



FINAL 2/23

MotherCareTM

**The State
of Breastfeeding
in Bolivia:**

**Practices
and Promotion**

Summary of the Final Report

Prepared for:
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Acknowledgments

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The assessment and reports were funded by
the U.S. Agency for International Development
under Contracts DPE-5966-Z-00-8083-00 (MotherCare)
and LAC-0657-C-00-0051-00 (LAC Health and Nutrition Sustainability).

The contents of this document do not necessarily
reflect the views or policies of USAID, MotherCare
or the LAC Health and Nutrition Sustainability Project.

August 1993

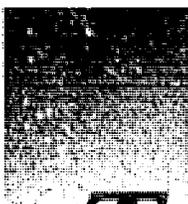


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Introduction

In the 1990 Innocenti Declaration, the international health community recognized breastfeeding's critical role in the health of mothers and children and called for support of a global initiative to improve breastfeeding practices. Taking up this call, the U.S. Agency for International Development (A.I.D.) issued its *Strategy for Breastfeeding*. Activities included under this strategy are: the conduct of country-level assessments to document the current situation and serve as the basis for planning; the development of national infant feeding strategies and action plans; and the implementation and evaluation of national programs.

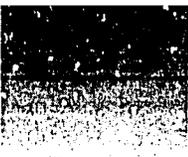
Purpose and Methodology

USAID/Bolivia and COTALMA (Bolivia's national breastfeeding group) requested this assessment of available information on the status of breastfeeding in Bolivia, including identification of supportive factors and obstacles to reaching optimal breastfeeding and areas requiring immediate action.

Using the *Guide for Country Assessment of Breastfeeding Practices and Promotion* produced by MotherCare, an interdisciplinary team conducted the assessment in August 1991. Activities included:

- a literature review;
- interviews with government, nongovernmental and private sector health and donor agency officials; and
- site visits to hospitals and health centers in La Paz, Cochabamba, and Santa Cruz.

The methodology gives a relatively quick means to assess infant feeding practices and the status of programs and policies that affect infant feeding. The results described here can be used to support the formulation of a national plan and can serve as a baseline for assessing improvements in optimal breastfeeding.



Country Background

Bolivia's 6.4 million people are predominantly ladino (mestizo), although a substantial portion are Aymara and Quechua who have maintained their cultural identity to the present day. Because of physical and social isolation, indigenous groups suffer disproportionately from lack of access to services.

Bolivia's diverse ethnic groups live in three distinct geographical regions—highlands, valleys and lowlands. Although the highland area is relatively small, 49 percent of the population live there. Nineteen percent of highland women speak only Aymara and 11 percent Quechua. One-third of Bolivians live in the valley region, which only comprises 19 percent of the land area. Over one-quarter of the women here speak Quechua. Almost two-thirds of Bolivian territory is lowlands though less than a quarter of the population lives there. Most of them are of the ladino culture.

Bolivia's GNP has begun to grow in recent years, currently yielding an average per capita of US \$570 (State of the World's Children, 1991). However, the minimum monthly wage is US \$35, unemployment is high, and the gap between the rich and poor is probably widening. The economic situation has resulted in an increase in women's participation in the work force. Women hold a secondary place in Bolivian society, as reflected in their scant representation at decision-making levels.

Infant and Child Health and Nutrition

Although the infant mortality rate in Bolivia has declined steadily during the past decade, it remains high at approximately 100 infant deaths per 1000 live births. Sixty-five percent of infant deaths are

Bolivia's Health-Related Statistics

Total population	6.4 million
% urban	51%
Total fertility rate	4.9 children
% of married women using contraception	30%
Female literacy	65%
Per capita GNP	\$570 ¹
Women receiving prenatal care	47%
Deliveries in formal health facilities	25%
Deliveries by trained attendant	42%
Infant mortality rate (/1000 live births)	96
Under 5 mortality rate (/1000 live births)	172
Maternal mortality rate (/100,000 live births)	480 ²

