Neonatal Health

Cómo Será, Pues?

The NGO Contribution to Neonatal Health in Bolivia

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CORE STORIES FROM THE FIELD

CORE

The **CORE Group,** a 501 (c) 3 membership association of international nongovernmental organizations based in Washington, D.C., promotes and improves the health and well being of children and women in developing countries through collaborative NGO action and learning. Collectively, its members work in more than 168 countries, supporting health and development programs.

The **Saving Newborn Lives** Initiative, led by Save the Children, seeks to draw attention and apply resources to the critical need for improved neonatal care. SNL promotes the adoption of affordable and sustainable interventions in communities and countries where death rates are highest and people have limited access to proven life-saving interventions. In addition, SNL supports action research to define new and better ways to improve newborn health and survival, change policies and strengthen programs. Web site: www.savethechildren.org/health/newborns

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Acronyms and Terms

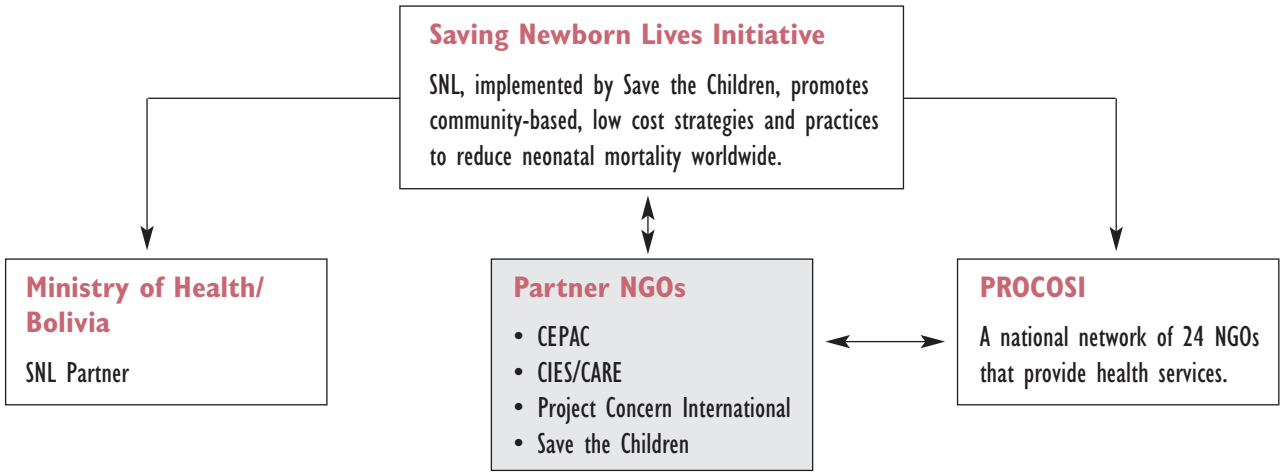
CEPAC	Center for Rural Livestock Promotion
CIES	Centro de Investigación, Educación y Servicios (Research, Education and Services Center)
IMCI	Integrated Management of Childhood Illness
NGO	nongovernmental organization
PCI	Project Concern International
PDQ	partnership-defined quality
PROCOSI	Integrated Health Coordination Program
SNL	Saving Newborn Lives

Introduction

The greatest risk of death can come at the very beginning of life. One million infants die each year on the day of their birth, and 2 million more die during their first week. Nearly all neonatal deaths occur in developing countries, the majority of which can be prevented with proven, low-cost interventions such as: tetanus immunizations during pregnancy, immediate and exclusive breastfeeding, clean delivery, umbilical cord care, keeping the infant warm, quick referral to a health care provider when appropriate, neonatal resuscitation, and antibiotics to treat illness. "Early success in averting neonatal deaths is possible in settings with high mortality and weak health systems through outreach and family-community care, including health education to improve home-care practices, to create demand for skilled care, and to improve care seeking," wrote Gary L. Darmstadt, co-author of a recent series of papers on newborn health appearing in *The Lancet.*

In Bolivia, from 2003 to 2005, four nongovernmental organizations (NGOs) worked together under the Saving Newborn Lives (SNL) initiative to introduce an essential newborn care (ENC) package (see Table 1) in at-risk communities, which covers care during pregnancy, care during childbirth, immediate care for the infant, and continued and routine visits with a trained health care provider. Project partners included the Ministry of Health and a national NGO network known as the Integrated Health Coordination Program (PROCOSI). As part of this consortium, the four NGOs—the Research, Education and Services Center (CIES) and CARE in El Alto; Project Concern International (PCI) in the Cochabamba region; Center for Rural Livestock Promotion (CEPAC) in Potosí, and Save the Children/USA in Oruro[1]—developed and implemented community mobilization and surveillance strategies to improve newborn care.

SNL PARTNERS/ BOLIVIA



1. CARE, Save the Children and PCI are also members of the CORE Group, a Washington, DC- based coalition of international nongovernmental organizations working together to improve children's and women's health in developing countries.

This field story examines how SNL's NGO partners started a dialogue between rural and poor communities and the health care facilities serving them through a methodology called *Calidad y Calidez,* adapted from Save the Children's partnership-defined quality model. SNL and its NGO partners used workshops as a tool to break down a number of communication barriers, setting a foundation for core program activities including: training community health workers and untrained traditional birth attendants *(parteras);* educating women's groups, men's groups, and local and district officials about neonatal health; and carrying out community mapping to identify families at high risk of a neonatal death. Additionally, the NGOs helped build capacity of health centers, peasant unions, mothers' clubs, and local health directorates to confront the issue of neonatal mortality in their communities.

NGOs developed different methodologies to identify pregnant women and newborns, to engage the community in acknowledging reasons why mothers and babies get sick or die, and to prepare action plans involving community health workers and municipal authorities. A complementary behavior change communication strategy included educational vehicles—such as public fairs and dramas—to promote basic ENC messages.

