. These included hospital practices that did not encourage breastfeeding and lack of medical staff trained in lactation management. Under the Soviet

system, Armenians had grown accustomed to the wide availability of inexpensive infant formula. With the interruption of economic relationships between Soviet Republics due to the collapse of the Soviet Union, economic blockade, and financial difficulties in Armenia, it was impossible to continue the importation of infant formula in the

Full breastfeeding at the age of 4 months (%) in Armenia



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same way, and Armenia appealed to humanitarian aid organizations for assistance in obtaining formula

In the early 1990s, several events highlighted the need for increased breastfeeding in Armenia and the negative effect formula importation has on the practice. A 1993 study of infant feeding, sponsored by USAID, revealed Armenia's drastically declining breastfeeding rates. Then, USAID announced that it was ceasing all donations of formula to Armenia as of June, 1994. The Ministry of Health foresaw a crisis in infant feeding and health if the breastfeeding rates were not immediately increased. The Baby Friendly Hospital Initiative (BFHI) was gaining international publicity and, beginning in 1993, the Armenian Ministry of Health (MOH) developed and implemented a multifaceted approach that has significantly increased breastfeeding rates. This approach is described below.

Establishing a National Policy and Program

In 1993, two high-level staff members of the Ministry of Health participated in the BFHI conference organized by WHO and UNICEF in St. Petersburg, Russia. They returned to Armenia convinced of the importance of supporting breastfeeding in the national policy and developed a national plan for breastfeeding promotion that was accepted by the MOH.

In 1994, the MOH asked Wellstart to provide assistance to its breastfeeding promotion activities through its Expanded Promotion of Breastfeeding (EPB) and Lactation Management Education (LME) Programs. Armenian policy makers attended a workshop facilitated by the EPB Program in the Ukraine on breastfeeding technical and policy issues. Two of the MOH staff members, plus

one other Armenian health professional from the Center of Perinatology, Obstetrics and Gynecology, attended the Wellstart LME course in San Diego in 1994. During this time they revised the national plan for breastfeeding promotion and developed specific goals for Armenia to reach by the year 2000. A national breastfeeding committee was established with the Wellstart Associates included as members, and in 1994 one of the Wellstart Associates was appointed National Breastfeeding Coordinator. Additionally, a National Breastfeeding Center was established by a Wellstart Associate at the Center of Perinatology, Obstetrics, and Gynecology.

Photo: Wellstart colleague from Armenia



Changing Mothers' Knowledge, Attitudes, and Practices

One of the first activities undertaken by the MOH in collaboration with Wellstart's EPB Program was an intensive, mass-media communication campaign aimed at mothers. The campaign, conducted in 1994, encouraged mothers to breastfeed rather than formula feed and promoted optimal breastfeeding behaviors such as exclusive breastfeeding for four to six months, breastfeeding on demand, rooming-in, and early initiation of breastfeeding. The theme of the campaign was that mothers should trust their bodies to provide adequate nourishment for their infants, even in times of poor diet and difficult conditions.

The campaign was conducted from September to December, 1994, and included a press conference, two radio spots, a two-minute television spot, full- and half-page advertisements in newspapers, and the production of baby t-shirts and 60,000 brochures for mothers and health care providers. An evaluation conducted one year after the campaign showed that the messages were still very well recalled by mothers.

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Mothers' and Health Care Providers' Exposure to Campaign

| | Mothers | Providers |
|---|---------|-----------|
| Remember hearing about breastfeeding on | | |
| Radio | 40% | 53% |
| Television | 65% | 66% |
| Newspapers | 26% | 38% |
| Have seen breastfeeding brochure | 74% | 87% |
| Have brochure in possession | 59% | 81% |

Over 51% of the mothers reported that the campaign included information that was new to them, a majority of those mothers reported that the message to "breastfeed on demand" was new, and 38% of the mothers reported that they behaved differently as a result of the information they had received. The brochure, in particular, was very well received by both mothers and health care providers.

Postpartum hospital practices improved significantly between 1993 and 1997.

Changing Hospital Practices

In 1993, the MOH adopted a policy ordering the immediate implementation of the five steps of the BFHI that required minimal training and resources in all maternity hospitals in the countries. The other five steps would be implemented gradually as staff received training.

From 1993 to 1994, the two high-level staff members of the Ministry of Health who participated in the BFHI conference in St. Petersburg helped provide 18-hour training courses for core specialists from each maternity hospital and polyclinic. Ten courses were held, four in the capital and six in other regions, training approximately 400 physicians in total. These physicians were then responsible for lactation training activities in their institutions.

A study funded by UNICEF and conducted by the Department of Public Health at the American University of Armenia indicated that postpartum hospital practices improved significantly between 1993, before the above policy changes and training activities had been implemented, and 1997.

