

**QUALITATIVE RESEARCH ON KNOWLEDGE,  
ATTITUDES, AND PRACTICES  
RELATED TO WOMEN'S REPRODUCTIVE HEALTH**

**Cochabamba, Bolivia**

**WORKING PAPER 4**

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**WORKING PAPER NO. 9**

**July, 1991**

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## PREFACE

This document is one of a series of MotherCare Working Papers describing formative research and assessment techniques that have been used successfully to investigate maternal and neonatal morbidity and mortality. The present Working Paper summarizes the results of an in-depth study of women's reproductive health knowledge, attitudes, and practices, which was carried out in early 1991, in the urban and peri-urban areas of Cochabamba, Bolivia. In addition to detailing and interpreting the study's findings, it also contains recommendations for future MotherCare project interventions--the results of a three-day workshop held in August 1991, in Cochabamba to review the study's findings.

The study, which followed an anthropological or qualitative model, was carried out by the Center for Health Research, Consultation, and Education (CIAES), with technical assistance and financial support from the MotherCare Project. MotherCare also planned and conducted the follow-up workshop with the help of CIAES. Both activities were part of a larger MotherCare effort in collaboration with the Cochabamba Health Office and a number of non-governmental organizations (NGO) that are working to improve maternal and neonatal health in the low-income areas of the city.

MotherCare, a world-wide project of the United States Agency for International Development (U.S.A.I.D.), is funded under AID Contract #DPE-5966-Z-00-8083 and implemented by John Snow, Inc. (JSI). Technical input for the Cochabamba MotherCare Project is being provided by JSI, The Population Council and The Manoff Group.

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# **I. SUMMARY**

## **Objectives**

From April to June 1991, a qualitative research study of women's reproductive health knowledge, attitudes and practices was carried out in the urban and peri-urban areas of Cochabamba, Bolivia. The objectives of the study were to describe and better understand the population's perceptions and behaviors in relation to the formal health care system, and to provide information that could be used to develop intervention strategies aimed at improving maternal and neonatal health.

## **Methodology**

Information was collected from approximately 230 women, using focussed group discussions, in-depth interviews, and short exit interviews with users of health services. Traditional birth attendants, both trained and untrained, were also interviewed. Observations in waiting rooms, during prenatal and postnatal consultations, and in mothers' clubs meetings were carried out in order to prepare the study's interview and discussion guides. The study's sample of women of reproductive age was divided into two groups--users and non-users of formal health services. "Users" (the reference group) were defined as women with more than one prenatal visit and/or one or more institutional birth, and "non-users" (the study group) as women with no more than one prenatal visit and no previous institutional births. Sampling was purposive, with selection carried out to include women of various ages and parity.

## **Content**

The study focused on eight stages in the reproductive cycle: pregnancy, labor and delivery of the infant, delivery of the placenta, the immediate postpartum period, the newborn period, breastfeeding, family planning and abortion. It also explored the cultural, social, and economic factors that affect reproductive health and the utilization of formal health services.

Study findings were analyzed individually, by reproductive stage, and as a whole to generate an ethnophysiological model, or an explanation of the way in which the ethnic groups that were studied understand the physiology of the human body and reproduction. This analysis enabled the investigators to compare a Quechua-Aymara ethnophysiological model with the biomedical model that is the basis for the formal health system. Highlighting areas in which the two systems are in harmony, in ignorance of one another, and in conflict, they then used the findings to develop intervention strategies aimed at improving home practices and increasing the appropriate utilization of formal health services.

## Findings

The ethnophysiology of the Quechua-Aymara woman is based in large part on her concern with ups and downs, and entrances and exits, inside and outside of the body. According to the population studied in this investigation, a woman is healthy when her important body parts are located and moving correctly. These movements are believed to be determined by the presence of warm or hot elements, which cause body parts to fall, or fresh or cold elements, which cause the entrance or rise of foreign elements and body parts. Besides having all of her body parts in the appropriate position, a healthy woman is defined as a strong, well-nourished woman with an abundance of blood, and as a good worker who gives birth to her children without problems.

Correct movement within a woman's body is felt to be especially important during pregnancy, delivery and the postpartum period. Pregnancy, for example, is the time to accumulate blood and to protect oneself against downward and other inappropriate movements of body parts, including the expulsion of the fetus. For this reason, a pregnant woman seeks a cool environment, "cool" foods, and a minimum of emotional stress. On the other hand, a woman in labor seeks heat, "hot foods", and an intimate environment, avoiding the cold to assure that the infant moves downward, as it should at this phase. In the immediate postpartum period, a woman takes measures to protect herself against the entrance of evil air currents (wind), while also seeking an equilibrium in the loss of blood through dietary controls and other precautions.

Other important findings reveal that in a home birth the newborn usually receives little attention during the critical first hours postpartum. Instead, attention is focused on the delivery and care of the placenta and on the woman's well-being. As shown in other studies, breastfeeding is also delayed, starting in most cases two to three days after a birth. This practice is based on an emic (folk) classification of the types of breastmilk a woman can produce and their appropriateness for the infant. Colostrum, unfortunately, is most often classified as being inappropriate for the newborn, while giving anise tea is felt to be necessary shortly after birth to cleanse the newborn's stomach.

Although women in the study group reported that their husbands most often assisted them during childbirth, TBAs, respected for their knowledge and wisdom, were also called in some cases. Some TBA practices are beneficial; however, others, such as the use of oxytocic drugs to speed labor, are dangerous and should be addressed through training.

Family planning, although little used by the women in this study, is apparently of great concern to them since there are strong social and economic reasons for wanting to limit the growth of families. Many multiparous women reported feeling great sadness and despair when they realized they were pregnant again. At the same time, a series of social factors, including trial unions before marriage, make it difficult to convince young women to delay their first pregnancies. Interestingly, the population distinguishes clearly between spontaneous abortion (miscarriage), a characteristic of weak women who are unable to fulfill their social role, and induced abortion, which is seen as a method of family planning and carries no stigma of weakness.

An important finding of this study is that "non-users" of Cochabamba's reproductive health services are not necessarily ignorant of the existence of these services. In fact, they often have well-formed opinions about them and some level of appreciation for the expertise of health professionals. The factors that act as barriers to their use of available services include the perceived mistreatment of women in these services, institutional norms that conflict with women's modesty and ethnophysiology, the lack of information and orientation given to women during clinic visits, and the cost of services in both time and money.

## **Conclusions and Recommendations**

While many of the study group's traditional beliefs and practices are considered beneficial, others represent a risk to maternal and neonatal health and survival. Potentially dangerous practices, identified as a result of this study, were prioritized for intervention during a project development workshop in Cochabamba. Those practices selected for immediate intervention include the population's:

- low acceptance of modern contraceptive methods and continued reliance on induced abortion as a family planning method;
- failure to recognize edema of the face and upper extremities as a danger sign during pregnancy;
- use of oxytocic drugs by untrained persons to speed home births;
- practice of cutting and tying the umbilical cord with unsterile materials;
- failure to provide immediate attention and care for the newborn;
- failure to initiate immediate and exclusive breastfeeding; and,
- failure to recognize and seek medical care for newborns with problems.

The principal interventions recommended to address these practices are information, education and communications (IEC) efforts at all levels, and the modification of existing reproductive health services to reduce the cultural, social and economic barriers women face when contemplating their use. In line with this second recommendation, a series of health sector practices were also targeted for change, including:

- the failure of health staff to communicate important information to women during prenatal care, information that women need and, in some cases, that they expect;
- the poor interpersonal treatment of women by health staff during prenatal consultations and labor and delivery;
- labor and delivery rooms that are kept cold and breezy;
- the lack of privacy and respect for a woman's modesty, exemplified by the presence of multiple persons--students, auxiliary medical personnel and cleaning staff in addition to the attending physician or nurse--during prenatal examinations and in the labor and delivery rooms;
- norms that require a reclining (gynecological) position versus the traditional upright or squatting position during labor and delivery; and,
- the failure of hospitals and clinics to return the placenta to the family for ritual disposal.

Intervention strategies to address these problems should focus on modifying services so that they become more acceptable to women, without affecting the quality of the medical care provided. For these changes to occur, health care workers must participate in planning and implementing the required changes. The dissemination of this study and its use in the basic and refresher training of health providers, could be an important first step in the change process.

Well-conceived intervention strategies--IEC, training, service modifications--could close the gap between the formal and the Quechua-Aymara health systems in Cochabamba and result in improved maternal and neonatal health for the city's residents. The MotherCare Project is currently working with the Cochabamba Health Office and its non-governmental counterparts to develop and implement the interventions recommended as a result of this study.

## II. INTRODUCTION

Bolivia's maternal and neonatal mortality ratios are among the highest in Latin America and existing information suggests that Cochabamba, the country's third largest city, has ratios similar to those for Bolivia as a whole. Nationwide, maternal mortality is estimated at 480 per 100,000 live births per year, while the corresponding ratio for perinatal mortality is 110 per 1,000 live births. Maternal and neonatal morbidity rates, which are more difficult to estimate, likewise appear to be very high.

Among the most important causes of maternal mortality are induced abortions, pregnancy-related hypertension, puerperal infections, and hemorrhage--all conditions that could theoretically either be avoided or treated to prevent death. The immediate causes of neonatal mortality are also, for the most part, preventable or treatable. They include birth-related asphyxia, birth trauma, respiratory and other neonatal infections, prematurity and low birth weight.

While other countries in Asia and Africa experience patterns of mortality that are similar to Bolivia's, in many ways Bolivia presents a special set of circumstances. Generally, countries with high maternal and neonatal mortality are characterized by a scarcity of health services, while those with more extensive service networks experience lower levels of mortality. This rule does not hold for Bolivia, where urban areas, including Cochabamba, are well supplied with physicians and hospital beds, but the benefits of these resources in public health terms are limited. While Bolivia has an overall physician to population ratio similar to that of Costa Rica (1 physician/2,000 population) and a ratio in its urban areas that is similar to Sweden's (1/410), the country's maternal mortality ratio is 24 times that of Costa Rica and 48 times that of Sweden. One of the underlying reasons for this disparity is felt to be the extreme under-utilization of available health services. Illustrating this is the fact that half of all Bolivian women receive no prenatal care during pregnancy and, even in the urban areas where medical services are readily available a third or more deliver at home, with only a family member in attendance in most cases.

The MotherCare Project is currently working with the regional office of the Bolivian Ministry of Health on an integrated effort to reduce maternal and neonatal morbidity and mortality in Cochabamba's urban and peri-urban areas. Project interventions are directed toward the various factors that are believed to contribute to these problems including: women's failure to seek medical care during pregnancy; the failure of women and families to recognize problems that arise during the various stages of the reproductive cycle; the under-utilization of available institutional health services when such problems occur; the limited availability of family planning information and contraceptives for couples who want to postpone or terminate childbearing; and the low quality of routine prenatal and postpartum care.

The qualitative study reported here was carried out between April and June 1991, as part of the MotherCare project in Cochabamba. The study's goal was to document women's beliefs, attitudes and practices in relation to the reproductive cycle and the formal health system. Because the under-utilization of available health services is known to be one of the most important barriers to improved health in Cochabamba, an important objective of the study was to better understand the various reasons for current patterns of service utilization.

As such, women who do not use formal health services (or "non-users") were the focus of the investigation. Three possible categories of factors affecting the utilization of services were explored based on the hypotheses that: 1) economic factors, not restricted to the lack of cash, may be limiting access to desired services; 2) social factors may be limiting the use of services because they are offered in an inappropriate or offensive manner; and/or, 3) cultural factors may be limiting the use of services because either the content of these services or the way in which they are delivered are not consistent with the population's beliefs about health and illness.

This report addresses the population's understanding of the reproductive cycle and its behavior in the face of traditional health beliefs and the biomedical system of formal health care. Specific findings for each reproductive phase are presented and complemented by an interpretative model of the population's beliefs about human physiology and reproduction, or what is called throughout this report, the "ethnophysiological" model. Finally, the report summarizes a series of recommendations for project interventions that were generated on the basis of the study's findings and which are currently being used to develop and implement the MotherCare project in Cochabamba.

### III. STUDY METHODOLOGY

#### Study Area

The study universe included the urban and peri-urban areas of Cochabamba city, and two nearby satellite areas that are also served by urban health facilities. Each area was first classified on the basis of a study that was carried out by the World Bank and the Ministry of Health in 1989, which classified all zones of the city by socioeconomic status. Five of the lowest income zones were then randomly selected as study areas. In order to achieve the desired sample characteristics, a sixth zone was added during the study.

#### Sample

The study's objective was to better understand the beliefs and practices of the low-income, urban and peri-urban woman. As such, the population was first divided into study and reference groups, as follows:

Study Groups ("non-users") were composed of women of reproductive age and TBAs (traditional birth attendants) with little or no experience or acceptance of the formal health system. Women in this group were defined as those who had no more than one prenatal visit in the past and had never had a birth in a clinic or hospital, but always at home. The TBAs in this group had never received formal training from the health services.

Reference Groups ("users") were composed of women and TBAs who had accepted some services from the formal health system. The women had at least two prenatal visits and/or an institutional birth, and the TBAs had received training in hygienic delivery methods at some point in the past.