Prevalence of undernutrition

Age	Wt/Age (undernourished)	Ht/Age (stunted)	Wt/Ht (wasted)
6-11 mos	8.6	20.3	2.0
12-23 mos	19.1	42.4	0.9
24-35 mos	12.1	50.7	1.7

Source: Demographic and Health Survey 1990, except as follows:

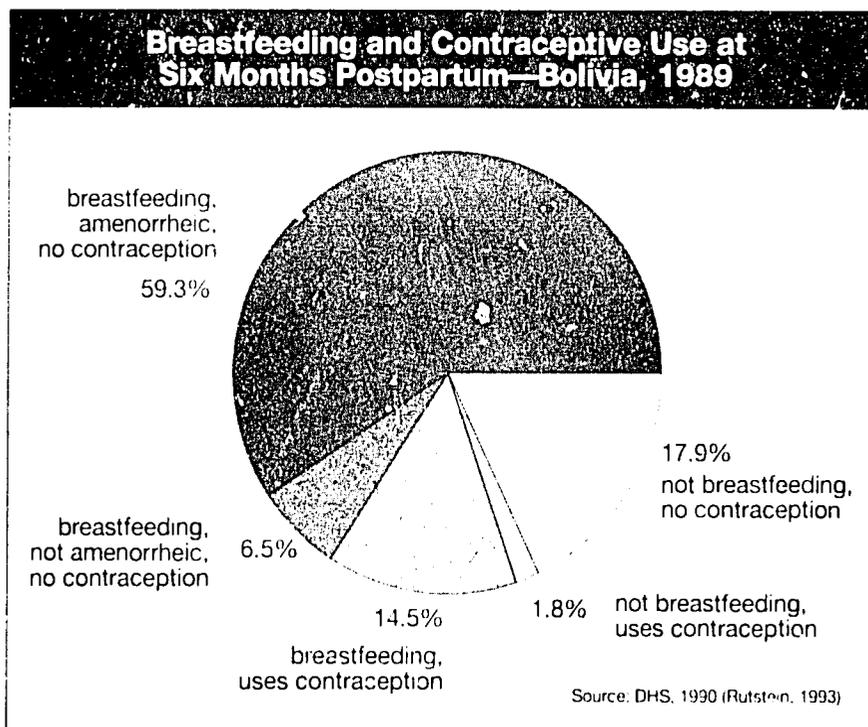
¹State of the World's Children, 1991.

²MPSSP-USAID/Bolivia, 1991.

caused by diarrhea and acute respiratory infections. Anthropometric data suggests little acute undernutrition but high rates of chronic malnutrition, affecting 38 percent of children under five. (DHS, 1990). Children with the highest risk of malnutrition live in the highlands; those with an intermediate risk live in the valleys.

Fertility and Contraception

In 1989, three-quarters of women were amenorrheic for up to six months. At nine months, 60 percent of breastfeeding women were still amenorrheic. Given that only 30 percent of married women are using contraception, amenorrhea may be a critical element in fertility control. Erosion of breastfeeding also contributes to morbidity from diarrhea and acute respiratory infections. Lastly, in a poor country where complementary feeding is so incomplete, breastfeeding is an extremely important supplement.





Current Breastfeeding Practices

Bolivia's Positive Breastfeeding Situation

Breastfeeding is widely practiced by Bolivian mothers.

- Nearly all (97 percent) infants are breastfed.
- More than half of 0-4 month old infants are exclusively breastfed.
- Approximately 71 percent of one year old children are still breastfed.

The median duration of breastfeeding is the longest in the highlands (19.7 months), near the national median (16.4 months) in the valleys, and is shortest in the lowlands (13.2 months).

Breastfeeding Statistics	
<u>WHO Indicator</u>	<u>Percent of Children</u>
Ever breastfed	97
Exclusively breastfed 0-3.9 months	59
Predominately breastfed 0-3.9 months (with or without water)	63
Still breastfed 0-3.9 months	96
Complementary foods 6-9 months and breast milk	57
Breastfed 12-15 months (1st yr of life)	73
Breastfed 20-23 months (2nd yr of life)	30
Median duration (months)	16.2

Source: DHS, 1990
NB: Percentages calculated from previous day's intake for children currently in age categories.