Additionally, partner NGOs, as members of the PROCOSI network, informed the Bolivian Ministry of Health in its work to integrate an ENC and maternal health component into its national strategy for Integrated Management of Childhood Illness (IMCI). A national Neonatal Alliance—including the Ministry of Health, Pan American Health Organization, UNICEF, UNFPA, PROCOSI, Pediatric Society, Obstetrician Society, The Population Council, and Save the Children/SNL, among others—was a key player in building consensus for an expanded IMCI strategy and in supervising behavior change components of the strategy.

TABLE 1: ESSENTIAL NEWBORN CARE PACKAGE

	Antenatal Care	Labor and Delivery Care	Labor and Delivery Care
NORMAL CARE	**Provider Contacts/Visits** • Tetanus toxoid immunization • Adequate diet • Iron, folate (& iodine*) • Syphilis detection and treatment* • Malaria prophylaxis* • Breastfeeding counseling** • Birth preparedness	**Skilled attendance** • Clean delivery • Prevention of hypothermia • Immediate breastfeeding** • Prophylactic eye care*	**Provider Contacts/Visits** • Exclusive breastfeeding** • Warmth • Hygiene, cord care • Immunization • Maternal nutrition • Birth spacing counseling
	Danger Signs		
SPECIAL CARE	**Maternal & Fetal Complications** • Prevention of mother-to-child transmission, if mother HIV-positive • Management or referral of obstetric and neonatal complications	**Birth Asphyxia** • Resuscitation • Post-resuscitation care • Referral, if necessary	**Low Birth Weight** • Special warmth • Kangaroo mother care • Special hygiene, cord care • Assisted feeding • Referral, if necessary	**Infection, malformation and other problems** • Antibiotics for infection • Supportive care • Antiretroviral therapy, if mother HIV-positive • Referral, if necessary

* Endemic areas
** Special counseling for HIV-positive mother
Source: Essential Newborn Care At-A-Glance, Save the Children

Newborn Care in Underserved Areas of Bolivia

Baby Doll Birth

"The head is visible," said the nurse, "Ease up." She waited. "Head's out… baby's turning… left shoulder is free…. now the right," she said. "Dale, dale," she announced and pulled a plastic baby doll out from under the blanket. She kept its head down to let imaginary mucous flow out of its mouth and nasal passage. "It's a girl," said one of the women sitting nearby. The others laughed as the nurse inspected the doll carefully. "No danger signs, good color, good respiration, and listen to him cry," she said cleaning the baby's mouth and nose. She pretended to tie the umbilical cord with a piece of sterilized thread, cut it with a new razorblade, and then wrapped the baby in a towel. "Keep her warm," she said. It was chilly inside the small adobe church. The nurse passed the baby to the young "mother" who was lying under a blanket before her. "Breastfeeding right after the cord is cut helps the afterbirth come out sooner." The young woman giggled as she put the baby to her chest. The session was easy and relaxed and the women clearly enjoyed themselves. After a quick review, the nurse ended with a reminder of the importance of the prenatal and postnatal visits.

As the women filed out of the health education session and entered the plaza in front of the church, one pulled her shawl tightly around her shoulders and asked, "No waiting for the placenta before cutting the cord? No bath or herbal tea for the newborn? Cómo será, pues? How could this be?

While SNL Bolivia—together with the Ministry of Health, the Pan American Health Organization, UNICEF and other partners—has worked to improve the quality of prenatal, delivery, and postpartum, and newborn clinical care, more than 44 percent of births in Bolivia still occur at home. The figure is far higher in rural areas and poor urban neighborhoods served by PROCOSI member organizations. Many women are unable to access skilled delivery services or postnatal care due to transportation costs, geographic isolation, and significant health system limitations. Though some have heard the basic newborn messages in radio spots, health fairs, or community meetings and can even recite them by heart, they continue to use a piece of ceramic to cut the umbilical cord. They bathe their babies immediately, delay initial breastfeeding, and ignore other critical recommendations. Why?

Mate and Broken Pottery

Filomena was pacing slowly in front of her house when the traditional birth attendant arrived. She had been having strong, regular contractions for several hours. Her gait was sluggish—an effect of her discomfort and the many layers of loose clothing she was wearing. The *partera* greeted Filomena's two young daughters who sat a few feet away in the shade. She had delivered both girls. She took Filomena's hand, rolled up the long sleeves of her undershirt, blouse, and sweater, and took her pulse. "Won't be long now," she said. They went into the two-room house, where Filomena's mother-in-law served her a bowl of hot broth. Filomena drank slowly, pausing after each spoonful. Across the room the *partera* sprinkled aromatic herbs into a pot of boiling water to heat and disinfect the room before the delivery.

Filomena went over to the bed and cautiously sat down. The *partera* sat on the earth floor in front of her. She placed her hands above Filomena's hips and drew her palms towards her pubic area to facilitate the baby's descent into the birth canal. Filomena's husband entered the room, carefully shut the door behind him, and checked to see that the windows were shut tight to prevent drafts. He sat down by Filomena and the *partera.* The three huddled together, heads touching, quietly observing Filomena's stomach as the *partera* methodically drew her hands from Filomena's hips to her pubic area. Filomena then squatted on the floor, leaned over the bed, and rested her head on a blanket. The *partera* took off her wool hat, handed it to Filomena's husband, who put it on Filomena's head. He massaged her back through the heavy shawl while the partera brought a cup of *mate,* herbal tea, from the kitchen. "This will speed the delivery," she said.

The percentage of expectant mothers who knew at least two danger signs during pregnancy rose from 38% to 93%. – Saving Newborn Lives/Bolivia Final Program Evaluation

Filomena sighed deeply and bore down with her stomach muscles. The room was quiet except for her sighs. Between contractions she appeared dazed and half asleep. The *partera* then moved behind her. There was a blur of action, then the *partera* pulled a baby girl out from under Filomena's underskirt. The baby cried. The *partera* wiped her clean, wrapped her in a small blanket, and placed her by her mother's feet. Exhausted, Filomena remained as at the moment of birth, bent over the bed. Everyone's attention was fixed on her. The baby was almost forgotten as they waited for the placenta.

