THE WARMI PROJECT:

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A PARTICIPATORY APPROACH TO IMPROVE MATERNAL AND NEONATAL HEALTH

AN IMPLEMENTOR'S MANUAL

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AN IMPLEMENTOR'S MANUAL

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Acronyms and terms used in this manual

AYUFAM	:	Help for the Family (a Bolivian NGO)
CIEC	:	The Center for Interdisciplinary Community Studies
JSI	:	John Snow, Inc.
MOH	:	Ministry of Health
NGO	:	Non-governmental Organization
Partera	:	Midwife
PROCOSI	:	Umbrella group for PVOs working in child survival
PVO	:	Private Voluntary Organization
SC/B	:	Save the Children Bolivia
SGF	:	The San Gabriel Foundation (Hospital)
USAID	:	United States Agency for International Development
Warmi	:	Means woman in Aymara, a local language; it was used as the name of the Save the Children/Bolivia MotherCare Project.

I. HOW TO USE THIS MANUAL

This manual is intended to be used as an implementation manual by PVOs who want to adopt a participatory approach to improve maternal and neonatal health. It includes a guide to the steps followed by the Warmi Project in a format that can be replicated. Various examples of the activities and outcomes of the Warmi Project are presented as an illustration of the type of action that can be taken when adopting a participatory approach.

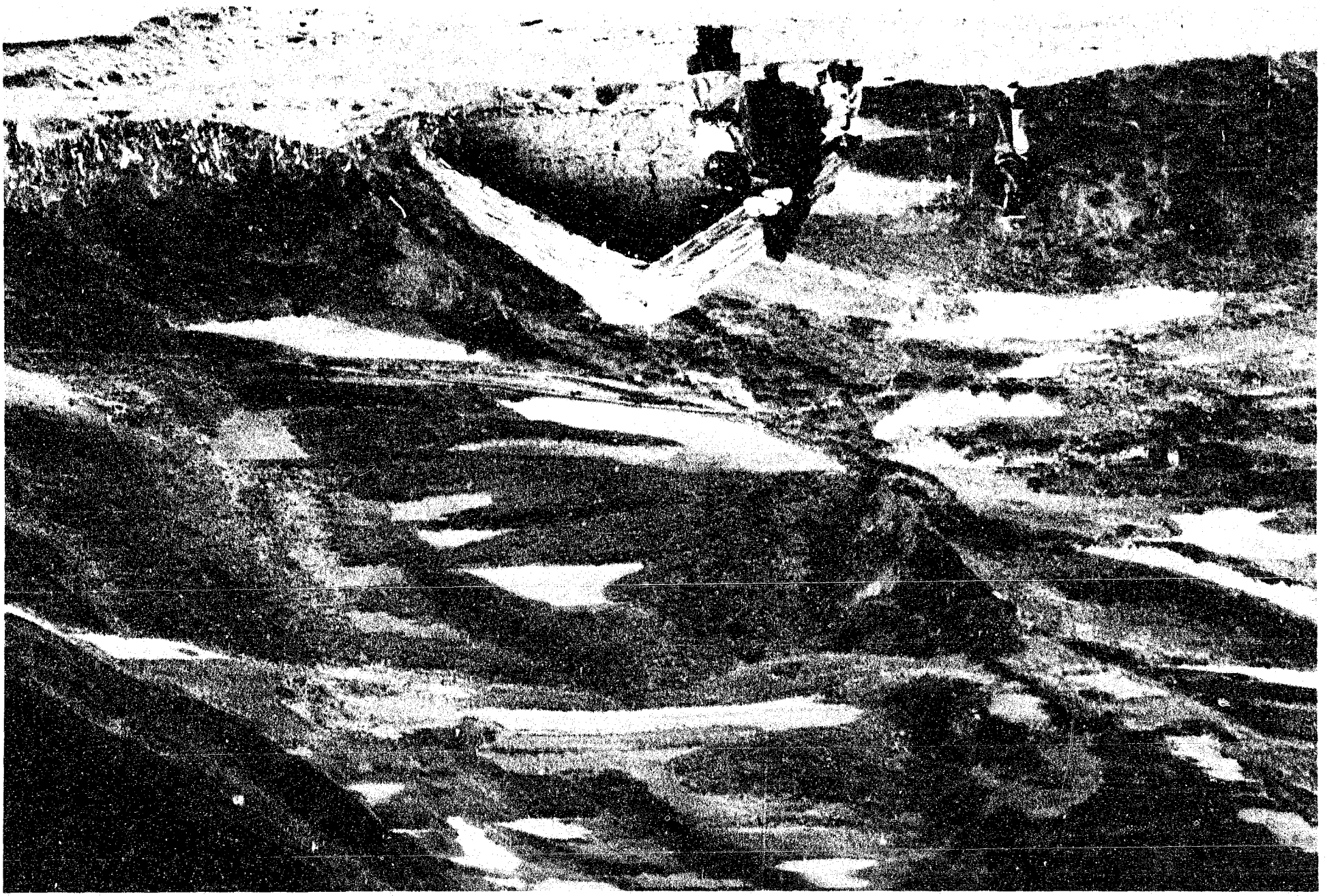
The manual is divided into four sections:

Section 1 contains an explanation of the underlying philosophy of the project and describes the conditions within the project area. It deals with the training of SC/B's staff and the preparation for the project, including the baseline study that was carried out prior to initiating project activities.

Section 2 is the main section of the manual and is a step-by-step guide to the project. It contains four sub-sections detailing all the stages that need to be followed and includes a comprehensive guide for facilitators.

Section 3 describes the implementation components of the Warmi Project and includes information on lessons learned by SC/B during the three-year implementation period.

Section 4 presents the results of the Warmi Project, along with conclusions and recommendations for PVOs who wish to use the project methodology.

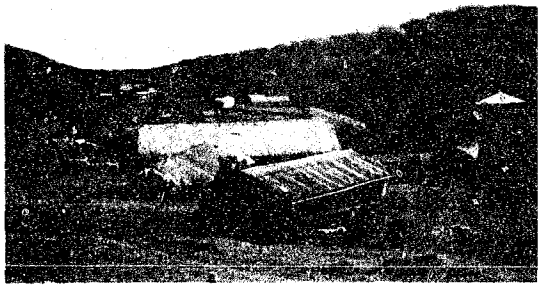


II. DESCRIPTION OF THE PROJECT

Introduction

This manual is the result of a three-year demonstration project in maternal and neonatal health in the rural Province of Inquisivi, Bolivia. The project was implemented by Save the Children/Bolivia (SC/B) under a subcontract to John Snow, Inc. and was funded by the United States Agency for International Development (USAID) MotherCare Project.

The "Warmi" Project (warmi means woman in Aymara, the local language) was initiated to determine how a community-based approach could be used to improve maternal and neonatal health in a very remote setting, in which there is little access to adequate formal health services.



This manual documents SC/B's experiences in a way that we hope will help other private voluntary and non-governmental organizations with their health programs. The manual is designed for program implementors, providing the reader with a step-by-step guide to each phase of the project and our experiences in the field, both good and bad. Since every setting has its own particular characteristics and resources, replicating the process presented in this manual will require some adaptations.

Program strategy

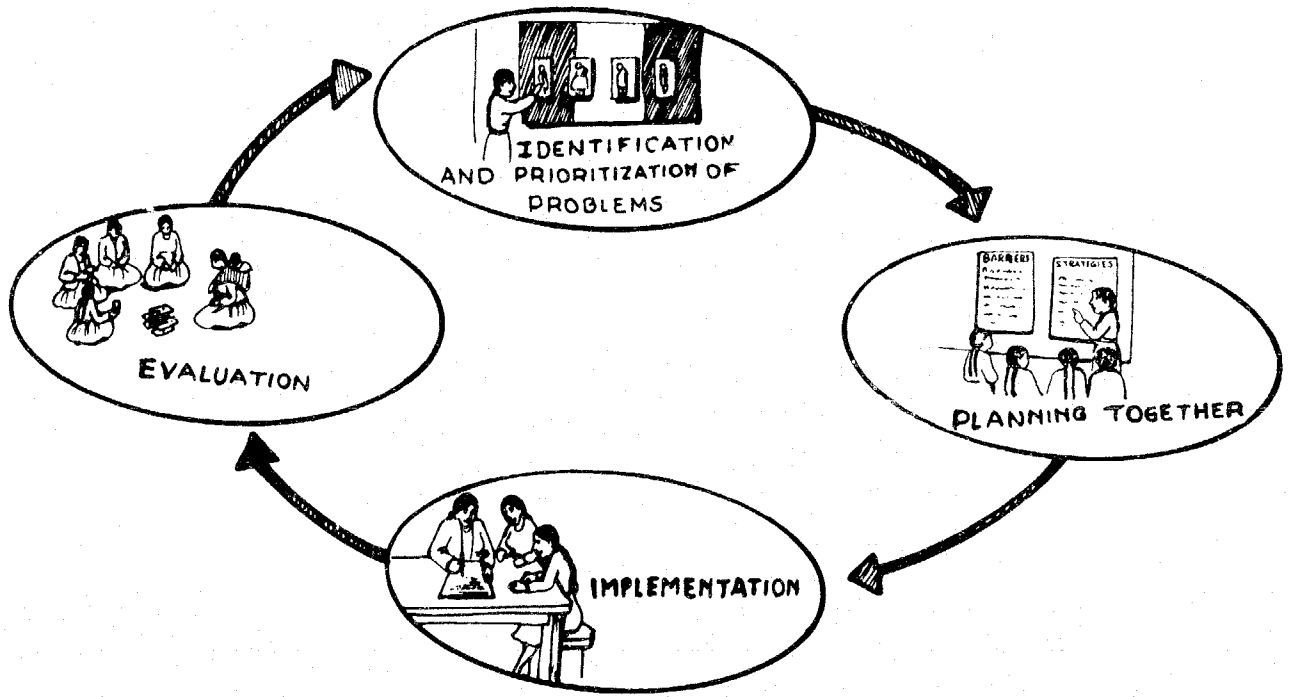
SC/B developed and implemented this project in the context of its established and proven methodology of Community-Based Integrated Rural Development ("C-BIRD"). This methodology is based on the premise that long-term, sustainable development depends on the capacity of community groups to determine local priorities, plan projects, acquire necessary resources and assume responsibility for the administration and coordination of development activities.

A very important aspect of this project was the evolution of a model for maternal and neonatal health interventions which other PVOs and community groups in Bolivia can replicate in the future.

SC/B believes that maximum community involvement will permit an eventual "phase over," with the expectation that certain benefits will be self-sustaining. Therefore, this project was designed so that participating women's groups would be able to replicate the same process (as described below) to address other community problems.

Community-Level Problem Solving

The SC/B Warmi Project developed a simple model for community-level problem solving. A diagram of the model, A Community Action Cycle, is presented below. This cycle was the basis for all program intervention. This manual presents each step in the cycle as carried out by SC/B, along with a short summary of the results of each step.



This cycle might be considered obvious by some readers. However, SC/B found that explicitly stating the steps and drawing the above diagram was a breakthrough in understanding the process, both for staff and community members.

The steps of this cycle were implemented as follows:

1. **Identification and Prioritization of Problems**

   An exercise called the autodiagnosis was developed for use with women's groups in identifying and prioritizing their problems.

2. **Planning Together**

   A 5-step process was devised as a vehicle for the women's group, along with other members of the community and local authorities, to carry out a planning-together meeting to develop strategies and actions to solve their problems. SC/B also developed a project implementation plan to guide activities at the project level.

3. **Implementation**

   The communities implemented their plans based upon their agreements from the "planning together" exercise.

4. **Evaluation**

   Participatory evaluation techniques were used in the final evaluation of the project. Nine community women representatives participated on the evaluation team with six external evaluators. However, the project had not field-tested the community-based methodology for communities to evaluate the results of their actions at the time this manual was printed. Based on the evaluation, problems should again be identified and prioritized, as the cycle begins anew.

Key Interventions

In order to achieve the project's objectives, SC/B used a community-based, participatory approach, working with organized women's groups and other community groups and members. The following are some of the interventions developed and implemented from July 1990 through June 1993 by SC/B and the communities with which it worked:

1. Organized and strengthened 50 women's groups.

2. Developed and implemented a problem-identification and prioritization exercise known as the "autodiagnosis," which was carried out by 50 women's groups.

3. Developed and implemented in 22 communities a "planning together" process to respond to prioritized problems with a formal action plan/community agreement.

4. Identified and trained 45 parteras[1] in workshops and in practical visits in the field; trained 42 of these parteras at the San Gabriel Hospital in a one-week in-service practical course and supervised their work in the field.

5. In collaboration with AYUFAM, a local NGO, educated both women and men in family planning methods and provided family planning services in seven communities.

6. Developed educational materials in collaboration with both (a) women's groups, who developed a home-based women's health card, and (b) CIEC, a local NGO, parteras and women's groups, who together devised and produced a manual for parteras, a series of four booklets for women on reproductive health, and five radio programs.

[1] "Partera," the Spanish term for empirical midwife, is used to represent those individuals who have been selected by their communities for training in safe/clean birth practices and who have begun to serve as community midwives. In Inquisivi, prior to the Warmi Project, the husband is traditionally the person most likely to attend births. The concept of a community midwife/ traditional birth attendant was unknown in the community. Additionally, during the Warmi Project period (1990-1993) there was no formal certification program for nurse/midwives in the Bolivian education system.

Key Achievements

In three years, the Warmi Project achieved the following:

* A decrease in the number of detected cases of perinatal and neonatal mortality from 75 out of 639 total births (1988-1990) to 31 out of 708 total births (1991-1993);

* The organization of fifty women's groups who meet regularly, with over 850 women directly participating;

* A noticeable increase in women speaking in groups and communication between women, specifically about maternal and neonatal health;

* An increase in users of contraceptives from an estimated baseline of approximately 0-1% to 27% of women of reproductive age in seven communities where services were offered;

* An increase in tetanus toxoid coverage (minimum of two doses) in women who delivered from 48% to 82%;

* An increase in pregnant women with at least one prenatal care visit from 45% (baseline) to 77% (last project-year average);

* An increase in the use of trained birth attendants (including doctors, nurses, parteras, husbands and other family members) from 13% (baseline) to 57% (last project-year average);

* An increase in immediate breast-feeding (within first hour) from 25% (baseline) to 61% (last project-year average); and

* An increase in the number of communities that now include women in general community meetings and an increase in women's participation in the community decision-making process.

SECTION 1

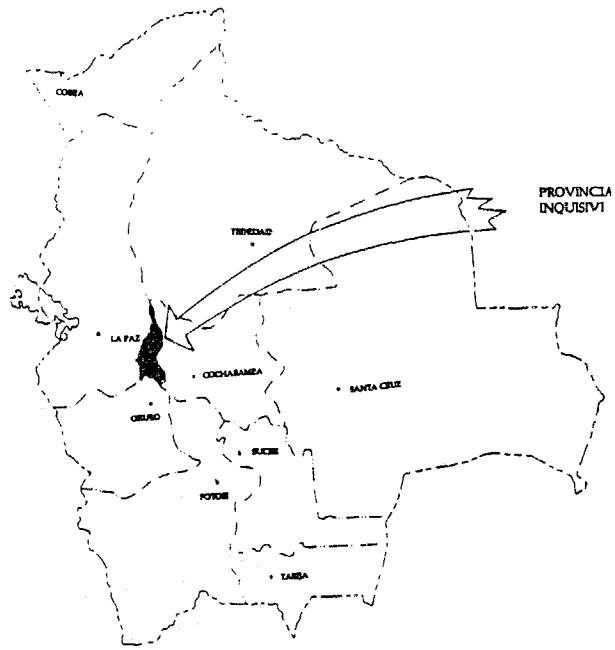
PROJECT PHILOSOPHY AND BACKGROUND

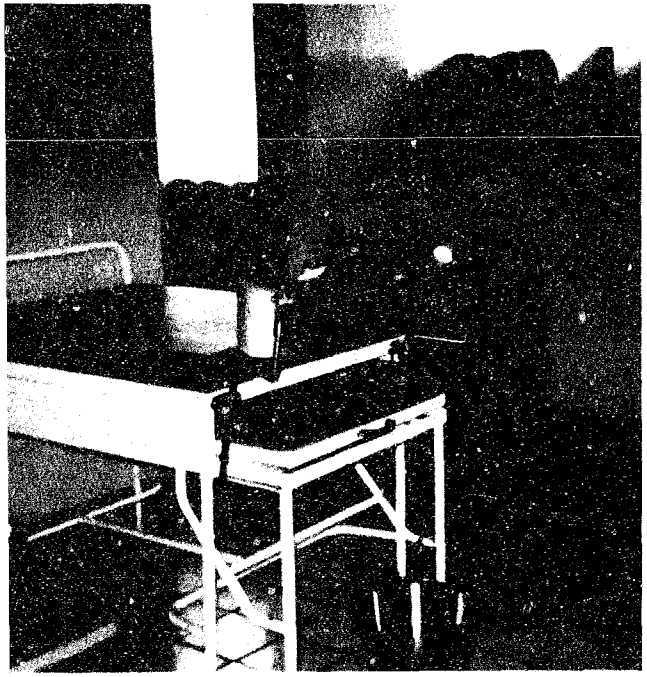
III. BACKGROUND

Save the Children/Bolivia (SC/B) began MotherCare Project activities in 50 communities in the Inquisivi Province of La Paz Department in July 1990. The goal of the three-year project was to reduce maternal and neonatal mortality and morbidity through affecting the range of behaviors that influence the outcomes of pregnancy, delivery and the neonatal period. A major strategy used to achieve these objectives was the organization of women's groups to increase women's knowledge and awareness of specific maternal and neonatal health problems and of the locally available resources that could be used to address these problems.

Geographical Setting

The rural Province of Inquisivi lies approximately five hours by road southeast of La Paz. The province is characterized by high plains (altiplano), high Andean valleys, and subtropical valleys. The 15,000 inhabitants in the defined project area are predominantly of Aymara (native American) extraction. Quechua migrants are also found in the lower valleys. The province encompasses over 5,000 square kilometers with difficult access to the population. Because roads are poor in many parts of the province, several communities can only be reached after many hours on foot. Means of transport are scarce and unpredictable.





Health Statistics in the Province

In 1990, a retrospective case-control study of maternal, perinatal and neonatal mortality was carried out by Warmi Project staff in the province. According to this study, verified mortality rates were extremely high in this population: for a two-year period of study, perinatal mortality was 103/1,000 births; neonatal mortality, 69/1,000 live births; and maternal mortality, 140/10,000 births. The most common probable causes of perinatal death identified by the study were asphyxia, sepsis, trauma, hemorrhage and hypothermia. Probable causes of maternal death included hemorrhage, sepsis associated with intrauterine fetal death and puerperal sepsis, and abruptio placenta.

Health care services in the province are provided by the Ministry of Health. There are two health posts, one in Licoma zone and one in Inquisivi zone, each staffed by one doctor carrying out the mandatory one-year rural medical service and by one auxiliary nurse. Circuata zone is served by a health post staffed by one auxiliary nurse. The posts are stocked with the bare minimum of essential basic medicines and equipment. The reference hospital in Quime does not meet the minimum WHO standards for a health post. Although staffed by two to three doctors, several nurses, a dentist and a custodian, the hospital lacks the sterilization and anesthesia equipment and trained staff to cope effectively with major complications which require surgical intervention. An ambulance is available for use by the Quime Hospital, but it is often out of service due to poor maintenance, lack of spare parts, and lack of funds to purchase gasoline. All health facilities are underutilized by the population, in part because of economic factors, in part because of sociocultural factors and in part because of the justified belief that the services are not equipped to deal with more complicated problems. Women who present complications during their pregnancies or labors are usually counter-referred to La Paz or Oruro (4-6 hours by road).

Women in Inquisivi, Licoma and Circuata Communities

Inquisivi

The Warmi Project worked in three geographic zones of Inquisivi Province (Inquisivi, Licoma and Circuata) that vary widely in their sociocultural characteristics. The families in the Inquisivi Zone tend to be older, more well-established and stable than those of the Circuata Zone. Formerly labeled "peons," these families have lived in the Inquisivi Zone for generations. The women tend to be Spanish-speaking and less literate than the women of Licoma and Circuata. Although the majority are Aymara, a significant minority are Quechua. The people are characterized as "altiplanicos" (i.e., closed, distrusting of outsiders, with very ingrained customs and less desire for change or "progress"). The homes of Inquisivi Zone families are much more dispersed than those in the Circuata communities. These communities, for obvious reasons, offered a great challenge to our attempts to change behavior.

Circuata

In contrast, the communities in Circuata Zone are newer, or, if old, have a number of recently immigrated families. In at least three of the communities, the entire population migrated as a unit to found the new villages. Though these new families are also descendents of altiplanic (highlander) people, the fact that they are a self-selected group of immigrants who initiated change implies that they are more interested in, and accepting of, change, progress, or improvement in their lifestyle. They were, therefore, more anxious to work in projects that they believed would influence their development. They are also more open in their praise and criticism. The villages are more concentrated than in Inquisivi Zone. The women are also more apt to be bilingual and have, in general, attained a higher level of formal education than the women of Inquisivi Zone.

General Characteristics

Men and women in the Inquisivi Province are bound by a tight family structure and rigid sexual roles. Traditionally, women have not participated in the decision-making process for community activities; it was usually the husband who had a voice and vote in the monthly community meetings, and, if women attended, they were never heard. The village authorities were elected or served in turn; the only time a woman was found in this position was if she was a widow of a former member and if she owned land.

In many of the communities, CARITAS Bolivia stimulated the organization of "mothers' clubs" and carried out health (mostly oral rehydration and growth monitoring) and homemaking activities. In exchange for their attendance, the women were given food supplements provided by the US government under the PL-480 program. When food donations stopped in the province in 1989, many of these groups either lost members or disbanded completely. Non-Catholic women, who comprised a significant proportion of the population, had always been excluded from these groups.

Organizing Women's Groups

Before the Warmi Project began in 1990, 20 women's groups were formed--16 responding to SC's strategy of training women's groups in horticulture to increase vitamin A intake and 4 initiated by women's agrarian unions with the support of SC staff. In the village of Polea before the Warmi Project began, women stated their interest in organizing for health. As one woman expressed it:

> "We need help in organization. Once organized, we will be able to elect our own health workers because even if men are good health care workers and are able to go out in the night, we can communicate better about our problems and our children's health with other women."

They also emphasized that women must be trained separately because husbands and fathers often did not permit them to participate in mixed groups. Indeed, of the 85 village health workers trained by SC/B prior to the Warmi Project, only a handful were women. In one extreme case, the president of a Mothers' Club was a man!

Not only were the communities led exclusively by men, but in the family, it was the man who most often made all financial decisions. Most SC/B field staff have witnessed cases of husbands deciding that it would cost too much to send a woman with complications during her labor or pregnancy to the hospital (3-7 hours by road, not including the time spent trying to gain access to transport). The cost of a caesarian, for example, may represent six or more months of cash income. The family is then left to make do with the few available local resources. This not uncommon scenario contributed to the high maternal and perinatal mortality rates in the province.

There were no exact data about the degree of domestic violence found in Inquisivi Province, but generally, a man was expected to beat his partner. The occasional beating was not identified by either man or woman as a problem unless it was continuous or resulted in serious injury or death. It was done openly and the children and neighbors became silent witnesses to it. Very often, alcohol consumption by the man or the couple was a prelude to violence.

IV. THE ROLE OF PROJECT STAFF

Philosophy

In keeping with SC/B's participatory approach to its work, the role of project staff is seen as a facilitatory one rather than an educational one. Staff are viewed as project "beneficiaries" along with project participants in the full belief that one of the project goals is self-development for all those involved. Taking the approach that the only lasting form of development is one where the participants take control of their situation and make collective decisions on improving it, project staff then assume the role of assistants in this process, facilitating and aiding the participants in making their decisions and in converting them into actions.

The underlying philosophy relating to staff is the central importance of respect for the project participants and of belief in their ability to identify and find solutions to their own problems.

This approach has encouraged SC/B to continuously assess the learning taking place in the areas of knowledge, attitudes and practices, both of project participants and of its staff. This constant self-evaluation and openness to learning has led to better acceptance and integration of staff within the women's groups and the community, and, ultimately, to more self-development within the groups. It has also resulted in greater understanding on the part of SC/B of the reality of the women's situation and of the essential need for locally appropriate solutions to their problems.

Training

In the initial stages of the project, much work needed to be done to enable staff to understand the difference between "educating" and "facilitating." Some staff members found it quite difficult to make the transition from taking a directive role to adopting the stance of listener and facilitator. However, with continual practice and training, their approach changed considerably, and staff learned how to facilitate the problem-identification and planning processes rather than direct them.

In response to requests from staff for further training, workshops have been carried out on:

a) non-formal adult education methodologies;
b) techniques for consensus-reaching with groups;
c) creativity in working with groups; and
d) the "child-to-child" approach.

Staff also received training in technical issues related to their work. This training included workshops on pregnancy, birth, postpartum care, care of the newborn, and family planning.

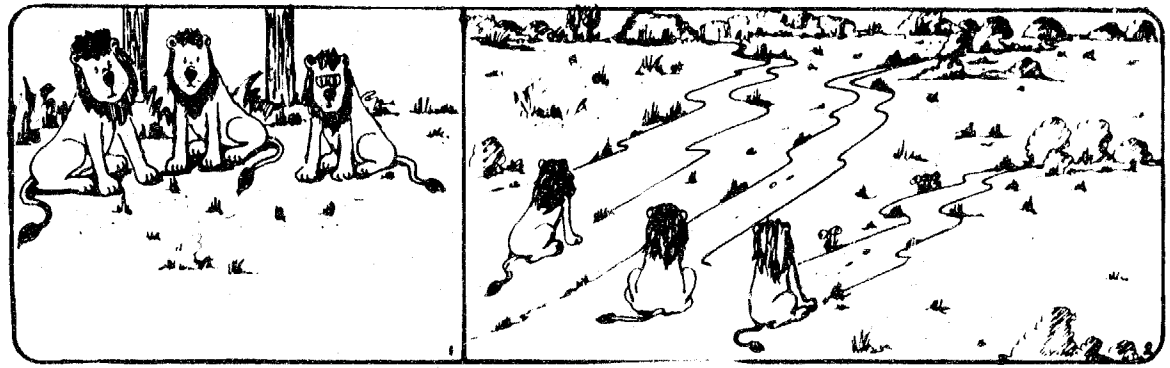
LESSON LEARNED

The success of the project was due in large part to the fact that it responded to needs expressed by the community members. Therefore, staff must be well trained to facilitate the process, rather than to impose their own ideas. In most settings this is a radical change and will only occur if senior staff are committed to this philosophy and strategy.

Learning through doing
("Don't be afraid to make mistakes and don't think you know all the answers.")

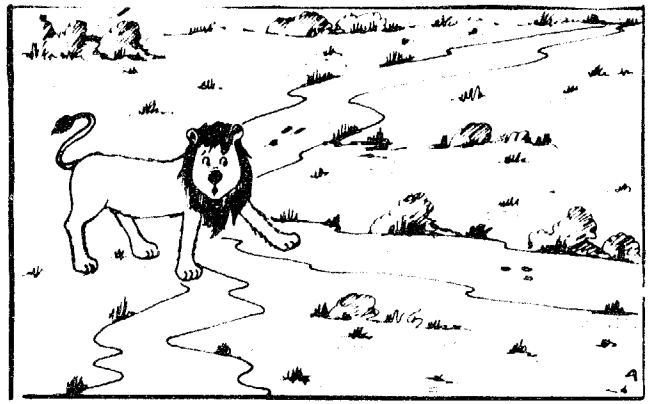
The approach taken with project staff has been one of learning through actually doing. Initially, many staff members were inhibited in their work, believing that they should have answers for every question (which, of course, they didn't). The project has fostered the idea that there is no one correct answer to any question nor any one solution to a given problem. It is only through a process of collective decision-making and action that an issue affecting a community can be resolved.

In the course of the project, staff became more confident in their roles of persons who are there to help the group to open up and to realize that they can influence what happens in their lives. In the process, the staff also realized that they do not have the answers to the groups' problems. This realization proved to be particularly important in preventing staff from making promises that SC/B could not fulfill and, thereby, falsely raising the groups' expectations. In addition, staff developed the ability to try different approaches with the groups and to accept that they, too, can make mistakes and should not be afraid to do so. Considerable staff development and learning took place through their contact and work with the groups.

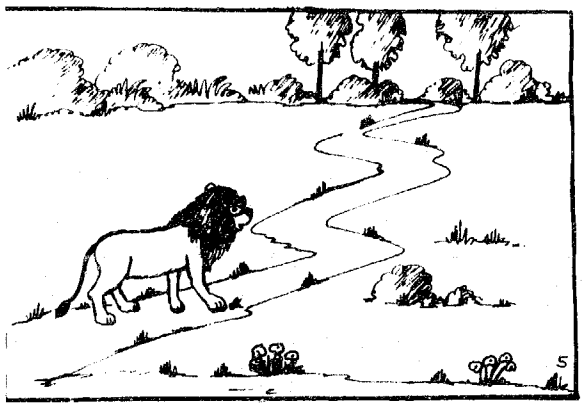


Once upon a time, there were 3 lions in a forest who wanted to go home. Each lion came to a fork in the road.

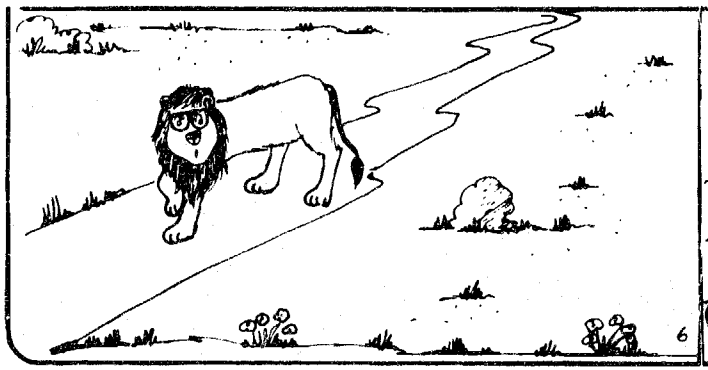
The first lion couldn't decide which way to go, so he remained there, puzzled.



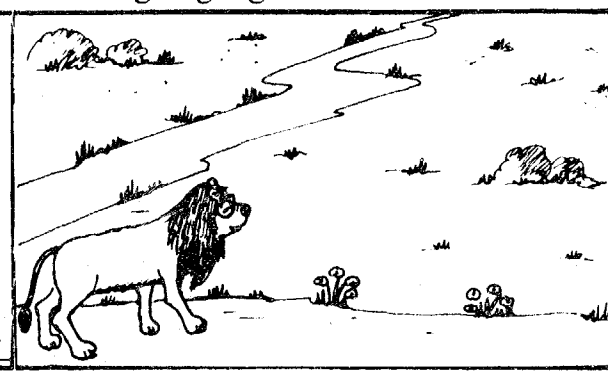
The second lion decided to take both roads and he got stuck with one paw going left and one going right.



The third lion chose a road.



After a while he found that the road did not lead to his home.



So he went back and followed the other road and arrived home.

Protocols

In the initial stages of the project, a set of action protocols was developed to address priority maternal, perinatal, and neonatal problems that had been identified through the retrospective case-control study (see Section V on page 20). However, these protocols were devised without the involvement of the women's groups. SC/B knew this would lead to difficulties in their implementation at the household level. Therefore, they were not used directly as produced but served as the basis for technical content for the development of the educational materials with the women's groups and parteras. The fact that the development of appropriate protocols with the communities was emphasized with staff as a component of their training made this approach easier to carry out.

The approach taken by the project was to encourage the women to identify strategies and actions that they needed to take to solve their problems rather than to present them with ready-made procedures to follow. SC/B is convinced that locally appropriate solutions must be found if the project impact is to be sustainable. The project participants must also be the key agents in deciding what type of practice is realistic within their situation. Therefore, a predesigned recommendation, such as to "upgrade the availability of area emergency transportation by creating an ambulance service based in Inquisivi," which would need the continual support of SC/B, was not deemed to be feasible.

Some of the protocols that were developed were indeed implemented, e.g., to "develop further training in emergency maternity care" and to "provide support for the establishment of family planning services in the impact area." However, these protocols were only put into practice after the communities had identified them as needs and had requested services in these areas.

V. RETROSPECTIVE CASE CONTROL STUDY OF PERINATAL AND MATERNAL MORTALITY

Rationale

In order to determine a baseline for the project and to learn about what practices were contributing to perinatal and maternal mortality, SC/B began the project with a retrospective case-control study. The subjects of the study were babies who had died within the previous two years before completing their first month of life and two "controls" for each of the babies that had died. The "controls" were babies who were born the same year, lived in similar communities, and had survived their first month of life. The study design was based on a similar study conducted in Guatemala (Bartlett, 1989).

The study sought to determine how "cases" were different from "controls" by looking at a variety of sociodemographic factors. The underlying premise was that if there were significant differences among these two groups, the project could target its interventions based on these differences.

Study Definitions

The definitions used by the World Health Organization were maintained for this study. To assist in the identification of appropriate interventions, perinatal and neonatal mortality were divided into subcategories. The definitions used for the study follow:

> Perinatal mortality: fetal/infant death from 28 weeks gestation until 7 days after birth. The denominator of this rate is the number of total births. The case control study divided perinatal mortality into several subcategories, including fetal death (28 weeks gestation until birth); stillborns; death during the first day; and death during the first week but not including the first day.
>
> Neonatal death: death of the infant during the first 4 weeks after birth. The case-control study divided neonatal death into the subcategories of death during the same day of birth; death during the first week after birth, not including the first day; and death during the first month after birth, not including the first week.
>
> Maternal death: death of the mother during pregnancy, delivery, or up until 40 days after birth as a result of obstetrical causes associated with the mother's pregnancy and/or delivery.

Organization of the Interviews

The Questionnaire

The study questionnaire consisted of three parts:

1. **Demographic data and community characteristics:** information about the informant and his/her family, existence of social and other services in the community, general characteristics of the community, including access to health services, type of production (agricultural or other), etc.

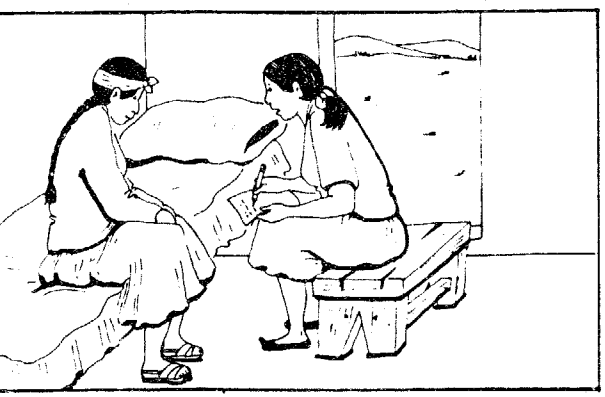
2. **Verbal autopsy**: a series of questions designed to try to determine the probable cause of death of cases.

3. **"Process diagnosis"**: based on a model (presented on page 28) developed by Dr. Alfred Bartlett with the SC/B field team regarding the family's search for solutions to maternal and neonatal health problems, a series of questions which tries to determine where the system "broke down."

The questionnaire is included in Appendix 1 of this manual.

Interviews

Five SC/B field supervisors served as interviewers. Each interview took from 45 minutes to an hour or more for cases and approximately one half hour for controls. The interviews were judged by the staff to be very complete but too long.



Alternative Questionnaire

In response to a request from CARE Bolivia, the JSI MotherCare project advisor worked with CARE to devise a shortened version of the questionnaire to be used only for cases of neonatal mortality. This questionnaire contains more open questions and, therefore, relies on well-trained field workers so that all of the information that is collected is well documented. The experience with this questionnaire was good, with interviews requiring an average of one half hour. Enough information was obtained to permit analysis of probable cause of death and some process indicators regarding where the system broke down.

A copy of this shortened questionnaire is included in Appendix 2 of this manual.

Summary of Results

Families of a total of 75 cases of perinatal and neonatal mortality were interviewed, as were 151 families of randomly selected controls. The most common probable causes of perinatal and neonatal death identified by the study are presented below.

Probable Causes of Cases of Perinatal and Neonatal Mortality

Probable Principal Cause	Number of Perinatal/ Neonatal Deaths(n=72)
* Asphyxia	18
* Asphyxia and/or trauma	6
* Sepsis	7
* Hemorrhage	7
* Trauma	4
* Hypothermia	3
* Hypertensive disease	3
* Pneumonia	3
* Tetanus	3
* Unwanted child/uncared for	2
* Maternal death	2
* Others	13

The study also identified and investigated nine cases of maternal death. Probable causes of maternal mortality are presented below.