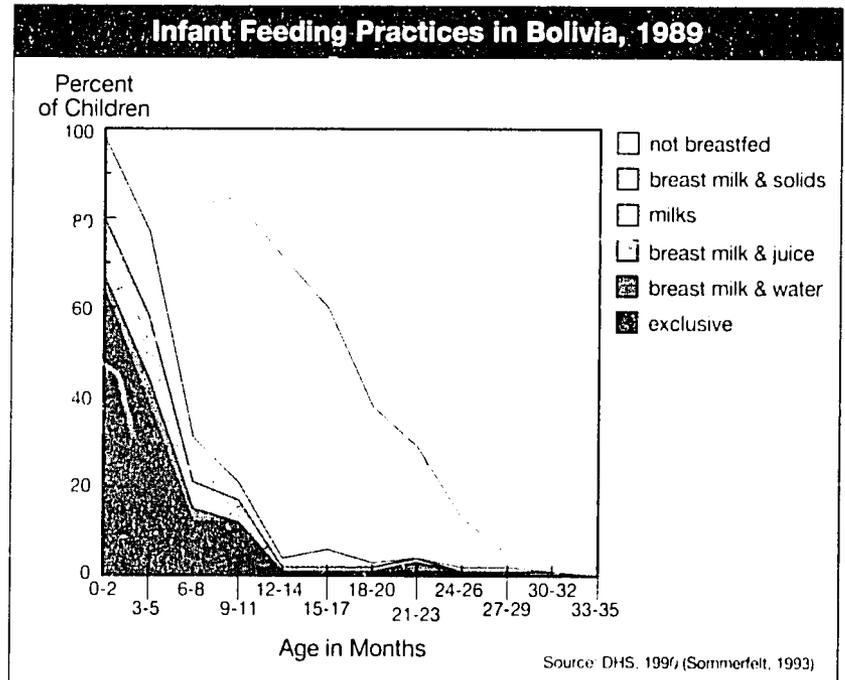
Factors Limiting Optimal Breastfeeding

While Bolivia's breastfeeding indicators are impressive compared to those from other Latin American countries, there are a number of sub-optimal practices which jeopardize the full benefits of breastfeeding.

- Widespread introduction of *mate de anis* and other teas and liquids to "clean the stomach" delays the initiation of breastfeeding and introduces contaminants.
- Delayed initiation of breastfeeding, up to two days, is relatively common. Studies in Bolivia show that the more hours the initiation of breastfeeding is delayed, the fewer months the child is likely to be breastfed (Vera et al., 1981).

- Related to delayed initiation is the practice of discarding expressed colostrum while waiting for the milk to “come in.”
- The median age for introducing supplementary liquids is 3.3 months, but it is significantly earlier in urban areas and in the lowlands.
- The use of bottles is increasing, particularly in poor rural communities in the highlands and in the lowlands.
- Patterns of both early and late introduction of solids are found in various regions. The poor quality of complementary foods increases the importance of breast milk intake.

The challenge in Bolivia is to **protect** mothers' desire and ability to breastfeed while promoting early and exclusive breastfeeding in the first 4-6 months with the introduction of foods by six months.



Knowledge and Attitudes of Mothers

In general, mothers seem to understand the importance of breastfeeding, but they lack self-confidence, proper information and support for avoiding or overcoming difficulties. Studies conducted throughout Bolivia show that the majority of women are misinformed about breastfeeding.

- **Women believe they don't have enough milk.** Almost all of the women surveyed in rural Santa Cruz said their newborns received tea in a bottle. Almost half of them did so because they believed that they lacked sufficient breast milk (Frias et al., 1990).
- **Women lack knowledge about appropriate infant foods.** When asked about special weaning foods, 65 percent did not know of any while other mothers listed coffee, crackers and rice soup (Frias et al., 1990).