The family visibly relaxed after the expulsion of the placenta. The *partera* tied the umbilical cord and took out a sterilized razor blade she had been given at the health center. The mother-in-law said no, and handed her a piece of broken ceramic, with which she cut the cord. They bathed the baby in warm water and chamomile, and wrapped it up with several layers of clean cloth. The mother-in-law then added another cloth, which fit like a scarf over the baby's head. The little face looking out was adorable. "Ay señorita," said the mother-in-law. The infant's two sisters, now allowed to enter the room, stood over the baby. They watched silently as their grandmother wrapped her in still another piece of cloth almost completely hiding her face.

Filomena held out her arms for the baby. The mother-in-law passed her the infant, which she held quietly, and fed herbal tea from a plastic cup. Three aunts arrived wearing heavy green shawls and wide brimmed hats. They passed the baby from one to another.

The Newborn in Rural Bolivia

Home birth in rural Bolivia involves much that is supported by biomedical research. The family works to keep mother and child warm. They cover the mother with blankets, feed her bowls of hot broth and boil aromatic herbs to heat the room. She is given fluids and encouraged to walk about and change positions during labor. The *partera* does not pull on the baby's head, or twist its neck. However, there are also many ways in which a home birth does not follow recommended biomedical practice.

Maternal mortality is high in Bolivia. The mother is the protagonist of the pregnancy, delivery, and postpartum periods in many rural areas, and newborn care may be overlooked. The family often waits for the "second birth," or the passing of the placenta, before cutting the umbilical cord. If they were to cut the cord before expulsion, they explain, the placenta might be retained and endanger the mother.

The umbilical cord is often cut with a piece of ceramic broken from a plate or bowl rather than a sterile razor blade or scissors. This does not necessarily imply a lack of a basic understanding of hygiene in the prevention of infection. "You break the piece off right before you use it," some community members reason, "so it has never met the air until that moment." Though research suggests that it is best to keep the infant warm and dry, many families immediately bathe the baby in a mixture of warm water and chamomile. They believe this practice will purify the infant and prevent fungal diseases and other skin infections. Many families delay breastfeeding in order to feed the infant an herbal tea, said to purify, cleanse the stomach and prevent colic. Some mothers wait up to three days to begin breastfeeding.

Though geographic isolation, poverty, and health system weaknesses still limit access to health services, the Ministry of Health has made significant progress in making obstetric services more available to underserved populations, through the National Maternal and Child Insurance program which subsidizes maternal and child interventions through municipality funds.

Despite these advances, geographic and cultural barriers still affect access to care, and there are many families who deliver at home out of choice rather than necessity. Few rural mothers come to all the recommended prenatal care appointments, and most bring their infant in only once for newborn care. Why would they not take advantage of these life saving services?

2. The altiplano is a barren, high altitude region in Western Bolivia composed of salt flats and lakes. It is home to the indigenous Aymara community.

Indigenous and Non-Indigenous in Bolivian Society

Bolivia is one of the poorest countries in South America. It is also one of the most economically unequal societies. People of European and mixed descent, the minority population, have dominated Bolivia since the Spanish conquest. The indigenous majority, who make up two-thirds of the population, inhabit Bolivia's *altiplano*[2], high valleys, and poor urban neighborhoods.

The divide between Indigenous and non-Indigenous is fundamental and is reinforced through language and education. Quechua speaking Bolivians (about 30 percent of the total population), Aymara-speaking (about 25 percent), and other indigenous groups, suffer from high unemployment, poverty, and centuries of social exclusion. Many lack access to clean water, electricity, sewage, and basic health care and education.

It is understandable then that indigenous people fare considerably worse on a range of health outcomes than those of European descent. Infants born to a family from the poorest income quintile are twice as likely to die during the neonatal period as children in the wealthiest quintile. They are more than three times as likely to be stunted. The mortality gap between rich and poor children is getting wider; under-5 mortality dropped by 34% in the richest quintile during the 1990s, but was reduced by only 8% among the poorest quintile.

The Bolivian government has made efforts to eliminate economic barriers to accessing health services, primarily through a universal maternal and child insurance (SUMI) scheme, which offers maternal and neonatal care free-of-charge, and mobile health brigades to reach people in rural areas. Despite these efforts, indigenous people remain less likely to use basic health services; women in the wealthiest quintile are about five times more likely to be attended by a trained professional while giving birth. Poor client-provider relations are a key cause of low service utilization in rural Bolivia.

SNL/Bolivia and its NGO partners actively encouraged a dialogue between rural and poor communities and the health care facilities serving them. This set the foundation for its core program activities involving community health workers, *parteras,* women's groups, men's groups, and local and district officials in improving newborn health and reducing mortality. Each of the four NGOs involved in carrying out the SNL program—CARE/CIES in El Alto, the Center for Rural Livestock Promotion (CEPAC) in Potosí, Save the Children in Oruro, and Project Concern International (PCI) in the Cochabamba region—developed their own strategies to implement these activities.

Doña Marisol and the Medical Director

"A Belly Full of Rags"

As part of its newborn care program, PCI/Bolivia set out to address the problem of poor client-provider relations. Staff organized a series of workshops called Calidad y Calidez, or Quality of Care and Human Relations, which they based on Save the Children's Partnership Defined Quality (PDQ) methodology. The three-day workshops brought community and health service personnel together to improve communication, develop a shared vision of quality, and increase utilization of health services. The first day was usually spent with community members, including local leaders and municipal authorities; the second with health workers, including any staff who might have client contact; and the third day with the two groups together. Through these workshops, community members and health workers together identified gaps in service quality and created common quality of care goals. A local quality improvement committee made up of health workers and community members was elected and was responsible for the implementation and follow-up of action plans to address agreed-upon quality of care issues. These workshops were held at five project sites in the Department of Cochabamba during the Saving Newborn Lives initiative.

The first day of the workshop was held in a school auditorium. This was the day for community members—mothers, fathers, village leaders, farmers' union leaders, municipal authorities—to discuss their vision of quality health service. Women filled the front row. Their breath steamed in the morning air.