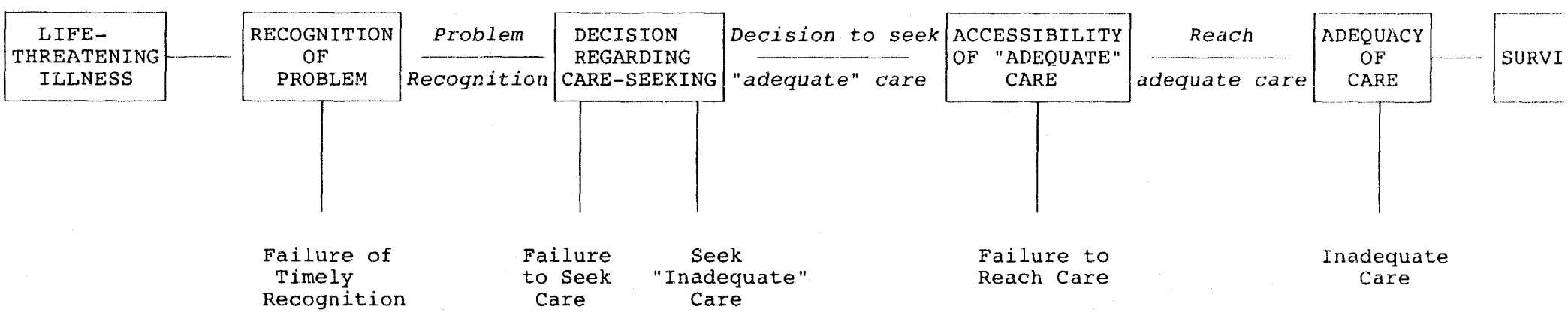
Probable Causes of Maternal Death

	Probable Cause	Number of Maternal Deaths (n=9)
*	Sepsis associated with undelivered dead fetus	3
*	Puerperal sepsis	1
*	Hemorrhage associated with placental separation during pregnancy	1
*	Hemorrhage associated with retained placenta	2
*	Malpresentation with prolonged labor	1
*	Unknown	1

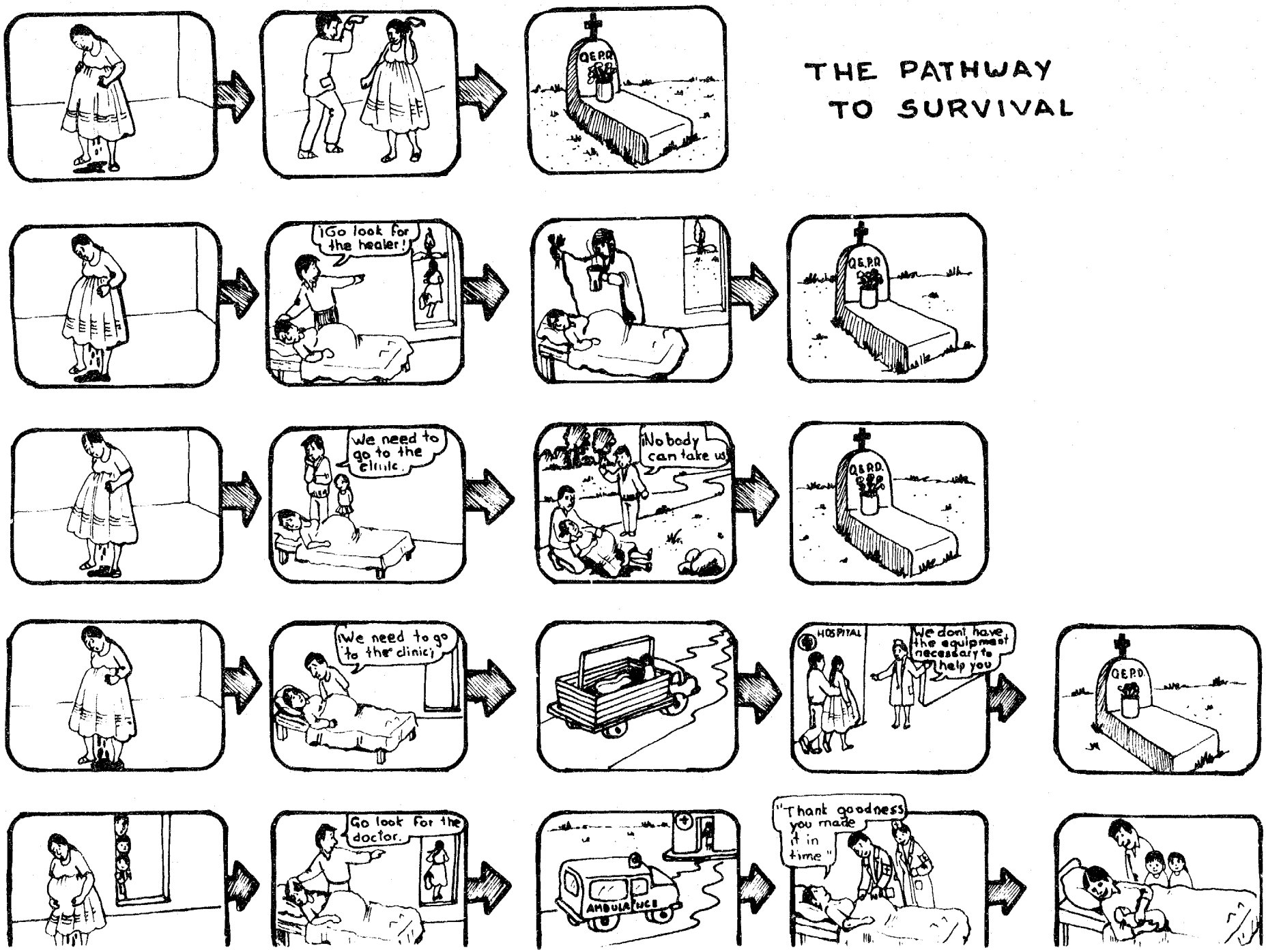
Results of the "process diagnosis" section of the questionnaire showed that families took appropriate action in only 27 percent of the cases at an adequate moment, whereas 30 percent identified the problem too late, 25 percent never detected a problem, and 16 percent detected a problem but did not deem it important enough to seek health services. Once a problem was identified, 29 percent of the families sought an "adequate" source (health post, hospital, etc.), 12 percent sought an "inadequate" source, 44 percent tried to solve the problem at home, and 15 percent tried other solutions.

These results indicated the pressing need for interventions aimed at increasing families' awareness of how to detect problems quickly and what actions to take once a problem is detected.

PATHWAY TO SURVIVAL



THE PATHWAY TO SURVIVAL



SECTION 2

A COMMUNITY ACTION CYCLE

VI. ORGANIZING AND/OR STRENGTHENING WOMEN'S GROUPS

What is an Organized Women's Group?

Bolivia has a long history of grassroots organization at the community level. A National Woman's Syndicate (Union) has been in existence for many years, although it has varied in its level of activity based on political and economic factors.

The characteristics of an organized women's group at the community level as described by SC/B field staff are presented in the box below.

An Organized Women's Group:

- Has an elected Directorate (President, Vice President, etc.).
- Has more power to realize its objectives than the women do individually.
- Has established policies and procedures on how the group functions (meeting days, agenda, etc.).
- Has common interests and a common vision.
- Plans its activities and makes its own decisions.
- Meets voluntarily.
- Is a union of women who want to reach their common objectives.
- Is a group of women who help each other.
- Works to solve its own problems.
- Carries out integrated activities.
- Can have representation in other groups at other levels.

Why Organize and Work with Women's Groups?

Women in Bolivia traditionally have not had a voice in decision-making in the home nor at the community level. In the past they did not have much experience working as a group to identify problems and solutions to those problems. The isolation of women has left many feeling powerless and alone. The purpose of the strategy to organize women's groups was to raise women's awareness that their individual problems are often common to others and that together they are more likely to find solutions.

The following box presents many reasons why SC/B field staff support organizing and working with women's groups.

WHY ORGANIZE AND WORK WITH WOMEN'S GROUPS?

- Women can help to identify and solve their problems.
- Working with a group, instead of going house-to-house, saves time and is more sustainable in the long-term.
- The messages are for all members of the group and that means less miscommunication and distortion (rumors, etc.).
- Women can become integrated into the community.
- More ideas come to light through sharing of ideas and experiences.
- SC/B staff can learn through the groups and replicate the experience in other groups.
- Through the women, we reach the children.
- It provides more opportunities for the women to make decisions and act together when they elect women to represent them at other levels (province, department, national).

- The work is more objective (i.e., doesn't create jealousies among women that some are receiving more attention than others).
- It helps alleviate the effects of the community discrimination against the women.
- The women can learn how to ask for the "floor" and how to work and speak in a group.
- The women do not feel so isolated and alone.
- The women can learn how to overcome their fear of self-expression and community participation.
- The women can speak and learn about their rights.
- It helps sustain women's actions in the community.
- The women can learn to value their role in the community (self-esteem).
- The women can learn how to prioritize their needs.
- The women can learn how to generate and better manage resources.
- Women can develop their personal strengths.
- It helps create leaders who can support the search for solutions with other leaders.
- The women learn how to participate in decision-making that affects their lives.
- It changes the "macho" culture.
- The women accept more responsibility in the community.

STRENGTHENING EXISTING GROUPS

- women's soccer matches;
- talking/organizing at fiestas and markets;
- group cooking demonstrations;
- support from local authorities;
- talks with husbands;
- family or community garden projects; and
- the autodiagnosis process.

ORGANIZING NEW GROUPS

- women visiting communities that had existing women's groups;
- community general meetings to identify interest;
- SC/B staff visiting house to house to identify interest;
- SC/B staff working in other projects identifying communities in which women had interest in organizing; and
- women, hearing about groups in other communities, approaching SC/B staff to express interest in starting their own group.

Strategies to Organize and Strengthen Women's Groups

One of the first activities undertaken by the Warmi Project was identifying existing women's groups and strengthening those groups that were interested in continuing to work together. The most successful strategies are described in the boxes on the facing page.

A common strategy used by other PVOs and NGOs that SC/B chose NOT to use for group formation and strengthening was that of donations to group members, including food and materials. This policy was established because experience shows that many women only use the group as a mechanism to receive the food and once the food disappears, so do the women. This strategy is not sustainable, nor is it empowering. Through our experience, we saw that once the group is established, its members are often highly motivated to meet regularly to discuss and solve their problems without donations and with or without SC/B staff.

Our experience with women's groups demonstrated that women could, and did, learn to identify and talk about their problems. Many groups developed and implemented strategies to deal with the problems that they identified. These strategies are discussed on page 39. Men became more interested in the women's activities. Many women became more comfortable speaking in front of men at community meetings. Leaders emerged from within the group. By the end of the project, some of these leaders were working to organize women at the zonal and provincial level. This is a slow process, but one that is very empowering for the women.

The women's groups consisted of approximately 10 to 30 members each and met at least once a month. Many groups met weekly. The groups functioned as a forum for learning, decision-making, social contact, and as a diversion from the hard life shared by all the members.

LESSON LEARNED

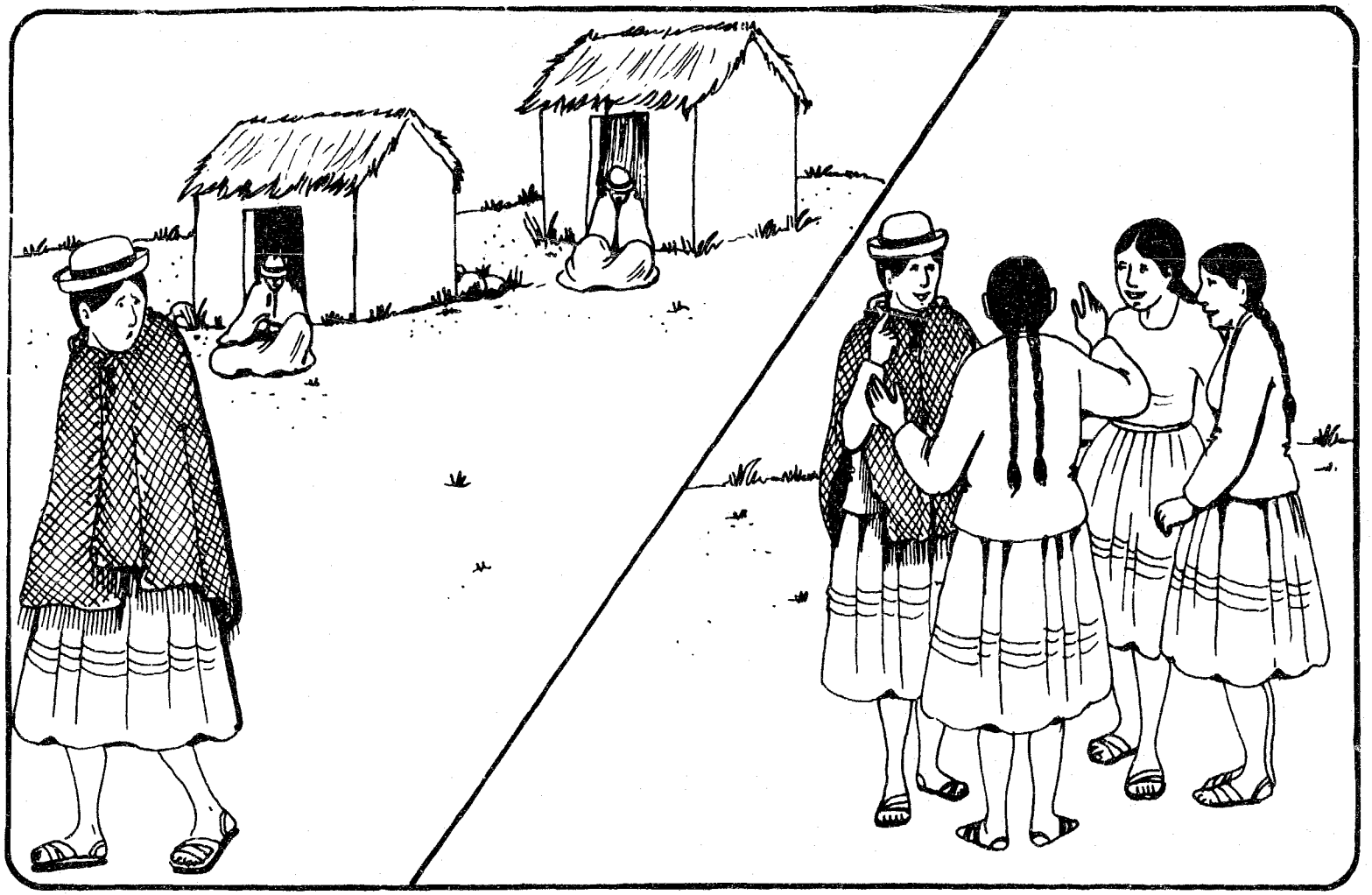
Organizing and strengthening women's groups is a good strategy to adopt in settings such as Inquisivi where women are isolated geographically, culturally, and socially. We saw remarkable changes in many women's willingness and ability to communicate with other women, both in general and specifically, regarding their maternal and neonatal health problems. For maximum results, the groups should work in a variety of sectors which affect their well-being and that of their family (health, education, agriculture, economic development, etc.).

ategies Applied and Lessons Learned

following chart presents the strategies that were used in working with the women, along with the level of success achieved and recommendation future use.

STRATEGY	SUCCESS/ FAILURE	WHY?	RECOMMENDATIONS/SUGGESTIONS
rovision of food (by other NGO)	Failure	Conditioned to receive food	Do not offer/give handouts
ood promotion by SC/B	Success	Create awareness of integrated development	Use this strategy, improve it
oordination with local leaders and achers	Success	Active involvement increases women's participation	Develop this strategy to achieve greater success
lentification of leaders among women	Success	Leader's assistance in motivating women	Make the leader feel important Choose a person who has good relations with the community
t the local meetings, stressing the nportance of the women's group especially to men)	Success	Husband allows wife to attend meeting	Do the exercise at every meeting Share successes with other communities
se of skills like cooking & weaving to nite women	Sometimes failed	No follow-up (supervisor changed) (individual initiative rather than general project activity) Accustomed to learning a skill	Accompany the skill with the educational component
se of weighing & vaccination sessions motivate the organization of women	Success	Broadens interest Takes advantage of attendance of women with their children	Don't miss opportunity to use these occasions where there are no organized groups Take advantage of integrated fairs

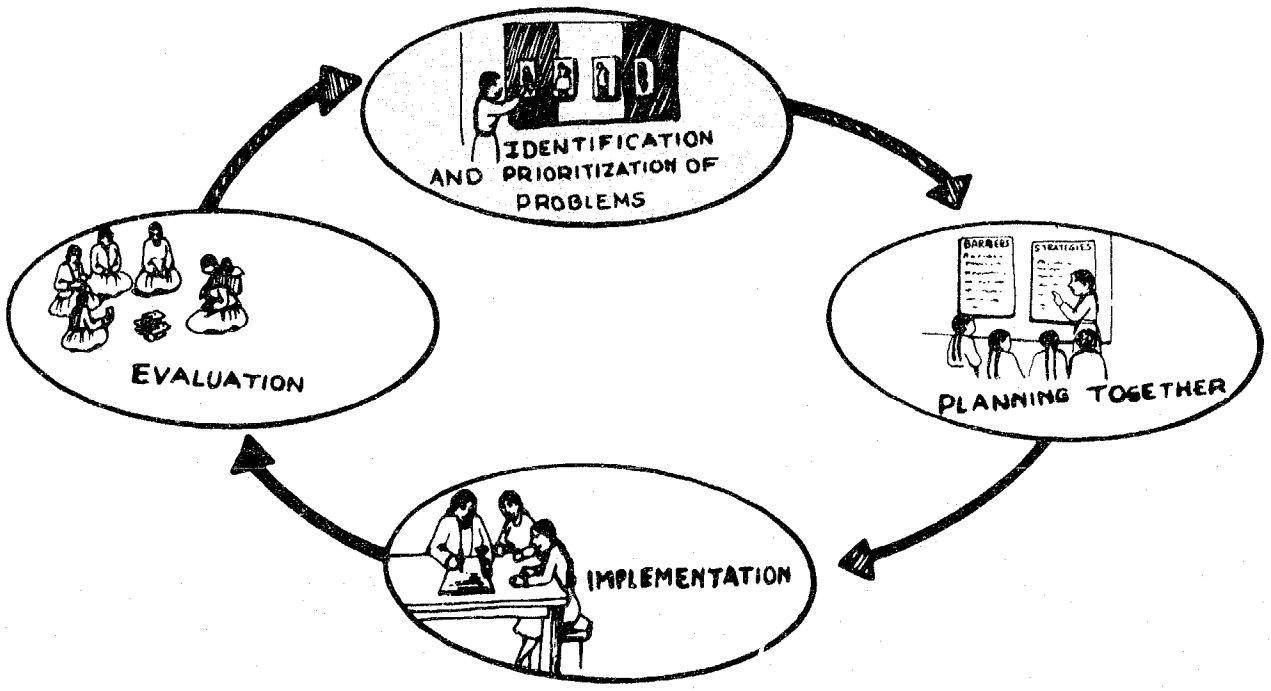
STRATEGY	SUCCESS/ FAILURE	WHY?	RECOMMENDATIONS/SUGGESTION
Contact with agrarian union authorities in community	Failure	No continuity of positions	Continue promotion with new authoritie without creating false expectations
Participation in local meetings (promotion of importance of women's groups)	Success	Raise husband's awareness of importance of women's organization	Continue to promote
Women's meetings: Promotion on importance of the organization	Success	Women have personal and communal expectations	Organize specific promotion with clear messages
Communication with respected community leaders	Success	Representatives of community	Very important, so ensure this occurs
Vaccination of children	Success & Failure	S: some aware of importance of vaccines F: not all participate in vaccination campaigns	Organize major promotion of importanc of vaccines
Training for women	Success & Failure	S: when there is follow-up F: when there is no follow-up	Ensure punctuality and responsibility of field staff
Promotion of literacy	Success	- Women are interested - Responded to a felt need	Continue the courses
Soccer games	Success	Fun activity	Increase activities
Cooking demonstrations	Success	Share and learn about importance of vegetables	Support and promote seeds demonstratic veg. garden
Credit	Too soon	Responds to felt need	Give it a try



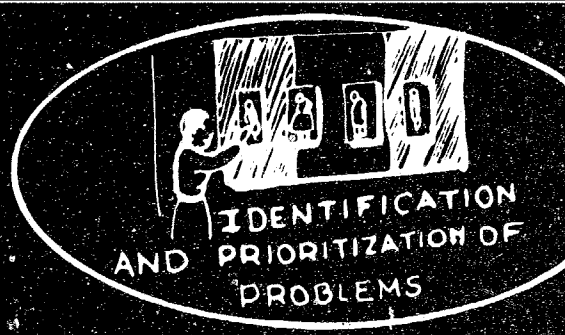
VII. THE AUTODIAGNOSIS

Context/Rationale for the Autodiagnosis

The autodiagnosis is the first step in a four-step process designed to result in community-based action to resolve identified problems.



Because of the highly motivating nature of the autodiagnosis, it should only be conducted in communities where follow-up work is planned, unless the community is well advanced in self-management and can proceed to the next steps on its own. **SC/B's experience with communities in Inquisivi was that only a very few were at this level and needed further assistance to develop strategies and action plans and to carry them out.**



AUTODIAGNOSIS

SUMMARY OF AUTODIAGNOSIS

Aim: The women will identify and prioritize maternal and neonatal health problems at the community level.

Activity: Four group sessions with women to explore their maternal and neonatal health problems.

Time: Four sessions of approximately four hours each.

Procedure: The sessions contain the following nine steps:

SESSION 1
Step 1: Orient women to Save the Children's Warmi Project.
Step 2: Explore attitudes of the group members toward pregnancy and maternity.

SESSION 2
Step 3: Learn what the group members know and do about maternal and neonatal health problems.

SESSION 2 OR 3
Step 4: Encourage group members to think about what other women in the community know and do in relation to maternal and neonatal health problems.

SESSION 3
Step 5: Explore and design different ways to collect information from other women in the community. Practice the method selected by the group members.

BETWEEN SESSIONS 3 AND 4
Step 6: Implement woman-to-woman interviews in the home.

SESSION 4
Step 7: Share the results with the group.
Step 8: Prioritize the problems.
Step 9: Evaluate the autodiagnosis process.

It is important to note that in the area of maternal and neonatal health, many interventions to prevent mortality rely on secondary- and tertiary-level medical care, which is often not readily available to impoverished rural communities. The autodiagnosis motivates women to look for solutions within their community context, trying to make the most of local resources. In the case of Inquisivi, the effective referral hospital is four to six hours away in La Paz. This distance necessitates different strategies to confront the problems in these communities than in communities that have fairly easy access to services.

Some people believe that if there is not easy access to services, awareness of the problems should not be brought to light in these communities through an exercise like the autodiagnosis. SC/B strongly disagrees. It is SC/B's belief that problems need to be identified before appropriate solutions can be sought. Women have a right to explore and identify their problems (particularly those that determine life or death) and seek possible solutions to improve their situation--be it through lobbying for better services, more training and education in preventive practices, establishment of community emergency funds, better transport links, etc.

The autodiagnosis process was not developed solely for the purpose of identifying maternal and neonatal health problems; more importantly, it serves as a means to empower women through self-reflection, through greater communication, and through learning a process for decision-making as a group--a process that many Bolivian women are not privileged to participate in at the community level. It is also the essential first step in identifying and prioritizing problems prior to solving them.

(Although Bolivian men are in a decision-making position, this process can also be useful to them to identify and prioritize their problems. In this project, the autodiagnosis with men was not particularly successful. However, it was attempted in the context of women's health problems; it might very well be successful for problems identified by men as their problems.)

Methodology of the Autodiagnosis

The autodiagnosis is an on-going qualitative research process in which women's groups in selected communities explore their maternal and neonatal health problems. As such, it allows both the community and the field staff to learn about how women perceive these problems and how they respond to them. Consistent with SC/B's participatory, community-based methodology, this process draws on basic concepts of facilitating the exploration of experiences, attitudes, and practices. Whereas in other more quantitative study methods, the interviewers seek specific, quantifiable data, in the autodiagnosis method there are no "right answers," only what the women themselves believe, understand, and do. In addition to raising women's awareness of specific maternal and neonatal health problems, a major goal of the process is to foster the women's confidence in their ability to gather information from their neighbors about topics that concern the community and to learn to prioritize the problems that are identified.

The autodiagnosis was carried out in 50 communities over a period of two years. It consisted of four sessions of approximately three to four hours each, not including external interviews with other women in the community. The four sessions were divided into nine steps. The process varied in some cases as a result of individual group differences and circumstances.

Objectives

For the women, the specific objectives of the autodiagnosis were to:

1. Define, identify and recognize common maternal and neonatal health issues and problems at the community level;

2. Increase women's awareness of and motivation to act upon maternal and neonatal health problems at the community level; and

3. Prioritize maternal and neonatal health problems as identified by the women in the community. The selected problems should be such that they are able to be addressed at the community level.

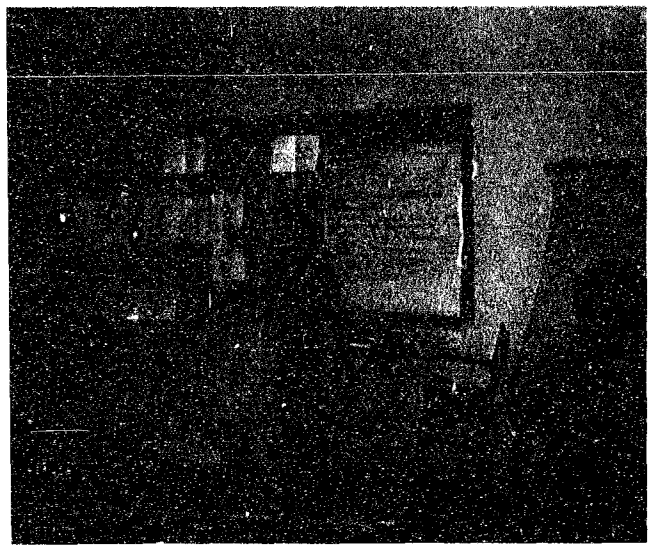
For SC/B staff the objectives included:

1. Gaining a better understanding of whether, how and why women attend their perinatal health care needs; and

2. Developing a basis for planning the interventions which will be implemented during the duration of the project.

For the women and SC/B staff together the objective was to:

- Explore and generate ideas about maternal and neonatal health problems and develop trust and confidence between the staff and the communities.



Preparation for the Autodiagnosis

Before the actual work with women's groups could be initiated, a four-day workshop was held with all field staff who would be facilitating the autodiagnosis. During this time, the staff helped to develop the steps and methodology of the autodiagnosis and prepared themselves for their role as facilitators. Special emphasis was placed upon the difference between being a "facilitator" and an "educator." Specific maternal and neonatal health problem concepts were explored in three pilot communities through the use of a "concept guide" that oriented the staff to local terminology, beliefs and practices. Drawings representing maternal and neonatal health problems were also tested and revised in these communities through the use of focussed group discussions and in-depth interviews in the three months following the workshop. These pictures would later be used during the autodiagnosis in several ways.

Review of the Autodiagnosis Methodology

SESSION 1

STEP 1: Orient the women to the Warmi Project--Promotion SC/Bolivia

Purpose: To ensure that the women understand what the Warmi Project is and that they will be invited to participate in the project.

Methodology:

Questions to stimulate discussion; short presentation on case-control study.

Knowledge of the facilitator:

- Knows terminology used in the community; language
- Knows the women's group
- Knows SC/B's programs
- Knows the objectives of the Warmi Project
- Knows the results of the case-control study of maternal and neonatal mortality and morbidity carried out in Inquisivi by SC/B staff.

Materials/supplies required:

- Summary of Warmi Project objectives
- Summary of the case-control study results on cardboard poster
- Flipchart paper
- Markers
- Question guide (below)
- Tape recorder (optional)

STEP 1--Continued

Possible barriers:

- Language
- Facilitator doesn't know the project well
- Facilitator doesn't know the local terms and/or customs in the community
- Lack of motivation of the group
- Facilitator lacks experience

Activities:

1. The facilitator asks the group:

   Do you know of any women from this community who have died? What caused their death? Did they die during pregnancy? During delivery of their baby? Within one month after they gave birth?

   Do you know of any babies who died at birth or during their first month of life? Why do you think they died so suddenly?

2. Brief presentation of the results of the case-control study using photos and/or slides and posterboard with summary of the results.

3. The facilitator asks the group:

   Have you ever heard of the Warmi Project? What is the project? (What do you think it could be?)

4. Brief presentation of the Warmi Project objectives.

Time: 2 hours

STEP 2: Explore the group members' attitudes regarding pregnancy, birth and motherhood.

Purpose: To know what women think about pregnancy, birth and motherhood.

Methodology:

Picture cards accompanied by questions to stimulate group discussion and reflection.

Knowledge of the facilitator:

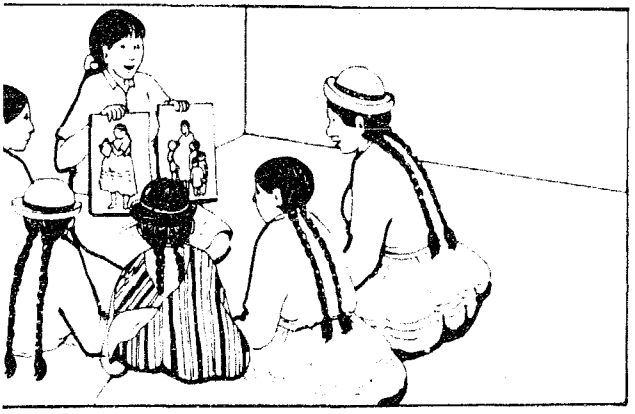
- Knows the community's terminology - language
- Knows the women's group
- Knows the subject
- Knows some of the community's traditions and customs

Materials/supplies required:

- Picture cards of an unhappy pregnant women and a happy pregnant woman
- Question guide
- Tape recorder (optional) or observer/recorder
- Materials for an icebreaker exercise

Possible barriers:

- Language
- Lack of knowledge about the subject
- Do not know the terminology
- Lack of motivation of the group
- Facilitator lacks experience



STEP 2--Continued

Activities:

1. The facilitator shows the picture card of the happy pregnant woman and asks the group, "What do we see in this picture?" The group responds with what they see. "Why is the woman happy?"

2. The facilitator shows the picture card of the unhappy pregnant woman and asks the group, "What do we see in this picture?" "Why is the woman sad?"

3. Discussion questions:

   How do you feel when you're pregnant?

   What do you think when you suspect that you're pregnant? Why?

   How does your husband react when he finds out that you're pregnant? During the pregnancy? During the delivery? After the birth? With the newborn baby?

   How do you react to your husband's response?

4. Brief explanation of what the group will do the next meeting.

Time: Approximately 1 hour

SESSION 2

STEP 3: Learn what women do about maternal and neonatal health problems.

Purpose: To identify and learn maternal and neonatal health problems and to standardize the terminology used to describe these problems within the group.

Methodology:

Role plays, skits, problem picture card games, open questions and group discussion.

Knowledge of the facilitator:

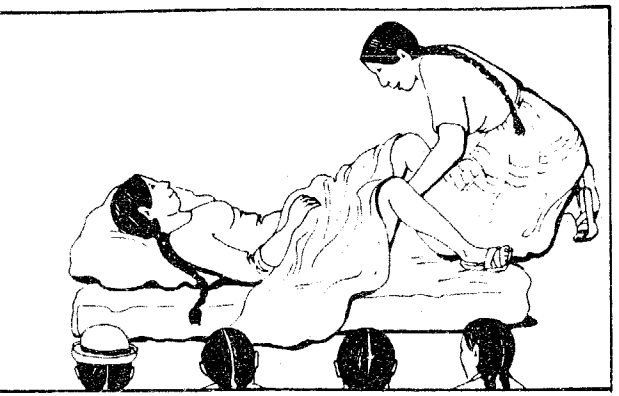
The facilitator must know the subject; must be open to women's knowledge, attitudes and practices; must not try to "correct" them.

Materials/supplies required:

- Picture cards of problems (see at end of Step 2)
- Flipchart paper
- Markers
- Question guide (below)
- Tape recorder or observer/recorder

Possible barriers:

- Language
- Facilitator doesn't know community's terminology and/or customs and traditions
- Lack of group motivation
- Facilitator lacks experience



STEP 3--Continued

Activities:

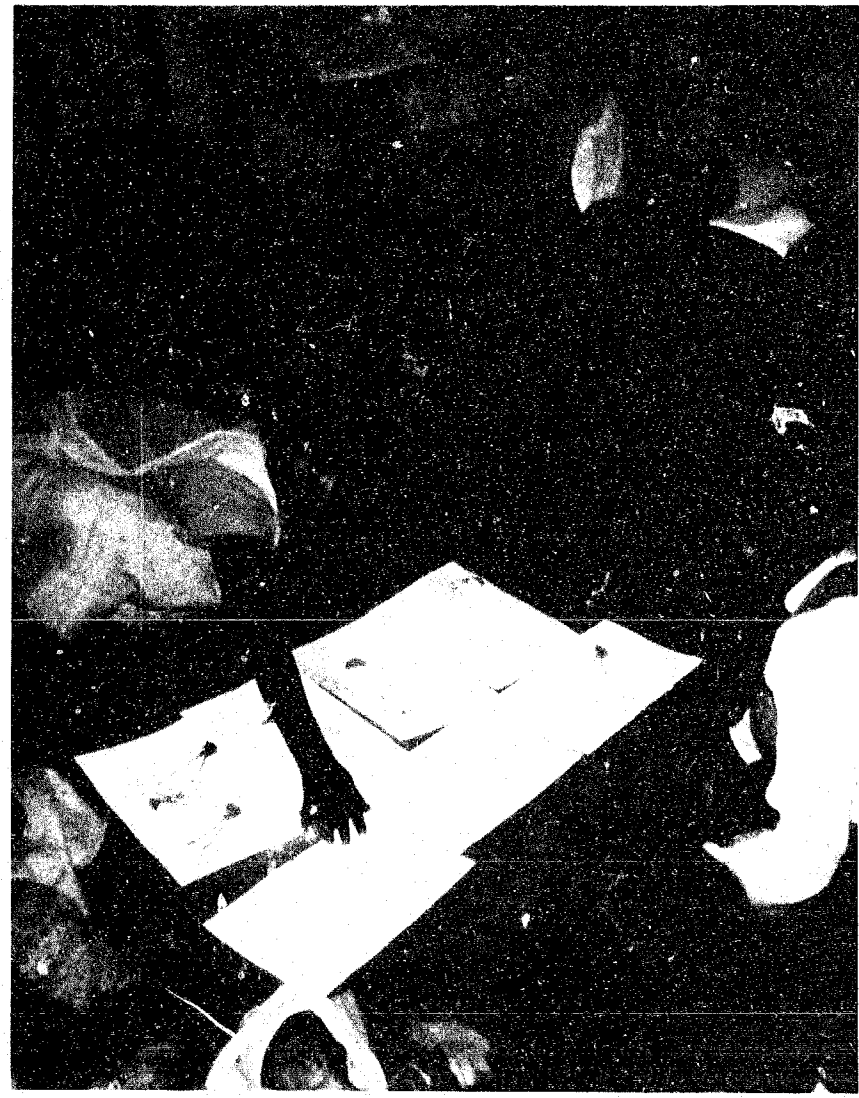
1. The group divides into two smaller groups. One group prepares a skit about what they do during pregnancy. The other group prepares a skit about what they do during delivery, care of the neonate, and in the month following birth.

   Questions to take into account when preparing the skits:

   Pregnancy
   - How do you know that you're pregnant?
   - What do you eat when you're pregnant?
   - How do you take care of yourself when you're pregnant (alcohol, work, hygiene, etc.)?
   - Who do you see when you're pregnant? (doctor, nurse, partera, mother, etc.)?

   Birth/Delivery
   - What things do you get ready for the birth?
   - Who attends the birth?
   - How do you know when you are going to give birth?
   - How do you deliver the baby (position, birth place, materials)?

   Postpartum
   - How does the placenta come out? How long after the birth does the placenta come out? If it doesn't come out, what do you do? What do you do with the placenta when it comes out?
   - How do you take care of yourself after the birth (hygiene, diet, rest)?
   - When do you get out of bed?



STEP 3--Continued

Newborn

- What do you do when the baby is born (mucous, crying, swaddling, drying, cutting the cord)?
- When, with what, and how do you cut the umbilical cord?
- After how much time do you put the baby to the breast?

2. The two groups present their skits. After each skit, the facilitator leads a discussion about the practices portrayed to see if all of the women agree with what was presented.

(If the group does not wish to do a skit, the facilitator can ask whether (a) volunteer(s) would like to tell the group about her pregnancy and birth experiences.)

STEP 3--Continued

3. The group develops a "Dictionary of Terms."

A variety of methods can be used for this activity, such as:

- The facilitator asks the group what maternal and neonatal problems the women have heard of. Each member of the group gives an answer, and the facilitator gives the respondent the picture card that represents her response until all of the picture cards are distributed. (If the problem is not present in a picture card, the respondent can draw her own card.)

- "Card game"- each of the women selects a card from the set of picture cards (without seeing what it is when she selects it) and then describes the problem represented by the picture.

- All of the picture cards are put on the floor, and each woman selects one that attracts her attention. She then tells the group what problem is represented.

- Less active, but also a possibility is for the facilitator to show the picture cards to the group one by one and ask the group what they see.

The facilitator asks the following questions related to the problems depicted by the picture cards:

Pregnancy and Labor/Delivery

- What problems do women experience during pregnancy, labor, and delivery?
- What is the problem called in this community (Aymara, Spanish, Quechua)?
- Does it occur in this community?
- Why does this problem occur?
- How do you treat it?
- If you don't treat it, what happens?

Postpartum and Newborn

- What problems do women/newborns experience within one month after the birth?
- What is the problem called in this community (Aymara, Spanish, Quechua)?
- Does it occur in this community?
- Why does this problem occur?
- How do you treat it?

To document this step, the observer/recorder can use the following chart:

Problem	What is it called (local terminology?	What causes the problem?	How is it treated?	If you don't treat it, what happens?	Does it occur here?

Time: 3 hours

The following table is an example of the results of Step 3 and is taken from the Dictionary of Terms compiled by the women of the Warmi project.