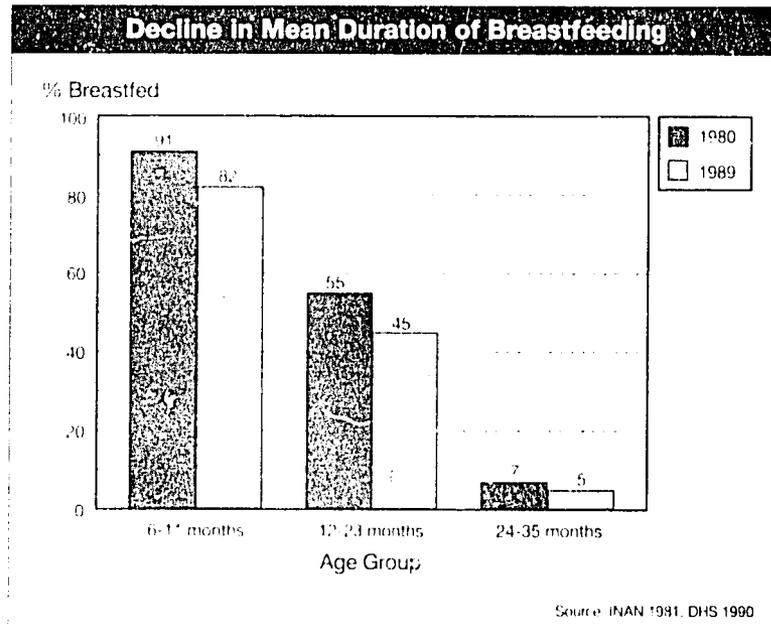
- **Health workers are poorly informed.** According to mothers in the poor rural communities of Potosi, nearly one-third of infants that received liquid from a bottle did so at the suggestion of a health professional.
- **Women have poor knowledge of maternal diet.** Only seven percent of mothers in the highlands mentioned foods with a high protein content as appropriate for breastfeeding women (MPC, 1982).

Trend Towards Declining Breastfeeding

Since the early 1980s, there has been a noted decline in breastfeeding duration due to negative influences which affect exclusive and prolonged breastfeeding, as shown in the following graph. Urban mothers with higher education and higher socio-economic status are the least likely to breastfeed.

Some of the factors known to have a negative influence include:

- Uninformed health workers;
- Detrimental hospital practices;
- Subtle influence of higher social class role models;
- Availability of bottles and pacifiers; and
- Availability of breast milk substitutes, the use of which reduces a mother's milk supply and her baby's desire to breastfeed.



Such factors are causing declines in both the duration and the exclusivity of breastfeeding.



***B**reastfeeding Promotion and Support*

The Political, Legal and Financial Context

The Government of Bolivia has no breastfeeding program or explicit component to protect and promote breastfeeding, nor a budget allocated for specific actions. One reason is that until recent documentation of sub-optimal practices, health officials assumed that Bolivia did not have a breastfeeding problem. The following steps have been taken in support of breastfeeding during the past few years, although in the absence of a national commitment, their large-scale impact and sustainability is questionable.

- In 1984, the Code for Marketing of Breast Milk Substitutes was made a regulation, but has never become a law. Companies continue to market a wide variety of breast milk substitutes. The contents of the regulation are poorly disseminated and there is little monitoring of compliance.
- Although policies on powdered milk distribution are beginning to improve, the UNHCR *Policy for Acceptance, Distribution and Use of Milk Powder in Refugee Feeding Programmes* needs better diffusion and adherence. Powdered milk has been widely distributed through donor-supported feeding programs.
- Labor laws exist that allow working women pre- and post-natal leave and time each day to breastfeed. Women rarely take advantage of this time for fear of losing their jobs.
- COTALMA and other non-governmental organizations have undertaken activities to promote and coordinate the breastfeeding support movement. However, activities are funded by members only, as there has been no outside financial support. The lack of a budget has become apparent in the areas of supervision, evaluation and follow-up of activities.