Two PCI outreach workers, Lillian and Ruth, explained the day's agenda and facilitated the introductions and opening activities. At one point, later in the morning, Lillian asked for six volunteers and escorted them out to the courtyard. "Think about a time when you or your baby was sick, and you sought medical attention, and the attention you received was poor. Do you have that experience in mind? Now turn your experiences into a skit for the rest of the group." The group returned to the auditorium a few minutes later and set up a make shift stage in front of the gathering. The room quieted.

A young woman walked out before the audience, newborn cradled in her arms. A man approached her, sweeping indifferently around her, with a worn hospital broom.

"Excuse me," she said in Quechua. He ignored her.

She eyed a woman napping with her head on a desk labeled "hospital registration." "Good morning," she said. "My name is Vanessa Mansilla." The woman looked up and pointed to a row of chairs in front of her. Vanessa sat down and waited. And waited. The

nurse finally called Vanessa's name and led her to a man at a second desk with a sign that read "consultation room."

'What have you come for?' he asked gruffly, in Spanish.

"My son's first postnatal check-up," responded Vanessa.

"Huh?" The doctor didn't speak Quechua. After much confusion she got her point across.

The doctor glanced at the child.

"He's fine," he said.

"He's been having diarrhea," she said. The doctor examined the baby. "He's got a disease called ragitis," he said.

"What is that?" asked Vanessa.

"A belly full of rags," he answered authoritatively. The audience laughed. "The nurse will tell you what to do."

"Mix one half teaspoon table salt and eight teaspoons sugar with one liter of water and give him as much as he can drink for the next several days" the nurse said hurriedly as she led Vanessa back to the waiting room. Vanessa stood there for a moment, baby in her arms, frustrated and
confused.

The group applauded and the actors took their seats. "What do you think of the skit?" Ruth asked the group.

"You get treated differently if you dress the way we do, with a traditional skirt (pollera), shawl, and hat," said a woman in the front row. Her name was Doña Marisol. She was a member of the community health oversight committee. "The doctors don't speak our language, they don't respect our customs, and they don't explain anything. I went with my niece for her prenatal check up. The doctor was called out of the room during the examination. He left the door open. My niece was on the examination table, her blouse unbuttoned, and the door was wide open."

"They make you wait and wait. You lose a day of work. Who will take care of your children and animals?" said the young woman who played Vanessa in the skit.

"I had my second baby in the hospital," said a thin woman sitting beside her. "I guess we arrived too early, because we were told that we'd have to leave and return when I was ready to deliver. But where could we go? We knew no one in town. We waited in the street in front of the hospital. I now give birth at home with a partera."

"Many of the auxiliary nurses in the health posts speak Quechua and serve conscientiously," Doña Marisol explained. "But there is often very little they can do for you. If you walk the five kilometers to the health post for your prenatal and postnatal exams, you can get a tetanus vaccination and have them check the position of the baby. Then once the baby's born they can vaccinate him too. They can't do prenatal laboratory tests. If you go there to have your baby and problems arise, they don't have blood, they don't have IVs, and they don't have resuscitation equipment for a baby with asphyxia."

"Now think about good service you have had," Lillian instructed the group. "What would high-quality attention look like?" Discussion ensued. The group consensus was that a skilled health worker—who works in a well equipped post, serves clients promptly and with respect, and explains everything clearly in the patient's own language—provides high quality of service.

NGO ENC INNOVATIONS IN BOLIVIA

- **Use of Health Center Personnel:** In Potosí, CEPAC included social workers from public health care centers into their operative teams, asking them to lead educational groups and work with pregnant women and new mothers. This approach helped build confidence in the health system and will allow for greater potential sustainability.
- **BABIES methodology:** This new methodology classifies dead newborns by weight and age to inform specific interventions in future programs.
- **Involvement of Men:** In El Alto, CIES/CARE expanded the success it had with women's support and education groups (WARMI) to men, who participated in the same surveillance, analysis, and action plan activities as did the women. Each of the four NGOs also reported that during home visits, men played an active role in the care of their wives and newborns.
- **Community Support Plans:** Each of the NGOs worked with families to develop community support plans to assist women during a time of emergency or delivery. Facilitators drew a map of the community, and participants identified local resources such as telephones, transportation, babysitters, and financial resources available to families to get to a health center for a birth or emergency.
- **Improved Information on Neonatal Health:** During the course of the program, the number of documented births and recorded neonatal mortalities in the project areas increased. People interviewed at all levels of the health care system believe the rise in reported neonatal deaths is a result of better surveillance and data gathering, rather than an indication that neonatal deaths have increased.
- **SECI:** This Community Surveillance System instrument helps identify neonatal and maternal health problems within communities and defines possible solutions through action plans.
- **Verbal Autopsy:** This instrument enables community volunteers to identify probable cause of death, particularly in home deliveries, in order to develop solutions to prevent future neonatal deaths.
- **Women's participation in training activities:** NGOs applied the ORPA[3] methodology with community health volunteers, and included women as community peer trainers.
- **Safe Delivery and Birth Plans:** This instrument for birth preparedness helps families to identify local transport facilities, purchase or make appropriate clothing for infants, and prepare materials for home deliveries. Early referral is emphasized when danger signs are present in the mother or newborn.

3. An adult training methodology that includes observation, group discussion, learning from experience, negotiation and commitment to change.

"Bolivia has changed. We have changed."

The next morning the PCI team met with the doctors, nurses, and staff in the municipal hospital health education room. It was a bright room with plenty of morning sunshine. Ruth and Lillian had arranged the chairs in a semi circle. The doctors mostly sat in the first row. The nurses, wearing white uniforms and blue nylon jackets, sat behind them.

After the introductions and opening activities, Lillian asked the group to close their eyes. "Think about a moment that was key to your decision to enter your profession. Why did you choose to work in health? What were your motivations? What was the idea you had of what this work would be like?" A man in the second row, the hospital director, raised his hand.

"I come from a rural mining town," he said. "The doctors were overbearing and thought they were great and important men. People were afraid to go to the health centers and hospitals. My father became very ill when I was about eight. My mother and I fed him, bathed him, changed his sheets. The hospital staff would make us leave each day at the end of visiting hours. I wanted to become a doctor and change all that."