Changes in Postpartum Hospital Practices (Yerevan)

- Increases in rooming-in (0% in 1993 vs 78.5% in 1997)
- Increases in the number of infants breastfed within 1 hour of birth (0% in 1993 vs 30.7% in 1997)
- Increases in the number of infants breastfed from within 1 to 6 hours of birth (12.7% in 1993 vs 18.1% in 1997)
- Increases in immediate skin-to-skin contact (0% in 1993 vs 28.3% in 1997)

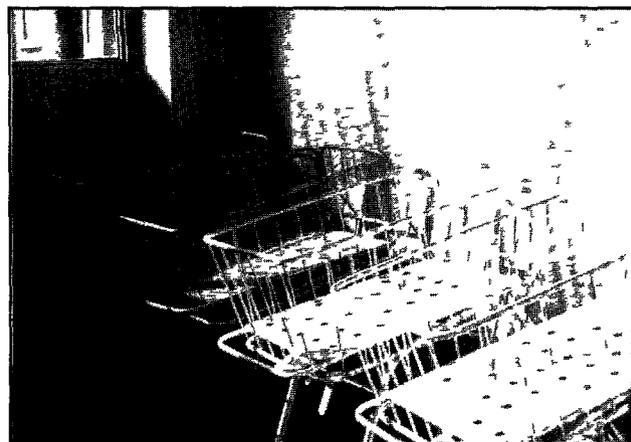


Photo Wellstart colleague from Armenia

Currently, several Armenian hospitals have implemented seven or eight of the BFHI steps. Although no Armenian hospitals have yet been designated Baby Friendly, they continue to work towards Baby Friendly status.

Training of Perinatal Health Care Providers in Lactation Management

Although significant improvements had been made in mothers' attitudes and hospital practices, in 1995 it was determined that Armenia could not meet its year 2000 goal of 60% of mothers fully breastfeeding for four months without further enhancing the lactation management skills of its health care professionals

A 40-hour WHO/UNICEF course entitled "Breastfeeding Counseling" was adapted for Armenia by the Wellstart Associates. The Associates enriched the curriculum, adding several new topics, such as socioemotional support during labor and delivery, breastfeeding and breastmilk contraindications, kangaroo care, and the Code of Marketing of Breastmilk Substitutes. In 1996, ten trainers were trained in the 40-hour course curriculum. Currently, 40-hour courses continue to be conducted for medical school faculty and practicing physicians throughout the country and considerable improvements have already been seen in providers' knowledge of breastfeeding issues.

Examples of Improvements in Health Care Providers' Knowledge

| | 1993 | 1997 |
|---|-------|-------|
| Percentage of pediatricians answering correctly | | |
| ■ A newborn baby needs to be given water besides being breastfed to quench his/her thirst [False] | 72% | 84.6% |
| ■ Babies should be breastfed on a schedule [False] | 31.4% | 93.4% |
| ■ Breast milk with a watery texture should be supplemented with formula [False] | 57.1% | 82.2% |
| Percentage of nurses answering correctly | | |
| ■ Colostrum should not be fed to an infant [False] | 56.5% | 92.7% |
| ■ A newborn baby should be given water in addition to breastmilk [False] | 6.5% | 67.6% |
| ■ Causes of sore nipples [Various answers] | 9.7% | 81.2% |

In 1997, with Dutch Government funding, additional Armenian professionals attended Wellstart's LME Program entry course in San Diego. They included the chief specialist in children's primary care from the Medical University, who

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began developing a plan to integrate breastfeeding into the training of medical students and residents, a leading neonatologist, who began developing a national policy for optimal feeding of preterm infants, and a pediatrician who is working to train physicians using a 40-hour course, with plans to translate it into Armenian for use with nurses as well. One of the previously trained Associates (the National Breastfeeding Coordinator) also returned to San Diego as an Advanced Study Fellow.

The Dutch Government also provided funding to the Wellstart Associates, the MOH, and Wellstart to improve Armenian capacity to address the nutritional needs of high risk infants. In 1997, approximately 50 neonatologists that had completed the 40-hour training participated in three-day advanced seminars on feeding and nutrition of high risk infants, with in-country costs supported by UNICEF.

Current Breastfeeding Situation in Armenia

Considerable improvements have been made in Armenia's breastfeeding practices in a very short period of time. In 1996, according to MOH figures, the prevalence of full breastfeeding at the age of four months was 41.7%, up from approximately 20% in 1994. Full breastfeeding is defined as the combined categories of exclusive and predominant breastfeeding. Exclusive breastfeeding is defined as only breastmilk and small amounts of medicines or vitamins, while predominant breastfeeding includes breastmilk and non-nutritive liquids. The results of the UNICEF study mentioned above show that within the city of Yerevan the rate of exclusive breastfeeding has increased dramatically and the use of formula has declined.