Because the study's findings were to be analyzed separately for each group, no effort was made to make the numbers in the study samples proportionate to their size in the total population of women and TBAs. Instead sampling was purposive, with emphasis on the study group because it offered the greatest insights into factors that influence the under-utilization of formal health services.

#### Methods

Information was collected from 230 persons using a variety of methods. First, focussed group discussions were conducted: three with study group mothers, three with reference group mothers, and one with reference group TBAs. (Untrained or study group TBAs were not included in the focussed group discussions because of their reluctance to meet in a group.) Second, 73 in-depth interviews with reproductive-age women were conducted: 53 from the study group and 20 from the reference group. Among the study group women, 10 women were pregnant for the first time, 14 were pregnant and had been pregnant at least once before, and 29 were not pregnant but had given birth during the past year. Third, to obtain direct impressions from women using health services, exit interviews were held with 33

women leaving prenatal consultations at Ministry of Health and non-governmental facilities. Systematic observations were also carried out in waiting rooms, examination rooms and mothers' clubs meetings in preparation for interviews.

To collect information, the researchers used nine different question and observation guides. (The guides used for in-depth interviews, exit interviews and focussed group discussions with women are included as Appendix 3 of this Working Paper). The instruments were predominantly open-ended, with the possibility of the interviewer adding probing or follow-up questions.

The research team was composed of three investigators from CIAES, one anthropologist (a MotherCare/Manoff Group consultant), and 11 field workers, most from the nursing school in Cochabamba, who were trained by CIAES prior to the study. MotherCare provided additional technical assistance during research design and preparation of the research instruments. The MotherCare coordinator for the Cochabamba project also participated in all phases of the study.

## **Analysis**

The analysis of the study's findings was carried out in two phases. The entire team participated in the first, which consisted of distributing different themes and their related questions to pairs of investigators and interviewers, who analyzed each answer for content and then constructed frequency tables for specific responses. Simultaneously, the study's anthropologist used the same information to derive an ethnophysiological model, or an explanation of the way in which the population perceives its reproductive functions and needs. Once the frequency tables and the ethnophysiological models were ready, the researchers then began a descriptive analysis and interpretation of the findings.

The next two chapters of this report describe the study's findings in two ways: first the ethnophysiological model is described and compared with the biomedical model that inspires the formal health system; and second, the specific beliefs and practices at each stage of the reproductive cycle are described.

#### IV. ETHNOPHYSIOLOGICAL MODEL<sup>1</sup>

Although ways of looking at the world may vary by culture, anthropology holds that each way possesses a basic rationality that organizes the world in a consistent and coherent manner. Once this pattern of rationality is uncovered to the outsider, the beliefs, attitudes and practices of a population cease to be an endless list of curiosities, becoming instead an intelligible whole that can even offer the possibility of predicting probable behaviors under varying circumstances.

The term "emic" refers to any description or analysis that is done in the target group's own terms. An important part of any emic system is the manner in which the human body is understood. Because this understanding is specific to the particular group under study, we call it ethnophysiology, that is, human physiology as viewed by a certain ethnic group.

Ethnophysiology covers the following, among other things: the body and its relationship with the outside world; concepts regarding health and illness; disease etiologies; the various parts of the body and how they function; the differences between men and women, and adults and children; the principal organs that indicate state of health; and in reproductive health, the mechanisms of procreation in all its phases: conception, pregnancy, labor and delivery, puerperium, and lactation, as well as the possible problems that can occur in each phase.

**Why an ethnophysiological model?** The present situation in Cochabamba is one in which the supply of formal health services exceeds demand. The supply emanates from one system of rationality -- biomedicine (i.e., western medicine) while the demand (or lack of it) emanates from a different one -- the Andean system of the Quechua and Aymara peoples.

In general terms we can say that these two systems are not interrelating very well, at times colliding and at times passing each other by without communicating. Consequently, an understanding of Quechua-Aymara ethnophysiology can help us see why and where the two systems are not in agreement. This comparison can be the starting point for the formulation of a strategy to reduce the distance between the two systems.

The strategy could consist of interventions in three areas: on the supply side (that is, making the services of the formal health system less antithetical to the Quechua-Aymara model); on the demand side (that is, encouraging the population to use the modified services); and in the area of health education (that is, encouraging and discouraging certain practices in the population).

An ethnophysiological model allows us to identify, for example, the traditional practices that support health. These can be encouraged, serving as a bridge to other intervention areas that present greater challenges. Also, the model allows us to identify the practices that are harmful to health and -- of utmost importance -- the reasons for those practices. This type of analysis also lets us separate the practices that are strongly linked to ethnophysiology from

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<sup>1</sup>The readers should be aware that this chapter and the next are written from the point of view of the women interviewed. The authors are describing their knowledge, beliefs, practices and attitudes without judging their merits.

those that are less so, the latter group being more amenable to intervention in health education. In the same way, we can identify the strong and weak points (from the ethnophysiological perspective) of the formal health system, which in turn helps identify possible priority interventions on the supply side.

### **Quechua-Aymara ethnophysiological model of reproductive health.**

Drawing from Reategui<sup>2</sup>, our Quechua-Aymara model posits a conception of illness different from that in the biomedical model. While the latter draws on a metaphor of war, in which the body must mobilize to combat dangerous pathogens, the Andean conception is based more on a metaphor of coexistence. Health is not, therefore, the absence of disease (as the World Health Organization, for example, has defined it), but rather a relative and precarious equilibrium among the elements of the universe, such as cold, heat and blood. No single element is negative or positive in itself, but only in relation to the other elements present. For example, in the Quechua-Aymara model we see that loss of blood is a very relative thing. After childbirth women want to lose all the "dirty blood" of the birth, but none of the blood that is not dirty, whose loss would represent the threat of over bleeding (i.e., hemorrhage).

Similarly, in the Quechua-Aymara model the origin of illness is more complicated than in the biomedical system, which attempts to identify a single cause for each illness. In the Quechua-Aymara model, on the other hand, the origin can as easily be external as internal, with external origins perhaps predominating. That is to say, that environmental elements, though not inherently disease-causing, can enter the body at inopportune moments and upset balances. Examples of such upsetting elements are wind, cold, heat, dietary foods and clothing. In the Quechua-Aymara model we see, for example, that cold in the body in the period after childbirth can cause many types of serious problems for women's health.

Third, this external/internal classification need not be a fixed dichotomy. On the contrary, it is a lax, fluid process from which concrete, situational classifications arise. For example, an element such as heat can be negative in one particular moment of the reproductive cycle and positive in another moment, depending on whether the objective is to shed blood or to retain blood.

Fourth, within the fluid system, there can even be illnesses that are not considered bad. Reategui gives the example of diarrhea as an illness that is longed for, because of its association with growth and dental development of children. A good example we have from reproductive health is labor. Although labor is considered by the vast majority of women as a normal process with generally happy results, it is referred to by Quechua-Aymara women as "getting sick".

With these points in mind, we propose space, time and movement as central symbols in women's reproductive health. We define health as an equilibrium between the position (space) of the body (internal space) and the elements of the environment (external space) at

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<sup>2</sup>Norma Reategui (1990). Estructuras cognitivas y afectivas de madres y niños andinos. La Paz: Ministerio de Planificación y Coordinación; & UNICEF.

a particular moment (time). This equilibrium is different at different moments, such as pregnancy, labor and delivery of the child, expulsion of the placenta, puerperium, breastfeeding and the interval between childbearing.

Therefore, our hypothesis is that the beliefs, attitudes, and practices most deeply embedded in women's ethnophysiology in the Quechua-Aymara system are those related to:

1. The location of things, whether inside or outside the body. Things must be in the right place at the right time, with varying right place being a function of the moment. For example, the fetus has to be in the correct position a few months before the delivery; the sun can make the placenta leave its proper place and stick to the back, thus causing problems at the time the placenta should be expelled; women in labor have to be in a position that helps the fetus and placenta leave the body, the most common being squatting or kneeling; in contrast, during the first three days after giving birth, women have to stay in bed with their head and chest slightly raised. This is so that certain parts of the body that should either stay put or be eliminated do not rise within their bodies. Finally, the way the placenta is taken care of is extremely important. The husband has to bury it in a shady place for the health and well being of his wife and child, so it does not go wandering around the world like a lost spirit. In short, although things do not always have a permanent correct place, they do have a correct location for particular moments -the fluid classification.
2. Because correct location varies over time, time is the second major symbol. For the purpose of this analysis, we can identify eight moments in reproductive health. They are pregnancy, childbirth, delivery of the placenta (which is considered separately here because of the great symbolism attached to it), the puerperium or lying-in period, care of the newborn, lactation, family planning and abortion. In each of these moments there is a correct location for the most important body parts of the moment, as well as a series of promotive, preventive and curative steps to ensure location.
3. Given that correct locations vary over time, the major third symbol is movement. Being a fluid symbolic system, Quechua-Aymara ethnophysiology posits things as changing location with relative frequency. What is critical is that these movements occur in the right directions and at the right moments. A good direction in one moment can be a bad direction in another moment. For example, during pregnancy women take certain precautions to ensure that things stay within the body, principally that the placenta stay in its appointed place and that blood accumulate in the body. In contrast, during labor women stay vertical to help ensure that everything that should descend and exit the body, does so -- blood, placenta, baby. Further, in the puerperium, the steps are more complicated. In order to protect themselves from the wind and cold, environmental elements which can enter the body through their pores, vagina and cervix, the women must cover themselves with many clothes and stay in bed. At the same time, they have to take guard against the ascent of the "dirty blood" of childbirth, as well as of the uterus or of a third body part that has no parallel in the biomedical physiology -- the "magre". The "magre" is an organ which develops behind the umbilicus during pregnancy. When the pregnancy ends, the magre may rise up in the body, going so far as to block the respiratory paths and kill the birthing woman. As preventive action, therefore, women lie down with their head

and chest slightly elevated. They also bind their stomachs to prevent undesirable ascents.

It is worth noting that the Quechua-Aymara culture is strongly linked to verticality. They are a people of great heights. La Paz, the capital city, is among the highest cities in the world, while Cochabamba is only 1,000 meters lower. Even in these very high cities, the Quechua-Aymara populations tend to seek high ground for their homes (even when socioeconomic factors have little bearing), while the more westernized populations inhabit the basins and flat areas. Since the people are always climbing up and down in their daily activities, they carry things on their backs (vertical) - including children. Height has a positive, healthy and sacred connotation to it. Therefore, in our analysis we should always be sensitive to a propensity for the upright position.

### **Constitution.**

In the Quechua-Aymara ethnophysiology, constitution is an important indicator of a woman's health. Women can be strong or weak. This dichotomy is determined by three variables: geographic origin, birth inheritance and women's self care, especially in diet.

The woman with a strong constitution, has the strength to work and is industrious. She tends to be from the highlands or the rural areas of the valleys. Her diet is good, she is robust (not fat), and she is full-breasted. She is easily recognized by the vein in her hand which pulsates quickly when she is pregnant (a sign that a good quantity of blood is circulating and accumulating in preparation for childbirth). This woman has more blood than a weak woman. She does not miscarry easily, and can have many children without compromising her health. Childbirth is usually quick and easy, and she does not complain. She re-enters a "vertical" life quickly, as she is up and about shortly after childbirth. Her children are healthy. Since she fulfills her reproductive role with ease, she rarely requires medical attention.

By contrast, the woman of weaker constitution may come from the lowlands, her family may be weak, and/or she may be weak because she does not take proper care of herself. Since she is thinner and less well nourished than the stronger woman, she does not have the capacity for work that the strong woman does. She may become pregnant easily, but she also miscarries frequently. She may not have enough blood for a healthy life. Childbirth can be dangerous and painful for her, and she may even experience the dreaded "dry childbirth", which is accompanied by very little bloody discharge. The weak woman tends to have many children in a short period of time, which weakens her further since her uterus does not have time to recuperate between pregnancies. An overworked uterus can invert itself (i.e. assume an incorrect position) or become perforated, both will cause future miscarriages. Moreover, the closely-spaced children of weak women will also be weak, giving rise to another cycle of bad health. After childbirth the weak woman needs to rest longer than a strong woman and she cannot carry weight or even her child. She has a predisposition for a horizontal life (i.e. lying down) and has a greater need to consult with doctors, given the higher risk she runs. Women are of a certain constitution when they are born, but it is their self care during life that determines if they continue with the same constitution or change to the other. Women born strong can become weak through poor diet and the lack of good care, such as not protecting their bodies with appropriate clothing or not controlling blood loss. Weak women

can become strong through good diet and correct self care.

### **Diet, the elements and blood**

Food, external elements and blood are interrelated and play a central role in the Quechua-Aymara ethnophysiology. Foods, by being hot or cold (in the humoral sense), and the elements, by being hot or cold (in the temperature sense) can affect the location and movement of the body parts, especially the location and movement of blood. The location and movement of blood is an important indicator of a woman's health and is closely related to her constitution.

The basic principal behind this is that hot things (both humorally or temperature-wise) provoke a loss of blood, while cool and cold things inhibit blood loss. Women who lose too much blood at inopportune moments become weak and even run the risk of death due to hemorrhage. On the other hand, women who do not shed blood at times when they should are also not healthy because the retained blood causes aches and pains in various parts of the body. The accumulation of coagulated blood can give rise to strong pains in the uterus and can even cause tumors to develop. Or the blood can rise to the head, causing strong pains and illness there.