RETAINED PLACENTA	INQUISIVI	LICOMA/CIRCUATA
WHAT IS IT CALLED?	- PARISA / QUEDNATATA	- PLACENTA
WHY DOES IT OCCUR?	- Because she exposed her back to the sun, the placenta gets stuck to the back and is not delivered - Some women drink teas - After the delivery of the baby, it takes a long time for the placenta to be delivered. We don't know why.	- Poor diet - Hot food (chili pepper) - Sun on the back - Because of teas - Old women - Too many children and the placenta is "used up" - They burn food cooked in a pan
HOW IS IT TREATED?	- We can't cure it - With infusions - They've got to go to see a doctor - The doctor cures it with shots - Some midwives/health workers pull it out - They get the midwife - We wrap the woman's abdomen	- If after half an hour, the placenta is not eliminated, they: * Blow into a bottle * Induce vomiting with a feather * Eat snake - Massage the abdomen with fat - Drink tea of azahar - Smoke the room (with fat, hair of the woman, and herbs) - Burn dynamite - Dead rabbit on woman's back
WHAT HAPPENS IF IT IS NOT TREATED?	- One can die - The placenta gets rotten inside the womb	- The mother dies - The woman gets a vaginal infection - She suffers puerperal sepsis
DOES IT OCCUR IN THIS COMMUNITY?	- Yes, it's very dangerous. Sometimes we are afraid of having children.	- Yes.

PICTURE CARDS

"HAPPY" PREGNANT WOMAN

TOO MANY CHILDREN AND "SAD" PREGNANT WOMAN

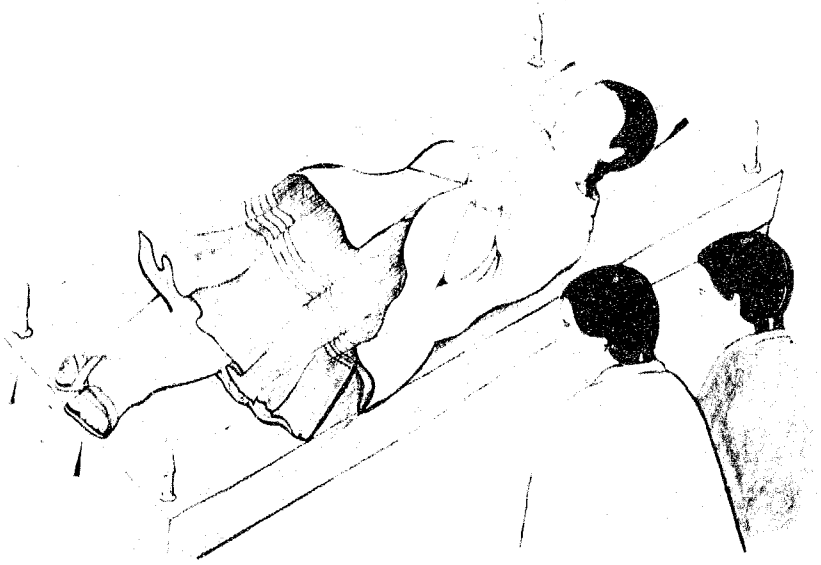
PICTURE CARDS--Continued

ANEMIA

EDEMA

PICTURE CARDS--Continued

NEONATAL DEATH



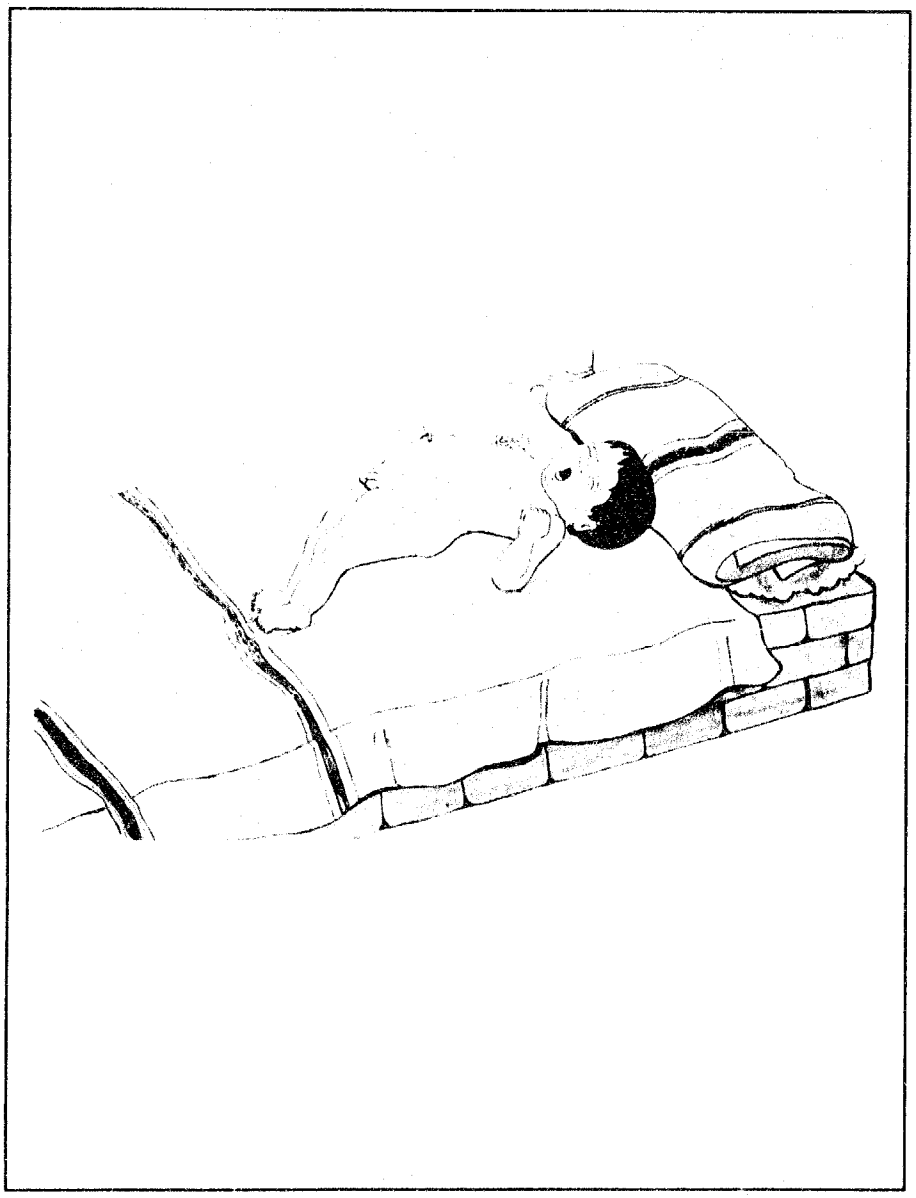
MATERNAL DEATH

PICTURE CARDS--Continued

TWINS

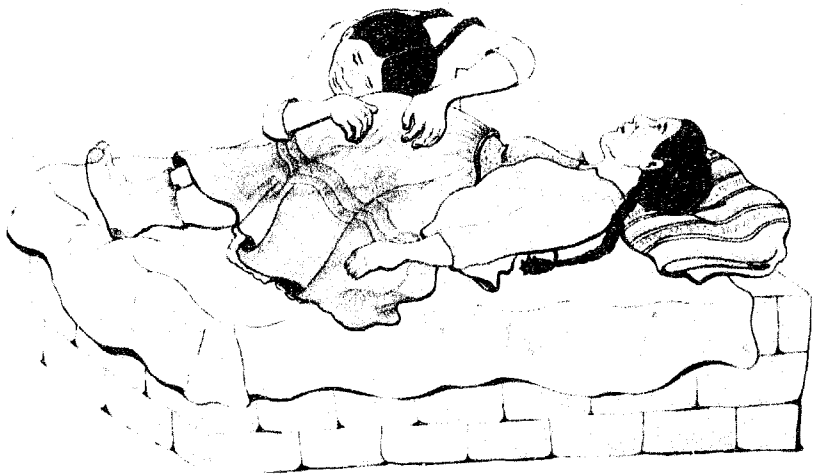
VAGINAL INFECTION ("WHITE PERIOD")

PICTURE CARDS--Continued

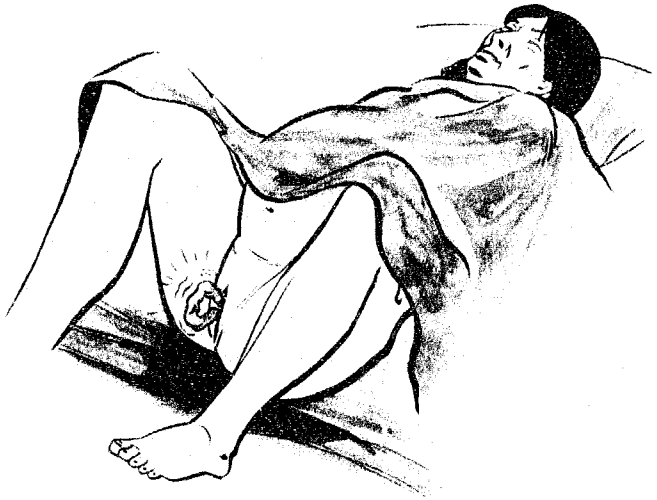


TETANUS (NEONATAL)

TUBERCULOSIS

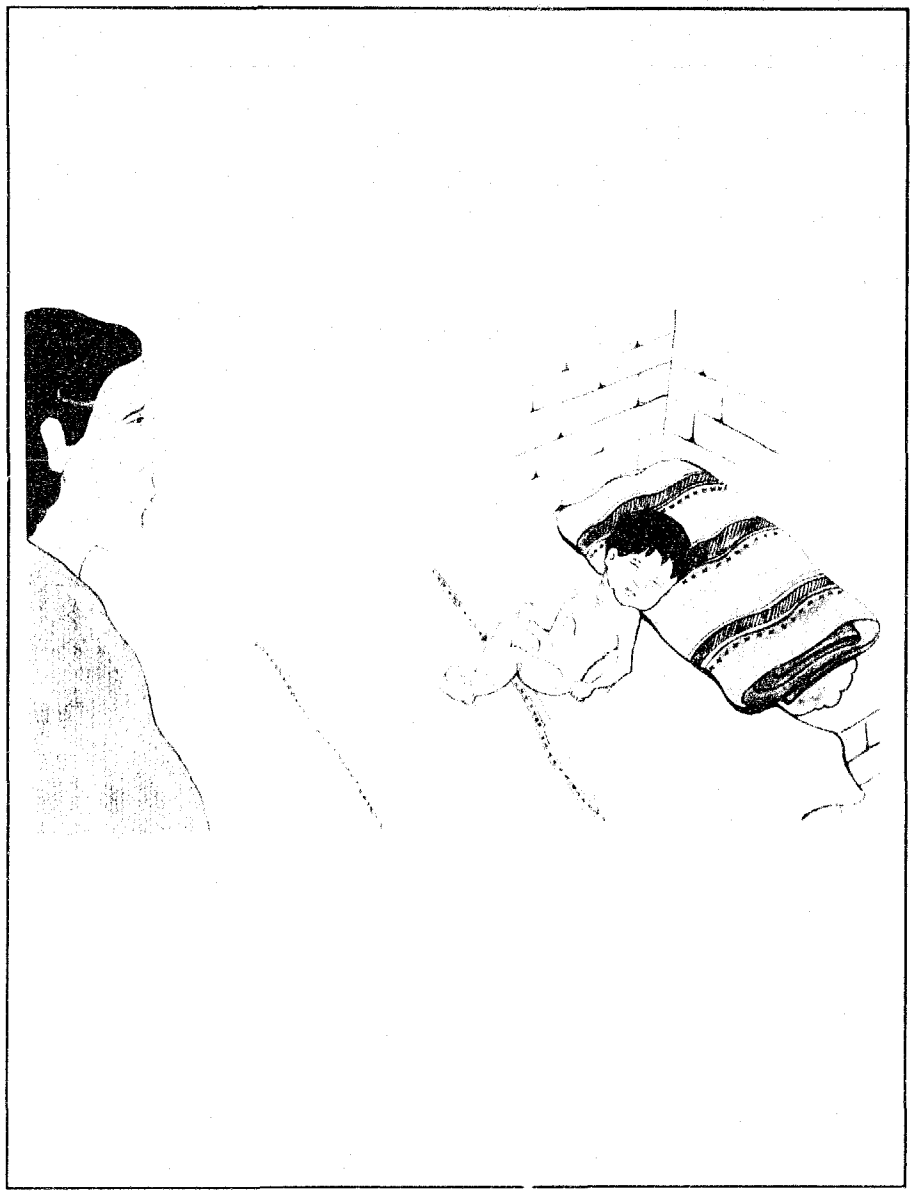


PROLONGED LABOR



RETAINED PLACENTA

PICTURE CARDS--Continued

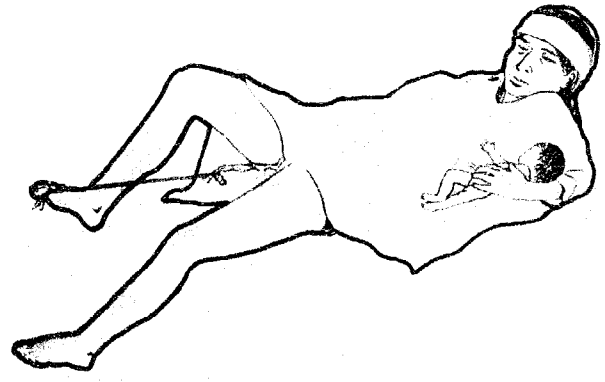


LOW BIRTH WEIGHT

MALPRESENTATION (HAND)

PICTURE CARDS--Continued

MALPRESENTATION (FOOT)



PRECEDENCE UMBILICAL CORD

PICTURE CARDS--Continued

GOITER

HEMORRHAGE DURING PREGNANCY

PICTURE CARDS--Continued

HEMORRHAGE DURING DELIVERY

HYPOTHERMIA

STEP 4: Encourage group members to think about what other women in the community know and do in relation to maternal/neonatal health problems.

Purpose: To prepare the group psychologically to think about the problems of other women in the community and motivate curiosity to know what other women think.

Methodology:
Group discussion facilitated by questions.

Knowledge of the facilitator:

- Knows the group
- Knows the language

Materials/supplies required:

- Question guide (below)
- Tape recorder or observer/recorder

Possible barriers:

- Group members are too timid to suggest ways to find out what others think.
- Most of the women of reproductive age already participate in the group, leaving almost no one left to interview.

Activity:

The facilitator asks the group:

1. Do other women in the community have the same problems and experiences during pregnancy, birth, and after birth that we in the group have?

2. How can we find out? (Discussion about ways to get more information-interviews, etc.)

Time: 15 minutes

SESSION 3

STEP 5: Explore and design different ways to collect information from other women in the community.

Purpose: To identify strategies to collect information from other women in the community about their maternal and neonatal health experiences and problems, select a strategy appropriate to the needs of the group, develop the materials, and practice the methodology.

Methodology:

Brainstorming ways to collect information, develop method that group chooses, role play and practice in pairs using the methodology selected.

Knowledge of the facilitator:

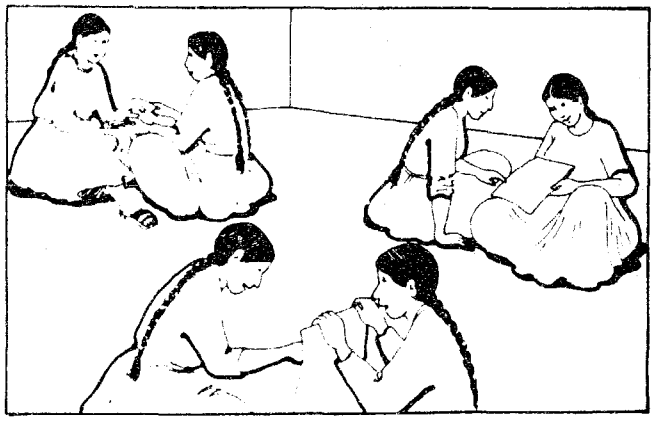
- Management of the technique
- Initiative and creativity
- Language

Materials/supplies required:

- Problem cards with figures, stories about real women
- Paper, markers
- Tape recorder

Potential obstacles:

- The facilitator is a man
- Availability of facilitator



STEP 5--Continued

Activities:

1. The facilitator asks the group:

   What information do we need?

   How can we collect this information from other women in the community?

   What material can help us to collect this information?

   How are we going to record the information so that we don't forget the answers?

2. The group discusses the options in materials and methodology and selects the most appropriate methodology and material.

3. Several volunteers from the group present a skit showing how to implement the selected strategy. The other members discuss how to improve the process based on the presentation.

4. The group divides into pairs and the women practice the interviews. One woman plays the role of the interviewer and the other the interviewee. Then they change roles. The women practice until they feel comfortable carrying out the interview.

5. The group organizes the home visits. Who will visit whom? Are they going to go first to the house to set a date and time and then return to do the interview?

   (The group prepares a list of the visits. Each woman should make at least one visit.)

Time: 2 hours

BETWEEN SESSIONS 3 AND 4

STEP 6: Implement the interviews.

Purpose: To exchange maternal and neonatal health experiences between members of the group and other women in the community, to reflect on these, and to validate that the problems identified by the group reflect the consensus of the community as a whole. This step is very important for the improvement of communication among women about their problems and also serves to raise their self-esteem and self-confidence in being able to speak openly with others.

Methodology:

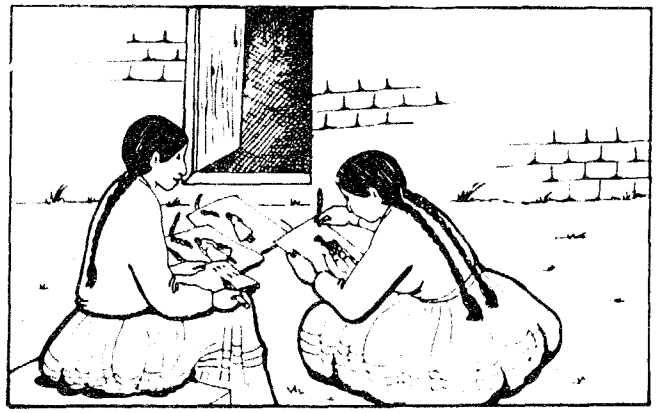
Face-to-face interviews in the home.

Materials/supplies required:

- Material for the interview as determined by the group in Step 5.

Possible barriers:

- Timidity or lack of confidence of the interviewers
- Refusal of the interviewee or her husband to do the interview
- Lack of sufficient practice to carry out the interview
- Lack of time to carry out the interview



STEP 6--Continued

Activity:

The women carry out the interviews using the methodology and materials that they prepared in step 5.

Possible questions for the interviews:

1. What do you see in the drawing? What problem is represented?
2. Have you ever experienced this problem?
3. When?
4. How did you feel when you had the problem?
5. What did you do to solve the problem? Why?
6. What problems do you think are the most important to treat in the community? Why?

Time: Depends on the interviewer, but the average interview lasts approximately one hour.

SESSION 4

STEP 7: Share the results of the interviews with the other members of the group

Purpose: To ensure that the results of their interviews (quantitative and qualitative) are shared with the other members of the group.

Methodology:

Group members present results using "health flag" and "silhouettes" (picture cut-outs) of problems. Group discussion of qualitative and quantitative results.

Knowledge of the facilitator:

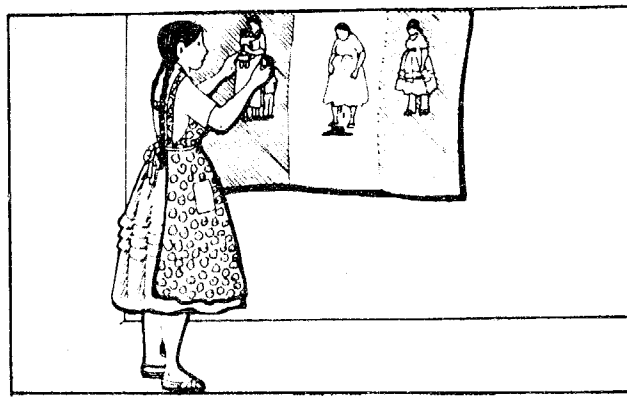
- Terminology of the community; language
- Knows the women's group

Materials/supplies required:

- Problem "silhouettes" with sandpaper on back
- "Health Flag" (Bolivian flag made of flannel with stripes of red, yellow and green)
- Flipchart paper
- Markers
- Question guide (below)
- Tape recorder (optional) or observer/recorder

Possible barriers:

- Language
- Facilitator doesn't know local terms and customs
- Lack of motivation of group (didn't do interviews, etc.)
- Facilitator lacks experience



STEP 7--Continued

Activities:

1. Each interviewer selects the problems identified during her interview(s) in silhouette form and tacks them onto the health flag according to their level of importance (red is the most important, yellow second most important and green is the third most important). While the interviewer tacks on the silhouette, she describes why the interviewee selected this problem as a priority. Then, the interviewer selects her own three most important problems and tacks them to the flag, explaining why she chose these three. Each interviewer tacks on the results of their interviews and their own priority problems in this manner. At the end of this step, all of the priority problems identified by the participants in the autodiagnosis (interviewees and the interviewers) will be represented on the health flag.

2. The facilitator asks the group:

   - What do you think about the results?
   - How did you feel while doing the interviews?
   - How did the women that you interviewed feel?
   - What did you learn from the interviews?

Time: 1 hour

STEP 8: Prioritize the problems.

Purpose: To have the group reach a consensus as to what the three most important maternal and neonatal health problems are that need to be addressed in the community.

Methodology:

Small groups work to prioritize problems using problem cards. Small groups present results. Debate among small groups to arrive at larger group consensus. Vote possible.

Knowledge of the facilitator:

- Local terminology; language
- Knows the women's group
- Familiarity with local resources
- Ability to facilitate the debate

Materials/supplies required:

- Problem silhouettes with sandpaper on back
- "Health Flag"
- Flipchart paper
- Markers
- Question guide (below)
- Tape recorder (optional) and/or observer/recorder

Possible barriers:

- Language
- Facilitator doesn't know local terms and/or customs
- Lack of motivation of the group
- Facilitator lacks experience
- Difference of opinion of group members--difficulty arriving at consensus

STEP 8--Continued

Activities:

1. The facilitator asks the group:

   Of all these problems, how can we decide which three are the most important to try to deal with in the community?

   What should we take into account when we prioritize our problems? (Discussion about **FREQUENCY, SEVERITY, FEASIBILITY**)

   What are the most frequent problems that we see on the health flag?

   What are the most serious (severe)? Why are they serious?

   What are the most important for your health?

   Can we deal with these problems in the community? What resources do we have available in the community to deal with these problems? If there are no resources in this community, are there other resources available in other places? Can we access these resources? How?

STEP 8--Continued

2. The group divides into two or three small groups and, using one set of the picture cards per group, each group discusses which are the three priority problems in the community and why. When they arrive at a decision, they go to the next activity.

3. Each group presents its conclusions and justifies its priorities. If there is not yet consensus among the groups' priorities, the groups begin a debate to justify their priorities.

4. If the group still does not arrive at a consensus, they can vote to determine the three priority problems. (Or, if the group desires, it can choose four problems if the group agrees to work on all four problems.)

Time: 1.5 hours

A summary of the priorities as determined by some of the groups

Zone	Priority #1	Priority #2	Priority #3
Inquisivi Zone			
Canqui Chico	Retained placenta	Transverse lie	Hemorrhage
Caychani	Too many children	Hemorrhage	Anemia
Chiji	Edema	Anemia	Sepsis
Chuallani	Malpresentation	Hemorrhage	Retained Placenta
Corachapi	Prolonged labor	Low birth weight	Sepsis
Ojo de Agua	Too many children	Hemorrhage	Sepsis
Ventilla	Vaginal infection	Too many children	Hemorrhage
Licoma Zone			
Charapaxi	Too many children	Prolonged labor	Sepsis
Cheka	Retained Placenta	Infection	Hemorrhage
Espiga Pampa	Too many children	Malpresentation	Retained Placenta
Lacayotini	Too many children	Hemorrhage	Malpresentation
Licoma	Infection	Anemia	LBW
Pencaloma	Retained Placenta	Edema	LBW
Pulchiri	Malpresentation	Hemorrhage	Edema/LBW
Rica Rica	Hemorrhage	Retained Placenta	Malpresentation
Circuata Zone			
Circuata (gp.1)	Edema	Anemia	Hypothermia
Circuata (gp.2)	Tuberculosis	Edema	Hemorrhage
Lujmani	Hypothermia	LBW	Tetanus
Miguilla	Too many children	Hemorrhage	Retained Placenta
Polea	Edema (pre-eclam)	Hemorrhage	Malpresentation
Villa Khora	Hemorrhage	Anemia	Malpresentation
V. Barrientos	Stillborns	Hemorrhage	Infection

"We liked it (the autodiagnosis) a lot, we have never spoken about our problems-- it was the first time."

"It's a good way to learn about our problems in the community and now we want to know how one can solve these problems. We want the institution (SC/B) to continue to help us learn and orient us better because we are now ready to learn."

STEP 9: Evaluate the Autodiagnosis Process

Purpose: To see what the women learned from the autodiagnosis and what can be improved for use in future communities.

Methodology:

Group discussion facilitated by questions.

Knowledge of the Facilitator:

- Knows the women's group (best if facilitator has participated with the group in previous sessions)

Materials/supplies required:

- Markers
- Flipchart paper
- Tape recorder (optional) and/or observer/recorder

Possible Barriers:

- Language
- Facilitator was not present during all or most of the group's autodiagnosis

STEP 9--Continued

Activity:

1. The facilitator asks the group:

   - What did you think of the autodiagnosis process?
   - Was there enough time?
   - What did you learn?
   - What did you think about the facilitator's participation?
   - How was the women's participation in the community?
   - How was your own participation?
   - Was it tiring?
   - What did you like? Why?
   - What did you not like? Why?

2. The facilitator congratulates the group for its participation in the process and says:

   In our next meetings, we will study different strategies and will learn more about how to deal with these priority problems.

Time: 20 to 30 minutes

"At first we were afraid to talk about our problems. Never before have we sat down as we do now to analyze our problems."

LESSONS LEARNED

The autodiagnosis is a valuable tool for women to identify and prioritize their problems and also serves as a strong motivator for women to look for solutions and to learn more about these problems. Results from the autodiagnosis were comparable with those from the case-control study, indicating that women can, and do, identify real problems, including the need for family planning services. As a result of the autodiagnosis, women also identified the need for literacy and greater access to economic opportunities (credit and savings).

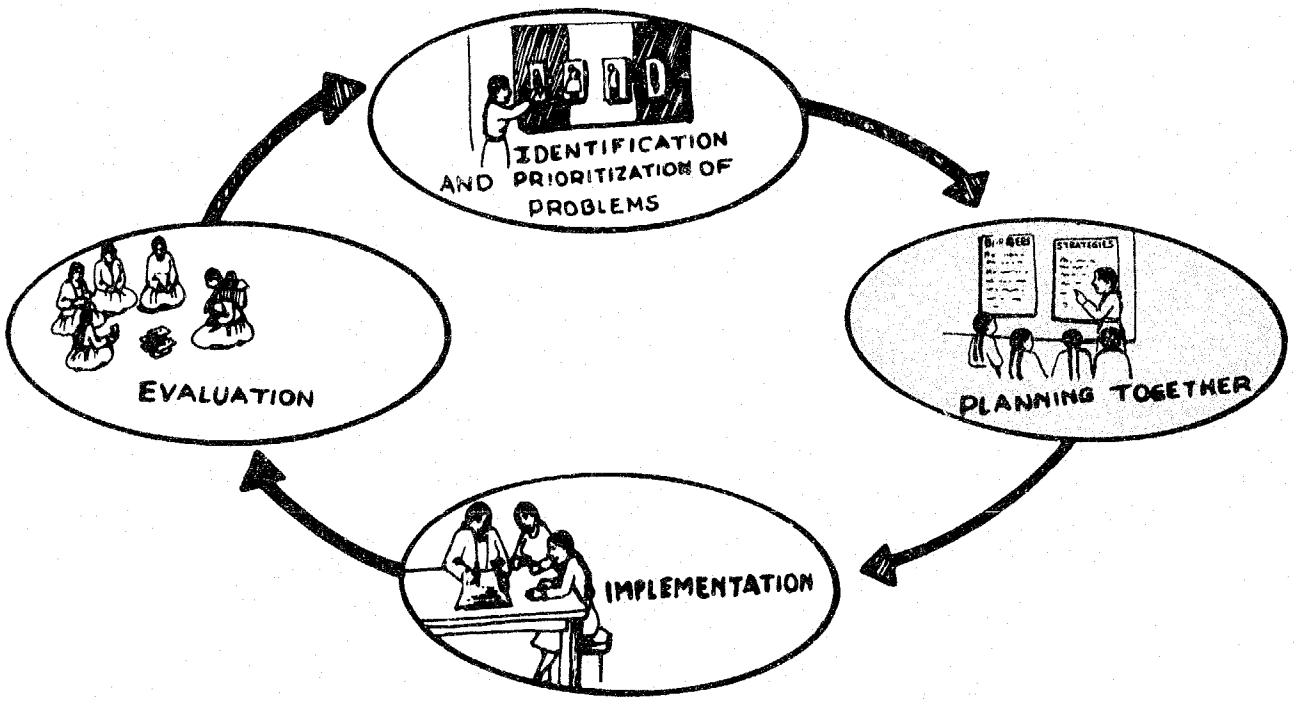
Experience using the autodiagnosis methodology with men was not successful. The autodiagnosis methodology may work better with men if the focus is on issues of direct concern to men.

However, men were very interested in the "planning together" exercise and actively participated in this phase. The fact that women set the agenda and that men chose to participate in decision-making based on women's problems was a big step forward in resolution of these problems at the community level.

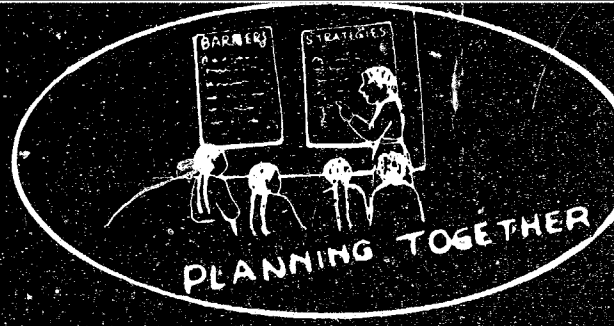
VIII. PLANNING TOGETHER

Context/Rationale for Planning Together

Planning Together is the second in a four-step process designed to result in community-based action to resolve identified problems.



Objective: To define strategies and actions to resolve the problems identified by the women's groups through a process of planning together with the group, with local authorities, and with other groups within the community.



PLANNING TOGETHER

SUMMARY OF PLANNING TOGETHER PROCESS

Aim: To define strategies and actions to resolve the problems identified by the women.

Activity: A planning together meeting with the women's group, with other members of the community, and with local authorities.

Time: At least 3 to 4 hours (plus preparation)

Procedure:

A. Preparation (including sociodrama)

B. Steps of the meeting

Step 1. Presentation of problems by the women

Step 2. Identifying barriers to solving the problems

Step 3. Identifying strategies and realistic, concrete actions

Step 4. Formalizing the agreements in a written document

Step 5. Closing of the meeting

Preliminary Phase

Prior to organizing a planning meeting, the group needs to prepare. The group members who participated in the autodiagnosis should review the results and decide how they are going to present them to other community members during the planning meeting. They should consider the following points:

- What priority problems did they choose? Why did they choose them?

- Who can best explain the process to the group? Does this person want to make the presentation directly to the group during the community meeting? Would it be better for a few people to make the presentation? Who will do what?

Preparation of a Sociodrama to Identify Barriers to Solving Problems

The women should choose some women from their group to prepare the sociodrama, taking as the main theme the problems identified in the autodiagnosis. They should consider the following when preparing the sociodrama:

- The scenario presented to illustrate the problems must be a real one.

- They need to display difficulties or barriers to solving the problem in a way that enables the participants to identify them. They must take into account that they will need to stop the sociodrama for a few moments whenever the participants identify a barrier. The group will need to rehearse the sociodrama in preparation for the meeting.

- How will the women present the process of the autodiagnosis, the results, and the sociodrama? Preparation must be made for charts, drawings, red cards for the sociodrama, stories, costumes, etc.

- Who should attend the planning meeting? The group needs to take into account people who have influence within the community and who can help in finding solutions to problems (e.g., MOH staff, teachers, General Secretary, partera).

- When will they meet? Availability of the people attending the meeting must be considered.

- Who will invite the participants? How will they be invited? By letter? (In Inquisivi, letters convey a greater seriousness of purpose and are, therefore, recommended.) By person-to-person contact?

- What materials will they need to conduct the meeting? Who will be responsible for the materials?

The women need to organize all of these details before holding the meeting.

It is a good idea for the women's group to rehearse their presentation prior to the meeting. They will then feel more secure and confident in their roles.

Planning Together

The planning together process requires a meeting of at least 3 to 4 hours duration. More time may be needed depending on the group and on the level of depth and detail they want. It is important that people with some experience and influence attend the meeting as they can help to look for realistic solutions and formulate action plans that can be implemented.

Steps of the Planning Together Meeting

The step-by-step process is described below. This process, as with the autodiagnosis, is flexible and can be changed if the group has a special need. The facilitator has to rely on his or her creativity to find techniques and methodologies which suit the group. If a particular step is not appropriate for the group, another approach needs to be tried instead.

STEP 1: Presentation of problems by the women

Aim: The group will learn about the problems identified by the women and will know why they are priority problems.

Activities:

1. The facilitator introduces the women to the group, explaining that they have carried out good work in investigating and identifying problems with maternal and child health during the first month of a baby's life.

2. The women present their autodiagnosis experience according to their plan.

3. The facilitator asks the group for comments or questions on the presentation. S/he congratulates the women on their presentation.

STEP 2: Identifying barriers to solving the problems

Aim: The group will understand what a barrier is and will identify barriers to solving the problems portrayed by the women.

Activities:

1. The facilitator demonstrates what a barrier is, using the real life experiences of those present. (10 minutes)

   Possible questions:

   - What is a barrier?
   - Can you give an example of a barrier that you have in your life?
   - What are the barriers to solving our problems with maternal and newborn health?
   - Why do these barriers exist?

(Examples of some barriers: People do not think the problem is important; people do not recognize that there is a problem; there is no transport available; there is not enough money or people do not want to spend it on medical services; people are maltreated by health personnel; there is nobody in the hospital to help; etc.)

STEP 2--Continued

2. Presentation of the sociodrama

   * A red card is handed out to each participant. Once everyone has a card, an explanation is given.

     "The women in the group will now present a sociodrama showing what can happen in reality when the problems we have identified occur in the family. Every time you (the audience) notice a barrier to solving the problem, you should hold up your red card. The sociodrama will stop while we write down the barrier on the sheet of paper. The sociodrama will then continue."

   * The group that prepared the sociodrama begins their presentation. The participants identify a barrier and the actors "freeze." The facilitator notes the problem that has been identified on a piece of flipchart paper. The sociodrama continues until it is finished, with the facilitator making a list of all the barriers identified by the participants.

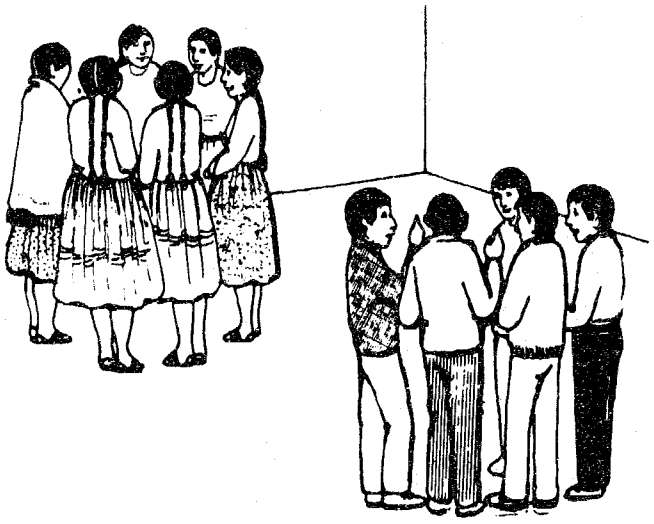
STEP 3: Identifying strategies and realistic, concrete actions

Aim: The group will identify strategies and realistic, concrete actions which will help to lessen or overcome the barriers identified.

Activities:

1. The participants divide into two groups, one group of women and the other of men. Both groups work with the list of identified barriers, taking each one in turn and discussing how the community can deal with them.

   At this stage the facilitator should stress that the plans they come up with must be very practical and realistic. The participants themselves will be putting the plans into practice and must, therefore, develop strategies and decide on actions that they will be able to commit themselves to doing.



STEP 3--Continued

Questions to support the process:

* What resources does the community have to deal with this problem?
  - material resources
  - people
  - other (time, etc.)

* What else do we need to confront the problem?

* Is it possible to get what we need? How? Who can help us? When? (specific dates, times if meetings are to be held, who will be responsible, etc.)

2. When they have finished, the two groups present their strategies to the whole group.

3. The facilitator asks if everyone agrees with the recommendations. The group discusses if the recommendations are realistic or not and whether they will solve the problem.

4. The group reaches a consensus on the strategies and actions to be put into practice.

STEP 4: Formalizing the agreements in a written document

Aim: The group will draw up a written document of the agreements they reached in order to put into practice the strategies and actions for dealing with the barriers to problem-solving that they have identified.

Activities:

1. Using the strategies prepared in the previous step, the group writes a final document of all the agreements. The document must contain at least the following:

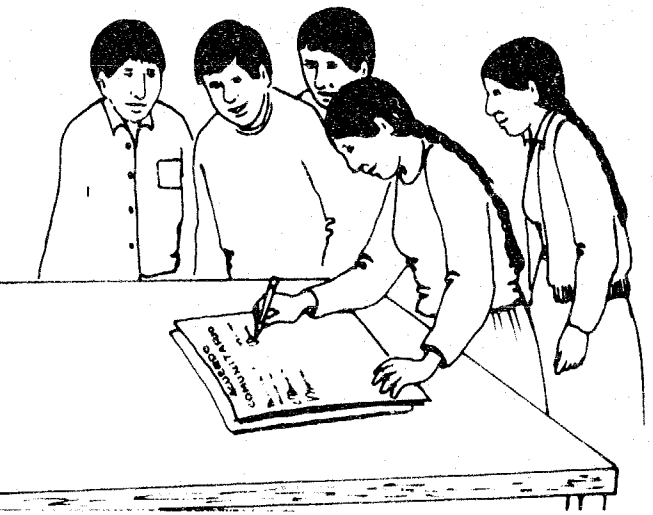
   - Specific identified strategies with concrete, detailed actions;

   - Dates (and hours, if applicable) of every action (including the date of the evaluation meeting to assess progress towards achieving their goal);

   - Person(s) responsible for each action; and

   - Names of all the participants.