Changes in Breastfeeding Practices (infants under age 4 months) (Yerevan)*

| | 1993 | 1997 |
|-------------------------------|-------|-------|
| Exclusive breastfeeding | 0.7% | 20.8% |
| Predominant breastfeeding | 30.1% | 41.6% |
| Breastfeeding and formula | 35.3% | 12.8% |
| Formula without breastfeeding | 23.5% | 16.0% |
| Other | 10.5% | 8.8% |

**Data was gathered using the 24 hour recall question recommended by WHO*

Future plans for Armenia's breastfeeding promotion program include continuing to provide 40 hours of training in lactation management to physicians and nurses throughout the country, publishing 60,000 copies of a prenatal care booklet which includes breastfeeding information for distribution among all pregnant women, and establishing nine Baby Friendly hospitals

Reflections on Armenia's Experience/ Lessons Learned

- *Much can be achieved in a centralized, top-down system when leadership is committed to change* The Armenian example offers proof of what can be accomplished in a centralized system The Wellstart Associates within the MOH are competent, dedicated, and energetic, and have been instrumental in enacting national policies from the very beginning of the program
- *In a country with an almost universal literacy rate a majority of the population in urban areas, and equal access to education for women, strategies that emphasize a communications and social marketing campaign targeting women can be quite successful* The fact that the social marketing campaign was the first ever initiated to change health behaviors increased the effect that it has had on the target audience
- *In a centralized system such as Armenia, the combined approach of gaining commitment for changes in hospital policy and, soon after, instituting a mass media campaign to reach both mothers and providers, can have a powerful effect* It was essential that the Ministry of Health be committed to changes in postpartum hospital practices to support optimal infant feeding and issue clear directives *before* initiation of the communication campaign Once these policy changes were in place the media messages served to educate providers as well as mothers
- *The training of health professionals is essential* Since there was no existing system for inservice training wide-scale training of health professionals in lactation management was one of the last activities to be implemented It is important, at this point, to continue both the training of health professionals and communication activities through posters, pictures, and advertisements in all of the mass media forms

This success can be attributed to the fact that it began with committed, high-level MOH staff establishing national policies and continued with a strong, multifaceted approach

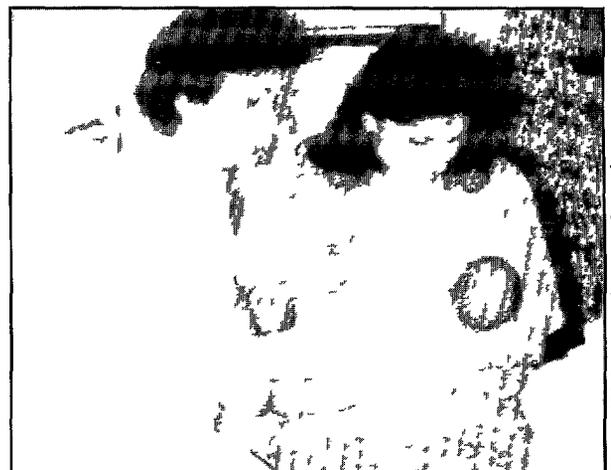


Photo Wellstart colleague from Armenia

- ***Educating medical and nursing students during their preservice schooling is fundamental to long-term change*** While inservice training of health care professionals is important, it is not sustainable unless preservice training of students and residents is also enacted. In 1997, with the inclusion of a Wellstart Associate from the Medical University, Armenians began making meaningful improvements in medical school curricula. Further preservice curriculum change is a goal of the Wellstart Associates in the future.
- ***Attention to monitoring and evaluation from the outset of the program can yield valuable results*** A strong feature of the program has been the well-planned collection of data to measure changes in key indicators as different activities are implemented. A good combination of monitoring, evaluation, and applied research activities has provided vital data to policy-makers as well as positive reinforcement and motivation for further effort.
- ***Changes in policy about formula donations presented an excellent opportunity for a breastfeeding promotion program, but also caused difficulties in evaluating the effects of the program*** The decreased availability of formula in Armenia presented a unique opportunity to increase breastfeeding rates. The actions of an external donor (USAID) caused a strong unification of physicians, hospitals, and the MOH in an attempt to avert a "formula crisis," resulting in strong support for breastfeeding promotion activities. It is important that breastfeeding programs be flexible enough to take advantage of such opportunities. However, because of the close link between the decreased availability of formula and breastfeeding promotion it was not possible to determine how much the increase in breastfeeding was due to the program activities and how much was due to the reduced availability of infant formula.
- ***A multifaceted approach to breastfeeding promotion can be a powerful tool for change*** The breastfeeding promotion program in Armenia has been extremely successful in a short period of time. This success can be attributed to the fact that it began with committed, high-level MOH staff establishing national policies and continued with a strong, multifaceted approach of educating mothers through mass media, changing hospital practices through training and policies, and educating perinatal health providers throughout the country in lactation management, while decreasing the availability of formula.

This case study was developed in coordination with Dr. Anahit Demirchian, National Program Coordinator for Breastfeeding Armenia, and Dr. Kim Hekimian, formerly of the Department of Public Health, American University of Armenia.