The Quechua-Aymara women must watch what enters their bodies to control the necessary shedding of blood. Hot food, the hot elements of sun and fire, and things that protect such as clothing, favor the elimination of blood. Hot foods produce internal body heat and are helpful during labor, childbirth and puerperium. They are contraindicated, however, during pregnancy because of their blood-letting characteristics, which would bring on miscarriage. On the other hand, cool and cold foods refresh the body and are avoided during the puerperium because they cause the blood to be retained and coagulate, with adverse consequences. There is a third class of neutral foods which do not pertain to either group.

In view of the above, we can conclude that in the Quechua-Aymara belief system:

1. A pregnant woman should avoid hot foods and elements since these can cause inappropriate bleeding (i.e. miscarriage). She needs to conserve blood for the delivery. She avoids spending time in the sun or near warm things such as fire. The sun causes the placenta to leave its appropriate place and stick to her back (bad location) causing difficulty at the time of childbirth. The pregnant woman must also try not to quarrel; anger which is a type of heat, can cause miscarriage or developmental defects in the fetus.
2. In contrast, birthing women want to eat and drink hot foods, and they seek heat and protective clothing because all of these things provoke bleeding, which eases and moves childbirth along. For this reason, home births are accompanied by manifestations of heat and warm, protective items such as clothing and blankets. The presence of friends and relatives also contributes to a warm environment. Windows and doors should be shut since an air current can interfere with the descent of the child, placenta and blood.

3. During the puerperium, the woman must avoid both very hot and very cold things. She can, however, have warm or light foods. This serves to maintain an equilibrium between losing all the "dirty blood" of childbirth and not going beyond that point to excessive bleeding, which could mean hemorrhage. Perhaps her greatest fear at this moment is the entrance of cold into her body. The entrance of cold air could suspend the expulsion of the "dirty blood" and cause swelling in the body and a series of very dangerous puerperal illnesses. To protect herself against these dangers, the puerperal woman --and the Quechua-Aymara woman in general -- wears many items of clothing. For Andean women clothes are an important symbol of protection against the elements, a symbol of health promotion and good manners.

Appendix I describes the ethnophysiological model in more detail.

## **V. FINDINGS BY STAGE OF THE REPRODUCTIVE CYCLE**

This chapter examines the relative contributions of and connections between the three sets of factors studied: cultural, social and economic. The chapter is divided into three sections. The first describes the beliefs, attitudes and practices for each of the eight stages of the reproductive cycle and the second summarizes the findings from TBAs. In both of these sections, the findings from the study and reference groups are differentiated; however, emphasis is on the study group because it represents the main target group for future project intervention. The third part of the chapter presents the study's findings on two additional themes of special interest for communications interventions: access to mass media and women's outlook toward the future. This third section discusses the findings from the study and reference groups together, since they differed minimally.

### **A. PREGNANCY**

#### **Study group/non-users of formal health services**

##### **Recognition of pregnancy**

Most women become aware of their condition early in pregnancy. They notice such signs as the cessation of menstruation, nausea, vomiting, and lack of appetite. A few become aware of their condition when their belly begins to grow. Women believe that menstruation stops in this phase of pregnancy because they must accumulate blood in all parts of the body so that at the moment of childbirth this blood can push out the baby. Commonly, women feel certain about a new pregnancy by the second month. They do not usually go to the formal health system, since pregnancy is considered to be a normal process.

##### **Attitudes toward pregnancy**

The most common reaction of women in the study to a new pregnancy are of sadness and worry (Table 1). Most women feel that their family's income is not sufficient to support more children. Also, they believe that pregnancy limits their ability to work and thus to continue to provide an important economic support to the household. First children, however, are usually received differently, since they fill the social need to demonstrate a woman's ability to have children, their primary role in life.

This concern with quickly having the first child is one of the conditions of the traditional "trial marriage" that is common in rural areas. Most of the urban poor are of rural origin and, although their traditions have been somewhat modified, they still have an effect on daily lifestyle. In peri-urban areas, couples usually enter into a formal marriage, both civil and religious, only after they have had several children. Moreover, a woman's reproductive capacity qualifies her as being considered "strong."

In general, women say that their husbands feel positive about a new pregnancy. None-the-less, in some cases husbands express resentment, rejection of responsibility, and even order their wives to have an abortion. These attitudes are not common in the first pregnancies.

**TABLE 1**

**Attitudes toward Pregnancy  
Testimonials from Women Interviewed**

**When you learned you were pregnant, what did you think or how did you feel?**

- *It makes me unhappy to have another baby; we've already got enough, and there's no work.*
- *Worried, because my son is very small; he can't walk yet and I'm having another child too soon.*
- *I felt happy because I would have a child; I wanted us to get married but my stubborn mother didn't want it.*
- *I felt fear and joy at the same time.*
- *Worried, because I already have many children and there's no money.*
- *Happiness, but I lost my child and was worried.*
- *Sad because I didn't want to have another one...it makes me feel weak.*
- *I began to cry; I didn't want any more children.*
- *I felt desperate because I was not well; I am still an invalid and very worried.*
- *I was worried because I couldn't work when I was pregnant.*
- *I didn't want to have children but I was afraid to go for an abortion.*
- *Sorrow, because I'm going to have too many children to feed or get through school.*

**Special care and nutrition**

Most women consider pregnancy as a distinct time of life. It is normal and natural but certain care and a special diet are required. Among the normal practices are the following:

- Do not lift heavy things, because this can cause a poor positioning of the placenta and baby. Back pain is an indication of poor positioning.
- Do not sew, as this can cause the umbilical cord to wrap around the baby's neck.
- Do not expose yourself to heat or sun, because this can cause the loss of blood, a miscarriage or the poor positioning of the placenta.
- Do not have sexual relations, because it is very important not to have too much weight on the belly.
- Use the appropriate form of *manteo*. The objective is to find a comfortable position for the baby. *Manteo* can be a gentle rocking or violent bouncing, with the pregnant women thrown up in the air on a blanket held by various

- persons.
- Massage the belly with oils or animal fat. The massage should be gentle with mild oils (so as not to cause the loss of blood) on the abdomen. The purpose is to achieve a good position for the baby; it also has a psychological component.

### **Diet and nutrition**

The women studied classify individual foods as hot or cold, or neither hot nor cold, not necessarily corresponding to the temperature at which they are eaten. During different times in the reproductive cycle, certain foods are appropriate; the same foods may be prohibited at other times in the cycle. It is important to realize that the preference for foods has more to do with their perceived effect on the blood than with a balanced diet. The following should not be eaten or drunk during pregnancy, because they cause the loss of blood:

- "hot" foods
- spicy foods
- egg, liver
- alcoholic beverages
- salt, parsley, oregano

Among the foods preferred for consumption are the following:

- meat
- fruit
- vegetables

While the above is true in most cases, a few women feel that they should eat all foods during pregnancy.

Women do not consider it desirable to gain much weight during pregnancy because they believe that the baby can get stuck during delivery, causing a serious problem. This is the emic explanation of cephalopelvic disproportion. This concept also demonstrates women's knowledge of a direct relationship between maternal weight gain and birth weight. Women state that they do not know their usual weight nor how much they gained during a pregnancy.

### **Prenatal care**

Most of the women in the study group had never had prenatal care, although several had a single consultation. A single prenatal visit could mean that the woman had an unsatisfactory experience and therefore did not return. The main reasons stated for desiring a prenatal visit are to learn about the health and position of the baby and to see a physician concerning a possible complication. Among the reasons most cited for not attending prenatal care are the following (Table 2):

- lack of money;
- lack of confidence in doctors (that they do not know or cure all illnesses);

- fear of mistreatment;
- embarrassment in front of male doctors.

Most women who had a prenatal consultation did so because of some problem (vomiting or bleeding, particularly) or they were motivated by food supplements they received. If the reason for a visit was vomiting, the visit usually occurred two to three months into the pregnancy. If for other reasons, the visit usually took place around the eighth month. Women were generally not satisfied with the visits, because they were only weighed and asked questions, but did not learn information about the child. Government hospitals and private physicians' offices were preferred by the same proportion of women. In the final days before the birth, some women reported consulting a TBA in their neighborhood.

Through immunization campaigns and prenatal consultations, the Ministry of Health offers tetanus toxoid to fertile-age women and three months of iron supplements to pregnant women in the form of ferrous sulphate. Most women received at least one dose of vaccine during the campaigns, but they had no idea what it was for. Most of the women interviewed also had no familiarity with or knowledge about the iron pills. Only two had received tablets but even these women reported that they did not take them for the time recommended.

### Complications during pregnancy

The majority of women stated that they knew of no problems that could cause the death of the woman during pregnancy. The most dangerous example of lack of awareness is that women consider edema to be a normal and beneficial condition. The swelling, according to them, is the result of the accumulation of blood that is necessary for the birth to take place. Nonetheless, they identified some illnesses and risks that could complicate pregnancy:

- poor position of the baby;
- miscarriages;
- bleeding, considered a bad sign because it represents the premature loss of blood, and if it happens during labor or delivery in quantities beyond what is considered normal, it can even cause the death of the woman.

Weak women (by physical characteristics, origin, eating habits, etc.) are said to have more complications during pregnancy and delivery, as well as women who do not take care of themselves (break taboos) by doing such things as lifting heavy objects or eating food they should avoid. If problems arise, women first seek help from the husband or immediate family, then they call a TBA, and finally they go to a doctor. About half of the women claim to have never had a significant problem. Others mention nausea, vomiting, lack of appetite, and back and head pain.

**TABLE 2**

**Attitudes toward Prenatal Care  
Testimonials of Women Interviewed**

**Do you believe that a woman should have prenatal care during pregnancy?**

- *Yes, only to see if the baby is okay.*
- *Only if something is wrong; when the woman feels well there is no need to go.*
- *One should go only if there are problems; this depends on each individual. I don't go for prenatal care.*
- *Yes, it is necessary to go for prenatal care in order to see how the baby is doing, especially if it is not well.*
- *No, because [pregnancy] is not an illness; only if something is wrong.*
- *Yes, because sometimes the baby's hands are bad or the head is on the other side or something, and they have to operate when it's time for the birth.*
- *No, because I am normal, and besides, I'd have to pay for a consultation, and I don't have the money.*
- *Even if nothing's bothering you, you should have a consultation because you're in a delicate condition.*
- *To see if the baby's okay, but if nothing's wrong, why bother? I've never gone.*
- *No, because it's a waste of time and the only thing they do is touch us, make us open our legs, and the doctor sees everything.*
- *No, because everything is fine in your own home, and besides, I don't have the money to go.*
- *No, because the doctor is a man and that scares us.*
- *No, if everything's going to be fine, why bother?*
- *Because of lack of time. I have to make baskets all day long in order to sell them twice a week in the market. When do I have time to go?*
- *They say you're supposed to have prenatal care, that it's necessary, but I haven't gone.*
- *Yes, when they're in a bad position.*
- *No, because they say that at a prenatal visit they only look at your belly and your parts (genitals), and there are many men and women looking at us; that's awful; that's why I wouldn't have prenatal care.*
- *I wouldn't have prenatal care because I don't think it's needed; also I fear other people and especially a doctor if he's a strange man, although as a last resort I think I'd go, I'd visit a doctor because the TBAs make you die.*

### **Role of the TBA during pregnancy**

Most TBAs do not make prenatal visits, but only help in childbirth. If the pregnant woman requests, however, they occasionally do belly massages or manteo some days or weeks before the birth. Both practices are aimed at achieving a correct position for the baby. Some women claim not to know TBAs.

### **Accessibility to health services**

Accessibility problems are economic (including lack of time), social, and cultural. Distance or lack of transport are not barriers. Among the principal complaints are:

- Services are expensive and not very effective.
- You have to wait a long time.
- Hospital staff mistreat patients.
- Care is poor, rooms are cold, and they make the women undress. (This reflects the ethnophysiological need for a warm birth environment.)
- They touch the vaginal area and there are many health staff (medical students and strange men). In contrast, the home birth is seen as an intimate event in which the husband and immediate family members participate.

### **Reference group/women who use formal health services**

The following discussion notes ways in which the reference women differ from the study women.

### **Recognition and attitudes towards pregnancy**

Among the signs of pregnancy recognized in the reference group are growth of the breasts and change in mood (irritability). Abortion, instigated by the father, was not mentioned in this group as a reaction to pregnancy.

### **Special care, including diet**

Among the things that one should not do during pregnancy are wash clothes and self-medicate, which can cause the baby to be malformed. Reference group women are familiar with manteo and stomach massage, but say they do not undertake these practices. Dietary practices and attitudes toward limiting weight gain are similar to those of the study group. In general, women do not know how much they gained in previous pregnancies, except for a few who were told that they gained 5 to 10 kilograms.

### **Prenatal care**

Approximately half of the "users" went for their first prenatal visit at two months and had laboratory confirmation of the pregnancy. They have prenatal visits fairly regularly, readily accepting the prescriptions for vitamins and tonics. Interestingly, these two things are not considered to be medicines. Almost all had received tetanus toxoid vaccine and knew its

importance. Iron supplements are not well known, and those who took them complained of stomach aches. There were also complaints about hospital care related to: economic problems, lack of information given and medicines that are not affordable. These women also view edema as a beneficial sign that augurs well for an easy childbirth.