"Thank you, yes?" asked Lillian, pointing at a woman in the back wearing the clothing of the rural Andes.

"I wanted to continue my studies," she said. "We didn't have the money. I enjoy cooking for the patients and helping to make them more comfortable."

"I was attracted to the white uniforms," said a young nurse. "Then with time, I learned of the psychological and physical comfort a nurse can provide".

"Now close your eyes again," said Lillian. "Think about your current work. Is it what you had hoped for?"

"The people in the villages treat themselves and their babies with home remedies and rituals and only come for services when they are seriously ill," said a doctor wearing the leather jacket. "The only time people come is when they have an emergency. We do what we can but…"

"The world has changed since I was a boy in that mining town," said the hospital director. "Bolivia has changed. We have changed. We are committed to providing all patients with skilled attention and of treating everyone with respect no matter how humble their background. People need to give us the opportunity to show them who we are."

"We tell them about the importance of immediate and exclusive breastfeeding," said the nurse who had earlier admitted that she had been attracted to the profession by the uniforms. "But they sneak in thermoses of mate for the newborn to drink right after birth and get upset when we take them away. We tell them of the importance of not bathing their babies after birth. But the first thing they do upon arriving home is get out the wash basin, heat up the water, and bath the baby."

In the afternoon Ruth elicited the hospital staff's vision of quality health services. A consensus was reached that a responsible, ethical, and well-trained health worker—who serves clients with respect and humility, and explains prevention, diagnosis, and treatment clearly through a nurse-interpreter if necessary—provides high quality of service. This was the same vision that community members had reached, yet both groups were suspicious of the other's motives.

A Missed Opportunity

Early the next morning the hospital director and the doctor on duty led the community group on a tour of the hospital. The health center personnel and community members then walked over to a Sunday school classroom at a church a few blocks away on the plaza. They were asked to present the lists of quality service attributes they had developed during the previous two days. They then worked to find three issues on both lists that that they all agreed were priorities. The issues were as follows:

1. Treat patients with respect
2. Communicate with patients in their own language (through a nurse interpreter if necessary)
3. Inform the patient clearly about their illness and treatment

"The last thing we need to do is to choose a committee to put these quality of service priorities into practice," said Ruth.

"No need to create more bureaucracy," said the hospital director. "We'll carry through with these things. We'll put up signs in the hospital about the importance of respect, communication, and information."

"But what about follow-up?" asked Ruth. "How can the group monitor the process?"

"We already have a municipal health directorate to handle these things," said the doctor who had helped lead the hospital tour earlier.

"The municipal board hardly ever meets," said one of the nurses.

"Then we can energize it," said the hospital director. "Any committee we choose here would not be legal."

"What do you think?" Ruth asked, looking to the community representatives. After a long pause, Doña Marisol raised her hand to speak.

"The municipal health board can do the follow-up," she said.

A member of the PCI group approached Doña Marisol after the workshop. "So you weren't too interested in the idea of choosing a committee to implement what was decided?"

"I liked the idea. It would have been good to have people following up on this. The problem was that the doctors were a little afraid that we'd get too much control." She smiled, paused, and said, "These things take time."

The Importance of Facilitating Dialogue

"Where do we learn the skills required for dialogue? Do parents really listen to their children? Do teachers model this behavior with their students? Does the supervisor often engage in a sincere dialog with her employees? A medical student never calls his professor by name. He always addresses him by his title. Interns become errand boys to the residents who in turn serve the physician in charge of the floor. Is it surprising that the intern recreates a hierarchy when she finally gets a full time position at a hospital?"—Save the Children staff member

A Calidad y Calidez workshop should be seen as just one step in a very long process of building mutual respect between community members and health professionals. "These things take time," as Doña Marisol said. Improving provider-client relations cannot be achieved with training alone. It often requires profound changes in the institutional culture of the health services. Despite these obstacles, the PCI Calidad y Calidez workshops

led to a number of positive outcomes. In many cases both parties came to know what was important to the other. The doctors learned from the community, and community representatives had the opportunity to present their perspective.

The workshop described above was the only one in which a quality of care committee was not created. In another municipality, the committee was able to arrange for interpreters (usually a staff member) during consultations and outreach activities. Setting aside afternoon slots for patients arriving from a distance on market days reduced the waiting time. In other locations the committees worked to promote Bolivia's new national insurance for pregnant and postpartum women and children under five. These activities improved communication between health center staff and patients, increased health worker attentiveness and friendliness, and increased service utilization.

SNL BOLIVIA: COMMUNITY MOBILIZATION OUTCOMES

- **In Cochabamba (PCI), some health centers have given community health workers a 50 percent discount on their own medical care in recognition of their work in the community.**
- **In Vinto (PCI), communities have worked with health centers so that they now save five appointments two days a week for patients who come from remote areas.**
- **In El Alto (CARE/CIES), one doctor says she has begun to accompany community health workers on home visits to help improve confidence in the local health clinic.**
- **In Oruro (Save the Children), health center staff have begun to allow traditional birth attendants to be present and participate in births at the clinics.**

Meetings of the Mind and Missed Opportunities

In tandem with their efforts to improve communications between health care providers and community members, NGO partners also strengthened local institutions—through the umbrella organization, PROCOSI—to strengthen neonatal health services and knowledge. CARE/CIES, CEPAC, PCI, and Save the Children have collaborated with a range of local groups and organizations that include health centers, farmers' unions, mothers' clubs, local health directorates, and community surveillance teams. This strategy of working with and strengthening local organizations has resulted in increased national attention to neonatal health.

Though PROCOSI's NGO members were implementing IMCI before the SNL Program began, clinical and community neonatal IMCI are now routinely included in child survival programs. NGOs have introduced safe delivery kits, birth plans, Kangaroo Care, home visit protocols and educational cards, community action plans, and pregnancy clubs into their programs, and many of these materials are cited as "best practices" in a new USAID-supported community health project in Bolivia.