(It is suggested that the participants organize themselves into working groups or "committees," with one person responsible for each group. These working groups may be written into the document as a formal mechanism for carrying out the work plan.)



LESSON LEARNED

The planning process is not necessarily an intuitive one for women who have not played a role in community decision-making. A structured guide to the process was helpful for many groups. The planning together process should result in written formal agreements among community members for specific, concrete actions that respond to specific obstacles and barriers to adequate care.

STEP 5: Closure of the planning together meeting

Aim: The participants formalize the agreements amongst themselves.

Activities:

1. The facilitator congratulates the group for its good work and reminds the participants that these are real agreements. If they want to solve the problems that they have identified, they must fulfill the promises on which they have agreed.

2. Everyone signs the document. If participants are pledging the participation of an institution, they can include their official seal as well. The document should be made as formal as possible (e.g., with signatures, seals, stamps) to project the seriousness of the participants' commitments.

3. The facilitator states that the group will meet on the date set to evaluate the results of the actions they have taken. It is always advisable to set the date for the next meeting during the planning together session.

Summary of Results

The community of Circuata conducted its planning together meeting in May 1993. Their plan is presented here as an example of one community's work.

MINUTES FROM THE PLANNING TOGETHER MEETING IN CIRCUATA

In the canton of Circuata, Inquisivi Province in the Department of La Paz, a meeting took place at 8:30 at night on Friday, May 21, 1993. At the meeting were present members from the women's group, parents and adolescents, and Mr. José Perea, Humberto Ignacio, both functionaries of the MOH and Basilio Cachi and Romelia Antonio from SC/B. The meeting was called and agreed upon by the women's group on May 6th with the objective being to realize the "Planning Together" exercise.

After initial words of introduction, the agenda was set:

1. Brief introduction
2. Presentations of reproductive health problems prioritized in the autodiagnosis
3. Identification of obstacles or barriers
4. Presentation of a "socio-drama"
5. Search for strategies to solve the problems
6. Agreements

An explanation was given to the participants about what the meeting would consist of and a brief brainstorming exercise was done with the participants on their ideas about problems of reproductive health.

PRESENTATION OF PROBLEMS BY THE WOMEN

The SC/B field supervisor introduced the women who were to present the problems prioritized in the autodiagnosis, relating them to what happens in reality.

1st problem: Malpresentation, presented by Mrs. Sonia Perea.

2nd problem: Hemorrhage in pregnancy and birth, presented by Mrs. Elena Celis.

3rd problem: Edema, presented by Mrs. Cristina Fauca.

The participants ratified the problems mentioned above and made comments about them.

IDENTIFICATION OF OBSTACLES/BARRIERS

After an explanation about what an obstacle is, with several clear examples from real life given, paper and markers were distributed to each participant so that each participant could draw something that represented an obstacle based on the three problems mentioned earlier.

PRESENTATION OF THE SOCIO-DRAMA

While the participants identified obstacles in drawings, the socio-drama was prepared. Then the socio-drama was presented. It was about a family with 4 children and a woman who had the same problems that the women had presented above which finally led to the woman's death. While the socio-drama was being presented, the audience raised their drawings representing obstacles each time that they observed an obstacle faced in the socio-drama. The facilitator wrote down each obstacle as it was mentioned.

LIST OF OBSTACLES OR BARRIERS IDENTIFIED

- There is no ambulance
- There aren't sufficient economic resources
- They don't go to the health post
- There is no doctor
- There is not enough food (poor diet)
- Lack of transport
- Little awareness of prenatal care
- Lack of confidence in the partera
- Detached husband, doesn't think of his wife
- Untrained partera
- Young mother
- Many children

The participants recognized and ratified the above as barriers that fundamentally obstruct solutions to problems that ultimately lead to maternal and neonatal death.

IDENTIFY STRATEGIES AND SPECIFIC, CONCRETE, REALISTIC ACTIONS

Through criteria, opinions, suggestions and interchange of ideas on: What the community can realistically and concretely do to confront the identified obstacles; as well as identifying that resources the community possesses. The consensus reached was the following:

STRATEGIES/ACTIVITY	WHEN	PERSON RESPONSIBLE
Request an ambulance for the town	When town meeting is organized	Whole town and authorities
Economic Resources * Payments to help in complicated deliveries, if family is poor * Generate funds by working and selling products * Loans to families if they need help * If the family has resources and the husband doesn't want to spend money for a difficult birth, the women's group will bring it to the authorities' attention	When difficult deliveries occur	Women's group, husbands and authorities
Nutrition * Improve nutrition through family gardens * The women's group will sell vegetable seeds, from which funds will serve for loans mentioned above	Continually support this activity	Women's group
Means of Transport * Search for other rapid means of transport	When difficult delivery occurs	Husbands, partera, women's group
Prenatal Care * Raise awareness of prenatal care * Pregnant women should go to the partera or to the health post	From May 21, 1993 onward	Husbands and mothers

STRATEGIES/ACTIVITY	WHEN	PERSON RESPONSIBLE
Detached Husbands * Orient husbands	From May 21, 1993 onward	Husbands, partera, health personnel
Untrained Partera * Conduct orientation and training in courses that exist in the future	From May 21, 1993 onward	Partera, MOH, SC/B
Young Mothers * Orient and train adolescents in sex education	From May 21, 1993 onward	Mothers, Bolivia Episcopal Conference
Many Children * Orientation, training and family planning methods	Continue with visits from AYUFAM or others	Interested couples, AYUFAM/other NGO

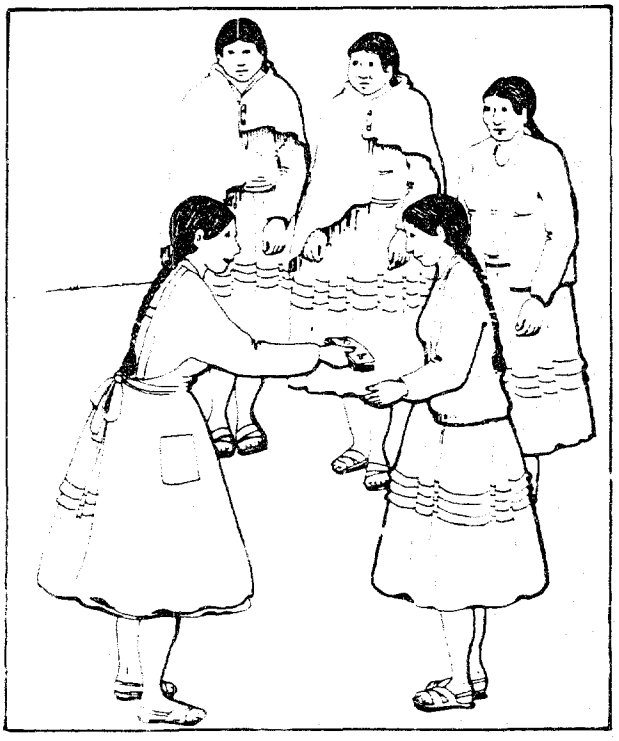
Due to the fact that it was getting late and the facilitator noted that some participants were tired, the agreements were finalized and the results were reviewed.

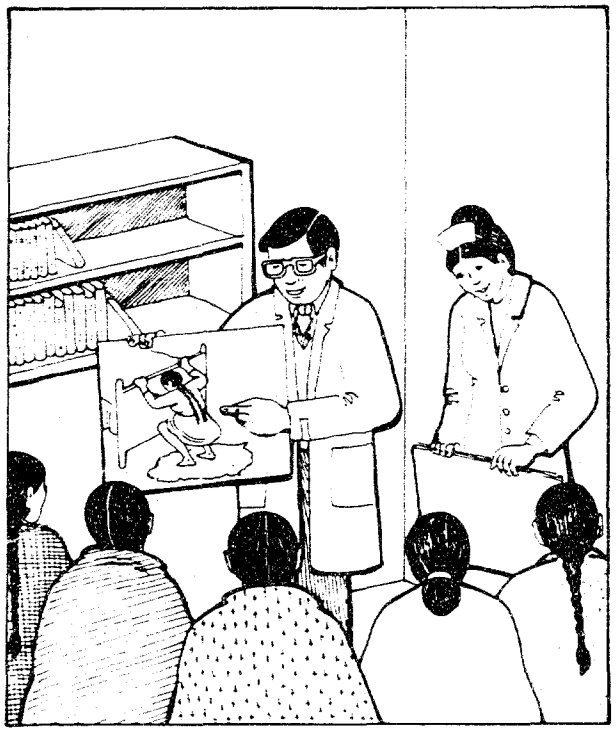
Agreements - The group decided to draft the present document as a testimony to the agreements. It will be signed by all of the participants. With words of thanks to the audience for their active participation, the meeting was adjourned at 10:00 the same night.

LIST OF PARTICIPANTS

Bertha de Sipe	Betty Miranda	Clara Munoz	Alejandra Sipe
Felix Clamani	Hugo Miranda	Cardenio Laura	Sonia Perea
Angelina Endara	Sahara Andrade	Hilde de Siles	Elena Celis
Sandra Celis	Margoth Cardenas	Emma Miranda	Lisia Celis
Celia Jimenez	Cristina Fauca	Soraida Rocha	Victoria Celis
Rufina Ayca	Olga Estrada	Carmen Ayaviri	Augustina Calatayud
Delma Bonifacio	Senóvia Mavia	Juaha Aranda	Mary Villar, ...etc.

FONDO DE
EMERGENCIA

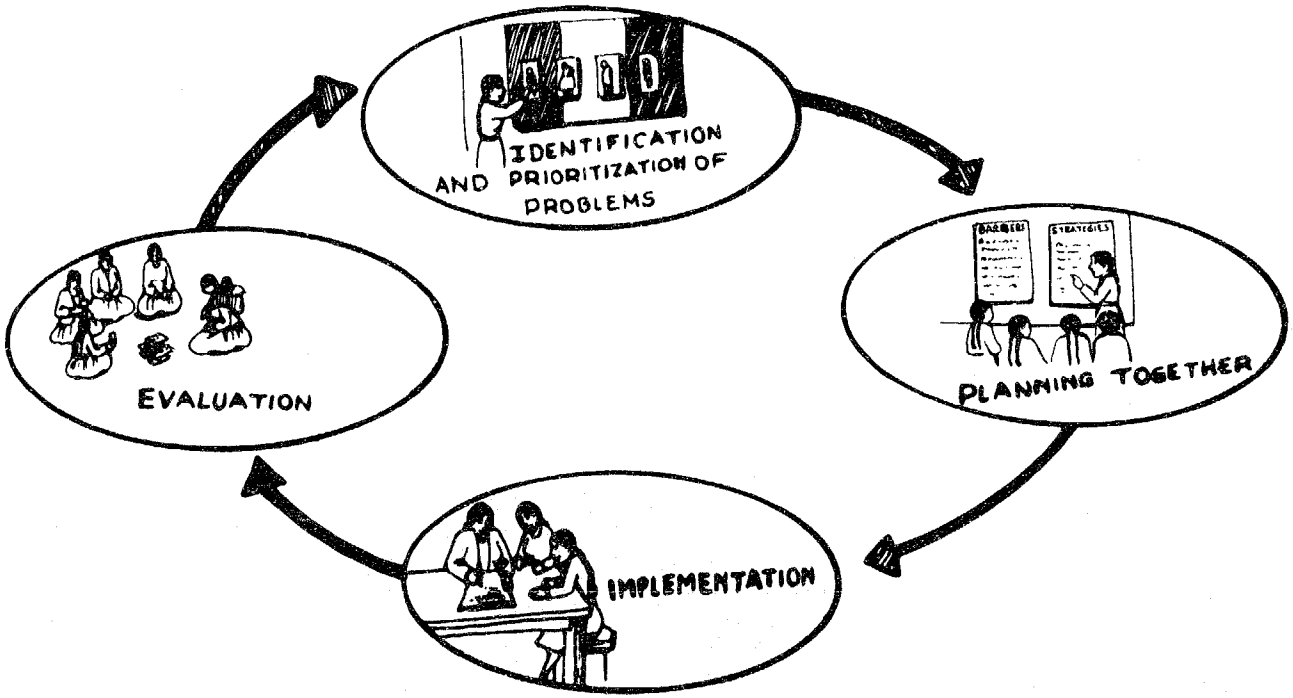




IX. IMPLEMENTATION

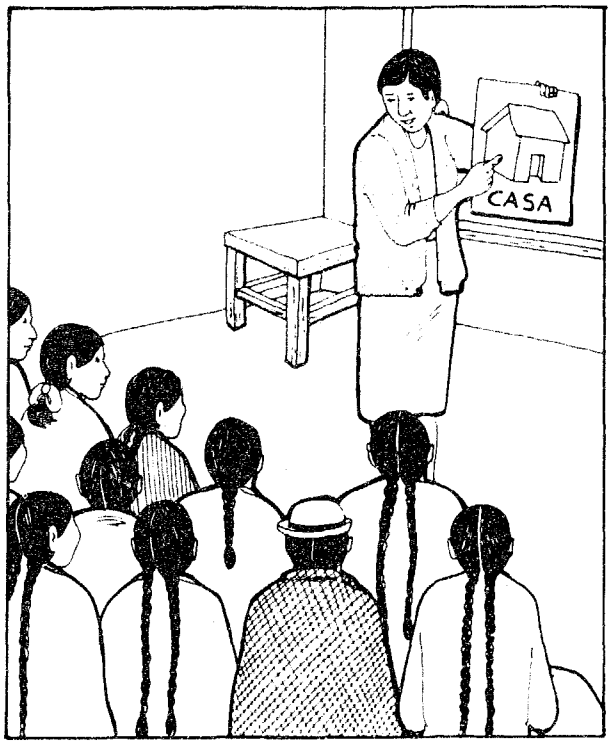
Context/Rationale for Implementation

Implementation is the third step in a four-step process that is designed to result in community-based action to resolve identified problems.



The implementation strategy decided on by the women in the Warmi Project is presented on the following pages.

IMPLEMENTATION



Warmi Project Implementation Strategies

In the course of the project, women's groups identified problems that they wanted to address and took a variety of steps to try to improve their situation. In addition to soliciting and receiving training on specific topics related to health and family planning, they also requested and took part in other actions aimed at solving their problems.

Many behavioral changes which have taken place have since been manifested in the women's response to situational events, e.g., one group called the police to convince the husband of a woman who was having a complicated birth that his wife should be taken to the hospital.

The following are some of the concrete actions that groups have taken:

Literacy Education

Many of the women's groups identified illiteracy as a major barrier to their ability to deal with their problems. They asked for literacy classes and selected women from the groups to be trained as literacy monitors. Literacy classes were then held in 25 communities.

(This action shows that it is important that NGOs be flexible enough to respond to legitimate, felt needs which fall outside the original focus of the project. In SC/B's case, we were fortunate to find a funding opportunity to respond to this request for literacy. At a minimum, NGOs should be willing to link communities' needs with other organizations which work in those areas.)

Training and Education

Many communities identified the need for further education and training in specific reproductive health themes. They also recognized the importance of developing local people such as parteras to respond to these problems. In response to this need, dates were set for training sessions and appropriate facilitators were identified by the community. There was a particularly high demand for more training of parteras and community education in family planning. Women's groups and parteras developed educational materials to support their training efforts. (See pages 153 to 161.)

Credit Program & Other Financial Resource Interventions

Having identified economic difficulties as a major impediment to access to health services and to developing economic opportunites, some of the groups took steps to gain access to financial resources. These steps took three forms:

a) Five groups solicited access to credit and selected women from their community to be trained in a pilot credit program for women.

b) Several groups decided to generate income to set up an emergency fund from which women could borrow. Some of the ways in which they generated funds were through communal gardens, sewing mosquito nets for sale, and running a local store.

c) Women in four communities organized a savings group to help them to manage their finances.

Transport

During their planning together sessions, many of the women's groups identified lack of transport, particularly in an emergency, as a major barrier to solving their problems. While to date no definite initiatives have been taken in this respect, it is a central issue for the women and one on which they were planning action.

Political Lobbying

Some women felt that the lack of adequate health services in their area was a major cause of their problems. Rather than thinking that this was an issue beyond their control, they decided to write letters to the MOH requesting better services and offering their own counterpart support to the MOH.

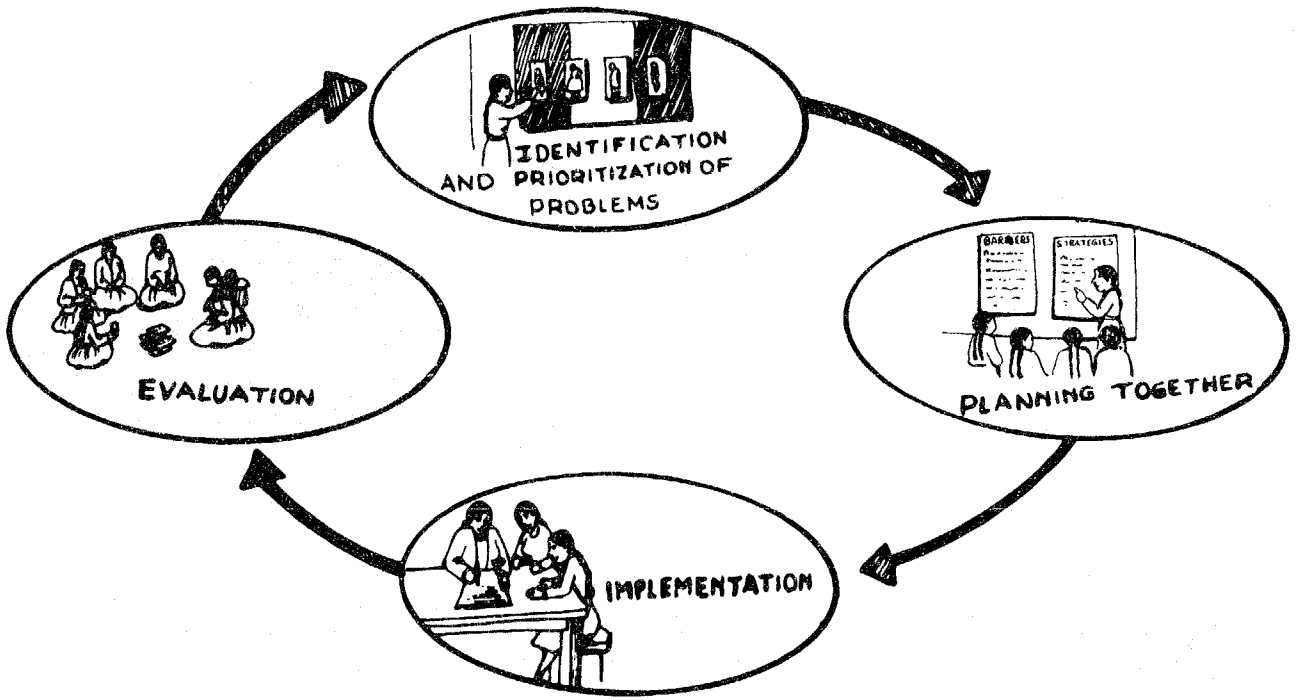
Use of Services

Many communities chose to increase their use of prenatal check-ups and of people trained to attend births, such as parteras, auxiliary nurses and doctors.

X. PARTICIPATORY EVALUATION

Context/Rationale for Participatory Evaluation

Participatory evaluation is the fourth step in a four-step process that is designed to result in community-based action to resolve identified problems.



PARTICIPATORY EVALUATION

Objectives/Rationale

The objectives of the participatory evaluation phase are:

* To determine whether the strategies developed in "planning together" were carried out according to the plan and if not, why not.

* To determine whether these strategies were effective in lessening or removing the barriers identified in "planning together" and if not, why not.

* To determine whether maternal and neonatal health has improved as a result of implementing the strategies.

* To determine whether any other "spin-off" effects resulted from the whole planning and implementation process.

* To set the stage for further identification and prioritization of pending problems, as the cycle begins anew.

SC/B was not able to field-test this phase by the time of writing of this manual. However, some ideas for this phase are included below. As each community's strategies are different, the facilitators will need to carefully experiment with various techniques to determine what works well in each situation. It is also important to note that the "final" version of the previous phases in the cycle changed (sometimes dramatically) from what was originally contemplated. Undoubtedly, this evaluation phase will also undergo modifications as it is tested in real-life situations.

There are several important factors to take into consideration when developing an evaluation methodology for maternal and neonatal health:

1. Unlike other health events, such as diarrhea, maternal deaths are rare, even in populations that have high maternal mortality rates. A decrease in maternal deaths is difficult to measure in small populations and may not be the best indicator in the short- or medium-term for a community, although ultimately on a larger scale it is a very important indicator.

2. Fetal and newborn deaths occur more frequently than maternal deaths and will probably be easier to monitor than maternal deaths.

3. Process indicators will be easier to evaluate in the short- and medium-term. These indicators include whether families are identifying problems in time to take action, which actions they are taking when complications arise (are they seeking "adequate" care or "inadequate" care), are birth attendants trained in clean/safe birth techniques and did they apply them.

SESSION 1

STEP 1: Preparation for the Participatory Evaluation

Purpose: The community will recall their autodiagnosis and planning together sessions and will discuss why they should evaluate the results of actions they have taken.

Knowledge of the Facilitator:

- Familiarity with the autodiagnosis done by the women's group
- Familiarity with planning together process and community's plan
- Language and local terms

Activities

1. The facilitator reviews why the participants are present and briefly summarizes the results of the autodiagnosis and the planning together phases, using questions to remind the participants of the process that they have followed:

    - Who can explain to the newcomers what the autodiagnosis is?
    - What problems did we identify through the autodiagnosis?
    - Who can remember what strategies/actions we planned to take to try to solve these problems? (Refer to the planning together document.)
    - Why are we here today?

2. The group discusses why they should evaluate the results of their actions.

    - What is an evaluation?
    - Why should we evaluate the results of our actions?
    - How do we know if we have achieved what we wanted?

STEP 2: Understanding and Selecting Indicators

1. The facilitator explains to the group what an indicator is and demonstrates the different types of indicators.

   - **Process indicators** ask: "Are we doing what we said we would do?"

     (Always take into account the problems identified and the desired results. For example: if hemorrhage was identified as the major problem and one strategy to prevent death due to hemorrhage was to start an emergency fund that would enable families to borrow money to hire transport, pay medical fees, etc., has this fund been established? Has anyone borrowed from it in case of hemorrhage? If yes, was the loan paid back? Is everyone aware of the fund? How is it being managed?)

   - **Quantitative indicators** are those factors/events that one can count, such as number of deaths, number of women with hemorrhage due to mismanagement of delivery, number of women who received prenatal care, number of women referred to health post, and number who actually went, etc. The time period for counting should always be well-defined so that the information collected is uniform.

   - **Qualitative indicators** assess perceptions, impressions, knowledge, and other aspects difficult to quantify, such as women's increased satisfaction with health services as a result of a community strategy to sensitize doctors' and husbands' understanding of the importance of prenatal care.

STEP 2:--Continued

2. The group determines what they will evaluate, taking into consideration the difference between quantitative and qualitative indicators.

   The group then divides into small groups, with each group focusing on one or two strategies that were developed during planning together (depending on number of strategies agreed upon). The group decides which indicators they will use to determine whether the strategy was effective.

   When the groups have made a list of several indicators that they believe are important to measure, each group presents its list to the other participants. The group discusses whether they are in agreement with the indicators proposed.

3. The participants become familiar with some quantitative and qualitative evaluation techniques.

   The facilitator asks the participants how they could gather information on one of the indicators agreed upon. As many types of information-collection techniques as possible should be explored. The facilitator can mention some of the techniques listed below to complement those mentioned by the participants.

STEP 2:--Continued

Quantitative evaluation techniques:

* **Counting important events:** If the community has access to the number of deaths and/or complications that occurred before the planning together phase, they may decide to count the number of deaths of women due to pregnancy, birth, and postpartum causes. Choose one simple technique to measure the quantitative results. Below are examples of some techniques that may be useful.

  - A commission selected by the community can carry out a census with the problem cards used in the autodiagnosis.

  - If all community residents attend the meeting, they can collect the information at the meeting, using the problem silhouettes to represent each case of death or illness.

  - If the community has access to health providers' records (and the registration system is good), they can count the events registered.

  - If the community does not have access to some kind of quantitative baseline, they may choose to do a retrospective study asking families how many mothers and newborns have died during the past three to five years due to causes associated with pregnancy, birth and the postpartum period. They can collect the data by year, using graphical representations of the years (agricultural calendar, annual holidays, or other annual events selected by the community to show the passage of one year) and causes of death.

STEP 2:--Continued

Qualitative evaluation techniques:

Answering the question, "Do women feel that the quality of their lives, particularly their health, has improved due to the community's actions?"

A variety of techniques exist to explore this type of question, including:

- **personal interviews**

- **small group discussions**

- **drawings** by women, husbands, community leaders, etc., that show how the role of women has changed in the community and the family before and after strategy implementation

- **story-telling** to determine the group's level of knowledge (The Warmi Project final evaluation used this technique with sets of three colored cards that were distributed to each participant. A story about a woman who was pregnant was read, and at various points in the story the participants were asked if what the woman did was good or bad or if they didn't know. The participants raised the colored card that responded to the question [red for bad, green for good and yellow for "I don't know"]. The questions were based on beliefs and practices that can be harmful to maternal health.)

STEP 2:--Continued

- **sociodramas** (skits) to demonstrate knowledge and/or practices, including real-life situations (a distinction should be made as to whether the scenes reflect real practices or what families think they "should do").

- **"pile-sort"** (selecting picture cards out of a stack) for qualitative prioritization when there are a number of options to choose from. (For example, the Warmi Project final evaluation used the "pile-sort" technique for women and local authorities to prioritize the top three or four interventions of the project out of a total of 16 interventions represented by drawings on cards.)

4. The participants return to their small groups and decide what information they need, how they are going to collect it, when they are going to collect it and who is going to collect it. The group develop a brief workplan based on their discussion. When all participants have finished, they present their plans to the rest of the group.

5. The participants establish the date of the next meeting, when all those responsible for information collection will present their results.

BETWEEN SESSIONS 1 AND 2

STEP 3: Developing instruments for information collection.

Simple instruments are developed for information collection, and information is collected according to the plan.

It is recommended that the people who have been assigned to collect information meet to review how they are going to collect it. Depending on the methods selected, they will probably need some time to develop the instruments and practice using them. For example, if they choose to do interviews, they will need to develop a questionnaire, determine who they will interview, and practice asking the questions before they actually carry out the interviews. (See Autodiagnosis, step 5).

This process will require the help of the NGO facilitator the first few times through the cycle.

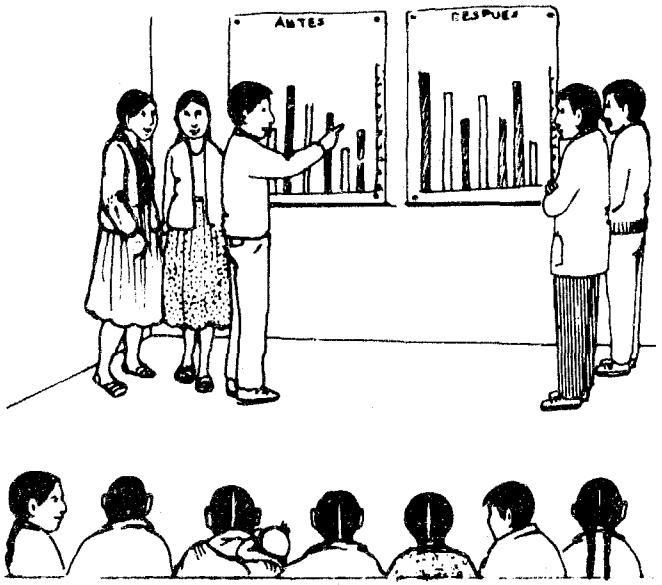
SESSION 2

STEP 4: Preparation for Presenting the Results

Before the third session takes place, all the people who accepted responsibility for collecting information prepare a presentation on what they have done. They also determine how they would like to present the results--with pictures, props, guest speakers, etc. They practice their presentations to make sure that they feel confident and that they have all the information they need.

A meeting leader is selected by the community prior to the session on the presentation of results. This facilitator also prepares him/herself by reviewing all of the practice presentations and by reading the autodiagnosis and planning together documents produced by the community.

The community sets the date, time and place for the "Presentation of Results" session if it hasn't already been established during the preparatory meeting. The community determines whom to invite and who is going to make the invitations if this is necessary.



SESSION 3

STEP 5: Presentation and Analysis of the Results

The facilitator gives a brief summary of the last community meeting and introduces the presenters, each of whom presents his/her findings to the group.

When the presentations are completed, the facilitator asks the participants:

- Has there been improvement in maternal and neonatal health? How do we know?
- Were all the actions that were planned implemented? If not, why not? What problems did we have?
- If there has not been improvement, why not? Did we implement the strategies well? Were they the right strategies?
- What should we do next? (Continue with the same strategies? Develop new ones? Begin to look at a new problem? etc.)
- What problems remain? If a problem has only been partially solved, is it still a priority problem for the community or are other problems now of higher priority?
- The group then sets the date and topic for the next meeting, to begin the cycle anew.

SECTION 3

SC/B WARMI PROJECT COMPONENTS

XI. STRATEGY IMPLEMENTATION

This section presents the components of the implementation stage of the Warmi Project. These activities were initiated as a result of the problem identification and planning-together exercises carried out by the women's groups and communities, and they are presented here as an illustration of how the implementation stage of the cycle has been approached.

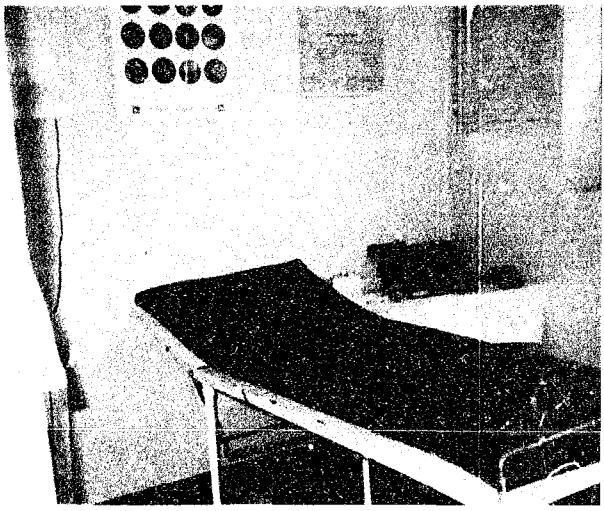
REFERRAL SYSTEM LINKAGES

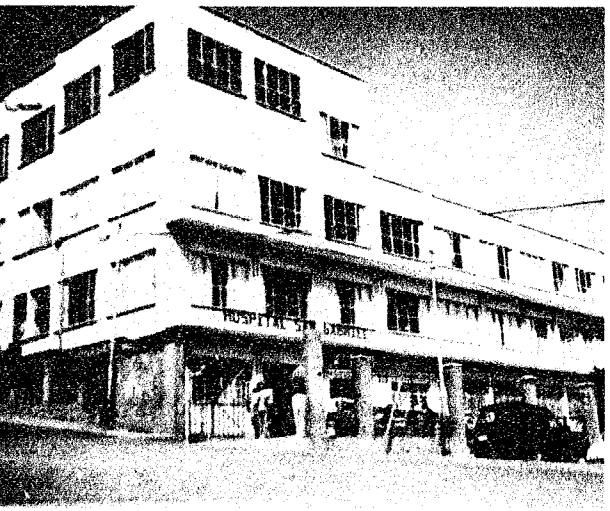
Coordination with the Ministry of Health (MOH)

Within the Warmi Project area, the MOH runs a hospital in Quime and health posts in Inquisivi, Licoma and Circuata. It has a doctor and a nurse auxiliary in Inquisivi and Licoma, a nurse auxiliary in Circuata, and some health promoters in the rural communities. Its infrastructure is minimal, with little equipment and supplies.

SC/B intended to involve the MOH District staff in interventions which would have an impact on health in the different communities. In some areas, the MOH personnel and SC/B's personnel were able to coordinate in some activities, such as "integrated fairs" and vaccinations. In the majority of cases, however, SC/B made referrals to the MOH facilities. The District's organizational structure was very narrow, and its personnel found it difficult to leave the health facilities. With some exceptions, they almost never accompanied SC/B on field visits and rarely attended the monthly and quarterly planning and evaluation meetings to which they were invited.

SC/B experienced many problems in trying to obtain its formal agreement with the MOH. These problems, coupled with the inability of the MOH to provide services in reproductive health, caused the project to look for other local NGOs to provide these services.





Agreement with a Local Service Provider

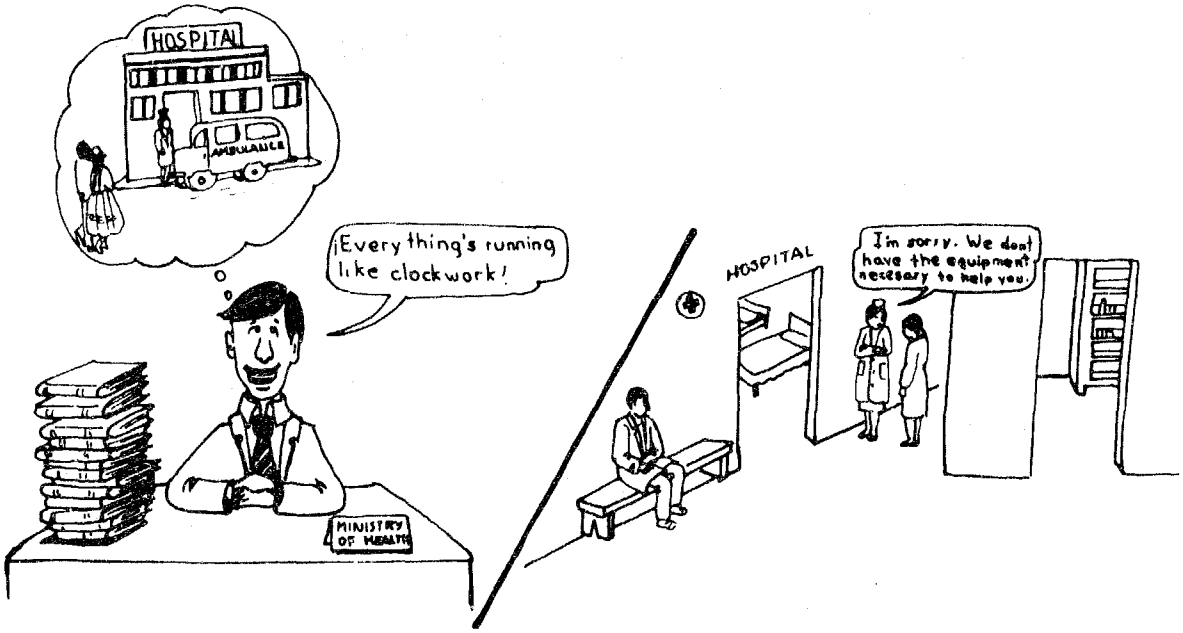
The San Gabriel Foundation (FSG) is a non-profit NGO that provides health services and education in one district in the city of La Paz. The Foundation has a tertiary-care hospital and nine clinics.

Two agreements were negotiated between FSG and SC/B:

1. The first agreement was for a period of one year, from January 1993 to January 1994, to be renewed on acceptance by both parties. Under the contract, FSG agreed to provide two services:

   (a) Technical training within its training center to parteras from Inquisivi; 42 parteras in total participated in one-week training courses.

   (b) Acting as a referral center for complicated cases in Inquisivi. FSG also agreed to offer patients referred by SC/B a discount of 5% for consultations and of 50% for hospitalization charges.



2. The second agreement was for a period of one year, with the expectation of continuing beyond that time. Under the agreement, FSG pledged to do the following:

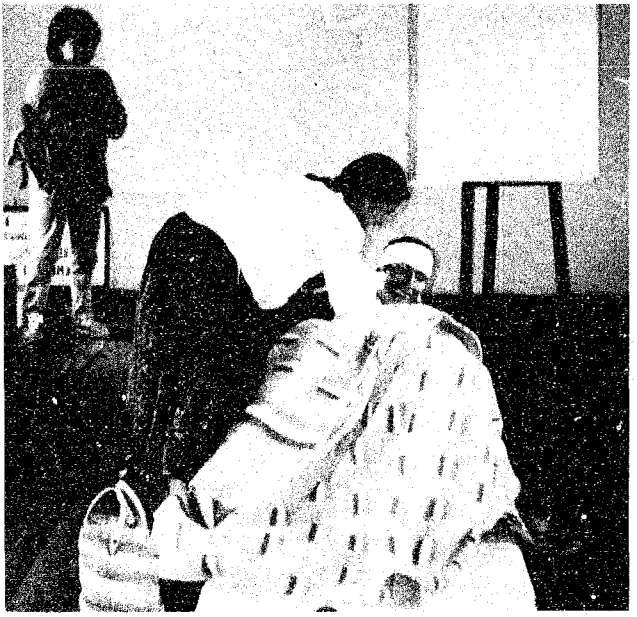
   (a) To provide family planning services for the rural communities of Inquisivi Province in response to their needs and demands.

   (b) To develop a training plan for family planning counseling and services to Ministry of Health staff in the health posts and in the hospital within the project zones. To develop an education program on family planning for the people living within the area, along with a sex education module for students at the junior high and high school levels.

SC/B agreed to support FSG with a private donation to develop the family planning and sex education program.