## **B. CHILDBIRTH**

### **Study group/non-users of formal health services**

#### **Awareness of labor**

Most women recognized well the initial signs of labor. These begin with stomach and back aches, desire to urinate, difficulty in walking, loss of the mucus plug or water breaking, and a "hard belly" or contraction. Usually, women are aware of the month of pregnancy, and around the ninth month they prepare the house and clothes for the mother and baby. Most have moments when they fear dying and/or they worry about the baby who is going to be born.

#### **Concepts related to childbirth**

Childbirth is referred to as an "illness," in spite of being the culmination of a normal process. This dichotomy highlights the precarious equilibrium and the co-existence of health and illness: there are illnesses that are necessary and even beneficial and expected, as in the case of childbirth.

The blood accumulated during the pregnancy is supposed to be eliminated with the birth of the baby. In fact, it is the blood that pushes the baby out of the body. For this reason, environmental conditions, as well as the foods and drinks that are prepared and consumed before and during the childbirth, should be those that facilitate the exit of the blood: hot foods, a warm environment, with no breezes or wind, and much clothing and blankets.

#### **Choice of the place of birth**

Usually, the place of birth is decided by the woman herself. Some wait for the husband's decision, and in a few cases the couple jointly decides. The decision is usually made during the pregnancy, before labor begins. In the study group, the births take place at home. Among the principal reasons for this choice are:

- Lack of money.
- Better care at home.
- Women have their loved ones with them.
- They can drink teas that help the delivery.
- They are ashamed of being attended by strangers.

Usually, in home births the husband provides most of the care, including help with the delivery. The woman's mother generally is present and sometimes another family member. Less often, a family might call a TBA from the neighborhood, who charges between 30 and

40 bolivianos (US \$8-10). When asked if they would again give birth at home, most women answer that they would prefer the hospital, but they do not have the money and are more used to home births (see Table 3). While many seem to perceive that risks are less in hospitals because of the greater knowledge of doctors, the discrepancy between what they say they would prefer to do and what they actually do is probably due to a series of factors that limit their access to formal health services.

TABLE 3

Attitudes toward Place of Birth  
Testimonials from Women Interviewed

Where is the best place to give birth?

- *At hospitals because it's safer.*
- *Only at home, since it's easy and the hospital charges.*
- *I would go if I had money...in the hospital they give medicines to slow down hemorrhage.*
- *I don't know but my mother always gave birth at home and nothing [bad] has happened yet; she's just fine. At home you are with your family and there are no strangers; besides, the husband buries the placenta. In the hospital they say you have to have it lying down, and my mother always gives birth kneeling, which is easier.*
- *At home it's private, you don't pay anything, it's affordable. My husband helps me if my mother's not there, and also you drink teas to help the birth. They don't understand us well in the hospital; besides, my friends tell me that they touch everything -- our genitals -- and also there's a lot of health staff.*
- *In the hospital they don't treat us the same as at home, and also they take more money if they operate on us.*
- *At home, because it's cheap, more comfortable, no one looks at us, and also our husbands are with us -- they say in the hospital they put us on a cold table, and we're naked and they laugh when we complain about any pain.*
- *For me it's with the doctors who can help us.*
- *At home, because in the hospital they send us away too soon and they make us walk. They don't know how to cut (the umbilical cord) and they get bothered and angry with us.*
- *In the hospital, because at home you're taking a risk being alone.*
- *In the hospital, because it's not good [at home] if it's a difficult delivery.*
- *Not in the hospital because they operate on you; the wound can open.*
- *At home. It doesn't cost anything, we are alone, there's no one else, and it's nice and warm.*
- *At home, because it's easier to do it there. No one sees us, we take care of ourselves alone without any problem; we sit down and the baby comes out quickly.*
- *Not in the hospital because a man attends you and it embarrasses me because they say that your feet dangle and they leave you uncovered and laugh at you. For this reason, I have to have the baby in my house.*
- *At home we can get ourselves comfortable and warm; in the hospital the bed is cold and the gown also.*
- *At home, because we can have the baby without going out and it's easy. They massage us, we can drink what we want, they use manteo, and they help us.*
- *At home, because nobody sees us; they give us food all the time -- chicken soup -- they leave us in bed for five days. In the hospital they release you the next day, and you have to go on the microbus, and more blood comes out. At home they massage your belly and at home they don't make us leave. To get up, it is necessary to massage the hands, feet, hips, and to wrap a cloth around the hips tightly or they will open. That's the way you're supposed to get up. In the hospital they don't do it that way. These women who give birth in the hospital later are unable to lift anything heavy.*

## **Knowledge of obstetric complications**

Generally, women recognize obstetric problems and complications. They distinguish between conditions that complicate the delivery and those that can cause the death of the mother. The following conditions are in the first group:

- Poor position of the baby.
- Prolonged labor.
- Dry birth. The loss of blood during the delivery must be adequate. An insufficient loss of blood is considered abnormal.
- Labor pains called "phengay." These slow down labor. They can be caused by the presence of a stranger in the room, especially if the person is dressed in black.
- Retained placenta, accompanied by excessive bleeding.
- Defecation by the baby during delivery.
- Baby's death during childbirth.
- Baby that is too big.

Among the possible causes of maternal death are:

- "Arrebato," a disease caused by failing to bind the women's head. It can cause blindness or even death.
- The rising up of the "magre" (see the discussion on the immediate postpartum period, below).

To prevent these complications, women say that the following practices should be followed: bind the belly and wrap the head (to avoid the inappropriate rising up of organs that are supposed to move down); drink teas and other home preparations; rub the belly (both to apply heat and to assure the proper position of the baby). Fewer women believed that the problems could be prevented by going to prenatal care and the hospital. A few women stated that they had problems during pregnancy. When a problem occurred, most women said they sought assistance first from their husbands, then from a TBA; only a few turned to another family member or a doctor.

## **Management of childbirth at home**

Once labor begins, the woman prepares the room. She cleans the area, closes the windows to avoid breezes, and piles up blankets, sheep skins, and other coverings on the bed. She prepares clothing for herself and the baby. Her outfit is comprised of blankets, wool, and clean rags that will be washed after the birth. She heats water in which to bathe the baby. Her husband or a TBA may rub her stomach with oil or chicken fat. She walks to bring on the birth and ties a belt around her belly. She drinks many teas to help move out the accumulated blood and expel the baby: teas made from carrots, chamomile, orange blossom, oregano (known to stimulate uterine contractions), coca leaves, parsley, and cooking oils.

These teas warm the blood. A few women believe that the teas replace lost blood and cleanse the inside of the body. Some women also report taking tablets or injections, called "pujantes" (labor augmenters) to speed up the birth, since they want a quick birth. Among these are

two pharmaceuticals, ergometrine and oxytocin, which are acquired without a prescription in pharmacies and with the pharmacists' full knowledge of their intended use.

The husband is the person who most often attends childbirth. She usually kneels at the side of the bed, sometimes bracing herself between the bars of the bed. Less often, the woman lies down covered with blankets, allowing no one, even the husband, to uncover her. The husband retrieves the baby from underneath the blankets and/or her skirts in most cases. In either position, the woman remains dressed, in order to have a warm environment and because of modesty.

The person who attends the birth cuts the umbilical cord with scissors cleaned with alcohol (to disinfect the scissors) or with pieces of broken ceramic. Once the cord is cut, it is tied with common thread or sometimes with wool. Many women interviewed had no suggestions how to improve childbirth at home, and some see no reason to want to improve things. Only a couple of women asked for information about this.

The women who had been attended by TBAs indicated that there is a sequence of practices during home birth: the TBAs wash their hands, boil water, prepare scissors and thread, and make a series of teas. Many TBAs were also said to give labor augmenters during childbirth.

## **Reference group/women who use formal health services**

### **Choosing the place**

The reference group has received some orientation or instruction about the importance of giving birth in a hospital and they see the need to save money to pay for hospital expenses. This causes much anxiety as the birth approaches; for this reason the decision about the place to give birth is made during the pregnancy and it is a joint decision with the husband.

### **Knowledge of obstetric complications**

It was easier for this group to identify problems in childbirth, such as fetal distress and maternal illnesses. They believe that mothers with heart problems are at greater risk of dying during childbirth. As for other risks, the findings are similar to those in the study group; reference group women also reported using teas and other labor augmenters to speed labor.

### **Management of childbirth**

In the hospital, they said that the cord is cut with clean scissors and is tied with thread, and the attendant aspirates phlegm from the baby's throat. These women believe that childbirth is less risky in a hospital because there are always nurses and doctors to take care of complications. Therefore, they believe that they will not die like women who give birth at home. But they do complain that in the hospital they are not given a pillow after the birth, which would help prevent the *magre* from rising up and killing the mother. Also, they do not like the cold rooms and breezes, and they complain that they are mistreated by the medical staff, who do not let them cry out and complain, and who, above all, do not return the placenta for ritual disposal.

## **C. BIRTH OF THE PLACENTA**

### **Study group/non-users of formal health services**

#### **Delivery practices**

Women believe that once the baby is born the placenta should come out quickly. This occurs if the placenta is well placed and the position of the woman (vertical) and the atmosphere (warm) favor its exit. Women help the exit by pushing on or blowing into a bottle; few wait for it to come out on its own. If there is a delay, some women stick a spoon in their throat to make themselves vomit. Others tie the umbilical cord to their big toe and try to pull the placenta out. If a TBA attends the birth, she usually hits the woman's back with a spoon or stick (thinking that the placenta may be stuck to the back) and she may also pull the cord.

#### **Care of the placenta**

Once the placenta is out, women feel relieved. Generally the husband or another close relative (the mother or mother-in-law) washes the placenta and buries it in a secret and shady place. Women explain that they do this so that the mother and child will have a calm life; this also protects both of them against diseases. Some women believe that the placenta should be burned rather than buried.

#### **Complications related to the placenta**

Women consider that the inappropriate position or retention of the placenta is caused by excessive exposure to the sun or heat before the birth. These situations cause the placenta to stick to the back, retarding its expulsion and causing serious complications and hemorrhage. In case of a retained placenta, the woman is advised to drink tea made from rosemary.

#### **Symbolism of the placenta**

The symbolism associated with the placenta is that of a body endowed with its own spirit emanating from both the mother and baby. This explains the importance of burying the placenta; since as it is "born," it also dies and the "cadaver" should be buried to set its spirit free. A body that is not buried or that has been abandoned or eaten by a dog is believed to have a spirit that wanders and complains to the family that abandoned it. This vision of the spirit that remains with the family until such time as they fulfill their ritual obligation of burial has its origin in a mixture of religious concepts.

### **Reference group/users of formal health services**

In contrast to the study group, reference women most often deliver in hospitals or clinics; few give birth at home. In the hospital, they do not see the placenta, much less have it returned to them. Because they do not know what happens to it, this practice causes anguish and worry. There was mention during the study that the placenta is put in the trash by hospital staff where it can be eaten by dogs.

## **D. THE IMMEDIATE POSTPARTUM PERIOD**

### **Study group/non-users of formal health services**

#### **Care during the immediate postpartum period**

Once the baby is born, women rest in bed in a semi-seated position so that the womb and uterus do not rise up and so that all the "dirty blood" can descend and the body can clean itself. The following practices are recommended:

- Not touching water or bathing, because water is a cold element that can interfere with the exit of "dirty blood".
- Remaining semi-seated. Partial verticality avoids the rise of some body parts.
- Staying wrapped up in bed to avoid the inopportune entry of cold and exposure to wind.
- Binding of the abdomen and tying something around the head to prevent illnesses caused by the rise of some organs.
- Avoiding excessive exposure to sun and heat, because the woman is searching for an equilibrium in the quantity of blood she loses.
- Cleaning oneself, one body part at a time, with rosemary tea.

The first three days after birth are considered to be the most critical, since both mother and child risk dying from grave complications. Nonetheless, special practices last from one to four weeks, and occasionally as long as eight weeks. The foods recommended during this period are:

- meat broths with oregano (to help the exit of blood);
- cinnamon water and anise tea (to clean the body);
- chocolate.

"Cold" foods should generally be avoided during this postpartum period because they affect the womb and stop the bleeding. They can even turn the blood white (with pus). Some women state that these foods give babies headaches, colic, and constipation. Among the foods to be avoided are:

- spicy foods,
- onions,
- chicha (corn beer), and
- pork, potato, lamb, and plantain.

## **Complications of the immediate postpartum period**

The mother greatly fears complications in this period. Some are related to retention of remnants of the placenta and to heavy, prolonged bleeding, which weaken the mother. Other complications are part of the folk culture:

- **Sobrepardo**: Pain in the entire body accompanied by chills. This is a postpartum complication caused by the entrance of cold air in the body. It is cured by cutting the nails and hair of the woman, adding these ingredients to others such as huana and zorrino that are burnt to make smoke which is then breathed by the woman.
- **Recaída**: Chills and fever of less duration and intensity than in sobrepardo; it is cured by drinking teas made from special herbs.
- **Pasmo**: Illness characterized by chills and pain in the gums and teeth. Sometimes it causes the teeth to fall out. It is caused by touching water after the birth and by not being wrapped up, and is cured by vapor baths and certain teas.
- **Suspensión de la sangre (cessation of bleeding)**: This is a sign of grave illness, because the natural postpartum bleeding is stopped.
- **Arrebato**: Illness caused by the woman not wrapping her head; it can cause blindness or even death. It is explained by the inappropriate rising up of some element.
- **Rise of the magre**: Description of the magre, an organ which has no equivalent in biomedical anatomy, is one of the innovative findings of this study. This organ is formed behind the navel during pregnancy and is subject to the principles of verticality and movement. During childbirth, the "lowering" of the womb, baby, placenta, and blood occur. The magre is supposed to follow the same logic. If the magre rises, it causes illness and death. This ascent is greatly feared by the mother during the immediate postpartum period; this is the reason the abdomen is bound. Women assert that the magre can rise into the lungs and block the respiratory passages, causing the woman to die from asphyxia.