The Law of Popular Participation

Over the last decade, Bolivia carried out an ambitious process of decentralization that not only transferred funds and new responsibilities to municipal governments but also mandated participatory budgeting and oversight by local organizations. The 1994 Law of Popular Participation recognizes indigenous communal and grassroots organizations—like farmers' unions *(sindicatos),* neighborhood organizations, women's groups, and communal land organizations *(ayllus)* in the *altiplano*—as representatives of their communities.

Local health boards *(Directorios Locales de Salud)*—usually composed of the hospital director, the mayor, and a representative from a local grassroots organization—oversee health services at the municipal level and advise on the distribution of health personnel and allocation of local health resources. The hospital director represents the Ministry of Health, the mayor represents local government, and the grassroots organization presents the point of view of the population using health services.

"The local health boards looked great on paper," said a Save the Children outreach worker, "but the reality was quite different. They rarely met and members did not know their roles" So the question remained: How to help the boards function in a more efficient way? "We found that having just three representatives was insufficient. When a larger, more diverse group participates, the directorates work more effectively. We encouraged a wide variety of people to attend the directorate meetings—everyone from nurses, auxiliary nurses, schoolteachers, NGO staff, and a host of community representatives. One of the health boards was able to arrange for the redistribution of health workers to the rural

areas of the municipality where several of the health posts had been closed for lack of personnel. Another uncovered theft in the municipal hospital."

Farmers' unions, or *sindicatos,* were important ENC collaborators in the rural areas around Cochabamba. Each *sindicato* has a Secretary of Health, but all too often the position is of little importance; many Secretaries have a vague idea of their responsibilities. Health is not often a priority with *sindicatos.* They are more concerned about subsistence—producing enough to feed the community for the coming year. PCI invited the secretaries to a series of local meetings in which they assessed newborn health status and practices in their communities (i.e., how many babies were born that month? How many umbilical cords had been cut with a clean instrument?) and to decide on practical steps to correct unhealthy patterns.

Listening for Background Noise

Together, the four NGOs participating in the SNL consortium trained nearly 8,000 volunteer health workers in ENC interventions, home visit protocols, and community mapping. The volunteer health workers carried out home visits, helped to organize women's and men's education and community health surveillance groups, and provided support to families with pregnant or newborns. Volunteers worked in tandem with the *parteras* to identify households where deliveries had occurred, so that the volunteer could arrange a visit within the first three days after birth and encourage the new mother to visit a nearby health center.

This community health worker program was the most challenging aspect of the strategy for many of the NGOs. In several areas, mothers were reported to have received the volunteer health workers more out of politeness than an interest in the topic, although other mothers (and fathers) did show an interest. More often, mothers were concerned with day-to-day economic survival than with preventative health. "All the volunteer health workers are trained to do is talk," said one mother. "They don't know how to cure our children and don't carry medicines." Home visits were often short because the women were busy taking care of their children, sheep, and cows, and bringing food out to the fields for their husbands.

Volunteer health worker desertion soon became a problem. In the upper Cochabamba area, for example, PCI saw up to 40% of volunteers drop out of the program—an issue that was unresolved at the end of the SNL initiative. They complained of a lack of community appreciation for the work they were doing. Many of the volunteer health workers were poor and subject to competing pressures (e.g., taking care of children and keeping up with agricultural work). Furthermore, seasonal migration in search of work also reduced the number of participants. PCI had better results in the Quillacollo area where the population was more economically secure and better educated.

A common problem in many of the ENC pilot areas was the volunteer health workers' limited training and flexibility. "When we do our home visits with a set of messages in mind," said one Save the Children program officer, "everything else becomes background noise which we need to filter out." The program officer accompanied a volunteer health worker on a visit to the home of a middle- aged couple. The volunteer started the visit well by introducing herself and clearly explaining that she had come to talk about newborn health. "And speaking of newborn health," she said, "your baby is darling." The mother was quiet at first, and then finally admitted that she wasn't feeling well. "I'm sorry to hear that," said the health worker. "Do you keep your baby warm? It's very important." She took out a set of laminated materials with health messages and started to go over the

newborn danger signs with the woman. "My wife has been bleeding since she gave birth," said the husband. "I'm really sorry to hear that," the volunteer said again. There was an awkward silence. "Do you know your baby is late for his BCG vaccination?" At that point the program officer intervened and arranged for the mother to be taken to the health center.

The volunteer health worker was trained in ENC. She had a set of messages she felt she needed to deliver. "She was so focused on the messages," explained the program officer, "that she missed what the couple was telling her. She had a quota of 40 families to visit and was afraid that if she didn't effectively convey the newborn care messages, an infant would die. A problem arose that had nothing to do with her limited training or the educational materials she was carrying. We need to teach the volunteers to handle a wider range of problems and help them learn to listen and be more open to the needs of the families they are visiting. We assume that because a woman is pregnant she is interested in learning danger signs for herself and her new child. But perhaps what is more immediately important to her is a chance to discuss her anxieties about being pregnant yet again and having another mouth to feed. If you listen, there is almost always something you can learn from a mother about her pregnancy, her newborn, or the conditions underlying her family's health or ill-health."

Community-Based Surveillance

An energetic doctor in the upper Cochabamba area, Dr. Condori, took a group of volunteer health workers to the top of a high hill that overlooked the municipal capital. He

handed out paper and pens and had the group draw a detailed map of the town below. They included the houses, churches, corrals, schools, and the farmer's union hall. He then went out with the volunteers to number each house. They flattened tin cans and painted them white. When the paint dried they added thick black numbers. After tacking a house number on each dwelling in the village, the group carried out a house-by-house census. They then tabulated this information by persons reporting any kind of health problem or risk, neonatal or otherwise.

Each of the identified "risk" groups was given a color. A pin of the same color was placed on the map wherever there was a pregnant woman, newborn, adolescent, or elderly person living. Yellow represented a newborn. Green meant there was a pregnant woman in the house. The map provided an instant overview of the health situation (by distribution of colored pins) in the town and guided the volunteer health workers as they planned home visits to discuss prenatal control, newborn care, and vaccinations. Dr. Condori repeated this with the volunteer health workers in each of the nine communities in the municipality. The next step was to analyze the information on local health problems they were gathering.