LESSON LEARNED

In situations where the health infrastructure cannot be greatly improved for political and economic reasons, work with a local NGO. In the case of SC/B, this consisted of referring patients to La Paz. Prior to this, patients often arrived in La Paz and were unsure where they should go. The agreement with San Gabriel Hospital formalized the referral point, and SC/B strengthened this link through the "partera" training courses within the hospital. This experience was positive for both parteras and hospital doctors in that both improved their level of patient care and treatment.



TRAINING OF PARTERAS

Parteras are not an integrated part of the traditional health care system in the community in Bolivia since husbands and other family members usually attend the birth. Traditional healers (*curanderos, yatiris*, etc.) sometimes serve this function in addition to their other healing responsibilities, but parteras, such as are present in other countries for the sole purpose of attending to pregnancy and birth, are not common. But, in spite of the cultural barriers, several programs in Bolivia have attempted to train parteras. The PRONIMA project, funded by PAHO/UNFPA, had very limited success. The San Gabriel Foundation had better results in a district outside of La Paz.

SC/B proposed the identification and training of parteras as part of the MotherCare Project to determine if this strategy could improve perinatal and neonatal care at the community level in a very rural district of Bolivia. This chapter describes how parteras were identified, how training was carried out in the field and in the hospital, how follow-up was carried out, and the results of the experience during the three-year project.

HOSPITAL
PUESTO SANITARIO

Identification of Parteras

Parteras in the project area were identified primarily on the basis of "self" or "community" selection. Some of the communities identified their own female or male parteras through tradition and practice; others have Community Health Workers (CHWs) who have been trained in programs sponsored by the Ministry of Health and Save the Children/Bolivia. The pregnant woman may or may not utilize these (all-male) auxiliary health promoters for prenatal care and childbirth. The higher, more isolated, traditional and Aymaran-speaking communities were generally more suspicious and closed. They would not utilize male health care workers in any aspect of prenatal, labor and delivery, or postpartum care, unless they perceived an emergency and there was no other option within the community. On the other hand, the communities at lower altitude, with a more recent (relatively) immigrated population, were more open and accepting and did utilize male promoters for prenatal, labor, delivery, and postpartum care (though still not with the same frequency as with female promoters). In one community, the women preferred and used the male promoter over the female partera for many years. However, this is not the norm.

Some of the self-identified parteras attending women's groups and meetings of parteras from several communities had never attended any births other than their own. However, they exhibited a strong desire to learn about safe birth practices and thus were included in training courses. Having their own communities recognize and utilize these "self-identified" parteras was a distinctly different aspect in their training in the field as well.

Of the three representative zones in the province, Circuata had 8 parteras and one male health promoter. Licoma zone had 18 parteras (2 of whom are male and well respected in their communities). Licoma also had a ministry health post staffed by a doctor and a nurse. The nurse attended many of SC/B's training sessions; the doctor worked jointly with SC/B staff on many occasions. The Inquisivi zone is the highest in altitude and has the most traditional Aymaran communities. There were only 4 female parteras, due to the selection by the community of men (a decision usually made by men). Three of the four women lived in Inquisivi town and were well respected and utilized by the community. Inquisivi town also had a ministry of health post staffed by a doctor and an auxiliary nurse, both of whom attended training sessions and who were used by pregnant women in cases of emergency.

Of the 12 other communities in the Inquisivi zone, none had community-identified female or male parteras. Male health promoters were trained and were underutilized or not utilized at all by women during their pregnancies or deliveries. In these strict, isolated, traditional communities, the woman delivers her own baby or is attended by her husband, mother, or mother-in-law. The lack of recognition of the value of trained parteras, particularly for prenatal care, is a distinct problem that needs more concentrated effort and education in these communities. The re-identification of female parteras by the women themselves may also help to solve this problem.

In total, there were 45 self- or community-identified parteras in the three zones of Inquisivi.

Initial Training in the Field

The town of Quime houses the District Referral Hospital, which was staffed by several doctors and nurse auxiliaries. This 10-bed hospital had no operating room facilities, no anaesthesia of any kind, no laboratory, no blood bank, and very few pharmaceuticals (they had no pitocin and the methergin was expired). They rarely had oxygen, only a few IV supplies, and the labor/delivery room was cold. They had nothing in the way of neonatal resuscitation. The facilities were extremely underutilized. In cases of maternal or infant emergencies, all were referred to La Paz or Oruro (4-6 hours away). Because of this underutilization, the MOH did not feel that it would be cost-effective to equip or renovate this hospital.

As a result of this situation, the initial "training in the field" necessarily focused on:

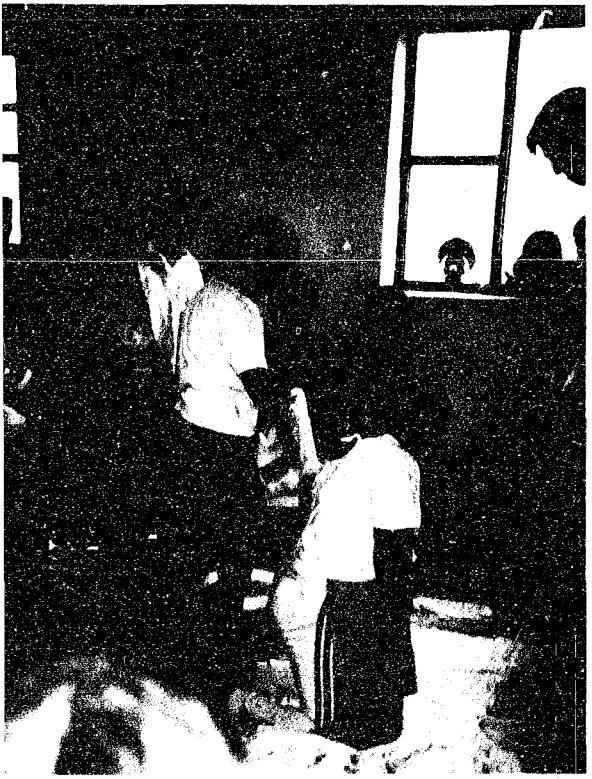
* **RECOGNITION OF DANGER SIGNS DURING PREGNANCY, LABOR/DELIVERY, THE POSTPARTUM PERIOD AND IN THE NEWBORN;**

* **PRENATAL CARE TO PREVENT COMPLICATIONS FROM OCCURRING OR BECOMING SERIOUS; AND**

* **LIFE-SAVING SKILLS IN CASE OF EMERGENCY WHEN NO OTHER RECOURSE EXISTS.**

Following the program strategy outlined on pages 4-6, identification and prioritization of problems were done by 50 women's groups. Most of the female parteras were also members of the women's groups in their communities. This process occurred in 1991-92 during the autodiagnosis. Groups of parteras and health promotors also separately prioritized problems.

The level of knowledge about anatomy/physiology/reproductive health/newborns was rudimentary at best--even among the ministry and SC/B-trained health promoters. Many of the parteras were illiterate, and for many, Aymara was their first language, Spanish their second. Many of the parteras had received some basic courses through SC/B field supervisors over several years regarding hand-washing, clean birth, tetanus vaccination, and basic newborn care.



In-Service Training in the Field

Traditions, beliefs and practices are enormous factors of influence when training anybody about pregnancy, childbirth, postpartum, and newborn care. Beliefs about anatomical or physiological functions of a woman's body are very much entrenched in Aymaran traditions and may be exactly the opposite of what "modern" medical practices show us. The customs and practices of the parteras (who, after all, are part of their communities with all its belief systems) may be at odds, sometimes dramatically, with information that is presented to them. **Customs need to be accepted, acknowledged, and incorporated as much as possible into the health-care training of parteras, promoters, nurses, and doctors.**

One example is the Aymara woman's concept and concern about the location of the placenta (which houses the baby's soul), what happens to it after the baby is born, and its relationship to other internal organs in the body. The placenta is part of the uterus and, like the uterus, totally envelopes the growing fetus. After the baby is born and the cord is cut (no one is allowed to touch the baby, either, until the placenta is born) there are two dangers that may occur: first, unless the end of the cord is tied securely to the big toe of the woman, it may re-enter the vagina, perhaps even permitting the placenta to enter as far as the chest cavity and never come back out, causing infection, suffocation, or death of the woman. Secondly, because the placenta is fused with, or even part of the uterus, if the woman pushes or squats to force the placenta out, the uterus could possibly be inverted! Hemorrhage and retained placenta have been identified by all women's groups, as well as by parteras and promoters, as the two leading problems in childbirth complications.

Compromises on the part of the health-care trainer as well as the parteras need to be made in the name of advancement of knowledge and the promotion of the health of women and infants. For example, in the case of the climbing cord, we all came to a compromise. First, you need to cut the cord in the location designated by two finger widths from the baby's umbilicus (not near the mother's vagina), thus making the cord nice and long. Secondly, we explained the relation of the placenta to the uterus as a separate organ (using the placenta, uterus and fetus of a butchered cow), and explained the contraction of the uterus which, in changing its shape, will seem to cause the cord to enter a little. We emphasized over and over that it only enters one or two centimeters. Then the woman can tie the cord to her toe if she wants to, BUT ONLY if her leg is fully extended (thus preventing accidental tearing of the cord or placenta). We then emphasized the importance of "giving birth" to the placenta, of changing positions, emptying the bladder, massaging the lower abdomen vigorously in case of a lot of bleeding, etc. By accepting some of the community's customs and not denying their fears, we were able to make some real progress in presenting our point of view and imparting some much-needed information to them.

The training topics for parteras and health promoters included:

* **Prenatal care**
* **Hemorrhage and anemia**
* **Retention of the placenta**
* **Reproductive health and sex education**
* **Care of the newborn**
* **Family planning**

To supplement these courses, each month the parteras and promoters reviewed their training while developing the Partera's Manual (see materials development section) with CIEC, a local NGO contracted by SC/B.

Included in these day-long workshops were the following topics:

* **Prenatal Care**
* **Anemia**
* **Nutrition**
* **Recognition of danger signs**
* **Hemorrhage (prenatal, intrapartum, postpartum)**
* **Retained placenta**
* **Malpresentation**
* **Care of the newborn**
* **Postpartum care**
* **Family planning**

These sessions helped to reinforce the concepts learned during prior training and contributed greatly to the content of the manual, both in ensuring that the text and pictures were well understood and in incorporating local practices where appropriate.

In-Service Training in the Hospital Setting

In January 1993, SC/B signed a formal agreement with the San Gabriel Hospital (FSG) in La Paz to carry out training of parteras in the hospital and to serve as the referral point for emergencies when the District Hospital could not cope. The objectives of the training course were:

1. To familiarize parteras with the staff and environment of the referral hospital so that they would feel more comfortable referring their patients to La Paz in the event of an emergency. San Gabriel staff agreed that the parteras should accompany their patients into the labor and delivery room, adding to their acceptance of the hospital services.

2. To provide theoretical and practical training in a supervised situation where the parteras could get hands-on experience with a large number of births within a short time period.

The week-long course began with a group of four parteras and consisted of classes at the theoretical level on prenatal care, labor and delivery, postpartum care, care of the newborn and family planning. Each participant then worked in the obstetric ward for 24-hour shifts, attending all the births that did not need surgical intervention. The number of trainees was decreased after the first course to two per week to give each participant more practical experience.

Benefits of the In-Service Training

Though the hospital setting was quite different from the home setting, the experience was quite positive for both the participants and the trainers. Initially, there were serious cultural differences between the parteras and FSG personnel. A lack of understanding of the parteras' experience, beliefs and customs on the part of FSG staff accounted for the feeling of lack of acceptance by the parteras. FSG rectified the problem with internal sensitivity training for its own personnel. In the course of the partera training, the participants did become more comfortable in the hospital and helped to raise the quality of care afforded to the patients.

FSG commented on the awareness that the parteras raised among its staff regarding the treatment of women during the birth process. In rural areas, the partera, who delivers the baby, customarily assists a pregnant woman from the first sign of contractions. In San Gabriel, as in much urban medical practice, the pregnant woman is assigned to a nurse and the doctor is only present to deliver the baby. (Many women are afraid to be left alone during their labor, yet they are left alone due to limited hospital staff.) As a result of this experience, FSG initiated an internal dialogue to explore ways to "humanize" the process within the hospital.

LESSON LEARNED

Though necessary, training of MOH personnel in this setting should not be the major focus intervention as they are constantly transferred out of the province. SC/B believes that it is better to focus on community members, particularly the parteras.

Rural Aymara vs. City Hospital Practices

The participants also remarked upon several medical practices that were being used routinely which made women uncomfortable and which were not medically justified (shaving, enemas, routine episiotomy, etc.). These observations helped hospital staff re-evaluate common hospital practice and retrain staff when necessary.

Both FSG and SC/B mentioned the conflict between practices based on medical technology and practices in areas with few resources. Early in the training the parteras came away with raised expectations of all the equipment and accessories necessary for a healthy birth. These would be impossible to sustain in Inquisivi. Discussions between SC/B and FSG brought about a few changes in the training; the curriculum was modified slightly to accommodate a rural reality.

Hospital staff commented on the need for further staff training on how to better incorporate the partera into the health-services delivery team. An attempt was made to respect traditional practices that had no impact on a pregnant woman's health and to modify those that did harm. This was a positive step in bringing together the traditional and biomedical models of care that may ultimately result in greater access to services due to decreased sociocultural barriers.

Follow-up in the Field

Once the training course was completed, SC/B staff accompanied the parteras during their prenatal and postpartum care visits and occasionally during labor and delivery. This afforded an opportunity to observe exactly what they were doing and to provide feedback on how to improve. These supervisory visits were important in ensuring that what had been learned during training was actually applied correctly in the field. They also helped to identify the areas in which the training was weak and needed to be strengthened.

Refresher Courses

A series of refresher courses were held after the initial training in an attempt to ensure that the participants continued to practice what they had learned and that they developed new and improved techniques. The majority of the refresher courses were day-long workshops with:

a) parteras, promoters and SC/B staff, dealing with the topics of prenatal care, safe birth, hemorrhage, retained placenta; and

b) women's groups, treating the issues of sex, pregnancy, birth, newborn care and family planning.

SC/B staff also participated in a workshop on family planning. In addition, courses were held with pre-marriage couples and their godparents on sexual relations, pregnancy and birth, and courses on pregnancy and birth were held for medical students.

LESSON LEARNED

Parteras are accepted and called upon when they receive good training and follow-up in the field. This experience has broad implications for Bolivian health programs, particularly where infrastructure is weak or non-existent and communities are dispersed. The failure of some other partera-training programs in Bolivia may be attributed to lack of adequate follow-up and support.

FAMILY PLANNING SERVICE DELIVERY

Strategy of service delivery

SC/B began supporting family planning activities in the rural province of Inquisivi in January 1992 in response to interest expressed by women's groups during the autodiagnosis. Prior to this time, family planning services had been unavailable in the province. Since SC/B did not provide direct health services, SC/B contracted AYUFAM, a local NGO, to provide education and family planning services to the communities that requested them. These communities had never had access to these services, so the project started on a pilot basis with one-week trips per month by a doctor and nurse.

An evaluation of the pilot project was conducted in February 1993 by SC/B and the MOH. In the seven communities that had access to services, with a total of 1,380 women of reproductive age, 284 couples had chosen to use family planning methods. Of these, 234 couples opted for "modern methods," such as the IUD, oral contraceptives, vaginal foaming tablets and condoms. This represents a total of 32% of the community members who attended family planning sessions (27% with modern methods). No serious complications were reported, and clients expressed satisfaction with the services.

Due to institutional and political difficulties between the MOH and the local NGO, a renewed contract was not authorized by the MOH. Therefore, SC/B contracted another local NGO, which also served as a training center for the parteras of Inquisivi and as a referral hospital for women with complications of pregnancy or birth. This agreement included four components: family planning education in communities that request it; sexual education and responsible parenthood classes for junior high and high school students; training of MOH staff in the health posts and the district hospital in provision and follow-up of methods; and provision of family planning services to those who request them.

LESSON LEARNED

Family planning is a very strongly felt need by both women and men as demonstrated in the autodiagnosis and "planning together." Women who had conducted the autodiagnosis and who have identified family planning as one of their priorities appear to have higher acceptance rates of modern methods than those who have not conducted the autodiagnosis.

The experience of the WARMI Project, based on women's self-identified needs, particularly in family planning in rural areas, helped to open the door for other PVOs to explore their own possibilities for beginning family planning programs.

Future strategy

The demand for family planning services was, and continues to be, high. Many community groups interviewed during the project's final evaluation chose family planning as one of the top three interventions that they believed would help save the lives of women and would positively affect the lives of families, especially children.

Because of the limited access to services on a regular basis, SC/B began to study the possibility of expanding the distribution of some family planning methods on the community level through parteras and/or community groups. The government norms and logistical concerns dictate which methods are eligible for distribution. In any case, training and adequate supervision are necessary to implement an effective community-based distribution.

LESSON LEARNED

For greater longer-term impact, more emphasis should be placed on sex education and orientation of adolescents on responsible parenthood.

MATERNAL/NEONATAL HEALTH INFORMATION SYSTEM

Women's Health Card

Description of the process of development

The development of a health card for women of reproductive age began in June 1991. The card went through a long process of continuous revision by the women's groups and parteras, culminating in the printing of the final version in March 1993.

The primary user of the health card is the individual woman. The aim of the card is to provide her with an easy-to-use, manual means to record and be aware of her fertility. It assists her in identifying primary problems in the area of reproductive health and in knowing what help to look for in an emergency.

There were several proposals for the type of health card that could be developed. The final version tracked the reproductive life of a woman in a way in which she could understand the logical sequence from pregnancy to birth, the postpartum period and the newborn. To complement this, a calendar was designed to help the woman track her monthly periods and her use of family planning methods.

After initial discussions with women's groups regarding the content of the card, a preliminary version was reviewed by the SC/B field team and several revisions were made. The card was then pretested in six communities (two communities per zone) in two validation sessions. A workshop was held in May with SC/B health staff to design the guide for the pretest. The results of the pretest were analyzed by the field team and revisions were made. Additional communities were selected to test the new version. After several rounds of validation and revisions, the card was sent to the printer for a final proof. The proof was presented to the Ministry of Health at the central level and was approved.

The card is a triptych consisting of the following parts:

a) The front side contains personal information and OB/GYN history, along with a guide to referral for women with complications.

b) The reverse side contains a calendar which enables a woman to track her menstrual periods for 5 years. The calendar includes codes for recording family planning methods used.

c) The central page of the triptych portrays a sequential presentation of pregnancy, birth, the postpartum period and the newborn, showing a complete picture of the entire obstetric process of the mother and child. It portrays in visual form difficulties that can arise and actions that need to be taken. This section can be used for up to three pregnancies.

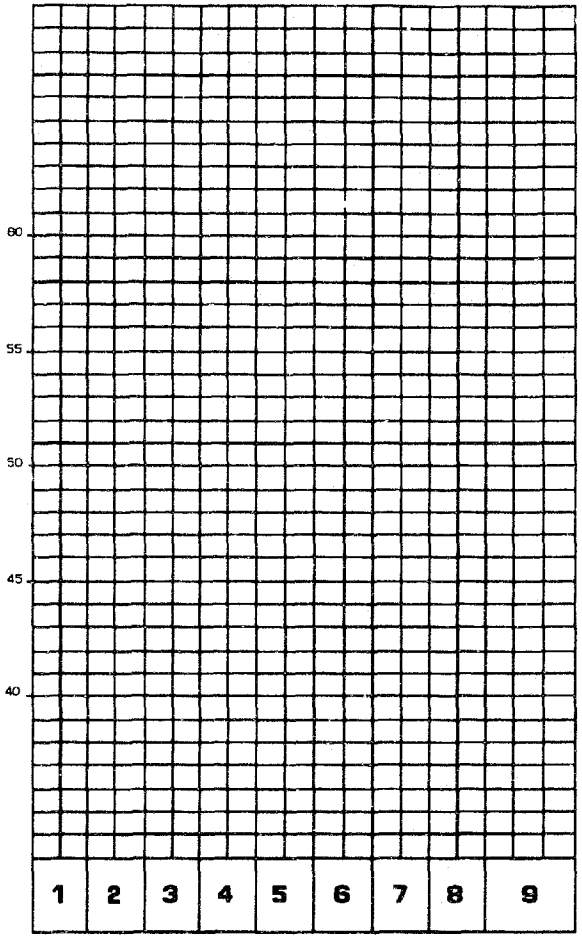
The card was designed taking into account the requests for simplicity and clarity made by the women and parteras during the process of validation of the materials. It contains simple drawings (in color), which were developed by the women with the help of an artist.

Use of the card

The MOH approved the women's health card and 3,000 copies were printed, of which 2,500 were enclosed in plastic folders and sent to the project area. Samples of the cards were distributed to various organizations. The MOH staff also requested and received a supply of the cards to distribute on their prenatal visits.

Training in the use of the card took place with women's groups in the communities where the project was being implemented. Training was given in small groups of up to 10 participants, with emphasis placed on the active participation of the women in understanding the different aspects of the card and in practicing its use.

S. I. S.



QUE HACER SI LE FALTA PESO

VISITAR LA CASA PARA:

- Enseñar y ver la Preparación de alimentos: "HIGIENE"
- Promocionar huerto familiar

QUE HACER SI HUBIERA MUCHO PESO

MANDAR AL MEDICO INMEDIATAMENTE

ALIMENTOS QUE DEBE CONSUMIR DURANTE EL EMBARAZO PARTO Y PUERPERIO

OBSERVACIONES: _____

_____

_____

NOMBRE: _____

FECHA DE NACIMIENTO: _____ EDAD: <19 ____ >35 ____

COMUNIDAD _____ Nº DE CASA ____

PROBLEMAS DE PARTOS ANTERIORES

ABORTO MES..... AÑO .....

NACIDOS MUERTOS MES ..... AÑO .....

NACIO VIVO MES..... AÑO .....

MURIO ANTES DE LOS 30 DIAS DE VIDA

ULTIMO PARTO	mes / año	PROBLEMAS

EDAD ACTUAL:

				VACUNA PARA TETANO				
				1	2	3	4	5
ENERO								
FEBRERO								
MARZO								
ABRIL								
MAYO								
JUNIO								
JULIO								
AGOSTO								
SEPTIEMBRE								
OCTUBRE								
NOVIEMBRE								
DICIEMBRE								

HUBO MENSTRUACION

NO HUBO MENSTRUACION

EMBARAZO

									SOLUCIONES

POSICION DE LA WAWA			PARTO	LO QUE DEBE HACER LA MAMA	PROBLEMAS DESPUES DEL PARTO		
FECHA	FECHA	FECHA	NACIO VIVO S NO FECHA MUERTO S NO FECHA	S NO	S NO	S NO	S NO

ANTECEDENTES GINECO OBSTETRICOS

Número de embarazos: _____
Número de abortos: _____
Número de nacidos vivos: _____
Número de nacidos muertos: _____
Vivos actuales: _____

PARTOS ANTERIORES

Número de Parto	Fecha del Parto

Sexo	Problema

Número de Parto	Fecha del Parto

Sexo	Problema

Número de Parto	Fecha del Parto

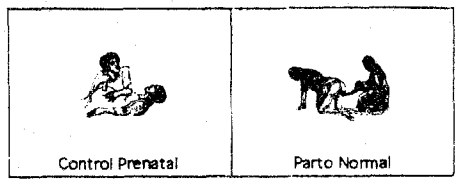
Sexo	Problema

VACUNA TT

	1	2	3	4	5
FECHA					

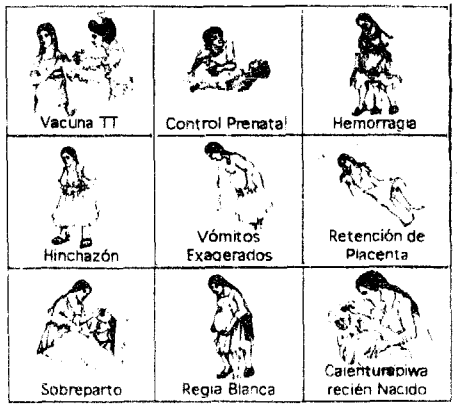
Debe ir a la partera en caso de:

PARTERA



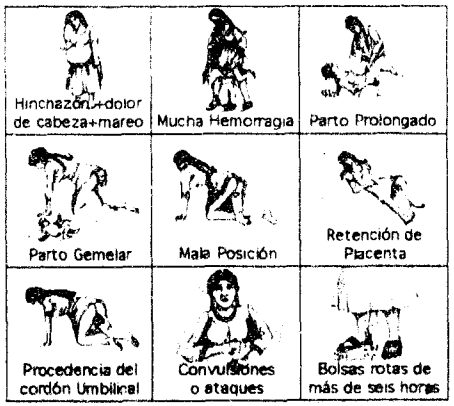
Debe ir al puesto sanitario en caso de:

PUESTO SANITARIO



Debe ir al hospital en caso de:

HOSPITAL



MINISTERIO DE PREVISION SOCIAL Y SALUD PUBLICA

Desarrollo Juvenil Comunitario

CARNET DE LA MUJER

Nombre: _____

Fecha de Nacimiento: _____

Dirección: _____

Número de casa: _____

Comunidad: _____

Fecha de Entrega: _____

El trabajo en el cual se basa este carnet, fue desarrollado por Desarrollo Juvenil Comunitario/Bolivia un programa de Save the Children dentro del Proyecto MotherCare bajo Contrato N° DPE-5966 Z-00 8083 00 con la Agencia Norteamericana para el Desarrollo Internacional
CON AUTORIZACION DEL MINISTERIO DE PREVISION SOCIAL Y SALUD PUBLICA
DIHAP con Cite No. 0231

CALENDARIO DE LA MUJER

Código de Métodos de Planificación Familiar

E=Embarazo	D=Diú	P=Pastilla	N=Natural/Ritmo	A=Abstinencia	C=Condón	L=Lactancia

	AÑO 19___		AÑO 19___		AÑO 19___		AÑO 19___		AÑO 19___	
	Menstruación	Método	Menstruación	Método	Menstruación	Método	Menstruación	Método	Menstruación	Método
ENERO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
FEBRERO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
MARZO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
ABRIL	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
MAYO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
JUNIO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
JULIO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
AGOSTO	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
SEPTIEMBRE	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
OCTUBRE	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
NOVIEMBRE	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	
DICIEMBRE	Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____		Sí No Día_____	

PARTO

Lugar, fecha y Quién atendió	/
Retención de placenta	Sí No Acción:
Mala posición Ladunquiwa	Sí No Acción:
Prolongado Jayawas t'alaya	Sí No Acción:
Hemorragia Wila apiri	Sí No Acción:

DESPUES DEL PARTO

Disminución del tamaño del útero	Normal ☐ Anormal ☐
Regla Blanca	Sí No Acción:
Fiebre Calenturan-piwa	Sí No Fecha: / / Acción:
Sobreparto Sobrepartu-piwa	Sí No Fecha: / / Acción:
Hemorragia Wila apiri	Sí No Fecha: Acción:

RECIEN NACIDO

Nacido	Vivo ☐ Muerto ☐
Sexo	Niño ☐ Niña ☐
Peso	_____ Gramos
Calostro	1ra. Hora ☐ 1er. Día ☐ No ☐
Problema	Fecha: / / Acción:

PARTO

Lugar, fecha y Quién atendió	/
Retención de placenta	Sí No Acción:
Mala posición Ladunquiwa	Sí No Acción:
Prolongado Jayawas t'alaya	Sí No Acción:
Hemorragia Wila apiri	Sí No Acción:

DESPUES DEL PARTO

Disminución del tamaño del útero	Normal ☐ Anormal ☐
Regla Blanca	Sí No Acción:
Fiebre Calenturan-piwa	Sí No Fecha: / / Acción:
Sobreparto Sobrepartu-piwa	Sí No Fecha: / / Acción:
Hemorragia Wila apiri	Sí No Fecha: Acción:

RECIEN NACIDO

Nacido	Vivo ☐ Muerto ☐
Sexo	Niño ☐ Niña ☐
Peso	_____ Gramos
Calostro	1ra. Hora ☐ 1er. Día ☐ No ☐
Problema	Fecha: / / Acción:

PARTO

Lugar, fecha y Quién atendió	/
Retención de placenta	Sí No Acción:
Mala posición Ladunquiwa	Sí No Acción:
Prolongado Jayawas t'alaya	Sí No Acción:
Hemorragia Wila apiri	Sí No Acción:

DESPUES DEL PARTO

Disminución del tamaño del útero	Normal ☐ Anormal ☐
Regla Blanca	Sí No Acción:
Fiebre Calenturan-piwa	Sí No Fecha: / / Acción:
Sobreparto Sobrepartu-piwa	Sí No Fecha: / / Acción:
Hemorragia Wila apiri	Sí No Fecha: Acción:

RECIEN NACIDO

Nacido	Vivo ☐ Muerto ☐
Sexo	Niño ☐ Niña ☐
Peso	_____ Gramos
Calostro	1ra. Hora ☐ 1er. Día ☐ No ☐
Problema	Fecha: / / Acción:

EMBARAZO Nº				
Número de control	1	2	3	4
Fecha parto				
Fecha control				
Edad de embarazo				
Presión arterial				
Peso				
Altura uterina Jacha usurikiwa Jisk's usurikiwa				
Presentación				
Movimiento fetal	Sí No	Sí No	Sí No	Sí No
Sal yodada	Sí No	Sí No	Sí No	Sí No
Sulf. ferroso	Sí No	Sí No	Sí No	Sí No
Hemorragia Wila apiri	Sí No Fecha: / / Acción:			
Edema Phusuntata	Sí No Fecha: / / Acción:			
Vómitos Wakaguiskiwa Kutiaskiwa	Sí No Fecha: / / Acción:			
Embarazo Gemelar	Sí No Fecha: / / Acción:			

EMBARAZO Nº				
Número de control	1	2	3	4
Fecha parto				
Fecha control				
Edad de embarazo				
Presión arterial				
Peso				
Altura uterina Jacha usurikiwa Jisk's usurikiwa				
Presentación				
Movimiento fetal	Sí No	Sí No	Sí No	Sí No
Sal yodada	Sí No	Sí No	Sí No	Sí No
Sulf. ferroso	Sí No	Sí No	Sí No	Sí No
Hemorragia Wila apiri	Sí No Fecha: / / Acción:			
Edema Phusuntata	Sí No Fecha: / / Acción:			
Vómitos Wakaguiskiwa Kutiaskiwa	Sí No Fecha: / / Acción:			
Embarazo Gemelar	Sí No Fecha: / / Acción:			

EMBARAZO Nº				
Número de control	1	2	3	4
Fecha parto				
Fecha control				
Edad de embarazo				
Presión arterial				
Peso				
Altura uterina Jacha usurikiwa Jisk's usurikiwa				
Presentación				
Movimiento fetal	Sí No	Sí No	Sí No	Sí No
Sal yodada	Sí No	Sí No	Sí No	Sí No
Sulf. ferroso	Sí No	Sí No	Sí No	Sí No
Hemorragia Wila apiri	Sí No Fecha: / / Acción:			
Edema Phusuntata	Sí No Fecha: / / Acción:			
Vómitos Wakaguiskiwa Kutiaskiwa	Sí No Fecha: / / Acción:			
Embarazo Gemelar	Sí No Fecha: / / Acción:			

Women's Health Roster

Description of process of development

The women's health roster was designed in November 1991 and has been in use since. It went through several revisions during that time. It was originally used by both field supervisors and parteras and contained several pages of indicators for each woman of reproductive age registered. The initial roster focused on information on the woman's age, her obstetric history, current pregnancy, prenatal care, postpartum care and problems, referral and training. The roster was reviewed during the mid-term evaluation and was judged to be much too complicated. The evaluation team encountered many errors in data entry. The following are some of the problems identified:

* Both field supervisors and parteras used the same roster, leading to occasional difficulties in its use by the parteras. A higher level of education was deemed necessary to understand its use.

* The number of indicators it contained was excessive; many of them were of little practical use.

* The definitions of maternal and perinatal mortality were not clear.

* The one roster served as a collective information system for a whole community which made its use overly complex.

The women's roster was simplified as a result of these findings. The improved version has been employed after validation by the field staff. It was determined that even in its simplified form it would not suit the needs of the parteras. At the time of the writing of this manual, SC/B had only just begun to work with the parteras on the development of an instrument that would suit them.

The women's roster is a manual instrument for gathering information on maternal health. It consists of one page per woman and contains the following:

* The top section of general information about the woman, including data on tetanus toxoid vaccinations and corresponding dates.

* The central part designed to tabulate information on up to six pregnancies, births, postpartum periods, and newborns.

  The different sections are obstetric history; pregnancy, including space for four family planning methods; birth; postpartum; newborn; referral; mortality.

* The base of the page, listing details of risk factors, people who attended the birth, referral, and the causes of fetal/neonatal and maternal mortality.

Use of the roster

The roster was used mainly to record basic information on the reproductive life of the women within the project area and to use that information to identify women in need of follow-up care. The roster was used by the field supervisors, who then tabulated the information.

The supervisors were trained in the use of the roster, including practice sessions on recording women's data. The roster was in use in all of the communities included in the Warmi Project and also in other communities in another zone as part of an expansion of project methodologies to that zone.

LESSONS LEARNED

Monitoring and evaluation instruments should be as simple and straight-forward as possible and should serve as a basis for periodic and ongoing program planning.

Zonal and management "quality circles" which delegated decision-making to SC/B staff closest to the issues resulted in more effective project strategies and implementation.

Quarterly evaluation and planning meetings in each zone were extremely helpful in the analysis of project progress and resolution of problems. They also enabled SC/B staff to see general tendencies and to determine how to better integrate all of SC/B's programs.

Consolidated Women's Health Roster

Every quarter, the information from the field supervisors' rosters is summarized on the Consolidated Quarterly Roster Sheet. This information is presented and analyzed by zone (Inquisivi, Licoma & Circuata) during the evaluation and planning meetings held in each zone at the end of every quarter. Initiated in July 1992, the form greatly improved the accessibility of information for analysis and led to the identification of problem areas in need of extra programmatic attention.

DEVELOPMENT OF EDUCATIONAL MATERIALS AND METHODOLOGY

Philosophy

One of the original aims of the Information, Education and Communication (IEC) component of the project was to enable women and staff involved in IEC work to "develop and/or use simple, appropriate IEC methods and materials to communicate maternal and neonatal health messages." In keeping with the basic philosophy of the project, the type of material that could be developed was not prescribed. When existing educational materials were collected, it was found that there was very little Bolivian material on pregnancy, birth, postpartum care or care of the newborn.

As a response to a need expressed by the women in the course of the project, material development commenced, and the approach adopted involved their full participation as co-designers of the material. SC/B considered this process to be essential to ensure that the materials were relevant to the women's needs and would thus be accepted and used.

Participatory Development of Educational Materials

Materials developed

Women's groups and parteras were involved in the development of the following materials to be used during group meetings and home visits:

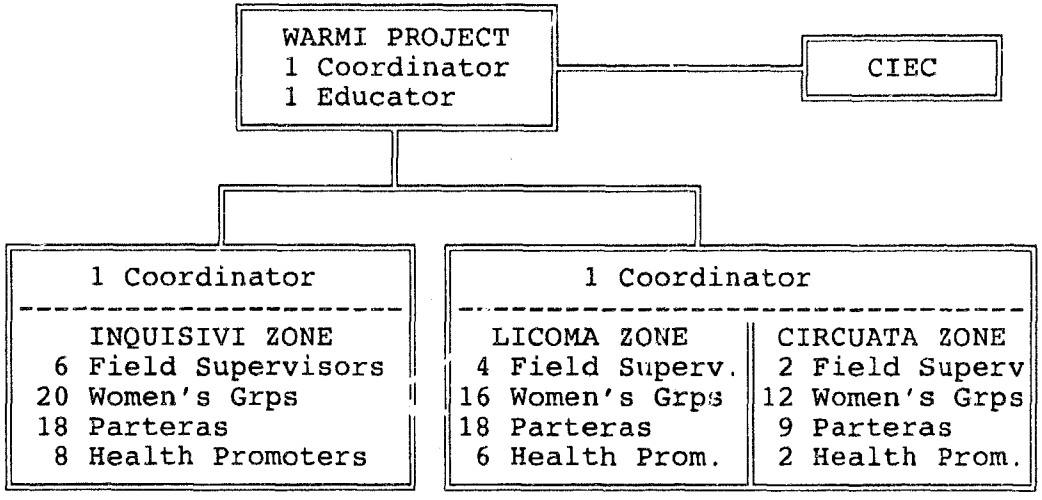
1. A woman's home-based health card
2. Picture cards of problems used in the autodiagnosis
3. A safe-birth kit to attend a normal home birth
4. A step-by-step guide to accompany the safe-birth kit
5. Four booklets for women on Pregnancy, Birth, the Postpartum period, and Care of the Newborn
6. A manual for parteras and field supervisors
7. Five short radio "soap operas" dealing with Pregnancy, Birth, Care of the Newborn, the Postpartum Period, and Health Services in the Inquisivi Province

While the basic participatory procedure followed for the development of all the material was similar, two approaches to the coordination of the materials production were adopted:

1. Items 1-4 above were developed by the communities in conjunction with SC/B staff, while
2. Items 5-7 were developed by the communities, along with SC/B staff under the coordination of a local NGO, the Center for Interdisciplinary Community Studies (CIEC) (cf. no. 6 below).

People involved in the materials development

The people who participated in the process included:



The advisors who participated directly in the activities were the SC/B Co-director, the SC/B Health Advisor, and a nurse/midwife based in Licoma. The CIEC team was composed of four people: the Director, an educational materials development specialist, and two field staff (one doctor and one education specialist). Comments and suggestions were also given by the medical advisor of SC/Westport, the MotherCare Cochabamba Coordinator, and the MotherCare/DC staff.

LESSON LEARNED

Developing educational materials with women's groups and parteras is a long process but is well worth the time invested. In addition to women learning directly through the process of developing the materials, many of the materials and messages changed significantly based on the women's observations. A true sense of ownership and pride was achieved, as well as a product which best met the women's needs.