When these problems occur, the woman is treated at home but she may also be taken to a hospital, since the complications are considered to be very serious and to require complex treatment.

### **Reference group/women who use formal health services**

The basic knowledge and practices are the same for both groups. The reference group is characterized, as would be expected, by influence from the biomedical system. Dietary recommendations include eating meat and eggs; however, both groups coincide in the foods which should be avoided. Although they use home treatments such as teas and other

preparations, the reference women also seek medical care more frequently than study women, and there is evidence of self-medication.

## **E. NEWBORN CARE**

### **Study group/non-users of formal health services**

#### **Newborn care**

In home births, the mother is the initial center of attention; only after the mother has been taken care of is care given to the placenta and finally to the baby. Problems that occur with the fetus or newborn are not considered to be preventable or treatable. The only recourse is the custom of *manteo* to adjust a poor fetal position. If this does not achieve the desired result, women become fatalistic. Women do not seek or attempt solutions to other problems with the newborn, such as neonatal asphyxia.

Care of the newborn is generally the responsibility of a member of the mother's family. The newborn is cleaned with a rough cloth to remove the vernix; then it is bathed with warm water and dressed. The purpose of the clothing is not to keep the baby warm but rather to protect it against air and wind, which are the cause of illness. A new mother does not normally have any immediate contact with the newborn, who remains separate from her during its first hours of life. In most cases, breastfeeding is not started immediately (see the section on breastfeeding).

#### **Illnesses of the newborn**

During childbirth, the baby is believed to be subject to a series of problems that can cause its death. Among the most common are prolonged labor; a baby born swollen or that drinks blood during its birth; a very large baby that gets stuck, making a vaginal delivery impossible (obstructed labor); and a bad position, which complicates the normal birth process. The mother perceives various illnesses of the neonatal period quite clearly. Among these are respiratory problems, above all referring to the newborn's inability to breathe (ways of resuscitation are not mentioned), stomach ache, and illnesses from the folk culture, such as orejado, arrebato.

Orejado: This refers to a skinny (malnourished) child. This condition occurs because the baby came in contact with odors from some body that was decomposing (it is not possible to gauge whether this term also refers to low birthweight babies).

Arrebato: This occurs because the child was frightened.

Most mothers state that they have had such problems with newborns at some time. They know traditional and home remedies to treat sick children that are based on ritual and folk knowledge. In only a few cases did they report turning to a doctor for help. It is important to mention that women in the study did not identify symptoms that might allude to neonatal tetanus.

## **Reference group/users of formal health services**

### **Illnesses of the newborn**

This group has some knowledge of illnesses in the biomedical sense, such as fetal distress and respiratory problems. In contrast to the study group, as the first treatment option, they choose a doctor. Relatively few women in this group, however, reported problems with their newborns' health.

## **F. BREASTFEEDING**

### **Study group/non-users of formal health services**

#### **Immediate feeding of the newborn**

The first food given to the newborn is normally anise water, which is administered in a baby bottle or with a spoon. According to the interviews, the purpose is to clean the child's intestines and avoid digestive illnesses (colic). Anise water is not seen as a substitute for milk, but as a stop-gap measure, since the majority of women do not believe that their milk comes in until the second or third day after delivery. While some mothers follow this regimen, others reported giving their child nothing during this period, while still others reported giving urine from the older brother, administered by spoon or dropper. Urine is believed to be good to clean the intestine of the blood swallowed by the infant during delivery.

Only a few mothers reported initiating breastfeeding immediately after a birth. Advice concerning breastfeeding usually comes from the woman's mother and at times from a TBA or mother-in-law. Beginning the third day, mother's milk is customarily the baby's exclusive food for the next six months. A few women, however, also reported giving canned milk.

#### **Knowledge about breastfeeding**

Traditional knowledge considers that the quality and flavor of mother's milk depends on such external factors as the mother's diet, and such internal factors as her constitution (strong or weak). It is believed that poor-quality milk does not nourish the child, that the child rejects milk with a bad taste, and that the mother's mental state (an internal factor) can influence the quality of the milk, as in the case of colerina milk. The names commonly used to describe mature breastmilk are:

- Leche gatuna: blue, watery, thin milk, it is not good for feeding children because it makes them ill and kills them;
- Leche ch'ua: another watery and thin milk, it also is not good for the child;
- Leche espesa (thick milk): good, normal milk;
- Leche colerina: milk produced when the mother gets upset; since it is not good for the baby, it is expressed and discarded;
- Sank'u: another thick milk that is good for feeding.

## **Colostrum**

Women believe that their breasts fill up with mature milk on the second or third day after delivery. They refer to colostrum as "corta". Some consider the "corta" to be leche gatuna (which should not be given to the infant) or blood serum. Nonetheless, half of the women reported giving colostrum to the baby, alternating it with anise water. The mothers who gave colostrum explained that they did so for the benefit of their children, because this gets milk to them quicker, or simply because the child cries or there is nothing else to give it. Those who said they did not give colostrum feel that it "kills" or is "poisonous." Some women believe that colostrum harms the baby's stomach and causes colic. Different qualities of both colostrum and breastmilk are given different names. Generally, having poor quality milk is given as a reason not to breastfeed.

## **Techniques and problems of breastfeeding**

The women interviewed claim to feed their children both on demand (when the child cries) and on a schedule. The child usually nurses until it is satisfied, only rarely for a certain length of time. Most women use both breasts. Advice on breastfeeding comes from the mother, nurses, and less frequently from the mother-in-law. Among the most frequent problems are cracked nipples, inverted nipples, and the child becoming bloated from swallowing air. In spite of these problems, breastfeeding usually continues. Such problems are cured by an herb called rejón, which was said to be recommended by other women and some nurses.

## **Supplementary feeding**

Opinions differ widely concerning the appropriate age to introduce supplementary foods. Generally, at six months of age children receive foods other than breastmilk; in a few cases this occurs at three or four months. The common foods are soups, often with fruits. The majority of women continue breastfeeding until the child is 18 months old.

## **Reference group/women who use formal health services**

There are some interesting and important differences between the reference and the study groups, among these the role of the doctor as an advisor. Also, while canned milk is mentioned frequently, the initiation of breastfeeding occurs earlier, generally on the day of birth. Colostrum, which is called by this name, is given by most, and mothers feel that it is food and that it strengthens the child's resistance to illness. Women who do not give colostrum think that it harms the child. Among the most serious breastfeeding problems mentioned by women are having little milk or not enough milk, something not mentioned by the study group. Cracked nipples are cured with creams, and women go to the doctor for treatment. The introduction of supplementary food is earlier than in the study group, but the foods are basically the same.

## **G. FAMILY PLANNING: Both Groups**

As there are no major differences between the two groups regarding family planning and abortion, the findings for both groups are summarized together.

### **Attitudes toward family planning**

Family planning decisions engender conflict. Women state that they must talk to their husbands, but many do not do this for fear that the husband will get angry and misjudge their intentions. According to women, they are the ones who perceive most clearly the need to limit the number of children for economic and health reasons. They indicate that their husbands do not see these problems and desire to continue having children, even though the family is already large. An important reason for this masculine attitude is that men associate contraception with the possibility of increased infidelity; therefore, according to their wives, they show no interest in, and often oppose, contraception. For their part, women criticize their husbands' attitude and consider them irresponsible.

In general, birth spacing is perceived as a necessity, on the one hand in order to be able to care for the youngest child and on the other hand to give the mother's body, especially the uterus, time to recover from childbirth. Likewise, women mention that they have responsibility for running the household and many times for earning supplementary income or working with the husband. A new pregnancy, on top of these responsibilities, creates a tremendous financial and emotional burden. The average time desired between pregnancies is three years.

### **Knowledge of family planning**

In the early reproductive years, most women become pregnant without realizing it and are not conscious of the fact that family planning is available. The concept comes into play as a means of ending childbearing once the family is already large. Women lack reliable information on family planning methods. Generally, information comes from family and friends, occasionally from doctors or mothers clubs. Friends customarily advise women to "cure" themselves, referring to induced abortion which is considered to be a form of family planning. Rumors that contraceptives cause women to become mentally ill, lose too much weight, gain too much weight, or become promiscuous, are rampant.

Few women have been counseled about contraceptive methods, during clinic or hospital visits. Women are very curious and they request and need more information. The contraceptive methods most frequently mentioned are the following:

Traditional methods to avoid pregnancy:

- Almost complete sexual abstinence, even sleeping apart from the husband.
- Sexual abstinence during seven days before and after menstruation (exactly the reverse of the biomedical recommendation).
- Breastfeeding, although they have little confidence in this, in spite of the increased birth intervals that they attribute to it.

### Modern methods:

- Copper T.
- Pills.
- Injections.

### Traditional methods to abort pregnancies.

- Oregano tea.
- Induced abortion.

### Social aspects of family planning

Society assigns women a predominantly reproductive role. Strong women should have many children and weak women are looked down upon because they cannot. Motherhood constitutes a way of satisfying the husband, especially when the children are male. In the traditional trial marriage, it is very difficult to postpone pregnancy once the couple lives together. Formal marriage usually occurs once there are already children, and if there are no children during the trial period, the man may leave.

Keeping in mind women's social role and the tendency to become pregnant at a young age, women cannot conceive of delaying the first pregnancy; it is more logical for them to interrupt a pregnancy if it occurs, which is done with hot teas and then induced abortion, than to prevent it. In spite of traditions and economic influences, urban women have begun to feel sorry for women who have many children and few economic resources for raising them.

## H. ABORTION

### Spontaneous and induced abortion

The terms used to describe spontaneous abortion or miscarriage are "failure" and "malparto" (bad birth or delivery); for induced abortion "to cure oneself" or less frequently "make it come out."

Women believe they can prevent spontaneous abortions, and to do this they employ a series of practices related to physical activity as well as to diet. The concept of "taking care of oneself" includes avoiding heavy physical effort because this can cause exhaustion or injure the belly. To prevent miscarriage, one should avoid foods such as coffee, "hot" foods such as oregano, honey, and onion, as well as prolonged exposure to the sun. These things, because they are "hot", can trigger a loss of blood. Also important, although to a lesser degree, is taking psychological care to prevent the woman from getting upset or complaining.

Miscarriages happen to weak women who do not take care of themselves. Almost all women associate the loss of blood as a symptom, and most go immediately to a doctor. Some women, in spite of knowing the severity of this problem, treat themselves, and a few seek assistance from TBAs or traditional healers.

Women view miscarriage and induced abortion as totally different. Miscarriage is seen as an unfortunate accident in a woman's life, related to the fact that she is already in the group of weak women who must take many precautions. On the other hand, induced abortion is commonly practiced as a method of family planning. Husbands and family members frequently encourage this practice, and the women themselves see induced abortion as a way of freeing themselves from undesired pregnancies. The woman who "cures herself" is not seen as a weak woman.

The attitudes expressed by women when they learn they are pregnant are often negative. It is perhaps for this reason that many experiment with teas, "hot" foods and other preparations that are forbidden during pregnancy in hopes of provoking an abortion. Once the pregnancy progresses, however, they are less likely to do this and will seek ways to protect it instead. This clearly illustrates the importance of "hot" and "cold" foods at different points in pregnancy.

## **I. TRADITIONAL BIRTH ATTENDANTS (TBAs)**

### **Study group/untrained TBAs**

This section describes the practices and knowledge of TBAs. As mentioned earlier, information was obtained through in-depth interviews and focussed group discussions with TBAs in the study area. A screening questionnaire was used to identify TBAs, since there is no register of their addresses, especially for those in the study group. It is important to remind the reader that the TBA plays a less important role in Bolivia than in other settings. Although TBAs attend some home births, husbands and other family members are the preferred birth attendants in the home setting.

### **Signs of pregnancy and pregnancy care**

Most TBAs in the study group report the following signs of pregnancy: nausea, vomiting, sunken eyes, feeling melancholic and weepy, and splotches on the face. They diagnose pregnancy by taking the woman's pulse, which is said to speed up if she is pregnant. Some mention the cessation of menstruation, swelling of the jugular vein, and growth of the abdomen. None of the study TBAs provide routine prenatal care; in fact, all are called only at the time of delivery. Nonetheless, some reported giving abdominal massages beginning the third month of gestation, in order to make the baby more comfortable. Hot oil or chicken fat are used. They also participate in manteo to move the baby to the proper position.

Among the advice that TBAs give pregnant women is the following:

- Do not get upset. This can cause a miscarriage.
- Do not weave or sew. This can cause the umbilical cord to wrap around the baby's neck.
- Do not expose yourself to sun or heat.
- Eat whatever you crave in order to avoid vomiting.