Groups Active in Breastfeeding Support

- Bolivian Pediatric Society
- COTALMA (Technical Support Committee for Breastfeeding)
- Children's Hospital of La Paz
- Breastfeeding Clinic
- Documentation Center on Breastfeeding
- Training center (proposed)
- La Leche League International, La Paz
- Save the Children Federation
- PROCOSI (Program of Coordination in Child Survival)

Activities for Support of Breastfeeding

<u>Activity</u>	<u>Level</u>
National Breastfeeding Policy	No
National Breastfeeding Committee/ Coordinator	No, but the COTALMA group exists
Comprehensive National Breastfeeding Program	No
Significant National Allocations for Breastfeeding Promotion	No
Health Services	
Hospitals with rooming-in	80%
Supplies given to mothers	Sometimes
National Code of Marketing Regulation	1984, but not law
Companies Distributing Breast Milk Substitutes	Nestlé (Nan, Nestgeno) Wyeth (SMA, S-26) Morinaga, Nur-soy PRELAC, Milupa, Dano
Companies Advertising Breast Milk Substitutes	Dano, possibly others
Breast Milk Substitutes in Health Centers	Nan, Nestgeno, SMA, S-26
Programs Providing Milk Supplements to Infants under 6 months	Yes
Number of Professionals Trained in Lactation Management	16 Wellstart
Mothers' Breastfeeding Support Programs	La Leche League, 1980s (La Paz only)
Support for Working Women	Maternity leave (90 days) Nursing breaks (an hour daily)
Extensive Communications for Improved Practices	No

Formal Health Services

Although breastfeeding support traditionally has been poor in government and private health facilities, there are signs that the situation is improving.

- The Ministry of Health's National Plan contains a chapter on Breastfeeding and Child Nutrition. In 1990, the "Ten Steps to Successful Breastfeeding" were added to this guide of standards and procedures. However, the Plan omits guidelines on breastfeeding preparation in prenatal care and it is weak in providing direction on weaning foods. Hospital staff are unaware of the steps and copies are not easily found in health facilities. Private facilities are unaffected by the breastfeeding norms of the Ministry of Health.

Ten Steps to Successful Breastfeeding in Maternities

1. Have a written breastfeeding policy.
2. Train all health care staff in necessary skills.
3. Inform all pregnant women.
4. Initiate breastfeeding within a half-hour.
5. Show mothers how to breastfeed.
6. Give newborn infants no food or drink.
7. Practice rooming-in.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers.
10. Refer mothers to breastfeeding support groups.

Source: WHO/UNICEF

- Health workers at all levels have been identified as having a major negative influence on breastfeeding because they do not know how to resolve the most common breastfeeding problems. Hospital staff commonly interpret a baby's cry as "breast milk is not enough" and offer substitutes.
- COTALMA, the Technical Support Committee for Breastfeeding formed by graduates of Wellstart's lactation management training program has trained health professionals who are now helping to affect positive changes in hospital practices and routines.

Although poor practices still dominate in most hospitals, a few are implementing model changes.

- The traditional 4-6 hour initial separation of mothers and infants is changing. A recent study found that breastfeeding was started in the first hour of life in 38 percent of cases observed (Bartos, 1991).
- Oral feeding with glucose is less common.

- Over half of all infants received only breast milk during their postpartum hospital stay according to one recent study (Bartos, 1991).
- Up to 80 percent of hospitals practice rooming-in.
- The "Kangaroo Mother Program" is being adopted in four hospitals to promote skin-to-skin contact for warming between premature infants and mothers as well as exclusive breastfeeding.
- The Children's Hospital allows female staff to bring their children to work and to care for them in their immediate work place to promote breastfeeding.
- The Children's Hospital also has established a breastfeeding clinic.

Traditional Health Care

In rural, indigenous areas, traditional medicine is well developed. To date, the only traditional practitioners to receive any breastfeeding orientation are traditional birth attendants. Their influence, however, is limited, since they attend only a small percentage of births. Typically, babies are delivered in the home with assistance from the husband or a relative. The Ministry of Welfare and Public Health (MPSSP) has undertaken a program to train attendants, husbands and family members in clean, safe delivery. Breastfeeding is emphasized, although the training is short on practical skills.