Steps followed in the development of materials

The procedure followed was essentially the same for all of the materials. Therefore, the steps involved in only one product will be outlined here. The Parteras' Manual was developed under the coordination of CIEC, using the following procedure.

Step 1: Workshop to initiate materials development

A two-day workshop was held in Inquisivi, attended by the Field Supervisors of the Inquisivi, Licoma and Circuata Zones, along with the Co-director of SC/B and the CIEC team of four. The primary objective of the workshop was to devise a plan for the development of the materials that had been identified as necessary by the women's groups and parteras.

At the close of the workshop, the participants had prioritized the development of a manual for parteras and a series of four booklets for women.

Step 2: Development of a preliminary draft of the parteras' manual

CIEC developed a preliminary outline of the parteras' manual, then held sessions with the parteras from the three different zones to discuss the manual. All of its aspects were discussed, including format, presentation, typeface, font size, and visual as well as textual content. This process was carried out in a truly participatory manner, with the parteras making all the decisions on how the manual should be structured and presented. The appearance of the manual changed significantly during the process. Decisions were taken on a majority vote with the consensus of the rest of the groups.

Step 3: Validation of the Manual

The manual was validated in the three zones by a total of 45 parteras. The materials were presented objectively to the parteras for their critical evaluation. All of the recommendations for changes and the suggestions of the parteras were then included in the revised version. This was a repetitive process, with up to 10 to 15 revisions of the same page, but this proved to be very educational for the participants.

Examples of the materials

1. The **Women's Health Card** is reproduced at page 146 of this manual.

2. The **Picture Cards of Problems** used in the autodiagnosis are shown in section VII on pages 58-67.

3. The **safe-birth kit** consists of:

   alcohol
   new razor blade
   sterile gauze
   sterile string
   clean plastic sheet
   mercurochrome
   small tube of ophthalmic tetracycline
   bar of soap

LESSONS LEARNED

Respecting cultural values and traditional practices is extremely important in developing messages and methods to affect behavior change. Field staff should be flexible enough to look for compromises that lead to better health practices (e.g., instead of the message that a woman should not tie the umbilical cord with a sting to her toe in case of retained placenta, a traditional Aymara practice, ensure that the woman extends her leg completely before she ties the string so that if she moves her leg she won't risk damage to the uterus).

4. **Insert for the safe-birth kit**

This insert, describing how to attend a normal home birth, consists of a series of 16 pictures on a continuous sheet of paper which can be displayed on a wall for easy reference. Underneath each picture is a simple explanation of the procedure taking place.

A copy of the insert is included as Appendix 3 of this manual.

5. **Four booklets for women**, dealing with:

Pregnancy
Birth
Postpartum period
Care of the newborn

Each booklet consists of:

* A real story in pictorial form taken from verbal accounts of community women;

* A description of normal care during the period of pregnancy/birth, etc.;

* A description of potential problems during pregnancy/birth, etc., and appropriate actions to take.

6. **Parteras' manual**

The parteras' manual deals with the same topics as the women's booklets, while providing far more information. These topics are:

Pregnancy
Birth
Postpartum period
Care of the newborn

The manual clearly describes procedures to be adopted during each of the four periods, accompanied by color pictures. It also includes a methodological guide with games and activities to be carried out with groups of parteras as a review for each section of the manual.

7. **5 radio programs**

These radio programs are dramas, each lasting approximately 8 to 10 minutes, built around the following topics:

Care during pregnancy
Care during birth
Care of the newborn
Postpartum care
Health services in the Inquisivi Province

"What really impressed me was the women's keen interest in the development of the materials and in learning more."

- Bill Bower

Training in the use of the materials

Most of the materials were being printed at the time this manual was written. But training had been given in the use of the women's health card. The procedure followed was:

- The field staff was trained in how to train at the community level in the use of the health card. This training took place in all three zones and included several practice sessions for the field staff.

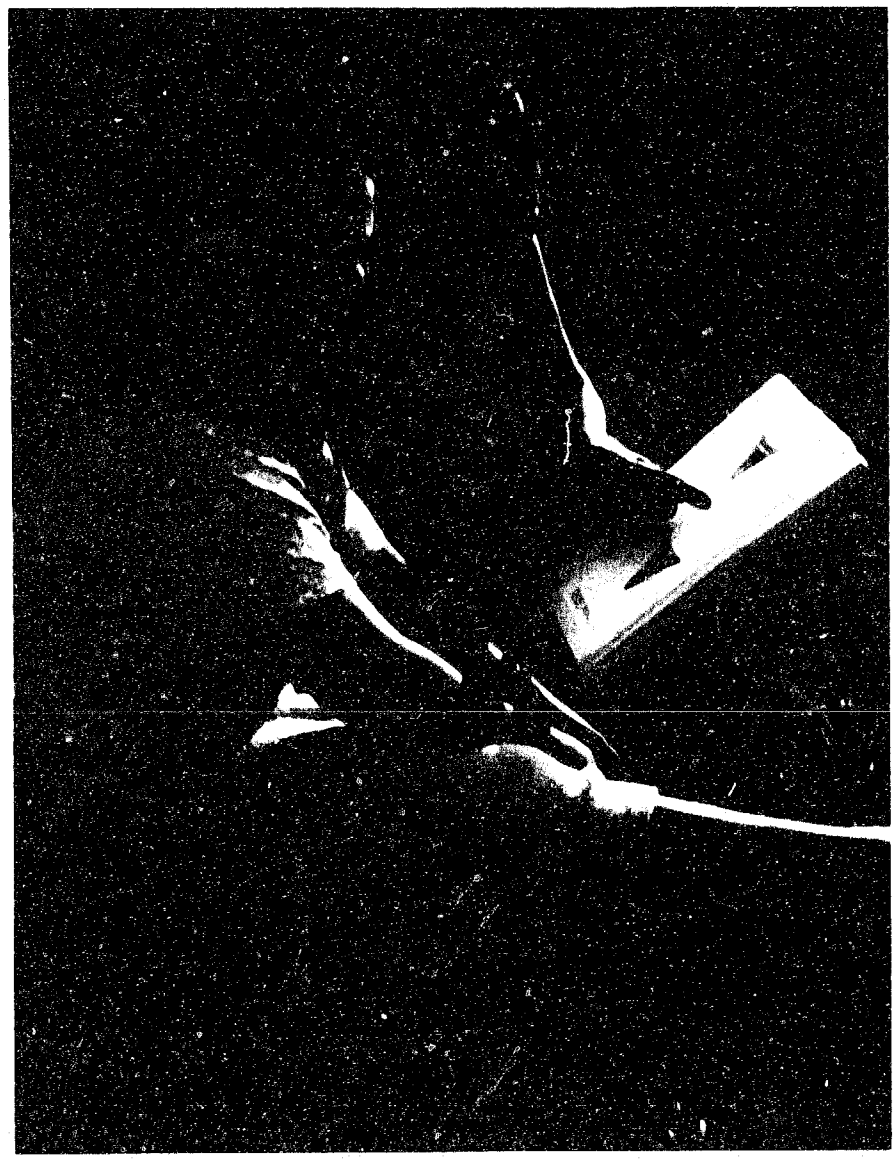
- The field staff trained community women.

- A preliminary evaluation was made that showed that women were using the health card. However, another more complete evaluation of use of the card was scheduled to be conducted a year after its introduction.

Training of staff and communities in the use of the other materials was scheduled to take place as soon as the materials were completed. All of the training sessions must be practical, giving the participants an opportunity to truly understand and to practice the use of the material.

Summary of experience from women's perspective

The development of educational materials was a very important and active learning process for the women, parteras and field supervisors, equal in importance to the publishing and use of the materials. In the course of their development, the materials changed dramatically, with the women asking for more content, more text, and more drawings so that they could learn more! Their involvement in collective decision-making on every aspect of the materials was highly educational for the participants and SC/B staff. A strong level of commitment to the project and to the materials was achieved during this process. The women and parteras truly felt that these were their products, which bodes well for their future use.



SC/B's strategy for use of the educational materials does not stop with their application within the women's groups, but also includes training women within the group to reach out to women in the community outside of the group. This is very important because women outside of the group may be at higher risk of complications and death than those who belong to the group.

Working with Local NGOs

The experience of working with CIEC, a Bolivian NGO, was a positive experience on both sides. While the approach normally taken by CIEC was different than that of the project, the team was responsive to the needs and requests of SC/B. SC/B and CIEC worked very closely together to adopt a participatory approach to the development of the materials, in which the women and parteras were genuinely co-designers of the educational aids. The CIEC team worked patiently with the women's groups, continuously adapting and revising the materials until the women were happy with the final product.

While this approach was time-consuming because it required a lot of consultation and close cooperation with CIEC, it was very worthwhile, not only in terms of the process and products, but also because it served as a very effective way of supporting and strengthening a local NGO.

The CIEC director described the work with SC/B as a "tremendous undertaking." The process of working closely with the women's groups and the parteras in the materials development was much more intensive and extensive than they had originally envisioned.

Through its involvement with the Warmi Project, CIEC has strengthened its institutional skills in the design of materials for a rural population. CIEC personnel acknowledged all that they had gained from the process and spoke very highly of their experience in Inquisivi. As a result, CIEC now emphasizes the participatory methodology in materials development with its own personnel.

SECTION 4

PROJECT RESULTS AND RECOMMENDATIONS

XII. RESULTS

Final Evaluation Methodology

The final evaluation methodology included both qualitative and quantitative methods, and was participatory in design, analysis, and writing. A wide range of persons played key roles in implementing the evaluation methodology and interpreting the results, including representatives from the MOH, a PVO, The Population Council, San Gabriel Foundation, SC/Westport, SC/Bolivia, and nine women representatives from communities participating in the Warmi Project. Emphasis on participation at all levels allowed the team to capture the explicit and implicit achievements of the program.

Using a variety of methods, the evaluation tried to consolidate the quantitative and qualitative results of the project.

Quantitative Methodology

A retrospective case-control study was conducted in November 1990 and was repeated in May 1993. The results from the 1993 study were compared with those of the original study in order to identify trends in the project indicators. In the original study, all identified cases of perinatal/neonatal mortality (75) and 151 controls were included. The repeated study included all identified cases of perinatal/neonatal mortality (31) and 136 controls. (When we adjusted the number of deaths that occurred in Warmi Project communities only, the baseline results were 66 perinatal and neonatal deaths versus 28 perinatal and neonatal death for the final study.)

The manual information system was reviewed, and the last project year's results were compared with project goals and objectives, as well as with the results of the study.

Qualitative Methodology

Individual interviews were held with:

pregnant women,
parteras,
MOH staff at health posts and hospital,
SC/B staff,
husbands,
women of reproductive age, and
representatives from PROCOSI, San Gabriel Hospital, CIEC and AYUFAM.

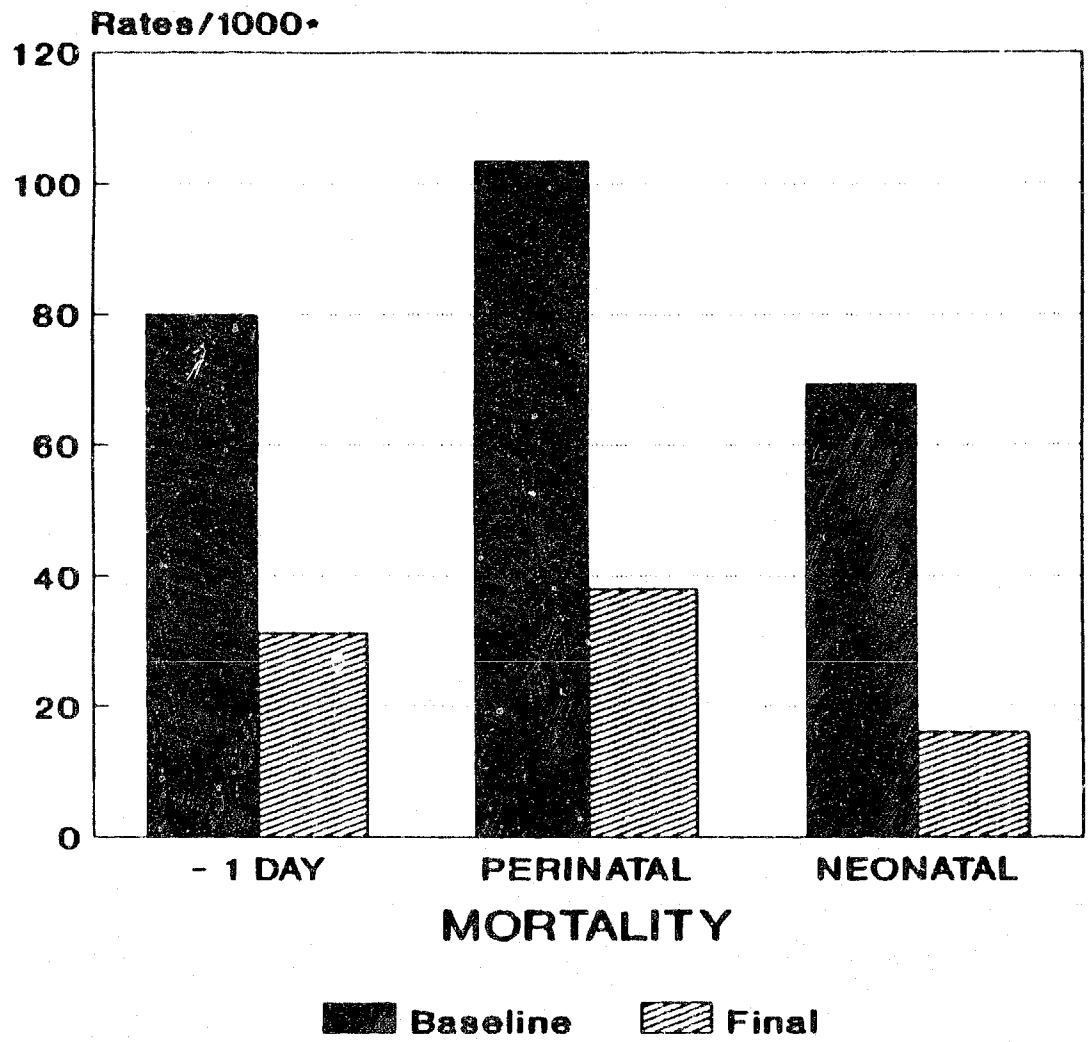
Group discussions were held with:

nine women's groups from the three project zones,
parteras at the zonal level, and
local authorities (General Secretaries, etc.) from each zone.

The evaluation team developed interview guides for all interviews. SC/B and MOH staff took a short written exam to determine their level of knowledge regarding several important indicators. The group interviews also utilized several participatory techniques, including a "pile sort" of project intervention cards in small groups, judgments of characters' actions (good, bad, don't know) in stories told by the interviewers, and drawings or written statements of the groups' vision of the future.

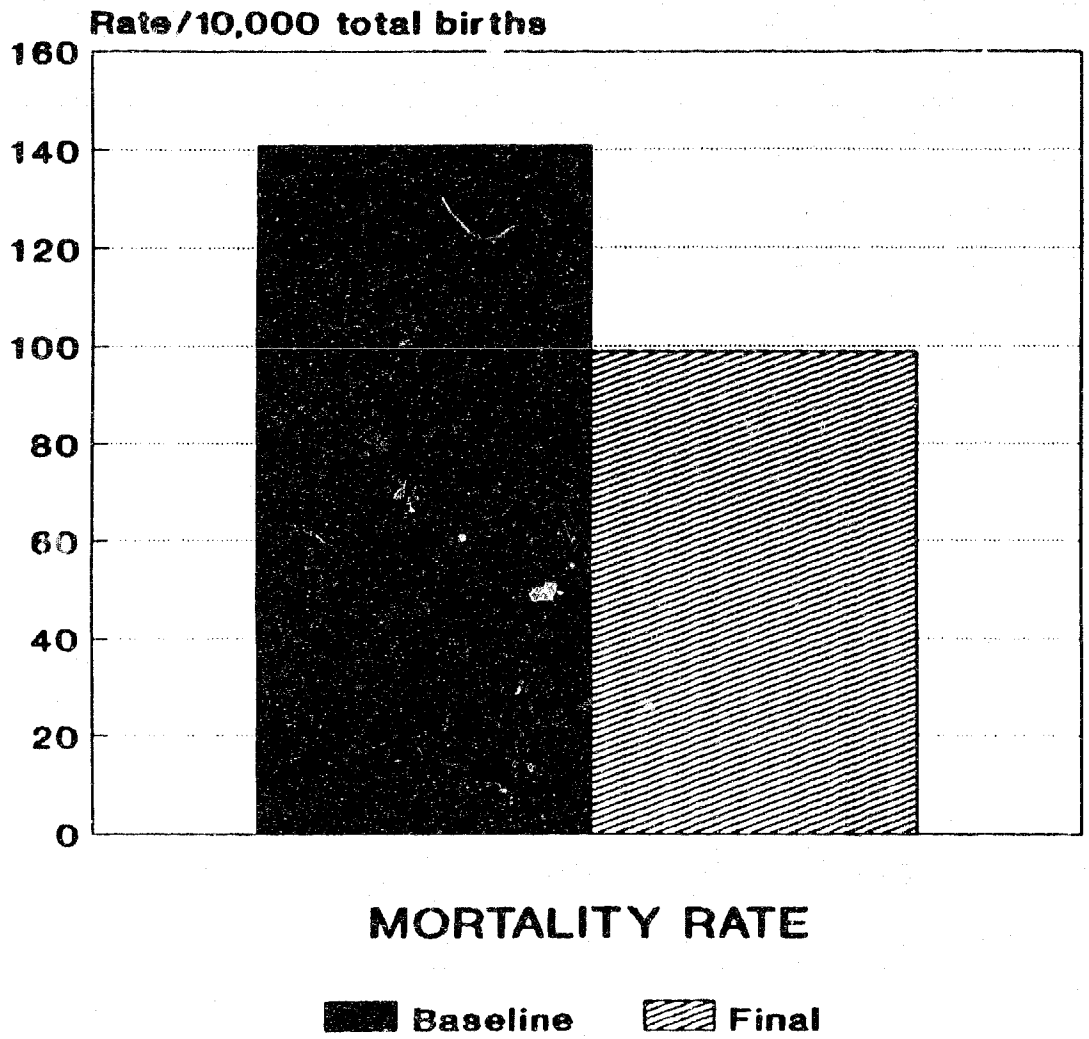
The results of the final evaluation point to very positive tendencies in service coverage and changes in practices. Increases were observed in tetanus toxoid coverage, ferrous sulfate distribution, immediate breastfeeding, consumption of iodized salt, prenatal care visits, postnatal care visits, the number of women attended by a trained birth attendant, and in many other areas. Some of the major indicators are presented on the following pages in bar graph form contrasting baseline and final results per the case-control studies.

PERINATAL & NEONATAL MORTALITY RATES
Baseline (1990) vs Final (1993)



* -1 Day and Perinatal/1000 total births
Neonatal/1000 live births

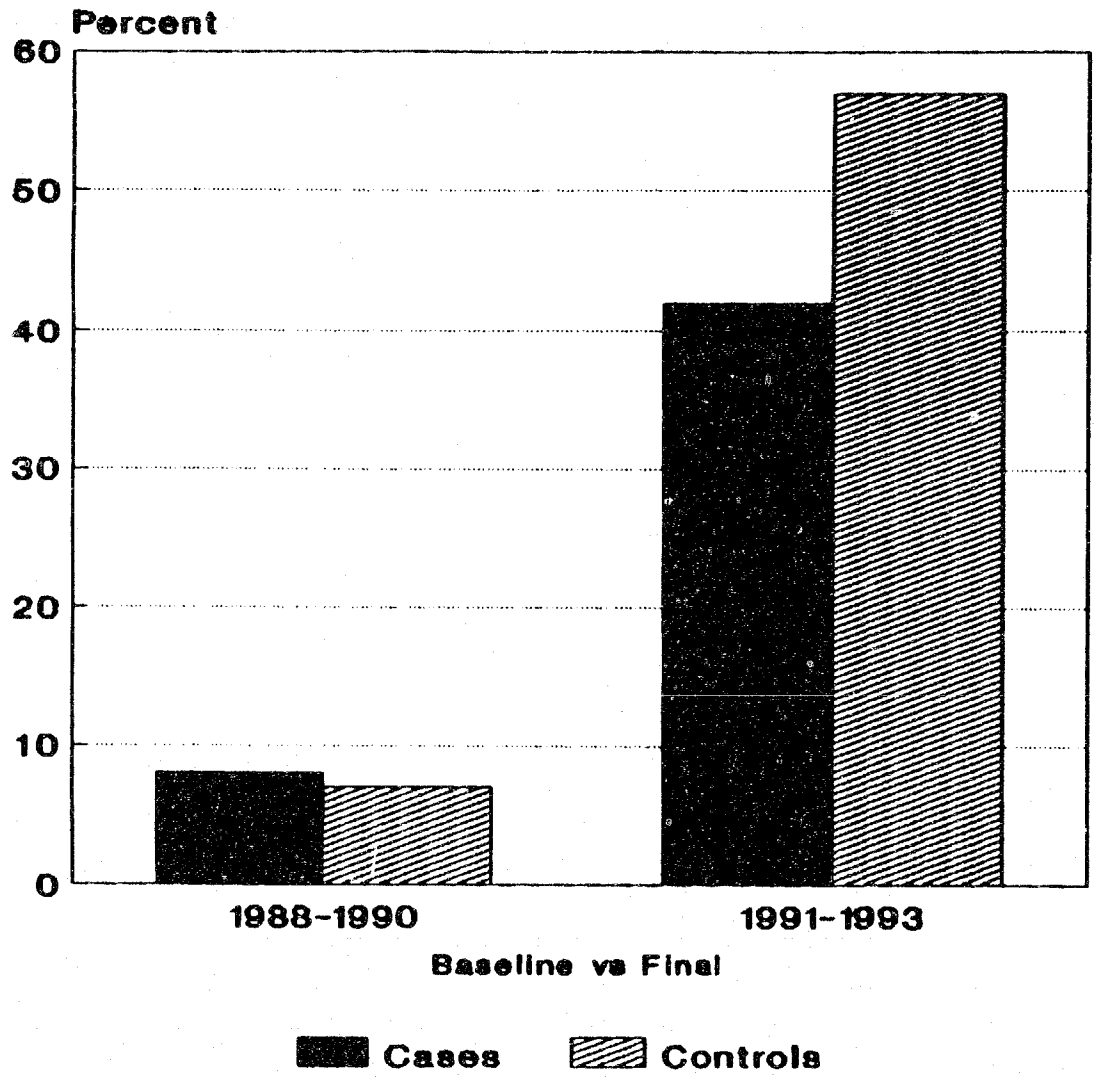
MATERNAL MORTALITY RATE
Baseline (1990) vs Final (1993)



(Note: population too small for true rates)

WARMI PROJECT: WOMEN'S GROUPS

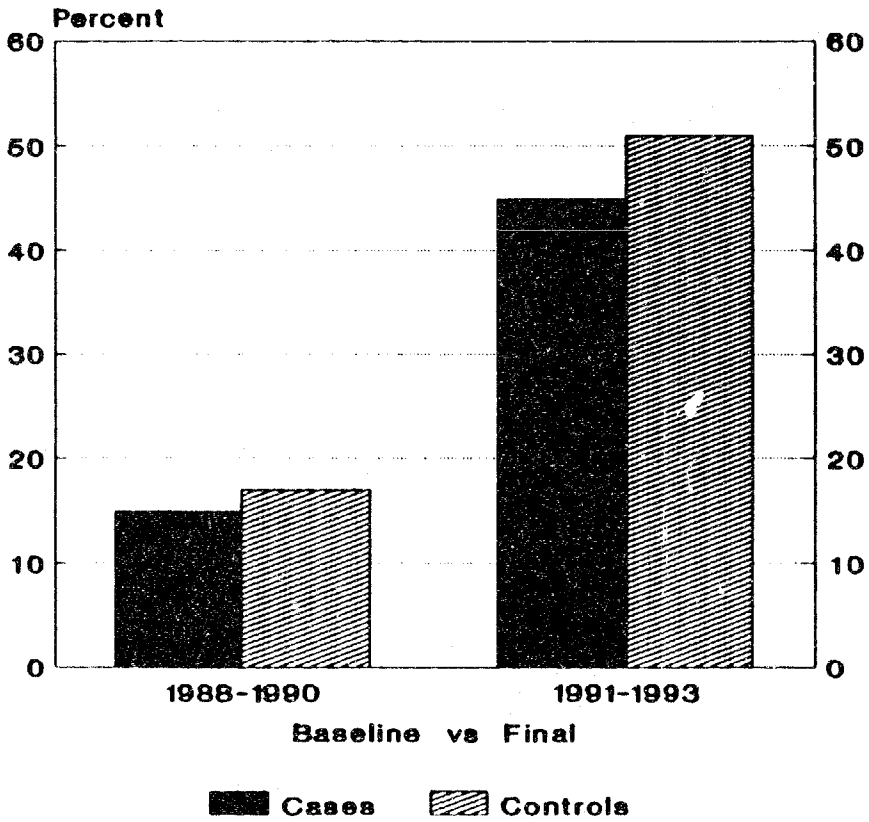
Mother Belonged to Women's Group



Cases (n=74, 31) Controls (n=148, 136)

PRENATAL CARE

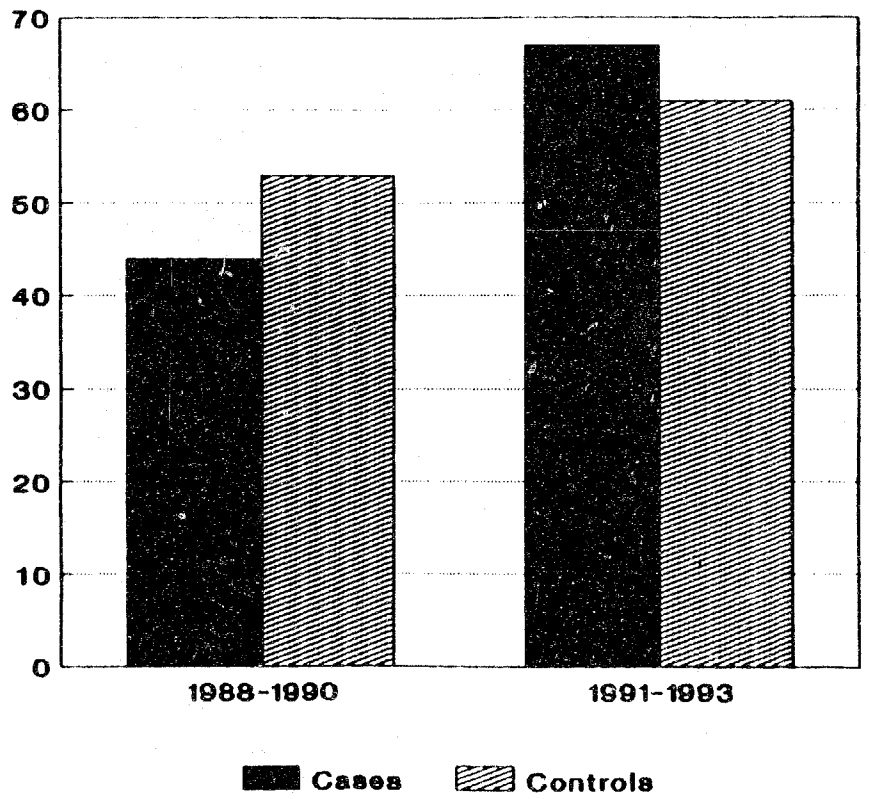
% Pregnant Women who Received FeSO4



Cases (n=75,31) Controls (n=151,132)

Tetanus Toxoid

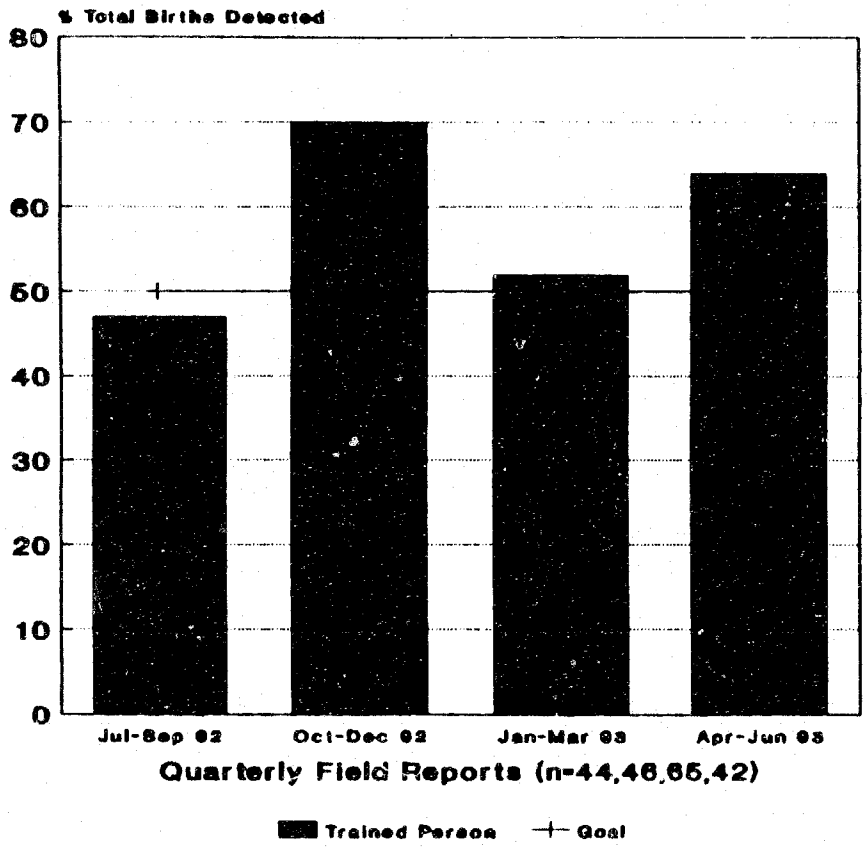
% Women with TT2 at time of delivery



Baseline (Cases n=75, Controls n=151)
Final (Cases n=30, Controls n=136)

BIRTH ATTENDANTS

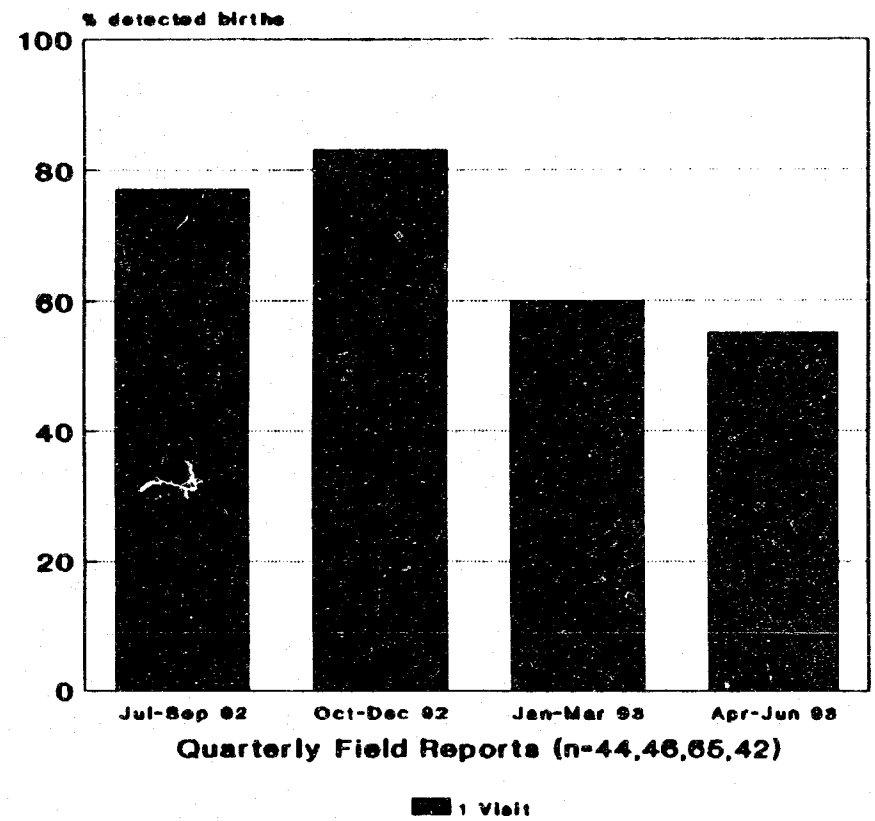
% of Births Attended by Trained Person



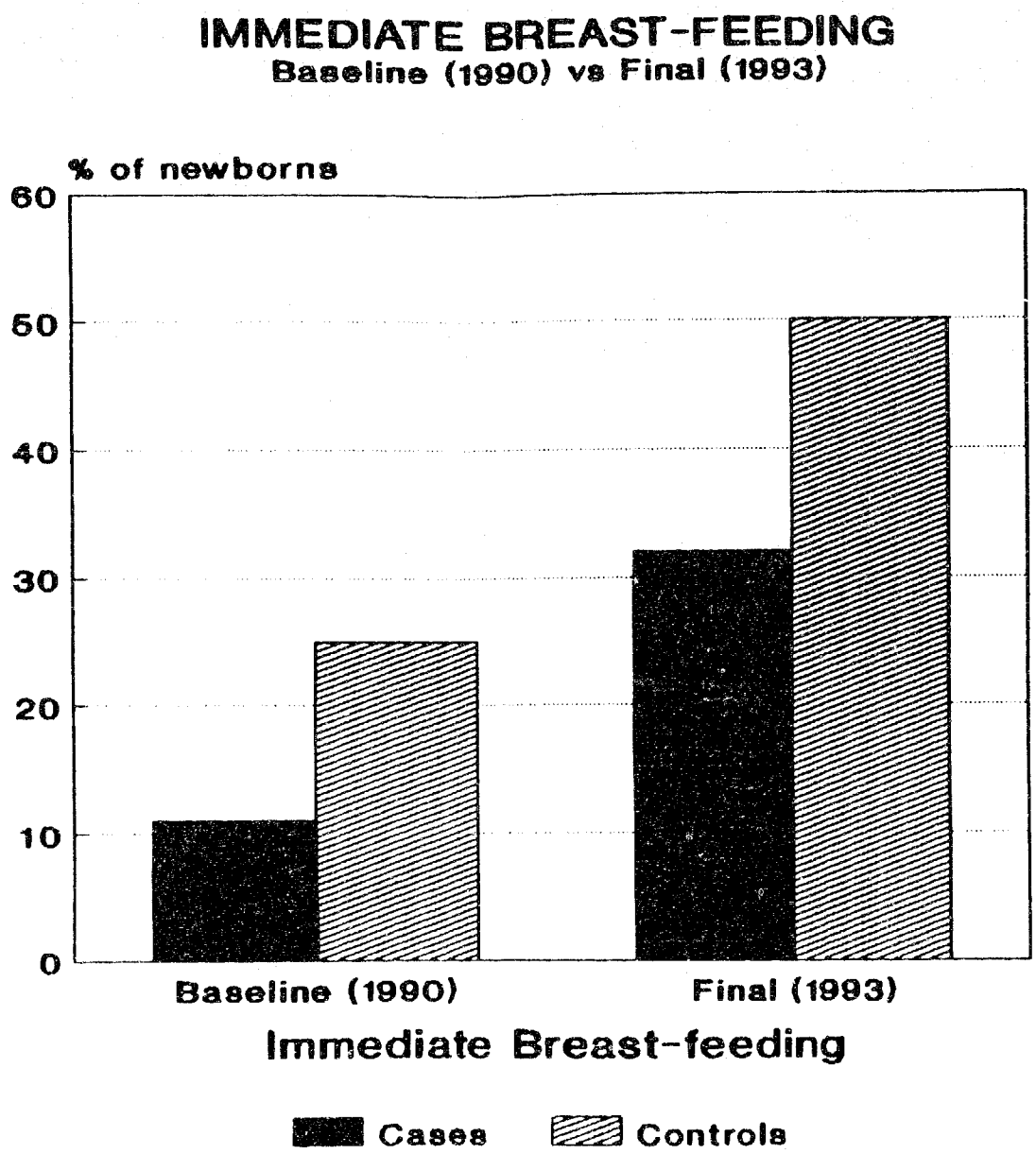
Manual Information System

POST-PARTUM CARE

% Women with Post-Partum Check-up



Manual Information System
Goal of 50% w/ 2 visits not achieved.



Case Control Studies

The tables below present the pre-post differences related to project indicators that were determined to be statistically significant. In some instances, only cases or only controls are presented because no significant change in the other was observed.