### **Complications of pregnancy**

Among the principal complications that most TBAs mention are: pain in the back, vagina, and belly and vaginal bleeding. Others indicate not knowing about complications. TBAs attribute almost all problems to the poor position of the baby. The fact that only one TBA mentioned a vaginal exam may be related to the traditional belief that nobody should see the woman's genitals. To handle complications, most TBAs massage the abdomen, advise rest, and a few refer women to formal health services. If a pregnant woman uses a TBA, it is normally the same TBA who attended her on a previous occasion. The TBAs say they prefer not to attend some births for such reasons as the family's inability to pay, not finding the baby's head (primiparas), a narrow vagina, or profuse bleeding, although they state that these situations occur rarely.

### **Care in home births**

Most TBAs state they know that labor has begun when the woman is eight or nine months pregnant and she feels an intense pain in her belly, loses the mucus plug, feels very anxious, has an urge to push, and the baby drops. Some TBAs note an increase in the woman's pulse the week before the birth, just as it increases at the beginning of pregnancy. They decide that labor has begun by taking the woman's pulse. A few TBAs begin following the woman's progress a week or so before labor actually begins.

To facilitate the birth, TBAs give hot teas made of rosemary, orange blossom, horse-tail, carrot flower, cooking oil, and beaten or boiled eggs. Among the most common practices are massaging the belly with hot oil. Only one TBA said she administered novalgina or dioxador if the woman was in great pain. Another TBA admitted using intramuscular oxytocin to speed up births.

Moments before the births, the TBAs reported washing and disinfecting scissors with alcohol and preparing cotton, soap, and diapers for the baby. In a few cases, TBAs reported using no materials, forceps and/or syringes for intramuscular injections.

TBAs said that the place of birth is generally the mother's bedroom, so that she has a maximum of privacy. She usually kneels on the ground on a blanket or sheep skin placed on a piece of plastic, or she may lie on her back on the bed with her feet suspended. Before attending the birth, the TBAs report washing their hands with soap and water, wrapping their heads, and straightening up the bed or other place where the birth will take occur. TBAs try to identify any problem with the baby before the birth by touching the head and listening to the fetal heart beat, which if slow is very dangerous. They say that their

experience is that few births have problems.

### Obstetrical complications

Among the danger signs known to TBAs are: 1) bad position of the baby (e.g., transverse lie); 2) emergence from the vagina of the umbilical cord or an arm or leg before the head; and 3) umbilical cord wrapped around the baby. Most TBAs attribute these problems to the mother's not taking care of herself or pushing too early. In these cases, most TBAs said they refer women to a doctor. Some TBAs believe that they should accelerate the delivery, and to do this they reported cutting the amniotic sack with a razor blade or tweezers; others massage and wrap the mother's belly. The TBAs who carry out these practices state that the babies are born quicker and without complications, and that when they refer women to a doctor they never receive any feedback. Most TBAs say that normal labor lasts from four to 14 hours, but others say one to three days. If labor lasts longer than normal, the woman is given hot teas and massages.

### Newborn care

Once the baby is born, most TBAs cut the cord before the placenta comes out; however, a few reported waiting for the placenta. Generally, they use scissors, razor blades, or a knife. In some cases, when the mother insists, they use *k'analla* (a piece of ceramic).

The TBA's care of the newborn was said to start with cleaning the blood and phlegm from its face, then tying the cord with thread or string. The baby is bathed and covered with cotton or clean rags to protect it from breezes or cold. TBAs say that the normal baby has rosy skin and a good sucking reflex. Only a few say that they do not know how to recognize a healthy baby. If the baby is abnormal, it does not cry, it sleeps a lot, and it has no strength. Most of these cases are sent to the hospital. Most TBAs say they do not know the reasons why babies die in childbirth. However, some say possible causes are the mother's taking medicines during pregnancy, complaining during the last months, or being beaten.

### Care of the placenta

Almost all TBAs wait between 15 and 30 minutes for the placenta to come out; some wait as long as three hours. If the placenta is retained, the woman blows on an empty bottle, and the TBA gives back massages with some type of fat, or she/he "adjusts" the abdomen. Also, they give hot teas. Only a few reported sending a woman to the hospital. As part of the normal procedure, the TBA buries the placenta in the woman's house.

### Breastfeeding

Most commonly, untrained TBAs advise initiating breastfeeding three days after childbirth. Only a few advise mothers to start two or three hours after the birth. Almost all instruct mothers to give anise water during the first two days. They call colostrum "corta" and consider it harmful to the child; only one recognized it as the best food for the child. They know three types of breastmilk: corta; gatuna milk, which is dangerous to the child's life; and normal milk, which is white, thick, and adequate for feeding. The duration of breastfeeding that is generally recommended is a year and a half, with fewer TBAs

recommending less time (i.e., 10 months), and even fewer recommending a longer duration.

### **The Postpartum period**

Most TBAs say that the woman should receive special care for two months, but a few say for only three to five days. During this time, the woman should be kept warmly clothed or wrapped, drink warm liquids, and not touch water or do physical work. Doing otherwise can cause recaída, pasmo, and sobreparto. According to the TBAs, interpregnancy intervals should be two years, with a minimum of one and a half years. For family planning, TBAs advise the traditions of periodic abstinence and breastfeeding. Some TBAs claim not to know any contraceptive methods other than traditional herbs.

### **Reference group/trained TBAs**

#### **Signs of pregnancy and prenatal care**

This group reports giving prenatal care consisting of measuring the fundal height and pulse rate, as well as counseling women to make prenatal visits to doctors. They say they recommend at least a weekly bath and give instruction on consuming foods from the three food groups.

#### **Complications of pregnancy**

These TBAs consider frequent vomiting and the woman's age (over 35 or under 18) to be risk factors. A woman who has pain in the right side that makes her limp is also considered to be at great risk. If the woman has edema in the feet and legs or strong, premature pains in the abdomen, she is also said to be referred to the hospital.

#### **Childbirth assistance**

Once the beginning of labor is diagnosed, TBAs prepare baths of chamomile with eucalyptus for the women and administer mallow and soap enemas to facilitate the birth. Fainting is considered a complication that can occur at the beginning of labor. Among the materials TBAs use are: a new knife, brush, nail clippers, gauze, plastic apron, towels, thread, sheet, and plastic. Before attending the birth, TBAs say they wash their hands.

#### **Newborn care**

The baby is bathed with rosemary water and the body rubbed with a rough compress until the skin turns red. Then it is given a massage with beaten egg, and phlegm is cleaned from the nose and mouth. If it does not breathe immediately, the TBA pats it on the buttock. The child is considered normal if it can hold up its head and it weighs between 3,000 and 4,000 grams. The child is considered abnormal if it is purple and does not cry. TBAs state that babies die at birth due to lack of oxygen and immediate care.

### **Care of the placenta**

To help the placenta come out, TBAs induce vomiting with their hand or a spoon. Afterwards, they examine the placenta to see if it is complete and hand it over to the family.

### **Breastfeeding**

This group of TBAs advise immediate breastfeeding and feeding on demand. They also stated that colostrum is the most important milk because it protects the child from many diseases. They also claim to believe that the different types of milk are equally good for feeding the infant.

### **Postpartum**

The duration of special care was said to be two weeks, with the postpartum diet based on meat and carbohydrates. If complications arise, trained TBAs say they refer women to a doctor.

### **Family Planning**

With respect to interpregnancy intervals, the trained TBAs stated that if pregnancies come too close together, babies are born weak and with low intelligence; short birth intervals were also said to be dangerous because the mother's body is weak. This group of TBAs recommends vaginal douches after intercourse, using boiled water, salt, lemon, and/or vinegar as the preferred contraceptive method.

## **J. OTHER FINDINGS<sup>3</sup>**

### **Radio**

Radio is the most common mass media; it is listened to by all but a few of the respondents. Most women listen daily and others only two or three times a week. The most popular hours appear to be during the morning and on weekends. The most popular type of programs are musical shows and the news. Most women do not value health programs. Among those who listen to such programs, the most frequently mentioned topics were diet, fever, cholera, and traditional medicine. These topics are discussed on the program "Medical Consultation," which is produced locally by Radio Centro.

### **Television**

Approximately half of the women in the study group watch television as a source of information. Frequency of watching varies from daily to two or three times a week. Preferred viewing times are afternoons and evenings. Among the favorite programs are soap operas, news, and films. Of the health programs, women mention "Dr. CBA" on Channel 13,

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<sup>3</sup>Since there were no major differences between the two groups, only one summary is presented.

a locally-produced, weekly program that gives information on a variety of topics, including contraceptive methods. Another frequently mentioned program is Dr. Carmen Ochoa's, a weekly Spanish production on the topic of sex education. The program was also said to provide information about cholera, and cancer in women, a topic of great interest to the women interviewed.

### **Print materials**

The majority of women interviewed do not know how to read. Nevertheless, most women claimed to have seen posters with clear messages, only a minority say that they did not understand such materials. Among the topics mentioned were immunization, cholera, diseases, breastfeeding, abortion, pregnancy, and iodized salt. Women said that the most attractive posters are those that have drawings and words. Other women could not specify what aspects of posters they liked. Magazines and books are not widely seen.

### **Social activities**

Almost half of the women interviewed said they do not participate in any social activities, staying at home with their children instead. Among the principal social activities for those women that do participate are religious, family and community events, Cochabamba-wide festivals and mothers club meetings.

### **Outlook toward the future**

Many women have a fervent desire for their children to study and become professionals. Some women say that they go along with what their children want to do or be, and a few state that they have never thought about this. Most women want their children to be useful, good, studious, and hard workers and to achieve this they say that parents have to help and sacrifice for them. The women see the professionalism and honesty that they desire for their children constituting the most important means for them to improve their socioeconomic standing. Looking to the future, women believe that their children's lives will be more difficult than their own, in terms of staying healthy and supporting themselves. They consider it most important for their children to maintain faith in God, go to the doctor, and follow the advice of experienced persons. Only a few mentioned traditional healers. The fatalistic attitude that many women have toward life, and their anguish and loss of hope for their own future, is projected in their aspirations for their children. To sacrifice for one's children is considered a maternal duty.

## **VI. CONCLUSIONS**

Clearly, the Quechua-Aymara health system has both positive and negative implications for maternal and child health. Among the many protective attitudes and practices are the importance of diet and the promotion of health in daily life, prolonged breastfeeding and the bed-rest prescribed for new mothers. It also should be noted that there are many practices that might be connected to the principal causes of maternal and neonatal mortality cited in the introduction. This final chapter analyzes these practices and suggests possible interventions for modifying their negative impacts.

### **Utilization of Services**

The underutilization of all types of formal reproductive health services -- a priority area for the MotherCare Project -- is also discussed. One very important finding of the study is that the women who are non-users of formal health services are familiar with these services. Although many women have not utilized the available services for their own care, they frequently have opinions and beliefs about them based on what family and friends have reported (see Table 3). This study has verified that in many cases the population recognizes medical knowledge and if necessary, as in the case of complicated deliveries, will use the formal system as a last resort. Nonetheless, although they recognize that the formal system has many good things to offer, they reject or prefer not to use its services.

Obviously, there are many reasons--economic, social, and cultural--for the underutilization of reproductive health services in Cochabamba. Specifically, we have seen that women do not utilize formal health services because they do not have the money to pay, because they do not like the treatment (interpersonal) they receive in health facilities, and because the services themselves conflict with the community's ideas about women's health and well-being. This conflict is due, in large part, to the existence of an alternative health system that underlies women's beliefs, attitudes and practices, and to the fact that formal health services are often delivered in a way that not only fails to respond to traditional beliefs but is also in direct opposition to the society's norms for male-female roles and relationships.

This study has resulted in the description of two logical health models or systems: the biomedical model that is the basis for the formal health system and the traditional Quechua-Aymara model as it has evolved in urban Cochabamba. Each system has a theoretical basis in human physiology, which underlies its preventive and curative practices, and each offers services in response to a demand that reflects how the community chooses between them. Understanding how the two systems are similar and different, and how they interact, is a prerequisite both to increasing the utilization of formal health services and to improving home practices that are related to maternal and neonatal health.

### **COMPARISON BETWEEN THE QUECHUA-AYMARA AND THE FORMAL HEALTH SYSTEMS**

The similarities and differences between the two systems can be classified in three categories: harmony, isolation, and conflict. The beliefs and practices in each of these categories can also be classified as positive, negative or neutral in terms of health impact. The following sections discuss and provide examples of these relationships.

## Harmony

In many ways, the biomedical and Quechua-Aymara systems are in harmony. This harmony is manifest in three ways: similar practices and beliefs that have a strong scientific basis and are considered positive; others that are considered neutral; and, lastly, others that may be considered dangerous.

Among the beneficial practices in which the two systems coincide are:

- not lifting heavy things during pregnancy;
- avoiding the loss of blood during pregnancy;
- not getting upset either in pregnancy or while breastfeeding;
- not consuming alcohol during pregnancy;
- external palpation during pregnancy;
- breastfeeding on demand for an extended period;
- initiating supplementary feeding at six months.

This harmony can serve as a basis for intervention strategies, since it implies beliefs and practices held in common by the two systems. Emphasizing these may make the use of formal health services more attractive.