Training Programs for Health Care Providers

In general the training of health professionals has not been supportive of breastfeeding. Up to 90 percent of medical curricula on infant feeding concentrated on preparing formula. Accomplishments of the COTALMA group and others are beginning to reverse this and should be evaluated.

- COTALMA has trained over 400 health professionals in lactation management.
- Universidad Mayor de San Andrés has changed infant feeding training for doctors, nurses and nutritionists.
- PAHO is assisting three medical schools to incorporate breastfeeding practice and promotion.

Women's Work and Support Systems

Approximately 66 percent of all women over 25 years old are employed outside the home (CONAPO, 1989). Bolivian laws afford 90 days of maternity leave, an hour daily for nursing mothers and day care support in cases where there are 40 or more female employees. These laws are not enforced and day care facilities are rare. An exception is the Children's Hospital, where mothers keep their children under 12 months old with them while they work. This low-cost alternative should be studied and publicized.

The longstanding tradition of mothers clubs in rural and periurban Bolivia provides a potential and currently underutilized infrastructure for giving information and support for breastfeeding. Traditionally, these groups had been used as a distribution point for donated food including powdered milk. The trend today is to discontinue distribution of donated milk and to encourage the groups to develop local assistance to women. For breastfeeding, this is a positive development as powdered milk can interfere with breastfeeding by offering an alternative to women who lack the self-confidence to sustain exclusive breastfeeding. While many NGOs are becoming active in women's reproductive health, there is only one, La Leche League (LLL) that offers direct breastfeeding support. LLL is initiating groups in urban areas other than La Paz.

Information, Education and Communication

Communication efforts to promote breastfeeding to women and other influential community members are few. Posters dominate, with a didactically oriented LLL poster competing with an emotive Nestlé poster on supplementary feeding that recommends breastfeeding in small letters.

Two projects that have undertaken communication and education efforts on breastfeeding offer models tailored to Bolivia:

- PROCOSI and the Ministry of Health's materials which integrate breastfeeding themes into all child survival activities.
- The A.I.D.-supported Buena Madre Project, implemented in the 1980s, offers valuable lessons regarding regional variations in nutrition and breastfeeding messages.

Radios are widespread in Bolivia and, as the Buena Madre Project and others have shown, offer an excellent medium for diffusion of information to a large number of people.

On the basis of the assessment team's findings, Bolivia received a score of 54 points out of a possible 130 on the Breastfeeding Situational Analysis Score Sheet. Reflected in this score are the positive breastfeeding practices and mothers' attitudes and practices as well as the poor breastfeeding promotion in the formal and traditional sectors and lack of appropriate training of health workers.

Supportive Factors for Breastfeeding

- Widespread acceptance of breastfeeding.
- Breastfeeding is integrated into the MCH program.
- The existence of a draft Bolivian code on marketing.
- MPSSP has norms for breastfeeding, though not complete.
- Existence of COTALMA, which has provided lactation management training.
- Over 400 health professionals trained in lactation management.
- The Universidad Mayor de San Andrés' new curriculum for medical students is a model for other schools.
- Most hospitals practice rooming-in.
- The Children's Hospital is a good working model for other hospitals.
- Longstanding mothers clubs are a potential venue for promoting breastfeeding in rural and periurban areas.
- The Buena Madre Project provides a good base of qualitative research on breastfeeding practices.

Constraints to Breastfeeding

- The Bolivian Regulation on Marketing of Breast Milk Substitutes is not law.
- Lack of a national breastfeeding policy.
- Lingering perception that breastfeeding practices are not a problem.
- Lack of national breastfeeding program and budget.
- Written protocols are not widely known or distributed.
- Inadequate knowledge and training of health care providers.
- COTALMA lacks funding to create a training center.
- Lack of access to health facilities for many rural women.
- Majority of deliveries occur at home.
- Low level of compliance with existing labor laws.
- Lack of a concerted communication effort in breastfeeding.