COMMUNITY ORGANIZATION/PARTICIPATION/RESOURCES Significant Findings From Case-Control Studies		
	Baseline (1990)	Final (1993)
Existence of women's groups in the community (cases)	36%	71%
Existence of women's groups in the community (controls)	30%	69%
Existence of trained midwives in the community (controls)	65%	83%
Mother belongs to the women's group (cases)	8%	42%
Mother belongs to the women's group (controls)	7%	57%

BIRTH Significant Findings From Case-Control Studies		
	Baseline (1990)	Final (1993)
Birth at home (controls)	96%	84%
Birth at mother's house (controls)	1%	8%
Promoter helped at the birth (controls)	0%	6%
Pushed when baby was at point of being born (controls)	55%	73%
"Manteo" (rocking) during labor (controls)	50%	30%
Abdominal massage during labor (controls)	53%	27%
Use of "pujante" teas (controls)	15%	4%
Birth position lying on back (controls)	33%	47%
Birth on old and dirty bed (controls)	33%	2%
Birth on bed with clean cover/blanket (controls)	31%	53%
Birth on clean plastic (controls)	3%	19%
No help used to expel placenta (controls)	47%	64%

PREGNANCY Significant Findings From Case-Control Studies		
	Baseline (1990)	Final (1993)
Urinary infection during pregnancy (cases)	7%	39%
Urinary infection during pregnancy (controls)	9%	27%
Prenatal care done by auxiliary (cases)	7%	23%
Prenatal care done by auxiliary (controls)	9%	25%
Prenatal care done by SC/B field supervisor (controls)	18%	35%
Believe that prenatal care is useful (controls)	60%	87%
Did not give opinion on prenatal care (cases)	63%	26%
Did not give opinion on prenatal care (controls)	38%	10%
Received ferrous sulfate during pregnancy (cases)	15%	45%
Received ferrous sulfate during pregnancy (cases)	17%	51%
Received teas during pregnancy (cases)	13%	35%
Received abdominal massage during pregnancy (controls)	44%	24%

CARE OF THE NEWBORN & POSTPARTUM

Significant Findings From Case-Control Studies

	Baseline (1990)	Final (1993)
Grandmother attended to baby (controls)	24%	9%
Used razor to cut cord (controls)	8%	22%
Washed cutting instrument with water (controls)	17%	33%
Used alcohol to disinfect cord ties (controls)	30%	44%
Washed cord ties with water (controls)	5%	15%
No disinfectant of cord ties (controls)	58%	39%
Resuscitated baby (controls)	3%	13%
Breast-fed immediately after birth (controls)	25%	50%
Cases looked for inadequate care (Sample is small and not stat. significant, but the fact that no one looked for inadequate care is interesting.)	7%	0%
Mother was washed after birth (controls)	47%	69%

Qualitative Results

The final evaluation indicated that many people's attitudes had changed toward the role of women and the importance of maternal and neonatal health to the family and the community. Knowledge and practices were greatly improved, even though the educational materials produced by the women and parteras had not yet been distributed. More needs to be done on immediate recognition of danger signs and on basic reproductive health concepts that were not always clear to those interviewed. This situation will likely improve over time with the implementation of the educational materials.

In prioritizing the Warmi Project interventions, women's groups and authorities most often chose "organization and strengthening of women's groups" as the intervention that they believed would most affect the lives of women and newborns. The second priority was family planning. Other priority interventions that were mentioned included literacy training, prenatal care, safe/clean birth, presence and training of parteras, emergency funds, and the autodiagnosis.

With very few exceptions, local authorities, women's groups, husbands, parteras, and SC/B staff expressed their satisfaction with the Warmi Project and with their participation in it.

Positive Tendencies

As the project ended, many communities were just beginning to implement their plans. In spite of this, impressive advances were already made including a significant decrease in perinatal and neonatal mortality, as well as positive changes in behavior such as immediate breast-feeding, safe/clean birth practices, increase in tetanus toxoid and ferrous sulfate coverage, increase in use of family planning methods, and others. At the beginning of the project, many were skeptical about the possibilities of improving maternal and neonatal health in such adverse conditions with virtually no formal health system support. We now know that improvements can be made at the community level through a participatory approach and through strengthening local resources such as parteras and women's groups. Even greater advances could be achieved if national norms delegated more responsibilities to the community level.

One of the major qualitative achievements of the Warmi Project was the change in how women are perceived in the community by others and, more importantly, in how women view themselves. One Inquisivi authority stated during the project's final evaluation:

> "The women have strengthened their organizations, now they have voice and vote."

The excitement of seeing women who formerly did not speak, or who spoke only with great difficulty in a group, and who now speak with ease and confidence, is difficult to quantify and impossible to describe. The opening of communication among women ended their isolation and began a search for solutions to common problems.

The Participatory Approach

The Warmi Project approach is not an easy one to implement. It requires a true commitment to, and respect for, rural community people and to facilitating (rather than guiding) the process of human development. Most field staff would agree that it is much easier to go to a community and give "talks" on how women should go to prenatal care, should go to the hospital for delivery, should....

True participation is not the result of a series of techniques. Rather, it requires a facilitator to be humble and to respect practices and beliefs that may be very different from his or her own personal beliefs. If this basic philosophy is not adopted from the start, all the steps of the Community Action Cycle will have little result.

LESSON LEARNED

The Warmi Project's participatory approach has been applied in other sectors as well and has demonstrated positive results. The Warmi Project has led directly to the initiation and implementation of literacy training and credit/savings programs for women--a very new concept for rural women in Bolivia. SC/B has decided to replicate the methodology in other zones.

XIII. CONCLUSIONS

A new methodology of working with rural women with little access to health services was developed, tested and implemented. Although three years is too short a period to make definitive statements, this new methodology appears to be a model which is effective and relatively low-cost, although human-resource intensive.

The Warmi Project has demonstrated that rural communities can identify and prioritize their problems and can take actions to improve maternal, perinatal, and neonatal health--even in the difficult conditions of Inquisivi Province. This process is relatively time-consuming but is sustainable because it empowers people. The skills of problem identification, prioritization, planning, and evaluation are not easy ones to learn, but once learned, they can be applied to many areas of life.

XIV. RECOMMENDATIONS

Scaling Up--Elements for Expansion

The Warmi Project covered approximately half of the Province of Inquisivi--a population of about 15,000. It is quite feasible for the project model to be expanded to an entire rural province or health district. This model would not be appropriate for urban districts but has thus far proven to be successful in rural areas. With this in mind, we recommend the following for "scaling up":

PVO responsibilities would include:

- With MOH if possible, carry out rapid participatory study of peri/neonatal and maternal mortality plus process diagnosis;
- Facilitate autodiagnosis, planning together, and participatory evaluation;
- Disseminate and validate educational materials and train community (women, husbands, parteras) in materials use;
- In collaboration with the MOH, train parteras in the field and coordinate training at the referral hospital;
- If possible, do prenatal and postpartum care check-ups in communities with parteras;
- Assist MOH with tetanus toxoid vaccination;
- Maintain an information system and share data with MOH;
- Strengthen sex education in schools;
- Help women's groups with preparation of safe-birth kits;
- Coordinate family planning activities with direct service provider (MOH or other local NGO).

MOH responsibilities would include:

- Provide direct preventive and curative services (prenatal, labor/delivery, and postpartum care; care of the newborn; complications; and family planning services when possible);
- Refer for TT vaccination;
- Maintain MOH information system;
- Coordinate with PVO in carrying out the above activities;
- If possible, equip and staff district hospital so that it can attend to basic complications, such as those that need emergency surgical intervention (caesarean section, etc.).

Additional Recommendations

1. The project has worked within the existing Ministry of Health norms and has demonstrated positive trends toward reducing maternal, perinatal, and neonatal mortality. However, much more could be done to further reduce the high mortality rates if norms were adapted to the rural context. If permitted by the MOH, parteras could play more of a role in stabilizing patients with life-threatening complications (manual extraction of placenta, use of oxytocin in cases of severe hemorrhage, use of antibiotics for puerperal sepsis, etc.) and could serve as community-based family planning service providers of at least some methods. The revival of "matrona" (nurse/midwife) training and certification is recommended so that this valuable member of the health team can help supervise and support community parteras at the district level.

2. SC/B's participatory, community-based approach (autodiagnosis, planning together, implementation and participatory evaluation) is a simple model that has been effective in increasing women's and their families' awareness of maternal and neonatal health problems and that provides a framework within which to generate realistic solutions at the community level. It is recommended that this approach be tested by other PVOs to determine whether it is applicable to similar rural areas. This approach can only be effective if donors who fund and implementors who execute these efforts are flexible in responding to community needs as identified by community members. The Warmi Project was fortunate to have had this financial support and programmatic flexibility from AID/Washington and Bolivia, John Snow, Inc., Save the Children and its local counterpart organizations.

3. Women's self-esteem and empowerment play an important role in whether women, and their families, choose to seek adequate health care: if women value their life and health, they are more likely to seek services to save their lives. The process of women's empowerment is an integrated one that involves access to information through education, access to economic resources, etc. Though reduction in maternal mortality requires adequate health services, these services, even when well staffed and equipped, are only effective if women use them. The "Pathway to Survival" model (Page 28) developed by Dr. Alfred Bartlett with the SC/B team does not begin at the hospital door. Rather, the hospital is nearly the last step in a very long and complicated personal, social, and cultural process. Institutions that choose to implement a program to reduce maternal and perinatal mortality should either address these issues directly or coordinate with other institutions and agencies to help empower women and their families.

4. In developing educational materials and training curricula, health and other field personnel should not approach communities with pre-set messages based on the biomedical model. New and improved practices should be negotiated based on mutual respect for one another's beliefs and practices. It is only when existing beliefs and practices are not only taken into account, but respected that true dialogue can begin and a realistic, "improved" practice be found.

5. SC/B zonal quarterly evaluation and planning meetings were determined to be extremely useful in constantly monitoring and reinforcing the program vision so that the field staff don't get stuck in the "micro view." The delegation of responsibilities and authority to zonal quality circles helped staff to internalize participatory planning and decision-making processes. These skills are critical not only to smooth functioning of the program, but equally important, to enabling the field staff to facilitate this process in the communities in which they work.

Sustainable Project Activities

The major strategy of the WARMI Project was to affect behavior change. Behavior change does not happen quickly, but when it does occur, the change is generally sustainable when the new behavior is internalized and incorporated into the social fabric of the community. Though it is difficult to predict how much time is necessary for internalization, we have already seen some practices change. We believe that a project of approximately five years' duration would lead to important sustainable changes in behavior.

- Women's groups can be self-sustaining if they have established a group vision and have acquired basic planning and management skills. The groups are more likely to continue if they include a variety of activities, such as literacy and savings, in addition to health.

- Trained parteras capable of attending normal births and detecting complications will likely continue to provide services if community members recognize the partera as an important resource. This is most likely to happen when the partera is well trained and the community realizes this. Lack of payment for services rendered is often a factor that leads to abandonment of work. Where parteras are recognized as a resource, they must be compensated for their services, whether the payment be in products, money, time, etc.

- The educational materials developed by the project are sustainable.

- Because the MOH provides the health services (prenatal care, TT vaccination, labor/delivery care, etc.), these services will not end when the project does. Family planning services could become sustainable if/when MOH staff are sufficiently trained and equipped to provide them. Community-based distribution through women's groups and parteras could be a viable strategy for the near future.

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APPENDIX 1

PROJECT QUESTIONNAIRE

QUESTIONNAIRE FOR THE "WARMI" - DJC PROJECT

1. Date of interview: ☐☐ day ☐☐ month ☐☐ year

2. Family record number: ☐☐☐☐

3. Area code: ☐☐ area ☐☐ zone ☐☐ community

4. Community: _____

5. House number: ☐☐☐☐

6. Family number: ☐

7. Number of families living in the house: ☐

8. Number of individuals in family group: ☐

9. Father's first and last names: _____
   Mother's first and last names: _____

10. Category:
    1 = case
    2 = control
    3 = maternal death
    Response: ☐

11. Case sub-category:
    1 = fetal death
    2 = stillborn
    3 = Death during the first day of life
    4 = Death during the first week of life (after 1st day)
    5 = Death during the first month of life(after 1st week)
    9 = Control or maternal death
    Response: ☐

12. Birth date:
    (register date of maternal death if case corresponds) ☐☐ day ☐☐ month ☐☐ year

COMMUNITY INFORMATION

13. Total population:
    1 = very small (<100)
    2 = small (100-199)
    3 = medium (200-499)
    4 = large (>500)
    Response: ☐

14. Organization: (0 = none 1 = yes)

Syndicate	
Mothers' Club	
Mother's organization	
Cooperatives	
Neighborhood committee	
Other	

15. Health resources: (0 = none 1 = yes)

Health promoter	
Trained empirical birth attendant	
Untrained empirical birth attendant	
Yatiri	
Health post	
Medical post	
Hospital	

16. Basic services: (o = none 1 = yes)

School

Water source
1 = river
2 = well
3 = watershed
4 = Public faucet
5 = Intradomiciliary faucet

FAMILY AND HOUSING INFORMATION

(NOTE: From here on the data refers to the moment the event occured.)

17. How many families live in the house:

18. How many persons lived in the house:

19. Number of habitable rooms:

20. In case of an emergency, how many hours does it take you to get to the nearest medical center?

Walking
Transportation

hrs.

21. Characteristics of the house: (0 = no 1 = yes)

False stucco ceiling
Dubbed out walls
Mixed type
Dirt floor

22. Where do you bring water from for personal use?
1 = river
2 = well
3 = watershed
4 = public water faucet
5 = private intradomiliciary water faucet

Response:

23. Sewage disposal (Drainage system)
1 = open field
2 = latrine

Response:

ECONOMIC CONDITIONS

24. Land holding (0 = no 1 = yes)
Legal ownership
Leasing
Sharing
Dependent (lodging)
Borrowed

25. What was being produced? (0 = no 1 = yes)
Cereals and grains
Vegetables
Tubers
Fruits
Pastures
Others

26. What was being sold? (0 = no 1 = yes)
Cereals and grains
Vegetables
Tubers
Fruits
Pastures
Others

27. What was being used at home? (0 = no 1 = yes)
Cereals and grains
Vegetables
Tubers
Fruits
Pastures
Others

28. Amount of land that was farmed?
1 = small (less than on "cato") Response: ☐
2 = medium (1-3 "catos")
3 = large (more than 3 "catos")

29. Maternal civil status: Response: ☐
1 = single
2 = formally united (not legally married)
3 = legally married
4 = separated, divorced or widow
(If the answer to question No. 29 is 1 or 4, then write down "9").

INFORMATION ON FATHER

30. Principal occupation or job:
1 = farmer Response: ☐
2 = cattle raiser
3 = merchant
4 = student
5 = other occupation

31. Organizations to which he belongs: (0 = no 1 = yes)
Syndicate ☐
DJC credit ☐
Cooperatives ☐
Neighborhood committed ☐
Other ☐

32. Level of formal education:
0 = none
1 = basic Response: ☐
2 = intermediate
3 = medium
4 = technical
5 = higher

33. Does he know how to read?
0 = no Response: ☐
1 = yes
2 = a little)

34. Does he know how to write?
0 = no Response: ☐
1 = yes
2 = only signs his name

35. What language does he speak? (0 = no 1 = yes)
Spanish
Aymara
Quechua

36. Were the following persons present at the birth (or event)? (0 = no 1 = yes)
Grandmother
Grandfather
Mother-in-law
Father-in-law

37. Was the father present during the child's birth (or event)? (0 = no 1 = yes)
Response:

INFORMATION ON MOTHER

38. Principal occupation or job: (0 = no 1 = yes)
Home chores
Helps doing the farming
Artisan
Merchant
Other occupation

39. Organizations to which she belongs:
Syndicate
Mothers' Club (CARITAS)
Mother's organization
Cooperatives
Neighborhood committee
DJC credit
Other

40. Level of formal education:
0 = none
1 = basic
2 = intermediate
3 = medium
4 = technical
5 = higher
Response:

41. Does she know how to read?
0 = no
1 = yes
2 = a little
Response:

42. Does she know how to write?
0 = no
1 = yes
2 = only signs her name)

Response: ☐

43. What languages does she speak? (0 = no 1 = yes)
Spanish ☐
Aymara ☐
Quechua ☐

OBSTETRIC HISTORY BEFORE THE SUBJECT PREGNANCY

44. Number of previous pregnancies: ☐☐

45. Number of previous abortions (losses): ☐☐

46. Number of stillborn children: ☐☐

47. Number of children born alive: ☐☐

NOTE: The total sum of 45, 46 & 47 should coincide with 44.

48. Number of premature babies: ☐
a) if there were premature babies, how many stillborn? ☐
b) if there were premature babies, how many died before the first month of life? ☐

49. Number of children born full term with low birth weight? ☐

50. Number of abnormal fetal presentations? ☐

a) if there were abnormal presentations, how any were stillborn? ☐
b) if there were abnormal presentations, how many died during the first day of life? ☐

51. Number of previous caesarean sections? ☐

52. Number of children who died during the first 7 days? ☐

53. Number of children who died after the first week but not past the first month? ☐

54. Number of children who died during the first year but after the first month? ☐

55. Number of children who died after the first year of life? [ ]

INFORMATION ON PREGNANCY AND BIRTH

(From here on we are talking about the actual event.)

56. Birth date (event): [ ][ ] day [ ][ ] month [ ][ ] year

57. Month and year of the previous birth or abortion? [ ][ ] month [ ][ ] year

58. Interval between 56. and 57.: [ ][ ] years months

PREGNANCY

59. Any problems during pregnancy?
(0 = no 1 = yes 9 = does not remember)

hemorrhage	[ ]
facial and hand edema (3rd trimester)	[ ]
strong and permanent headache (3rd trimester)	[ ]
urinary tract infection	[ ]
seizures	[ ]
fever	[ ]
Hyperemesis	[ ]

If any chronic condition was present during pregnancy, what was it? (0 = none)_____ [ ]

60. Prenatal care: (0 = none 1 = yes) [ ]
Number of controls by each provider:

Physician/Medical post	[ ]
Health officer/Health post	[ ]
Field supervisor	[ ]
Trained TBA	[ ]
Untrained TBA	[ ]
Promoter	[ ]
Other	[ ]

61. What is your opinion about prenatal care?

_____

_____

(1=useful 2=not useful 3=no opinion) [ ]

62. Number of tetanus shots received:

Before this pregnancy [ ]
During this pregnancy [ ]

63. Any treatments or remedies taken during this pregnancy?
(0 = none or no 1 = yes 8 = does not recall)
Vitamins [ ]
Ferrous sulphate [ ]
Analgesics (sedatives) [ ]
Antihypertensives [ ]
Infusions [ ]

64. Practices (0 = no 1 = yes 8 = does not recall)
Mantling or handling with a mantle [ ]
Massage [ ]
External fetal rotation [ ]

65. Feeding during most of the pregnancy:
1=less than normal Response: [ ]
2=normal
3=more than normal

66. Maternal work during pregnancy: (0 = none 1 = yes)
Farming [ ]
Harvest/sowing [ ]
Carrying heavy loads over long distances [ ]
Commercial [ ]
Pastoral [ ]

LABOR AND DELIVERY

67. Did the baby move during the days prior to labor?
0 = no Response: [ ]
1 = yes)

68. How many months did the pregnancy last? [ ] [ ]
months weeks

69. Was this a multiple pregnancy?
0 = no Response: [ ]
1 = yes

70. Where was the baby born?
1 = at home
2 = at the mother's mother's home
3 = at a medical post
4 = at another place

Response: ☐

71. How did the mother know labor had begun?
(0 = no 1 = yes)

show	☐
pulse	☐
contractions (pain)	☐

72. How many hours did labor (pains) last? ☐

73. How long before labor did the fetal membranes rupture?

1 = during delivery
2 = less than 6 hours before delivery
3 = 6-12 hours before delivery
4 = more than 12 but less than 24 hours before delivery
5 = more than 24 hours before delivery

☐

74. Who assisted labor? (0 = no 1 = yes)

TBA	☐
Mother-in-law	☐
Mother	☐
Husband	☐
Promoter	☐
Physician	☐
Nurse/Nurse aid	☐
Nobody	☐

75. Who assisted during delivery? (0 = no 1 = yes)

TBA	☐
Mother-in-law	☐
Mother	☐
Husband	☐
Promoter	☐
Physician	☐
Nurse/Nurse aid	☐
Someone else	☐
Nobody	☐

76. Who helped assist during delivery of the baby:
(0 = no 1 = yes)

TBA
Mother-in-law
Mother
Husband
Promoter
Physician
Nurse/Nurse aid
Someone else
Nobody

77. Delivery route:
1 = vaginal
2 = caesarean section
3 = was not born

78. How long before delivery did you begin to push down?

1 = From the very first moment the contraction started (pushing down all through labor).
2 = Only when the baby was about to come out (be born)
3 = A few hours before birth
4 = Started to push but stopped later.
5 = She did not push.

79. Any problems during labor and delivery:
(0 = none 1 = yes)

Abnormal breech (buttocks) presentation
Abnormal breech (podalic) presentation
Prolapse of extremity(ies) (hand)
Meconium staining of amniotic fluid: the liquid was dark brown or green
Transverse lie
Umbilical cord wrapped around baby's neck
Umbilical cord prolapse
Hemorrhage
Fever
Seizures
Other problems

80. Any treatments performed during labor or delivery?
(0 = none received 1 = yes)

Handling the abdomen with a mantle
Massage
Putting the baby back in normal position (external rotation)
Girdle
Pelvic examination (vaginal)
Oregano, chua-chua, kinsa k'uchu infusions
Pill 1 for pushing (white and gray capsule)
Pill 2 for pushing (yellowish white tablet)
Another "pushing pill"_____

Injection for hastening labor:
"Peturitina"
Methergine
Ignores the name
Large tablet
Other treatment

81. In what maternal position was labor and delivery conducted?
1 = lying down on her back
2 = kneeling down
3 = on hands and knees
4 = squatting down

Response:

82. What was the baby born on to?

1 = sheep skin
2 = animal carcass
3 = old and dirty bed
4 = bed or leather plus clean cloth
5 = plastic

Response:

DELIVERY OF THE PLACENTA

83. How long before the placenta was ejected?
1 = fast
2 = less than one hour
3 = more than one hour

Response:

84. What assistance was performed to help eject the placenta?

1 = blowing, coughing or provoking nausea
2 = other
3 = none

85. Was there bleeding immediately after delivery of the placenta?
0 = no 1 = yes

86. How long did the blood loss last? (hours)

87. Approximate amount of blood lost?
0 = nothing
1 = a little
2 = a lot

NEONATAL CARE PROVIDED

88. Birth weight (grams):

89. Was the baby immediately cared for or until after the placenta came out?

1 = care provided immediately after birth
2 = care provided after the placenta came out
3 = don't remember

90. Baby's condition at birth:

Crying:
0 = none
1 = weak
2 = strongly
3 = cannot remember

Movements:
0 = none
1 = very little
2 = fairly active
3 = cannot remember

Skin color:
0 = pale
1 = blue (cyanotic)
2 = pink
3 = cannot remember)

Breathing:
0 = did not breathe
1 = very little
2 = with whining (moaning)
3 = normal
4 = cannot remember

91. Baby's condition a few moments later (about five minutes after birth).

Crying: ☐
Movements: ☐
Skin color: ☐
Breathing: ☐

92. Were there other abnormalities noticed in the newborn? (0 = none 1 = yes)

Bad odor (stench) ☐
Bruises: any purple lesions or excoriations derived from trauma ☐
Maceration: the baby with characteristics similar to those found in a "wet baby" ☐
Deformities: ☐
Which?_____

93. Suction reflex immediately after birth:

0 = baby did not nurse
1 = nursed weakly
2 = nursed vigorously
3 = baby was not offered breast

☐

94. Who assisted the baby: (0 = no 1 = yes)

TBA ☐
Grandmother ☐
Father ☐
Promoter ☐
Physician ☐
Nurse ☐
Someone else_____ ☐
Mother ☐
Nobody ☐

95. How long did it take to have the umbilical cord cut?

1 = immediately
2 = after the placenta was delivered
3 = after destroying the placenta
4 = don't remember

☐

96. What was used to cut the umbilical cord:

1 = a broken piece of new ceramic ("juk'illa)
2 = broken glass
3 = knife or switchblade
4 = scissors

☐

97. How was this material disinfected?
(0 = no 1 = yes 8 = cannot recall)

with alcohol or other antiseptic	
washed with water	
boiled	
with a piece of cloth	
did not disinfect at all	
cannot remember	

98. What was used to tie (ligate) the cord?
1 = sack cloth thread
2 = mantle thread
3 = nothing
4 = other material

99. How was this material disinfected?

1 = with alcohol or another antiseptic
2 = washed with water
3 = boiled
4 = did not disinfect

100. What was used to cure?

1 = mercury
2 = sulfa
3 = alcohol
4 = other substance

101. Immediate care given to the newborn? (0 = no 1 = yes)

Bathed	
Clothed	
Stimulated	
Placed beside mother	
Resuscitated	
Pharyngeal aspiration	
Other_____	

POST-PARTUM AND PUERPERIUM MATERNAL CARE

102. What was done to control post-partum bleeding?
(0 = no 1 = yes)

There was no hemorrhage	
Transabdominal uterine massage	
Methergine administration	
Nipple massage	
Other_____	

103. What was done to correct placental retention?
(0 = no 1 = yes)

There was no placental retention
Pulling the umbilical cord
Blowing/coughing/provoking nausea
Manual extraction
Other _____

104. Immediate care to the mother after delivery:
(0 = none 1 = yes)

Washed
Changed clothes
Given liquid
Clothed
Girdled (sheep hair belt)

105. Lochia: (0 = none 1 = yes)
How many days did it last?
Bad odor?

106. Fever after delivery: (0 =none 1 = yes)

If yes, how many days after birth did it begin?

107. How long did the fever last?

108. How was the fever treated? (0 = no 1 = yes)

antibiotics
local remedies
putting the baby to the breast
no treatment

109. How many days after birth did the mother get out of bed?

110. How many days after birth did the mother wash herself (or was washed)?

NEONATAL CARE DURING THE FIRST MONTH

111. Was the baby given colostrum?
0 = no
1 = yes

112. How many days after birth did breast-feeding begin?

1 = immediately after birth
2 = on the first day
3 = on the second day
4 = on the third day
5 = after the third day
6 = never breast-fed

113. Did the mother stop breast-feeding her baby?
0 = no 1 = yes

114. What was used to cure the umbilical cord?
(0 = no 1 = yes)

mercurochrome
burned piece of cloth
"mantizan"
other substance
nothing

115. How many days after birth was the baby cleaned?

116. How often was the baby bathed or washed?

117. Who was the baby taken to for health check-ups during the first month of life? (0 = no 1 = yes)

TBA
Promoter
Traditional healer
Physician
Nurse

118. Did the newborn receive a BCG shot during the first month?

0 = no
1 = yes

119. Did the baby suffer any illness during the first month of life?

0 = no
1 = yes

120. What illness was this?_____

_____

121. Who cared for the child while during this illness?
(0 = no 1 = yes)

Physician	
Nurse	
Promoter	
TBA	
Traditional healer	
Someone else	
Nobody	

CHILD'S VERBAL AUTOPSY

122. At what age (in days) did the child die? [ ]

123. Symptoms of the terminal illness or disease:

SYMPTOMS	1 = present 2 = absent	Number of days before death
GENERAL stopped nursing		
irritable		
too much crying		
weak crying		
difficulty nursing		
nursed weakly		
depressed		
fever		
hypothermia (cold)		
whining/moaning		
apnea (stopped breathing)		
NEURO MUSCULAR could not swallow		
muscular spasms		
rigidity		
convulsions (attacks)		
abnormal movements		

SYMPTOMS...cont.	1 = present 2 = absent	Number of days before death
RESPIRATORY cough		
nasal secretions		
nasal flaring		
noisy breathing		
rapid breathing		
breathing fatigue		
chest retractions (caving-in of chest cavity)		
DERMATOLOGICAL		
cyanosis (purple, blue)		
palid		
jaundiced (yellow)		
erythrodermia (red skin)		
pus on umbilical cord		
bad odor of umbilical cord		
blisters		
blood blisters		
rash		
BLOOD hemorrhage		
where?_____		
DIGESTIVE abdominal distention		
no bowel movements		

Describe in narrative form a summary of the fatal disease.

_____
_____
_____
_____
_____

Interviewer's opinion:

_____
_____

124. Diagnosis of probable causes of death:

1 = probable
2 = possible
3 = not applicable

Principal _____

Contributing Factors
1. _____
2. _____
3. _____

PROCESS DIAGNOSIS

125. Nature of the event/disease that led to death:

_____

126. Who participated actively in response to this event?
(0 = no 1 = yes)

TBA ☐
Mother-in-law ☐
Mother ☐
Husband ☐
Promoter ☐
Physician ☐
Nurse ☐
"Yatiri" ☐
Someone else _____ ☐
Nobody ☐

127. At what moment was the existence of a problem noticed?

1 = detected early
2 = detected too late
3 = passed unnoticed
4 = detected but considered unimportant
5 = other

☐

128. Once the problem was detected, what was done about it?

1 = looked for adequate care
2 = looked for inadequate care
3 = did not look for help (tried to treat it at home)
4 = other
9 = question does not apply

129. If inadequate resources were sought, why did you decide on this? (0 = no 1 = yes 9 = not applicable)

Because of the cost of adequate care
Because of transportation costs
Because we trusted in the inadequate care
Lack of trust in adequate care
Because of advice given by someone
Because of the distance from adequate care
The person to contact was not in the community
Other

130. Who participated in deciding on inadequate assistance? (0 = no 1 = yes)

TBA
Mother-in-law
Mother
Husband
Promoter
Physician
Nurse
"Yatiri"
Someone else _____
Nobody

131. What treatment was administered by the inadequate resource?

a) _____
b) _____
c) _____

132. After using inadequate assistance, was adequate assistance sought?

0 = no
1 = yes, an adequate person was called
2 = the case was taken to health services
3 = the individual had already died
9 = not applicable

133. If an adequate person was called, what did this person do? _____

_____

1 = adequate response
2 = inadequate response
9 = not applicable

134. When it was decided to look for adequate resources (persons), did you reach them?
1 = yes
2 = no, because there was no transport
3 = no; there was transportation but the owner did not think the matter was important.
4 = the individual died before the person came
5 = no/other reason _____
9 = not applicable

135. When you reached the health services, what type of care was given?

1 = adequate care
2 = inadequate care
9 = not applicable

MOTHER'S VERBAL AUTOPSY

Maternal Mortality: (all deaths caused by pregnancy, birth or post-partum)

136. The mother died during:
1 = pregnancy
2 = birth: labor
3 = giving birth
4 = exit of placenta
5 = post-partum: immediately
6 = after a short time
7 = later

Response:

137. Pregnancy:
1 = first trimester
2 = second trimester
3 = third trimester
4 = abortion: induced
5 = spontaneous

Response:

138. General signs and symptoms
(0 = no 1 = yes 8 = don't remember)

Pregnancy:

Hemorrhage: first trimester
second trimester
third trimester

Fever

Urinary infection:
much urine
little urine
strong odor
dark brown urine
pain urinating
putrid vaginal secretion
pelvic pain
shoulder pain
headache
vertigo, dizziness
palid (anaemia)
facial & foot edema(swelling)
("ve chispitas")
seizures/convulsions
prolonged sleep

Ectopic pregnancy:
(0=no 1=yes 8=don't remember 9=not applicable)

history of amenorrea
intense pain in area of ovaries

Labor and birth
(0=no 1=yes 8=don't remember 9=not applicable)

presentation: transverse
podalic
breech
cord wrapped around baby's head
prolapsed cord
hemorrhage
premature rupture of membranes

139. Length of labor:
(0 = no 1 = yes 8 = don't remember)

multipara (more than 8 hours)
primipara (more than 16 hours)

140. Post-partum severe anaemia(shock)

141. Multiple birth (twins)

142. Placenta:
(0 = no 1 = yes 8 = don't remember)

Hemorrhage
Placental retention of more than 45'

143. Post-partum:
(0 = no 1 = yes 8 = don't remember)

fragments of placenta in uterus
fever
general malaise
putrid secretion
puerperal endometritis (white period)
cold sweat
debilitated, bed-ridden
abdominal pain
abdominal swelling
puerperal infection

SHORTENED QUESTIONNAIRE: PERI/NEONATAL MORTALITY SURVEY

1. Name of interviewer: _____

2. Community: _____

3. Number of Household (if available): _____

4. Name of Head of Household: _____

5. Name of Informant: _____

   Relation of Informant to infant who died: _____

6. Date of interview: ___/___/___

7. How many living children does the mother have? _____

8. Did the last child born die? Yes No

9. If the answer to question 8 is yes, did the baby die within the first month of life? yes no

10. Age of mother at time of last birth: _____ years

11. How many days old was the baby when s/he died?

    _____ days

12. When did the baby die? ___/___/___
    day mo yr

NOTE:
If the answers to the above questions indicate that there was no death of a child less than one month old or if the death occurred more than two years ago, you may stop the interview here. If there was an infant death within the first month of life and it occurred less than two years ago, continue with the interview.

Inform the interviewee that all questions which follow will focus on the perinatal period surrounding this infant's death. Only that pregnancy should be considered when responding to these questions.

---

13. When was the baby born? ___/___/___
    day mo yr

14. When did you first know you were pregnant? ___/___
    mo yr

15. How did you know you were pregnant?

    _____

16. Did you receive any prenatal care? yes no

If yes, proceed to questions 17 and 18. If no, skip to 19.

17. Who provided the prenatal care?

1. Government facility (Doctor)
2. Government facility (nurse)
3. Government facility (auxiliary)
4. Private doctor
5. Private nurse
6. Midwife
7. Traditional healer
8. Family member (husband, mother, mother-in-law, etc.)
9. Other

18. When did prenatal care begin? _____ months gestation

19. Did you have any problems during your pregnancy, such as:

1. Hemorrhage
2. Swelling of the face, hands and feet (3rd trimester)
3. Bad persistent headache (3rd trimester)
4. Urinary tract infection
5. Convulsions (attacks)
6. Exaggerated vomiting during the 3rd trimester
7. Other problems? _____

20. Did you receive any tetanus toxoid injections before the birth? yes no

How many doses? 1 2 3 4 5

When? ___/___/___ ___/___/___ ___/___/___
day mo yr day mo yr day mo yr

21. Are there any foods that you did not eat because you were pregnant? yes no

If yes, what couldn't you eat? _____

_____

APPENDIX 2

ALTERNATIVE QUESTIONNAIRE

22. Where was the baby born?

1. Hospital
2. Clinic/health center
3. Health post
4. Home
5. Other _____

23. Who attended the birth?

1. Doctor
2. Nurse
3. Auxiliary or promotor
4. Midwife
5. Husband
6. Woman herself
9. Other _____

24. Did you choose this person to attend your birth? Yes No

Why? _____

_____

25. How long were you in labor before you gave birth?

1. less than 12 hours
2. 13-24 hours
3. 25-36 hours
4. 37-48 hours
5. 49 or more hours

26. What did the person who attended your birth do? (If the husband, other family member or the woman herself delivered the baby and this person is available to respond, ask the birth attendant directly how they delivered the baby. What did they do?)

Person responding:

1. Mother 2. Birth Attendant 3. Mother who delivered alone

_____

_____

_____

_____

_____

_____

How was the cord cut? _____

What did the attendant do to the cord after the it was cut?

_____

27. Did you or your birth attendant notice any problems while you were in labor or during the baby's delivery? Yes No (If yes, describe)

_____

_____

_____

_____

27a. Review the following list of possible problems that may have occurred during labor with the informant. Did any of the following problems occur?

1. Breech birth (baby bottom first)
2. Transverse birth (baby sideways)
3. Cord wrapped around baby's neck
4. Baby's hand or foot first
5. Umbilical cord first
6. Hemorrhage (heavy bleeding)
7. Fever
8. Meconium (green or brown liquid)
9. Convulsions (attacks)
10. Other _____

28. Did anyone provide medical care for you and the baby during the first days after the birth? Yes No

Who?_____

What did they do?_____

_____

_____

29. Did you breastfeed the baby? Yes No

When did you begin to breastfeed the baby?

Within 1st hour___ Within 1st day___ After 1st day___

If breastfeeding was not begun during the first day, ask why the mother began when she did.

_____

_____

_____

30. When did the mother/parents notice that there was a problem with the infant's health?

_____ hours old

_____ days old

31. How did they know there was a problem? What symptoms or conditions did they notice?

_____

_____

_____

_____

31a. Symptoms. Review with the informant the following list of symptoms and circle the numbers of those that were present.

GENERAL
1. Irritable
2. Much crying
3. Weak crying
4. Difficulty nursing (due to something other than weakness)
5. Nursed weakly
6. Depressed
7. Fever
8. Hypothermia (cold)
9. Whining/moaning
10. Apnea (stopped breathing)

NEUROMUSCULAR
11. Could not swallow
12. Muscular spasms
13. Rigidity
14. Convulsions (attacks)
15. Abnormal movements

RESPIRATORY

16. Cough
17. Nasal secretions
18. Nasal flaring
19. Noisy breathing
20. Rapid breathing
21. Breathing fatigue
22. Chest retractions (caving-in of chest cavity)

DERMATOLOGICAL

23. Cyanosis (purple, blue)
24. Palid
25. Jaundiced (yellow)
26. Red skin
27. Red umbilical cord
28. Pus on umbilical cord
29. Bad odor of umbilical cord
30. Blisters
31. Blood blisters
32. Rash

BLOOD

33. Hemorrhage
    Where? _____

DIGESTIVE

34. Abdominal distention
35. No bowel movements

32. What did she/they do once they noticed that there was a problem? Did they go to a hospital, clinic, health post, traditional healer? Did they stay home and try to treat the infant there? How? What kind of care did the infant receive? How long was this care received before the infant died?