While examples are few, the Quechua-Aymara belief system has had some effect on the formal health system--unfortunately, however, the effect has not always been a positive one. This is demonstrated by the fact that several popular practices, such as giving anise water to the newborn, have been incorporated into hospital practices. While such points of harmony should generally be encouraged, in this case it is important to note that giving anything other than breastmilk to the newborn is not recommended from a biomedical standpoint. International guidelines, such as the 1989 joint WHO/UNICEF statement, "Protecting and Supporting Breastfeeding: The Special Role of Maternity Services", call for exclusive breastfeeding to be initiated within one-half hour of delivery and continue until 4-6 months of age. Giving other preparations and foods during this period exposes the newborn to undue risks of infection from contaminated water and feeding bottles, and it can also interfere with the establishment of successful lactation.

Likewise, the formal system has influenced the traditional health system, and again this influence has not always been positive. For example, in some home births oxytocic medicines are now used to speed labor. It appears that these products include oral ergometrine tablets and oxytocin injections. Although these pharmaceuticals can be very beneficial if used under medical supervision, their use by untrained persons, particularly during labor, can result in fetal distress and/or a ruptured uterus. Another example of a negative practice that both systems share is use of the baby bottle, which women have learned about from seeing it used in some clinics.

## Isolation

Some traditional practices that have strong cultural roots have little to do with the formal health system. Among these are not sewing or weaving during pregnancy, taking soups and teas and special foods during and after the birth, and bathing with rosemary water after the

birth. Making such beliefs or practices the focus of intervention strategies is not recommended since they are not harmful nor do they affect service utilization. However, it is important to remember that they are important for promoting health within the Quechua-Aymara system.

In other cases of isolation, the effects may be dangerous, and intervention is needed to bring the two systems closer together. Perhaps the most important example is the lack of popular acceptance and use of an important formal health service -- prenatal care during pregnancy. Since prenatal care is essentially preventive in nature, it is foreign to the Quechua-Aymara system which has no equivalent for preventive action during pregnancy by anyone other than the woman herself. In general, although people take many preventive actions in their daily lives, health providers in the Quechua-Aymara system perform an eminently curative function, with healers and TBAs providing care only in the case of illness. This is why while TBAs may be called to assist during some births (a condition that is referred to as "getting sick" in popular terminology), only rarely do they attend women during the prenatal period, a time that is considered to be normal.

The traditional Quechua-Aymara ethnophysiology also lacks the biomedical concept of elements or signs of risk in processes that are considered normal. Moreover, some biomedically-recognized danger signs, such as generalized edema and poor weight gain during pregnancy, are considered to be beneficial in the Quechua-Aymara ethnophysiology.

As a result of these conceptual differences between the two systems, few women seek prenatal care and those that do are unclear about the need for or the utility of such care. It is very clear from women's testimonials (Table 2) that few see the value of prenatal care and most have no understanding of the preventive purposes of the immunizations or pills they receive.

The concept also persists that newborns should be taken for health care only in the case of serious conditions, with the formal health system seen as a last resort for curative treatment. The belief that illnesses in the postnatal period are caused by external elements that should be treated by traditional methods causes families to delay seeking formal health services for such a long time that when they do, it is often too late to help the infant. This harmful behavioral pattern makes it extremely difficult to have an impact on newborn morbidity and mortality.

Isolation is also seen in the immediate postpartum period. Women believe that doctors know a great deal but not everything, and that they know how to cure some diseases, but not all. This attitude possibly arose because the biomedical system has not tried to find ways in which biomedical and traditional definitions of illnesses might be similar, as in the cases of the sobre parto, the recaída, and the magre that rises and kills the woman. Although these are important illnesses in the Quechua-Aymara system, modern medicine neither recognizes nor has tried to understand them. Neither has it given importance to external elements such as bad air currents (aire), wind, and sun, which the people believe cause specific ailments.

## Conflict

Unfortunately, there are abundant examples of conflict between the two systems. The study encountered strong contrasts in each of the eight stages of the reproductive cycle. From the biomedical perspective, the essential problem is scarce use of health facilities that provide reproductive care. Table 4 shows in some detail the conflict that exists between the two systems in relation to the low utilization of services for delivery assistance.

One area of extreme conflict exists because health facilities keep labor and delivery rooms cold and well ventilated, and require patients to wear light-weight, open hospital gowns. All of this contradicts community beliefs about the importance of warmth during labor and delivery. Another conflict is the viewing of the birth itself. While families believe that the delivery is an intimate, family event at which only the husband should be present, the hospitals have made delivery an almost public occasion, witnessed by many unfamiliar people -- often many more than necessary. In Cochabamba, these frequently include medical students, paramedical staff, and cleaning staff. These situations conflict with the patient's concern for modesty and intimacy, causing profound negative reactions in the women.

Although the husband plays a crucial role during home births, husbands generally have no access to hospital delivery rooms, and the advantages of their possible participation in hospital births have not been considered. Women feel uncomfortable in an unfamiliar environment and among strangers. Care of the placenta in the hospital also constitutes a strong conflict, since the parents do not know the placenta's final destination, which has profound significance in the traditional ethnophysiology.

Another example of conflict between the two systems is the prenatal diet. While the Quechua-Aymara system uses a traditional classification of "hot" and "cold" foods and considers "hot" foods to threaten the pregnancy, the formal health system ignores the women's beliefs and practices and advises "building and energy" foods. This creates a conflict since many of the recommended foods contradict women's beliefs about appropriate diet during pregnancy.

During the immediate postpartum period, the Quechua-Aymara system advises bedrest for several days or weeks. During this period, the woman should be semi-reclined and wrapped in clothes and blankets. In contrast, institutional births use quite different norms. Besides being kept in cold rooms and dressed in light gowns, women who give birth in hospitals are released during the infant's critical first three days of life. The following words of one woman represent the sentiments of many:

*"At home nobody sees us; they always give us a little something to eat -- chicken soup - they don't get us out of bed for five days. In the hospital, they release you the next day, and the microbus takes you, and more blood comes out. At home they massage your belly and they don't make you leave. To get up, you should have your hands, feet, thighs, and back massaged and have a tight belt around your thighs to keep them close together. That is the way to get up. In the hospital they get you up all the time. These women who give birth in the hospital aren't able to handle anything heavy later on."*

**TABLE 4**

**Conflict between the Quechua-Aymara and Biomedical Systems regarding Delivery Assistance**

<u>Quechua-Aymara System</u>	<u>Issue</u>	<u>Biomedical System</u>
warm environment	room temperature	cold environment
no air currents	ventilation	ventilated room
husband, mother-in-law, TBA	attendants	doctors, nurses, interns
heavily clothed & wrapped	clothing	light gown
none	preparation	enema, wash and shave vaginal area
hot foods and teas	diet	none prohibited
vertical	position during labor	horizontal
walking	movement during labor	none
teas, massages, augmenters, pharmaceuticals	labor inducers	oxytocin
kneeling	position during delivery	supine gynecological position
a ceramic shard	instrument to cut umbilical cord	metal
bury or burn in home area	care of the placenta	throw it in the trash
modesty, privacy, well-being of woman, adherence to protective customs	primary concerns	proper biomedical techniques, asepsis, well-being of infant, other patients' needs

## Other Factors

It should be emphasized that not only cultural factors affect the relationship between the two systems. Economic and social factors are also very important. Since the study group is from a deprived socioeconomic class, economic considerations have direct influence on their behavior. In Cochabamba, neither public nor private health facilities deliver free health services for poor women. Women know they have to pay 5-10 bolivianos for a consultation and 30-50 bolivianos for delivery assistance<sup>4</sup>. Families do not customarily save money in order to pay for an institutional birth.

Another conflict women feel deeply is the social aspect of going to formal health services. Almost all women complain of the poor way they have been treated, the lack of information they received, and the lack of kindness shown them when they have utilized formal services.

## Summary

Understanding how the Quechua-Aymara and the formal health systems are similar and, especially, how they conflict is an important first step toward change. The results of this in-depth study have given planners in Cochabamba a good indication of some of the potential interventions that might be developed to bring the two systems closer together and, thereby, improve the health situation for women and newborns. The final chapter of this report contains recommendations for such interventions.

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<sup>4</sup>It should be noted that the present costs of a normal delivery in a government hospital in Cochabamba at the time of the study was actually between Bs \$50 - \$150.

## VII. RECOMMENDATIONS FOR PROJECT INTERVENTIONS

The findings of the qualitative study described in this document were presented during a strategy development workshop in Cochabamba, from August 30 to September 1, 1991. During the workshop, representatives from the organizations that are working with the MotherCare Project analyzed two lists of important practices that were identified through the study--the first, a list of those popular practices that are rejected by the biomedical system, many of which have detrimental effects on maternal and neonatal health (Table 5); the second, a list of the biomedical practices that are rejected by the population and, as such, may act as barriers to the utilization of services (Table 6). In both cases, shorter lists of priority practices, or those requiring immediate intervention, were then defined.

The criteria used to prioritize practices for intervention included both the feasibility of changing a specific practice (considering its cultural, social and economic roots), and the epidemiological importance of that practice in health terms. Once practices were prioritized, the workshop's participants generated recommendations for strategies that might be developed to change them through:

- information, education and communications activities;
- modification of health services, including the content of services and the way in which they are delivered or offered to the population; and,
- training of health providers at all levels.

The methodology used during this workshop is explained in greater detail in Appendix 2. The detailed recommendations put forth during the workshop are also provided for the reader's information in Appendix 2. In the sections that follow, the workshop's recommendations and the study's other programmatic implications are briefly discussed.

### Priority population practices

The following seven problems were selected by the workshop participants for immediate intervention (not in order of priority):

- lack of recognition of generalized edema as a sign of risk during pregnancy and the failure to seek medical attention when it occurs;
- use of pharmaceutical labor augmenters (ergometrine and oxytocin) by untrained persons during home births;
- cutting and tying of the umbilical cord with nonsterile materials;
- failure to provide immediate attention to the newborn;
- delaying the initiation of breastfeeding, and discarding of colostrum;
- not seeking medical care for newborns with problems;
- limited use of modern family planning methods and the related use of induced abortion to limit and space births.

**TABLE 5**

**Popular Practices Rejected Scientifically and/or by the Formal Health System**

- Not using the rhythm method of family planning correctly, abstaining on the days before, during, and after menstruation and not during the fertile period.
- Not breastfeeding because of "bad milk."
- Not seeking medical care for problems of the newborn infant.
- Lack of attention to the newborn immediately after birth.
- Bathing the infant after birth.
- Pulling on the umbilical cord to remove the placenta.
- Low utilization of available institutional delivery services.
- Not utilizing contraceptive methods.
- Not identifying edema as a risk factor during pregnancy.
- Not getting tetanus immunizations.
- Poor utilization of ferrous sulphate.
- Not seeking prenatal care.
- Self-medication during pregnancy and childbirth.
- Avoiding much weight gain during pregnancy.
- Using labor augmenters to speed up delivery.
- Practicing abortion as a method of family planning.
- Not feeding colostrum to newborns because it is considered poisonous.
- Giving anise water rather than colostrum to babies during the first days.
- Drinking hot chicha during labor.
- *Humear* the place of birth (fill with smoke).
- Seeking formal care only for complications.
- Tying the cord with unprepared materials.
- Cutting the cord with nonsterile materials.
- Practicing *manteo*.

In general, it was decided that these problems should be addressed through the communication of key behavior-change messages to the population, using a variety of mechanisms, including print materials, radio, television, and community education programs. In addition to the specific activities and messages mentioned in Appendix 2, the following important points were raised by the workshop's participants and the study's investigators:

- The identification of the sign of a dangerous complication during pregnancy, such as generalized edema, should begin by differentiating the location of the problem; for example, edema of the legs and ankles is normal during pregnancy; however, in other parts of the body, such as the face, hands and arms, it is a sign of complications. IEC messages, therefore, must place emphasis on the location of abnormal edema.
- Concepts related to the vertical movements of the blood and organs should be incorporated into messages. For example, one might argue against inappropriate labor augments such as ergometrine by associating them with the possibility of altering the normal movement of blood during childbirth. In their place, other traditional substances could be encouraged, such as oregano tea which is also perceived as something that facilitates the delivery.
- Concepts related to external elements should be considered in association with what is happening inside the mothers. This relation is of special importance in the case of hot or cold foods, which should be considered in recommendations concerning diet during pregnancy and lactation.
- Possibly the most complex theme is the management of home births. It was suggested during the workshop that there should be less focus on the idea of having normal births in institutions and more emphasis on the increasing awareness of the "clean home birth" techniques and the danger signs and risk factors that call for a hospital birth. In this system, hospitals would constitute referral centers for high risk and complicated births, and referral to the centers would have to be done by family members or the woman herself. This would only be possible if simple and sensible indicators of obstetrical risk could be disseminated. Since the husband usually attends the births, he should be the primary target for messages on "clean birth." A good opportunity to reach men might be in army barracks, where young men give one year of military service and then usually return to their communities and marry soon afterwards.
- Care of the newborn after home births can be improved if messages insist that the baby, as well as the mother, should participate in the "hot" elements that surround the birth. In this way, deaths from hypothermia might be avoided. The essence of the message could be that the baby should be wrapped, should avoid touching water, and should be kept in a warm environment, just like the mother.