Recommendations

Policy and Planning

The National Breastfeeding Promotion Committee that was instrumental in making the Marketing Code a regulation needs to be reactivated to provide a national decision-making and administrative structure for new activities.

The Ministry of Health's breastfeeding policy and standards as presented in the National Plan need to be strengthened and widely disseminated. Appropriate training and supervision need to be implemented to ensure the policy is followed.

The Bolivian Regulation for Marketing of Breast Milk Substitutes deserves review and dissemination and efforts to make it a law. Monitoring and reports of violations should be strengthened. With this, there should be careful regulation of the use of powdered milk in food distribution programs.

Health Facilities, Universities and Local Organizations

Hospitals and health centers need to adopt the WHO/UNICEF "Ten Steps to Successful Breastfeeding." This will require health facility administrators to develop policies and make appropriate adjustments in procedures. The cost savings from implementing a breastfeeding policy should be monitored to encourage administrators to sustain such a policy. Part of this initiative will be to get tough on the marketing practices of infant formula companies.

Universities will need to review and revise medical curricula to expand lactation management training and minimize orientation in formulas.

COTALMA requires funds to establish a training center at the Children's Hospital in La Paz that will offer the support needed to improve breastfeeding practices within institutions.

Bolivian NGOs dedicated to supporting women have a great potential for introducing proper information and training in breastfeeding management. These groups should be engaged in the activity.

Thousands of mothers clubs established in the 1960s and 70s offer a venue to provide breastfeeding support at the community level. Breastfeeding activities could help them in the transition from the distribution of donated foods, including powdered milk, to women's support programs.

Households

In an effort to achieve optimal breastfeeding, a better understanding of maternal behavior is needed. This requires high quality research looking at knowledge, perceptions and practices of the mother and her immediate family support, including the father. Priority themes are: the lack of colostrum use, late initiation of breastfeeding, the use of bottles, the reasons for early or very late weaning, and how to achieve exclusive breastfeeding.

Following the qualitative research, communication strategies should be written. These would probably include a national one with segments for urban communities and rural communities, possibly segmented further by geographical zone. Certainly part of the strategy should include the use of radio along with interpersonal communications.



Sources

Bartos, A.E. *Prácticas hospitalarias y Lactancia Maternal (Informe Preliminar)*. La Paz: COTALMA-UNICEF, 1991.

Community and Child Health Project. *Presentación de resultados encuesta de línea de base 1990. Proyecto de salud infantil y comunitaria*. La Paz: MPSSP-USAID/Bolivia, 1991.

Consejo Nacional de Población (CONAPO) and The Pathfinder Fund. *Mujer, trabajo y reproducción humana, en tres contextos urbanos de Bolivia*. 1986-1987. La Paz: Artes Gráficas Latina, 1989.

Frias, E. de et al. *Estudio sobre prácticas en lactancia materna en áreas rurales*. La Paz: Community and Child Health Project (CCH), MPSSP-USAID/BOLIVIA, 1990.

Griffiths, M. and M.A. Anderson. *Guide for Country Assessment of Breastfeeding Practices and Promotion*. Arlington, VA: MotherCare, 1993.

Instituto Nacional de Estadística and Institute for Resource Development/Macro Systems, Inc. *National Demographic and Health Survey (DHS) 1990*. La Paz and Columbia, MD, 1990.

Ministerio de Planeamiento y Coordinación (MCP). Dirección de Planeamiento Social, Departamento de Alimentación y Nutrición. *Proyecto Experimental – Buena Madre – Nutrition Education and Social Marketing*. La Paz, Bolivia, 1982.

UNICEF. *State of the World's Children 1991*. New York, 1991.

Vera, R., F. Villaseca, A. Alliaga et al. *Situación de la lactancia materna en áreas urbanas de Bolivia*. La Paz: Instituto Nacional de Alimentación y Nutrición, 1981.