PCI worked with Dr. Condori to organize community health surveillance committees in several parts of the municipality. These committees, called *Comités de Análisis de Información,* are part of the national epidemiological network. They are meant to be participatory meetings in which local health problems are analyzed by community members and health workers, and plans of action developed to address problems identified. At the time PCI began in the Cochabamba region, the community surveillance committees rarely met. PCI invited health center personnel, village leaders, community members, and volunteer health workers to a series of community surveillance committee meetings focusing on neonatal health.

"There was one public health nurse that had a talent for facilitating community health surveillance committee meetings," said a Save the Children staff member. "I was at a meeting where she talked about delaying the baby's first bath. The mothers disagreed. They gave her a long list of skin diseases the newborn would get if they didn't wash him. The nurse listened. The conversation moved to the problem that only one out of three children born that month was delivered at the health center. The women complained about the fact that there were no *pallasas,* or large pillows, at the health centers that would aid them when squatting during delivery. (They wrote to the municipality with the request. Two months later the mayor released the funds to buy the *pallasas.*) At the end of the meeting the nurse added her own thoughts about what had been discussed. Until then she had mostly listened. She knew that though some of the people in these meetings didn't know how to read, they had spent their lives in this community and had a different kind of knowledge."

Roman Balance

The ENC Bolivia strategy integrated newborn health with the health of women during pregnancy, delivery, and postpartum. This offered a more coherent way for the program to speak to communities about danger signs, prevention, and the importance of trained health care.

PCI, CARE/CIES and Save the Children were especially effective in their work with traditional birth attendants, or *parteras.* In the upper Cochabamba area a very old woman showed up at the first day of a workshop for *parteras.* "I came today out of curiosity," said

the old woman. "I get invited to these workshops but never go. Why should I? The trainers lecture at us and try to get information about our clients." Lillian, the PCI workshop leader, explained that the goal was simply to exchange experiences and see how they might assist the *parteras* working in the municipality.

It turned out that the old woman was well known in the area and had delivered more than 80% of the babies in her community. She became a regular participant at the workshops. They discussed danger signs in pregnancy and in the newborn, as well as essential newborn care practices. The *partera* came up to Lillian after the third workshop. "I used to do all these things we've discussed. I used to cut the umbilical cord with a piece of ceramic. I believed that if I didn't the baby would become a thief. I helped bathe babies right after birth, and allowed the mother to delay breastfeeding so that the family could get the priest and name the child. We used to say that a little devil, a child that has not been named, doesn't take the breast." The *partera* then explained in detail to Lillian how she now cut her finger nails before each birth, washed her hands, dried them with a clean towel, cut the cord with the razor blades provided in the delivery kits, wiped the baby clean, and wrapped it in a warm blanket and put it to its mothers breast.

Within a year she told Lillian that most people in her community had come to accept these new practices. Some were still unconvinced that it would be good to wait until the second day to bathe their infant. A few were also reluctant to breastfeed the baby before the infant had been ritually named. According to the *partera,* relations with the health center had improved dramatically since the SNL activities began. People now went to the nurse for their prenatal and postnatal appointments and their children's vaccinations. When Lillian asked what she felt was behind this change, the woman thought for a moment and said that people were better informed. "They listen to the infant care messages on the radio and hear me go on and on about danger signs and how to protect their babies."

"Women say they go to traditional birth attendants because they are warm and empathetic," explained Lillian. "The *partera* prepares cups of *mate* and bowls of broth. She massages the woman, encourages her to deliver in the position she is most comfortable in, and believes in all the customs that the woman herself believes in. In contrast, when a woman goes to the health center they often forbid all of this. In many of these communities, when a woman thinks she might be pregnant she consults the partera. The *partera* can tell her what she wants to know by simply touching her wrist or looking at her. That is, they take her pulse to see if it is a little accelerated or look into the woman's eyes to see if they shine. The *partera* is seen as a person who can solve anything."

Community demand for prenatal and postnatal care in Bolivia had risen due to increased referrals from traditional birth attendants, the recent introduction of a free package of neonatal health services by the government, and radio spots educating listeners about essential newborn care practices.

This rising demand helped NGO partners carry out community-based surveillance. In the Oruru area, Save the Children worked with a *partera* from an isolated village. Though she spoke Quechua, she seemed to follow the Spanish language trainings well. She started attending the monthly surveillance meetings, where births and pregnancies were reported, as well as how many babies had postnatal check-ups. Save the Children organized with the local *parteras.* The woman came to each session with full information about each of the babies she had delivered. The program staff was surprised to learn from another TBA that she had

no scale or measuring tape. She had been weighing the babies on a roman balance and measuring them with a piece of cloth that a friend later measured with a ruler.

The NGOs' experience with local health boards, community health surveillance committees, *sindicatos,* and *parteras,* suggests that collaboration with communal or grassroots organizations, pre-existing social structures, and people in indigenously accepted roles, can at times be more effective and more sustainable than creating such new roles and entities as the volunteer health worker.

Squeaky Wheels

At the time PCI began its ENC work in Punata (in upper Cochabamba), many of the outlying health posts were poorly equipped, with only one ambulance to serve the entire area. Two years later all the posts had received new equipment and medications and the mayor approved the purchase of a second ambulance.

"We started hearing complaints about the health posts and lack of emergency transportation," said the mayor. "Whether in meetings of the local health board, reports from community health surveillance committees, or during visits to the communities, people kept saying the same thing. 'Why should our wives run to the health post if they have nothing to offer there, not even transportation to the hospital.'"

Under Bolivia's Law of Popular Participation, funds are set aside for each community to use for projects of priority to them. When the law was enacted a decade ago, community members prioritized more health personnel, better equipment, and medications, over other projects such as new roads. The mayor of Punata was happy to reallocate the funds, reflecting the wishes of surrounding communities.