_____

_____

_____

_____

_____

_____

33. Why do(es) the mother/parents think the baby died?

_____

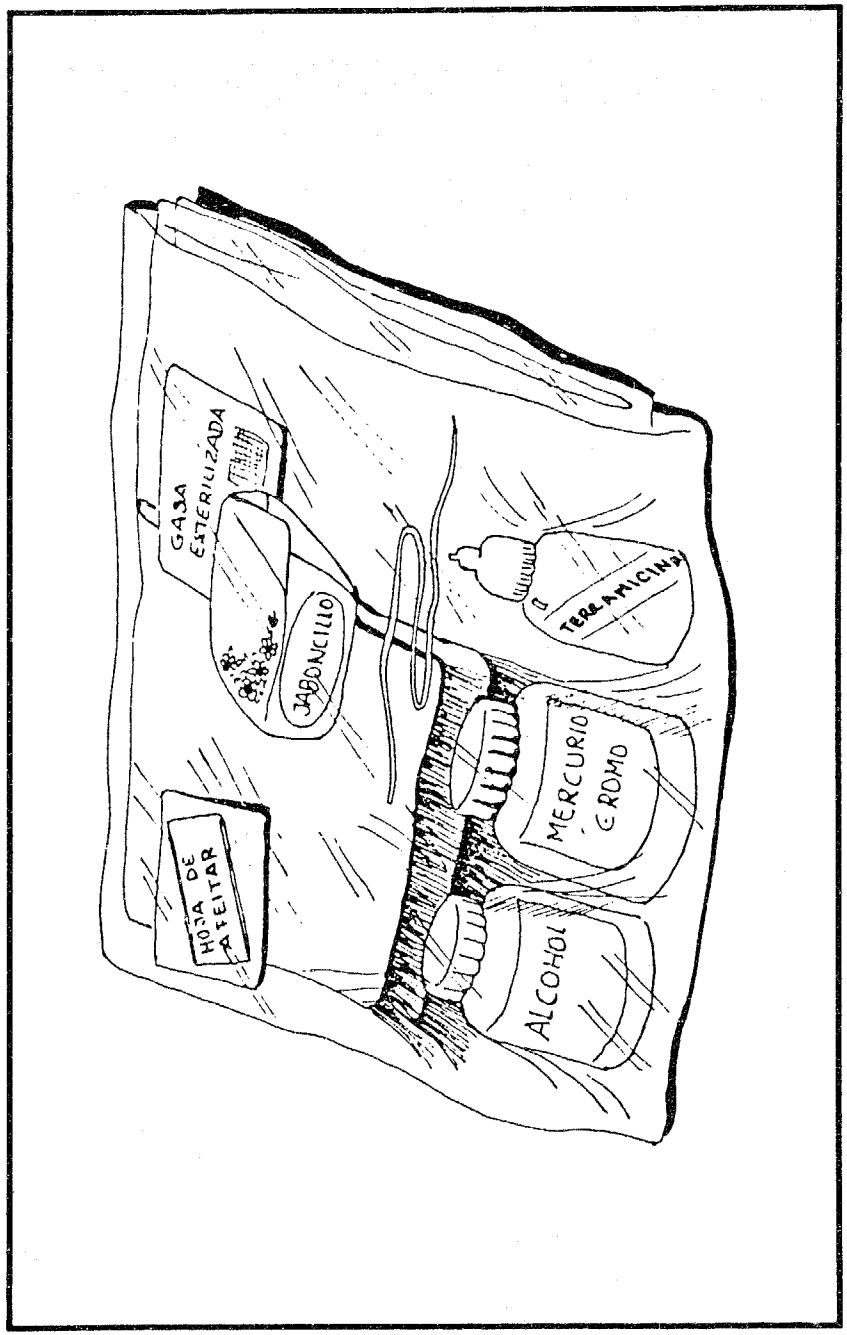
APPENDIX 3

SAFE BIRTH KIT INSERT

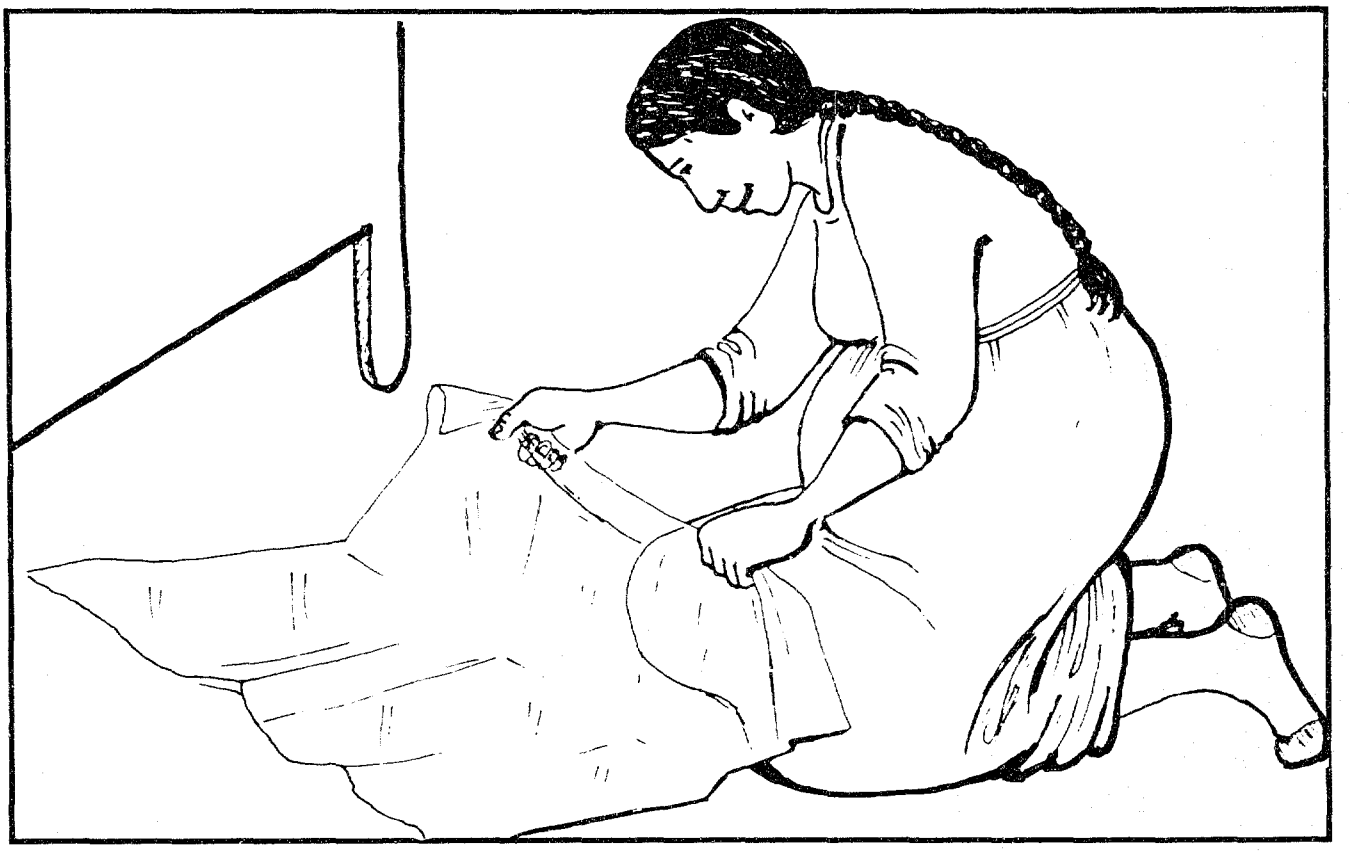
Desarrollo Juvenil Comunitario

INSTRUCTIVO PARA EL PAQUETE DE PARTO LIMPIO

El trabajo en el cual se basa este folleto, fué desarrollado por Desarrollo Juvenil Comunitario/Bolivia, un programa de Save the Children dentro del Proyecto MotherCare, bajo contrato No. DPE-5966-Z-00-8083-00 con la Agencia Norteamericana para el Desarrollo Internacional.



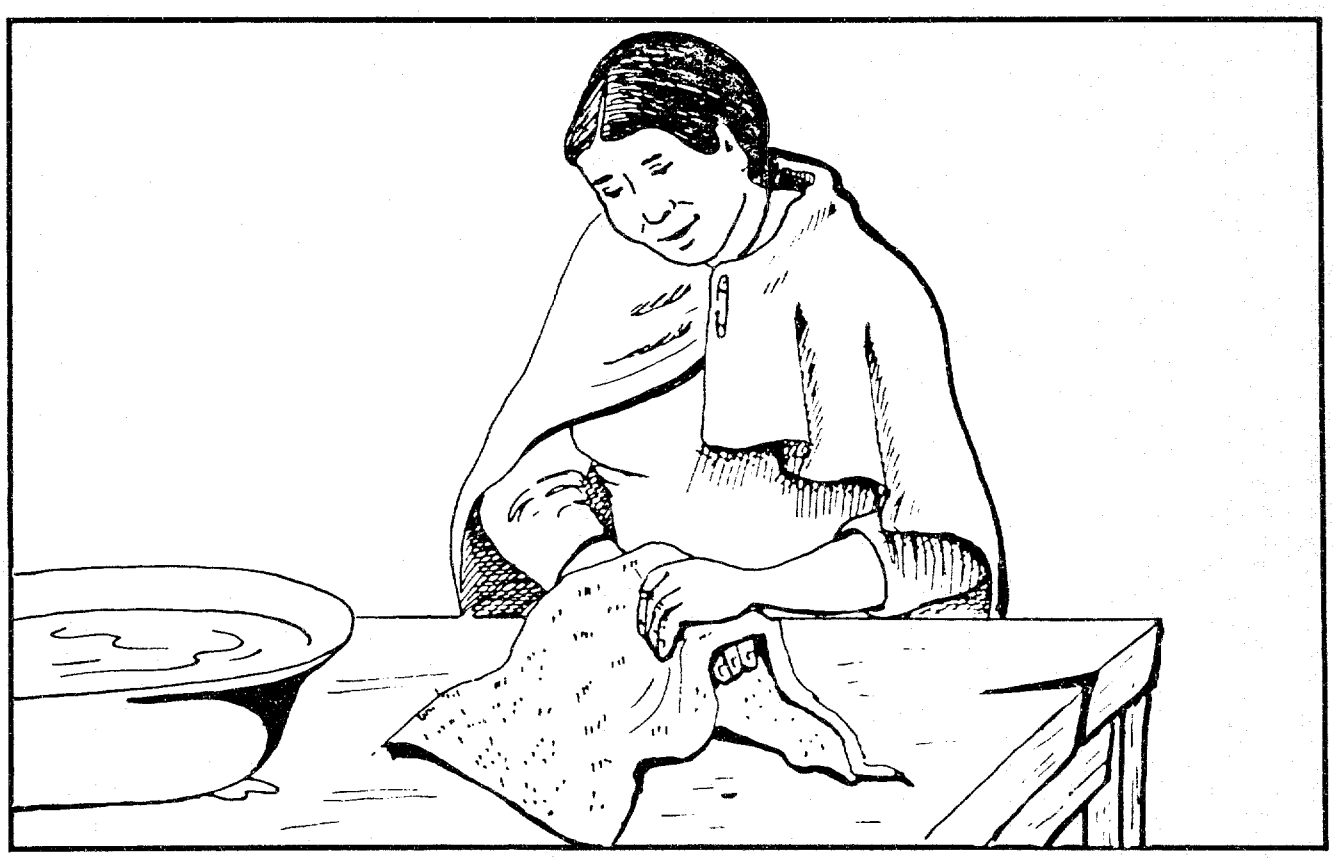
INSTRUCTIVO PARA EL PAQUETE DE PARTO LIMPIO



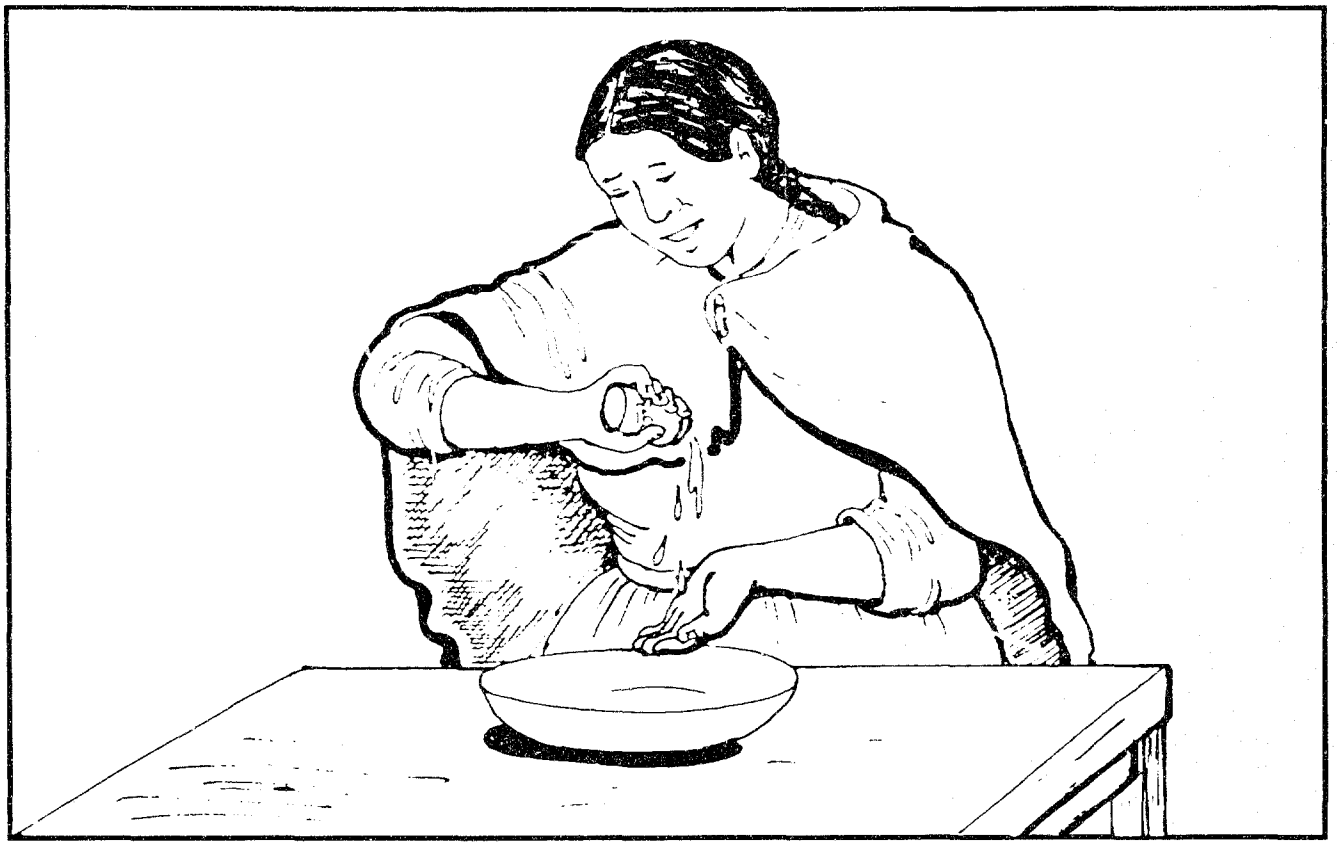
1. EXTIENDA EL PLASTICO O NYLON EN EL LUGAR DONDE VA A SER EL PARTO.

2. QUE LA SEÑORA SE PONGA ENCIMA DEL PLASTICO O NYLON.

3. LA PERSONA QUE VA A ATENDER EL PARTO SE LAVE BIEN LAS MANOS CON MUCHA AGUA Y JABONCILLO.

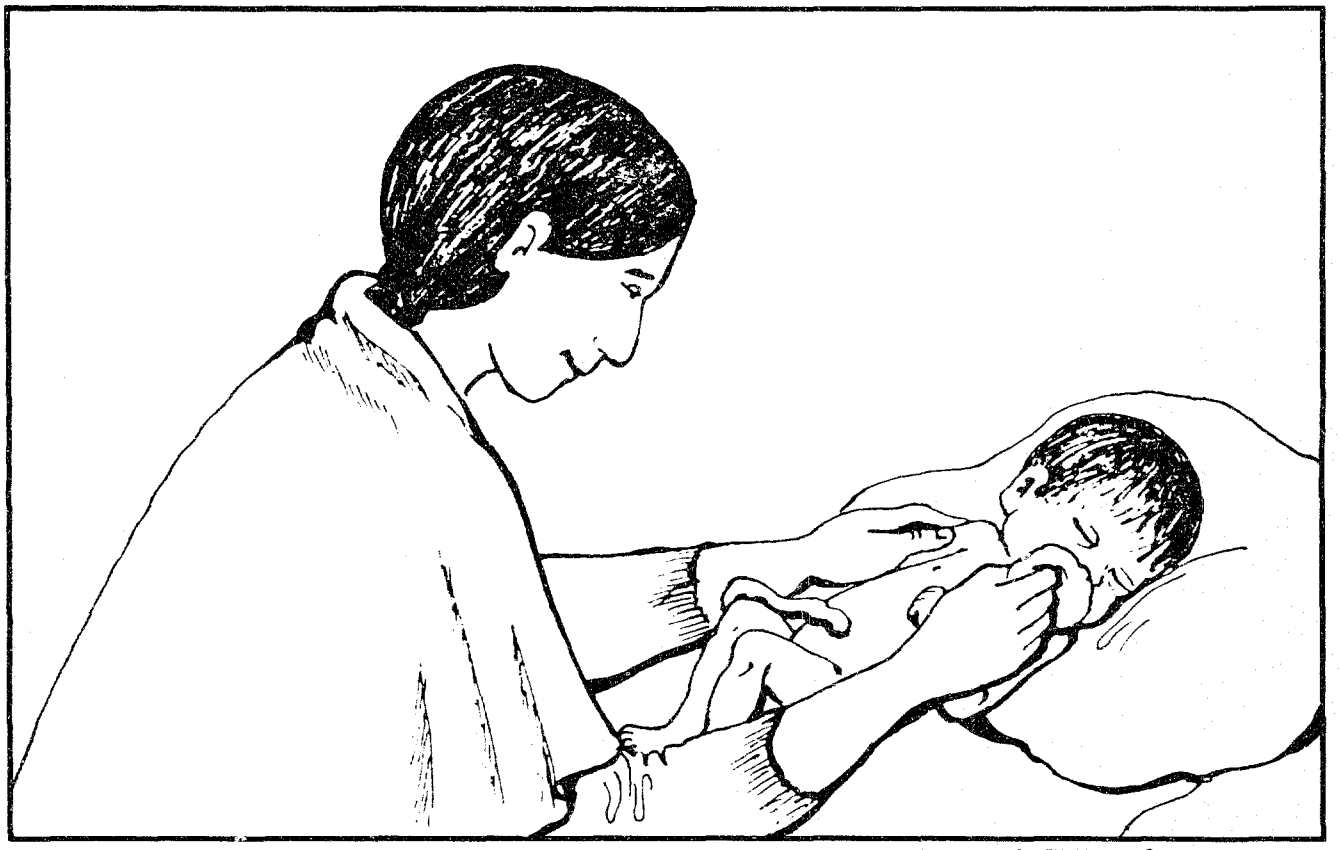


4. USE LA TOALLA LIMPIA PARA SECARSE LAS MANOS.

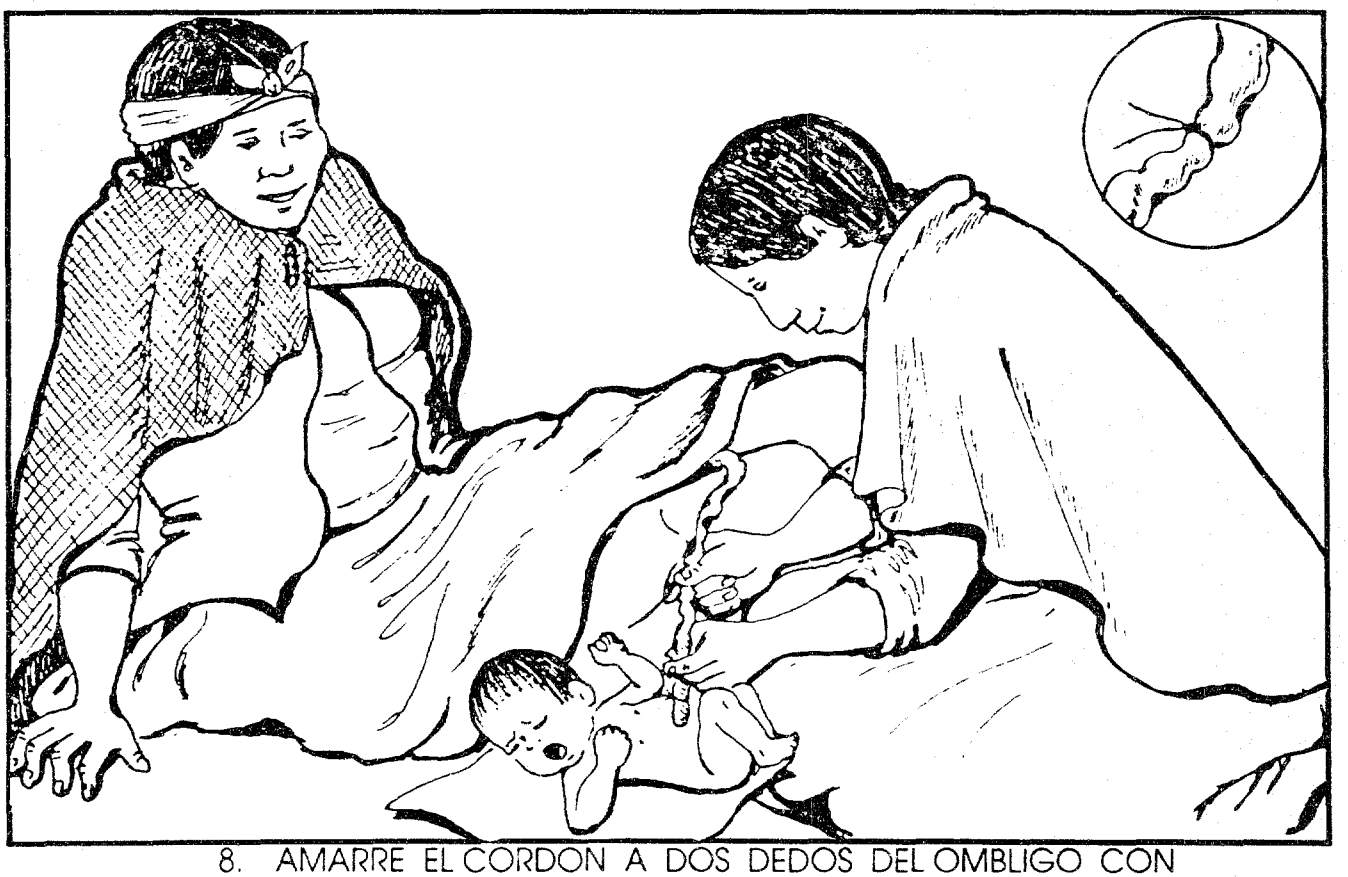


5. MOJESE LAS MANOS CON ALCOHOL PARA QUE QUEDEN BIEN DESINFECTADAS.

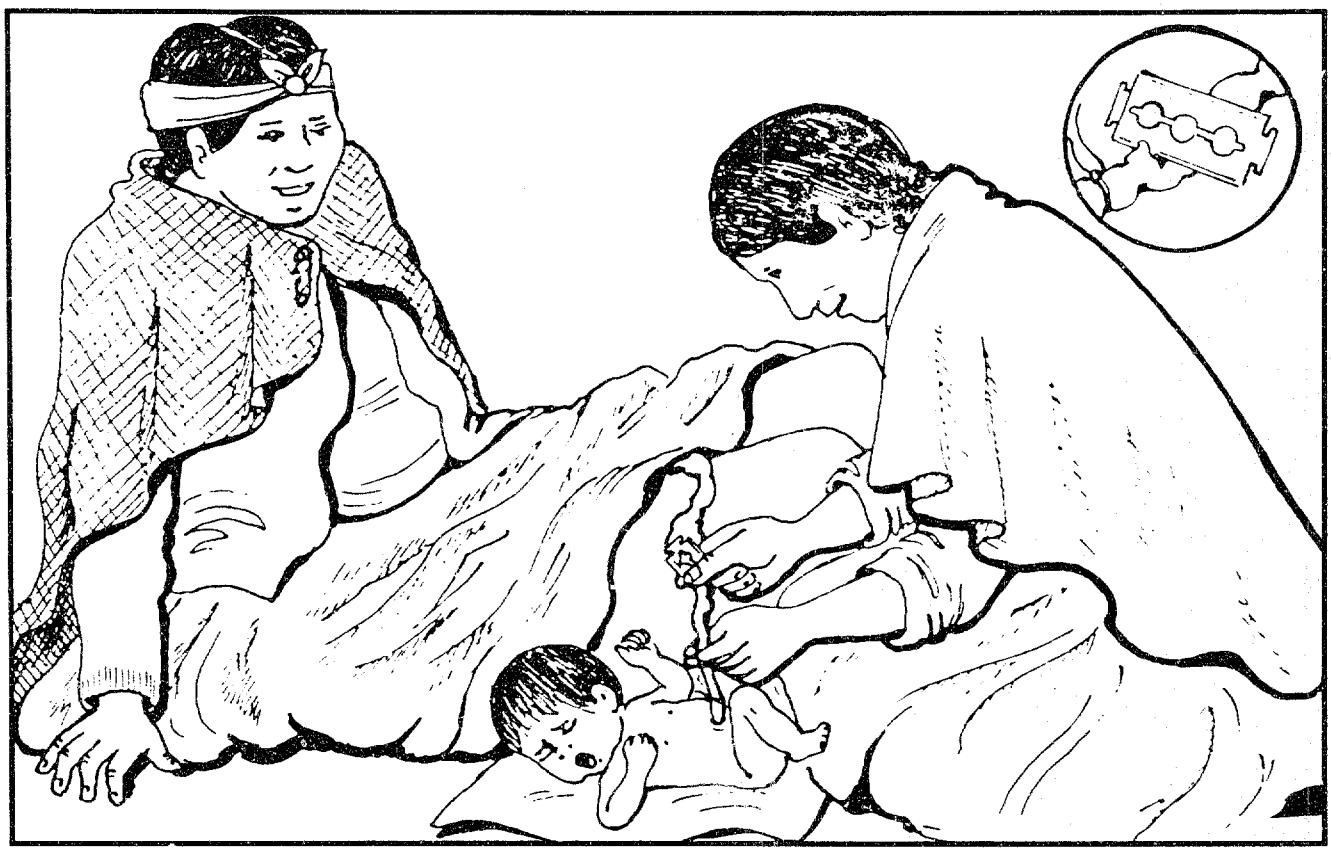
6. PROTEJA LA SALIDA DE LA WAWA EVITANDO QUE SE CAIGA LA WAWA Y QUE SE LASTIME LA MAMA SUS PARTES OCULTAS.



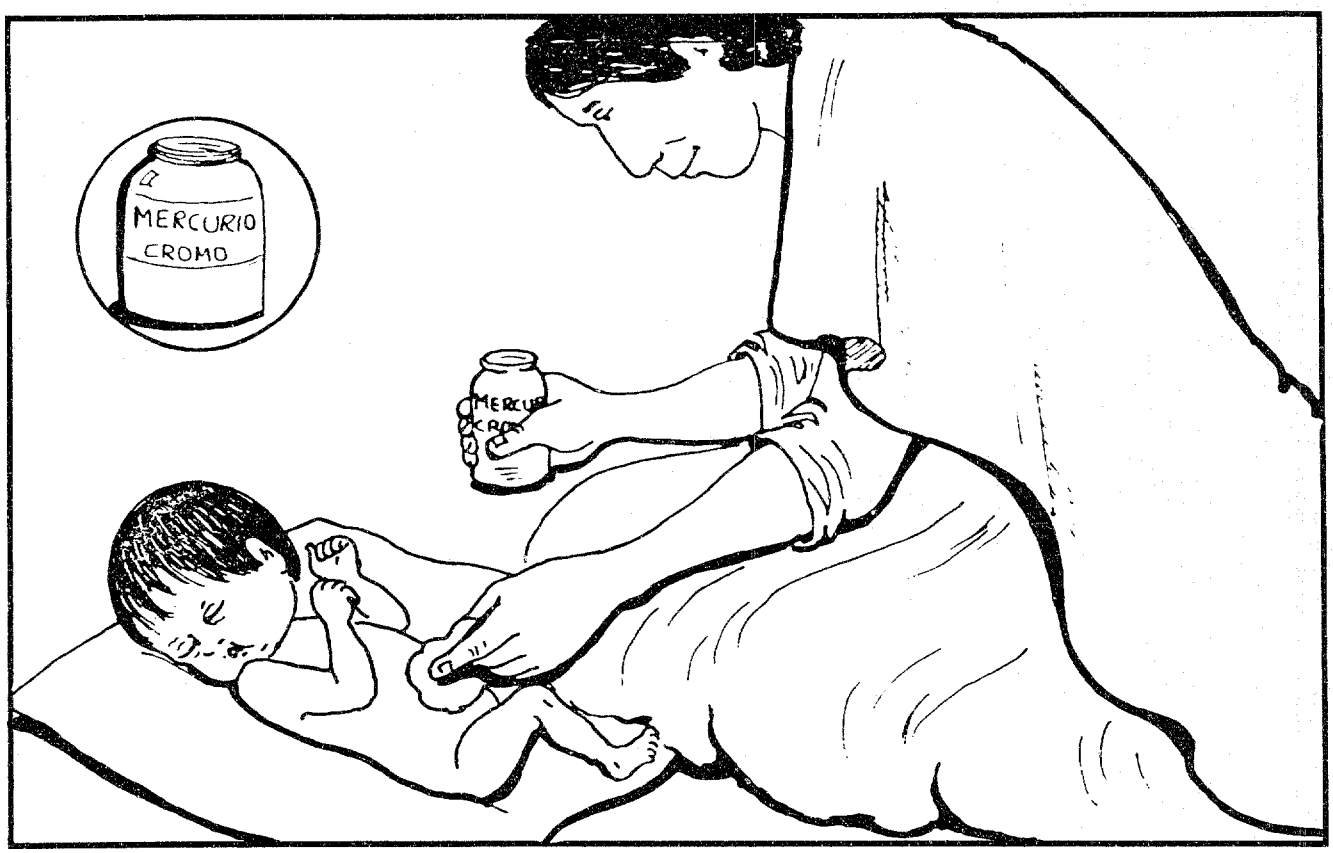
7. CUANDO HAYA SALIDO LA WAWA, LIMPIE LAS FLEMAS DE LA NARIZ Y DE LA BOCA DE LA WAWA CON UNA GASA.



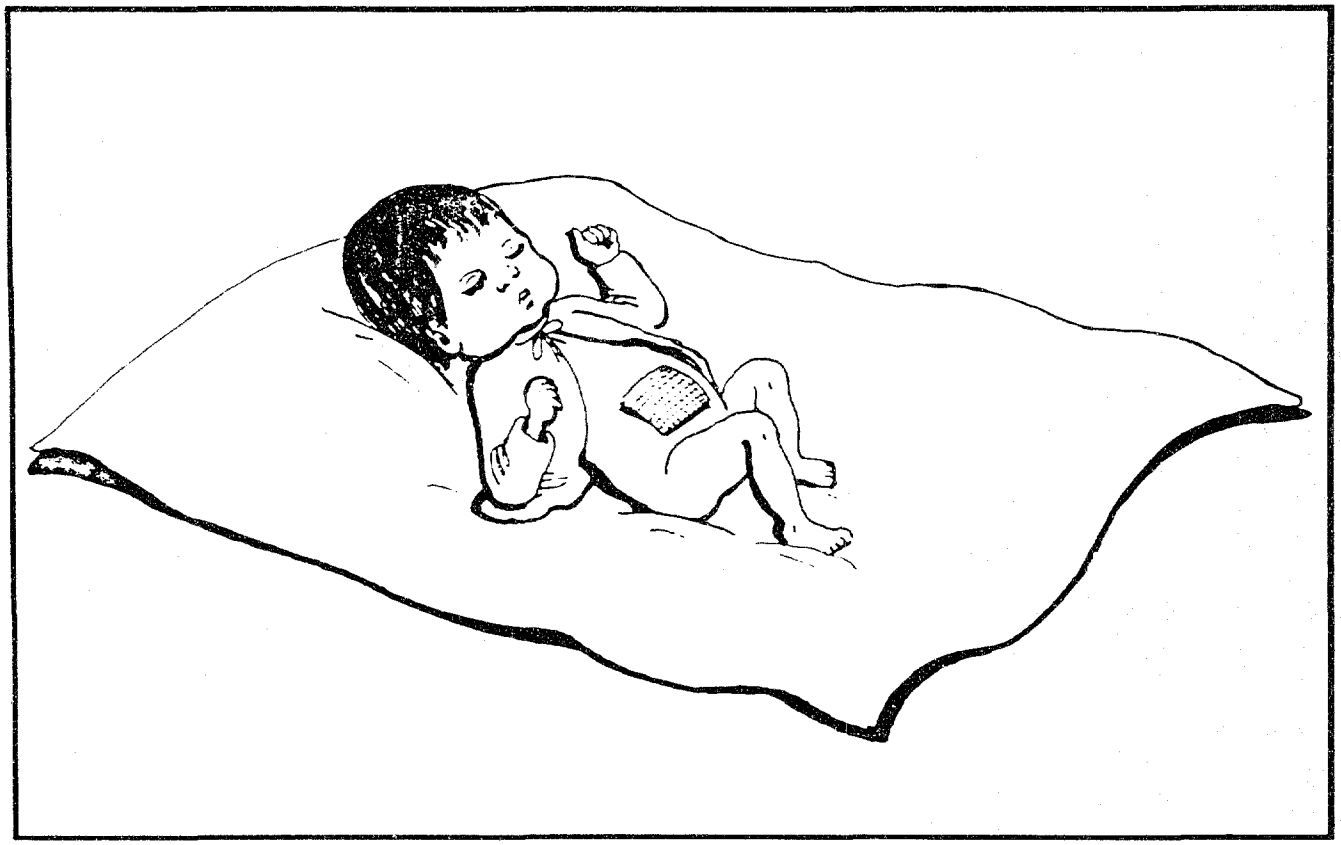
8. AMARRE EL CORDON A DOS DEDOS DEL OMBLIGO CON UN HILO MOJADO EN ALCOHOL, DEJA UN ESPACIO DE DOS DEDOS Y AMARRE EL CORDON CON OTRO HILO



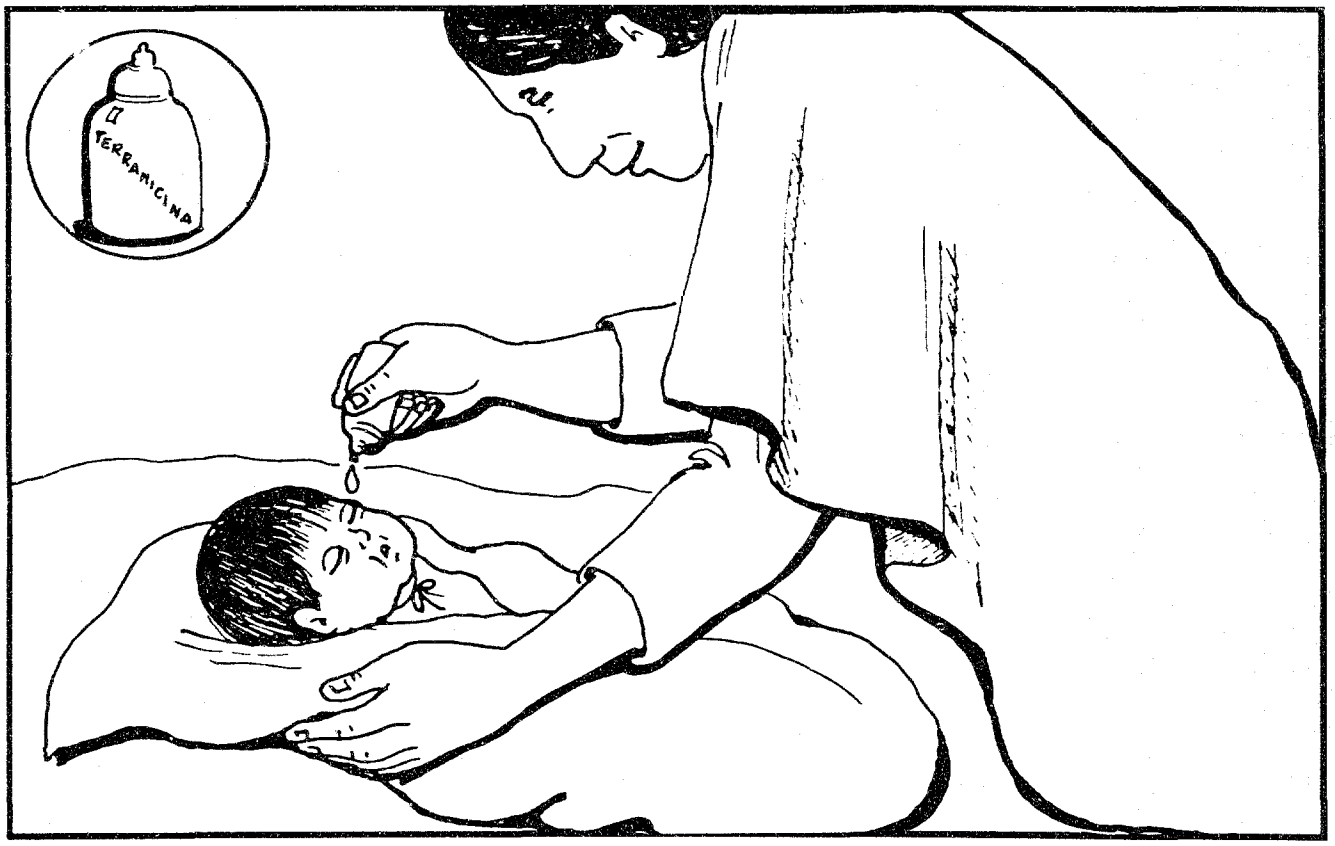
9. CON EL GILLETTE NUEVO, CORTE EL CORDON DE LA WAWA ENTRE LOS DOS HILOS.



10. PINTE EL OMBLIGUITO DE LA WAWA CON EL MERCURIO CROMO



11. CUBRA EL OMBLIGO DE LA WAWA CON LA GASA Y SUJETELO CON LA FAJITA.



12. PON UNA GOTA DE TERRAMICINA EN CADA OJO DE LA WAWA

13. SI TIENE BALANZA, PESE A LA WAWA Y ANOTE SU PESO EN EL CARNET DE LA MUJER.

14. PON A LA WAWA EN EL PECHO DE LA MADRE PARA QUE ESTE CALIENTE Y DELE EL PECHO A LA WAWA INMEDIATAMENTE.