Perhaps the most impressive aspect of SNL partners' work was the capacity and deep commitment of the NGO public health nurses and outreach workers, many of whom

LESSONS LEARNED: DELIVERING ESSENTIAL NEWBORN CARE IN BOLIVIA

- **An integrated strategy, taking into account the health of women during pregnancy, delivery, and postpartum, creates a coherent way to speak to communities about danger signs, prevention, and the importance of trained health care, and to introduce the mother-newborn continuum of care concept.**
- **Collaboration with communal or grassroots organizations, pre-existing social structures, and people in indigenously accepted roles can be more effective and more sustainable than creating such new roles and entities such as the 'volunteer health worker.' Moreover, working only with community health workers may limit program impact. Other stakeholders and local leaders—school teachers, union representatives, and municipal authorities—can be valuable supporters of an ENC program as well.**
- **In cases where there are wide cultural gaps between health providers and the communities being served, the partnership-defined quality (PDQ) methodology can uncover misperceptions and miscommunications that pose a threat to newborn health programs. The resulting dialogue can lay a strong foundation for introducing new services that span the home-community-facility continuum.**
- **Communication and mobilization strategies were key to marshaling support for an ENC package in the community. Time spent negotiating consensus among community members on what constitutes 'best practices' for newborns was a vital determinant of program impact.**

spent 5 to 7 days a week working and sleeping in the communities. Most communicated fluently in the language of the communities they served. Lisset Camacho was trained as a public health nurse and worked with PCI's neonatal survival program in the Cochabamba region. She was the nurse described in the opening paragraph of this case study.

"When outsiders come to talk about health, people listen respectfully and thank them for coming," Lisset said. "But they don't put the visitor's lessons into practice. They wonder how an outsider would know what is best for them. My father came from one of these villages. I speak their language. When I am living with them I identify with them. At times I think that if I lived there I would think the same. I would be more interested in survival than preventative health. But then I think that with my studies I have something to offer them, something good that they often don't recognize. With time I've seen people change. So I keep coming back."

The percentage of mothers who received post-partum care within 3 days of delivery by a trained provider (traditional birth attendant or community health worker) rose from 42 % to 79 %.

—Saving Newborn Lives/Bolivia Final Program Evaluation

People have changed. In the areas served by SNL Bolivia and its partners, the number of mothers whose birth was attended by a trained provider (nurse, nurse midwife or doctor) increased 34 % over the two-year period of the project. The number of mothers who breastfed their infant within one hour of birth increased by 23%. The number of mothers whose infants received newborn care within one week after delivery increased by 30 %. Nearly 70% more mothers now know at least two newborn danger signs. The program had impact far beyond the communities it served. Based on the initiative's promising results, the Ministry of Health invited SNL Bolivia to help develop national strategies for reducing neonatal morbidity and mortality. This, perhaps more than any other aspect of the effort, will help ensure sustainability.

Appendix 1: NGO Community Mobilization Strategies for Essential Newborn Care in Bolivia

Implementing NGO	Participants	Description
CIES/CARE	• Community Health Workers • Traditional Birth Attendants • Clinical Health Workers • Mothers/Fathers • Local Authorities (less frequently) • CIES/CARE educators	• Community health care workers and CIES/CARE educators collect information through home visits, group meetings, festivals, and other means • Information regarding newborn deaths is categorized into a table, according to age of death and weight at death. The number of healthy newborns is also included in the table. • Community members meet to analyze the causes of deaths and develop action plans. Each "box" indicates a different type of necessary intervention depending on the stage at which the problem is most likely to have occurred (prior to conception, during pregnancy, during birth, or after birth) • Action plans may include home visits, meetings with health care officials, more educational sessions, development of group emergency plans to address lack of transportation systems, financial resources, etc.
Save the Children	• Community Health Workers • Traditional Birth Attendants • Clinical Health Personnel • Mothers • Local Authorities (less frequently) • Save the Children educators	• Community health care workers and clinical health personnel collect information through home visits, group meetings, festivals, and other means • During a meeting to discuss community-based health information systems, the information is graphically shared with the community. The methodology employs a flag and various colored dolls (red, yellow, and green) depending on the seriousness of the given cases. • The dolls show live newborns, newborns who have died, who are being exclusively breast fed, whose cord was cut with a clean instrument, and who received care within 3 days of birth • Participants develop action plans to address the issues of greatest seriousness • Action plans may include home visits, meetings with health care officials, more educational sessions, development of group emergency plans to address lack of transportation systems, etc

Implementing NGO	Participants	Description
Project Concern International (PCI)	• Community Health Workers • Clinical Health Personnel • Mothers • Adolescents • Traditional Birth Attendants • Local Authorities (less frequently)	• Community Health Workers hold educational sessions with mothers, health fairs, and home visits both for teaching purposes and to gather information about neonatal health and deaths. Clinical Health Personnel participate in these activities. • Information is combined with that obtained by Health Centers • During Community CAI sessions, community members and health workers analyze the data and develop community emergency plans • Although traditional birth attendants participate in these activities, they note that their role is increasingly less clear
CEPAC	• Community Health Workers • Health Center Social Workers • Mothers • Local Authorities (less frequently)	• Community Health Workers and Clinical Social Workers hold educational sessions with mothers, health fairs, and home visits both for teaching purposes and to gather information about neonatal health and deaths. The aim is also for mothers to continue to educate others in the community regarding these practices (called EMEs, or Mothers Teaching Events). • Information combined with that of Health Centers • During Community CAI sessions, community members and health workers analyze the data and develop community emergency plans • The same information is also analyzed on the level of the "Area CAI," which has impact on a greater geographical region

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More on PDQ

More detailed information on the PDQ methodology is available at the Save the Children web site: http://www.savethechildren.org/ technical/health/PDQ_Final_ Manual.pdf.

An article by Bernice Pelea on the PCI Bolivia adaptation of the methodology is available at http://www.sph.umich.edu/pfps/pubsresources/documents/Spring%2005%20Fellows%20NewsFINAL.pdf.

PDQ materials are also available at the CORE Group Web site at: http://www.coregroup.org/diffusion/pdq_save.cfm.