- Breastfeeding and colostrum. There is often a discrepancy between the "ideal" behavior and what might be called a "feasible" behavior, or one that we expect the population to be able to accept and perform. In the case of breastfeeding, for example, while immediate breastfeeding postpartum, giving of colostrum and withholding of any prelacteal foods are the ideals, the workshop participants felt that these might not be totally feasible, given the strength of cultural beliefs surrounding the importance of giving anise tea to the newborn. Instead, feasible behaviors and corresponding messages were felt to be:
  - ◆ put the child at the breast as soon after birth as possible;
  - ◆ give the infant colostrum; and
  - ◆ use a cup and spoon when feeding the newborn anise tea.
  
- Ethnophysiological barriers to family planning do not appear to exist. However, women's knowledge about contraception is very limited. Many women in the study population said that they wanted to plan their families, but confessed they lacked the information to do so. The expressed desire for more information is an important entry point for communications interventions. One of the first objectives of such interventions should be to reduce the current misconceptions about the side effects of modern contraceptives. It is also important to note that one of the principal obstacles to the acceptance of family planning methods is the attitude of the husband, whose concerns about infidelity will also need to be addressed.

Based on the study's findings, family planning messages should first emphasize limiting the number of children, and then the importance of child spacing. Poverty seems to cause multiparous women to react to each new pregnancy with sadness and worry. These feelings contradict the value that the Quechua-Aymara culture places on strength and fertility, showing the need to address economic concerns first, and cultural concerns second.

In the promotion of child spacing, cultural concerns are potentially more important than economic motivations. In this case, mention could be made of the body's need to recover after a birth, especially while a woman is breastfeeding. The fact that family planning could help reduce miscarriages also addresses women's concerns about preserving their own strength and status in society. As the study showed, such an explanation of cause and effect fits with the ethnophysiological beliefs and concerns of the population.

- Intervention strategies intended to modify household practices have to be planned and implemented with the full knowledge of their cultural, social and economic roots. Programs of information, education, and communication should employ traditional terms and concepts, focusing on the possible motivations and barriers that the study identified.

## Priority Health Service Practices

The study identified numerous barriers to the utilization of formal health services--cultural barriers that are often related to conflict between the population's ethnophysiology and the biomedical health system; social barriers related to the mistreatment that many women perceive in the health facilities; and economic barriers related to the cost of services.

To increase the utilization and improve the quality of health services, the workshop's participants gave six practices or conditions, common to the formal health system, priority for immediate intervention. They include:

- giving inadequate information and orientation to pregnant women during prenatal care;
- mistreating clients during prenatal visits and delivery;
- keeping labor and delivery rooms cold and ventilated;
- having too many persons present, whether auxiliary nurses, students, cleaning staff, interns, or attending physicians, during prenatal visits, labor, and delivery;
- insisting on the supine, gynecological position in labor and delivery; and
- not returning the placenta to family members for disposal.

During the project workshop, participants proposed six preliminary strategies for changing the six priority practices. Three were completely developed and three were only partially-developed during the workshop: Appendix 3 contains the draft strategies. Among the suggestions for modifying the formal health system are the following ideas:

- Intervention strategies should be directed not only at structural changes but also at the personnel who provide these services. Although some changes are apparently simple, the principal problem appears to be resistance to change from medical professionals trained in another logical way of thinking--which is why health personnel must become aware of the reasons for all changes and why changes should be planned on the basis of the explanations that this study uncovered.
- Some structural changes may be necessary in the delivery room. For example, a warmer environment could be created by avoiding excessive circulation of air, equipping rooms with heaters, or providing heavier gowns, socks or shawls to women in labor. Allowing the entrance of the husband to provide important emotional support to the woman may also be important. This innovation might, in fact, facilitate other useful changes, such as the return of the placenta to the husband.
- Health services should consider important findings related to the administration of diets and teas that are in accord with traditional customs.

- One of the greatest challenges will be changing the attitudes of health personnel toward their patients, attitudes that are directly related to reducing social mistreatment, long waits, the lack of (clear) information given to patients, and the excess of people in prenatal consultations and the delivery room. These are all difficult problems to confront. The purchase and use of pelvic models for the practical training of medical students could be one helpful step.
- The health system also has its deeply-rooted traditional practices that lack a sound scientific basis or that can be demonstrated to be harmful to health. Patients themselves support the continuation of some of these; for example, the use of baby bottles, anise water, and the immediate postpartum bath for the newborn. In contrast, others are simply perpetuated by medical custom. Since they are never questioned, they continue, even those that are despised by the women. Besides those already mentioned, such as the position in labor and lack of privacy, there are: the episiotomy, pubic trichotomy or shaving and vaginal examinations.<sup>5</sup> Whenever possible, it is recommended that scientifically validated alternatives be considered and tried in place of those biomedical practices that are rejected by the population. National, regional, and professional medical societies should all be involved in this process. When it is not possible to change such practices without a deterioration in the quality of care provided, at a minimum, it is recommended that all women be given clear information about a procedure and the reason for it, before being subjected to it.
- To reduce economic barriers to appropriate service utilization, public and private institutions should propose alternative ways of paying for services or discounts on delivery care for women who regularly attend prenatal care.

Intervention strategies directed towards these problems must make specific reproductive health services more accessible and acceptable to the population, without undermining the quality of the services in question. In order for these changes to come about, they must be planned with an understanding of the findings of this study and the full participation of medical professionals who will implement them.

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<sup>5</sup>Many of these practices, which have become routine in many hospitals, have been challenged in the literature.

**TABLE 6**

**Health System Practices Rejected by the Public**

- Keeping the pregnant woman in bed with no pillow to elevate her.
- Using medical terms and concepts that women do not understand.
- Making few comments on weight during the prenatal care.
- Long waits (loss of time).
- Prenatal care consists only of asking questions and weighing.
- Making few comments on the condition of the baby during prenatal care.
- High cost of prenatal and delivery care.
- The newborn is not bathed.
- The umbilical cord is cut with metal.
- The placenta is not returned.
- The woman in labor is not allowed to change positions.
- The woman must remain in the gynecological position for delivery.
- The patient is isolated from her family during labor and delivery.
- The delivery room is kept cold and ventilated.
- The patient is undressed.
- Routine episiotomies.
- Routine trichotomies or pubic and perineal shaving.
- Routine perineal scrubbing.
- Women must be in the gynecological position for prenatal exams.
- Mistreatment during prenatal exams and labor and delivery.
- Many interns and other staff are present during prenatal exams and delivery.
- Many vaginal exams, some unnecessary.

## Training TBAs

A third area of intervention should be in the training of TBAs. Although one finding of this study has been that husbands rather than TBAs attend the majority of home births, TBAs are often called when difficulties arise and it is likely that they attend or at least have contact with many complicated deliveries.

Many TBA practices are beneficial for maternal and child health, such as advising about appropriate nourishment; washing their hands; keeping a warm environment, a practices which is especially beneficial to the newborn; washing the materials and clothes used during the birth; respecting the vertical position during birth (kneeling or sitting on the edge of the bed); and permitting the woman to walk during labor.

Nonetheless, other practices are dangerous, and should be the object of intervention by means of TBA training programs. Among these are:

- using ergometrine tablets or intramuscular oxytocin to speed up the delivery;
- in difficult births, doing a vaginal exam and perforating the amniotic sac, without using sterile materials;
- routinely bathing the newborn, which increases the risk of hypothermia; and
- advising women not to feed colostrum and urging the use of anise water as the baby's food for the first days after birth.

Modifying some of these dangerous practices appears to be quite feasible, as shown by the fact that the reference group TBAs (who have received some training) have some appreciation for the concepts of risk and asepsia, and knowledge of situations in which they should refer the woman to the hospital.

## Future directions

Achieving changes in attitudes and behaviors, whether the population's or the health system's, is a long and arduous process. Initiating this process with a more complete understanding of the target population's beliefs and practices, and their ethnophysiology, has been an important first step in Cochabamba. Successful intervention strategies from the two sides--information, education and communications directed towards the public, and modifications in the health system--now depend in large part on a coming together of the formal and the Quechua-Aymara health systems. For this reason, MotherCare plans to disseminate this report to all institutions that provide maternal health services or that train health staff in Cochabamba. Additional in-depth studies and seminars, focusing on the reproductive health attitudes and practices of men, of decision-making when families are faced with serious maternal and neonatal health problems, and of the effects of the project's various interventions on attitudes and practices are also planned in Cochabamba over the next two years.

## **GLOSSARY**

## Glossary

The following terms are utilized frequently in the Quechua-Aymara culture:

<i>Aire o mal viento</i>	Literally, "air" or "bad wind." Something evil in the atmosphere; it enters in the body and can attack any organ at any time.
<i>Alimentos cálidos</i>	Literally, "hot foods." Those that produce internal heat in the body. They are bad during pregnancy because they produce bleeding and cause miscarriages. On the other hand, they are helpful during and after childbirth because they help things to come out.
<i>Alimentos frescos</i>	Literally, "fresh foods." "Cold" foods that refresh the organism or body. They are bad in the postpartum period because they make blood coagulate and thus stop bad blood from leaving the body. This causes the belly to swell.
<i>Akja (chichi)</i>	An alcoholic drink prepared by chewing corn and then letting it ferment.
<i>Arrebato</i>	An illness that can make women blind or even kill them, caused when women do not bind their heads. The child can also get this illness if it is frightened.
<i>Avilla</i>	White blood caused by fresh foods.
<i>Calentura</i>	Fever.
<i>Corta</i>	Colostrum.
<i>Curarse</i>	Literally, "to be cured" or "to cure oneself." To abort an undesired pregnancy, or less frequently, to use a family planning method.
<i>Chiri Chiri</i>	Chills that are cured by steam infused with <u>Schinus molle</u> (a sacred tree of the Incas), ashes, and coffee.
<i>Chumpa</i>	A woolen belt two or three meters long that is wrapped around the woman's belly and the newborn's body immediately after childbirth.
<i>Chuwa</i>	Watery, thin breastmilk.
<i>Enfermarse</i>	Literally, "to become sick." To go into labor.
<i>Gatuna</i>	Bluish breastmilk, watery and thin, that should not be given to infants because it makes them sick and kills them.
<i>Huayrara</i>	Small pimples that appear on the newborn's body because the mother left clothes to dry in the wind.

<i>Japhega</i>	Illness caused because the person was frightened or cried in certain places.
<i>Koar</i>	Religious rite in which one burns <u>koa</u> as an offering to Pachamama (Mother Earth), to attract good luck and drive away bad spirits. The koa contains special traditional herbs, mysterious substances, sweets, and dyed sheep's wool.
<i>Leche colerina</i>	Literally, "mag milk." Breastmilk produced when the mother gets upset. It accumulates in the nipple and therefore must be eliminated by squeezing it out before nursing the infant.
<i>Leche normal</i>	Thick, white breastmilk; the best milk.
<i>Magre</i>	An organ located in the woman's navel, formed at the time of conception. Its care during the immediate postpartum period is important because it can rise up into the navel via the respiratory system and kill the woman by asphyxiation.
<i>Mal parto</i>	Literally, "bad birth." Strong abdominal pains accompanied by vaginal bleeding. It occurs during pregnancy, is caused by the woman straining or receiving blows, and leads to expulsion of the fetus. This is also called <u>fracaso</u> ("failure").
<i>Mallphuracum</i>	A child who becomes ill.
<i>Manteo</i>	A strongly-rooted traditional practice that consists of bouncing the pregnant woman in a blanket held by four individuals, one at each corner, with the purpose of changing the position of the baby.
<i>Millur</i>	A special rock, transparent yellow, that is passed over the entire body.
<i>Nazca</i>	A condition in which the child cannot breathe.
<i>Nawi onq'oy</i>	A disease in the eyes caused when the contents of a pot spill, before or after the childbirth. It is cured by placing meconium around the infant's eye.
<i>Orejado</i>	Skinny (malnourished) child, a condition caused by the child breathing the bad odor left by a body that is decomposing (human or animal).
<i>Pachamama</i>	Mother Earth, the source of life.
<i>Parir</i>	To give birth.
<i>Partes</i>	Literally, "parts." Genitalia.

<i>Pasmo</i>	A postpartum complication. A disease characterized by chills and such pain in the gums and teeth that sometimes the teeth fall out. It occurs when a woman touches water after childbirth and does not keep warm. It is cured by taking a Turkish bath and hot teas of rosemary, chamomile, spearmint, and saltwort, and mouthfuls of rosemary.
<i>Pheng'ay</i>	A phenomenon that occurs when at the moment of childbirth a strange person or neighbor dressed in black enters the room. The infant returns to the mother's body, causing pains.
<i>Placenta pegada</i>	Literally, "stuck placenta." A condition caused by excessive time spent in the sun and direct heat. It causes the placenta to turn black during childbirth.
<i>Poge</i>	Thick milk (Aymara).
<i>Recaída</i>	Postpartum complication with chills and fever that does not last as long as that in <u>sobre parto</u> . It is cured with hot teas of quinine, rosemary, burnt onion and <u>azuri azuri</u> .
<i>Saik' u leche</i>	Old breastmilk.
<i>Seña</i>	Vaginal elimination of white mucus with blood.
<i>Sobre parto</i>	Postpartum complication that consists of body pain and chills. It is cured by cutting the nails and hair of the woman plus <u>huano</u> , <u>anatuva</u> , and fox meat. The woman breathes smoke from this preparation and she is given a cup of tea.
<i>T'isi</i>	Dry mucus.
<i>Wachar</i>	To give birth.
<i>Wato o k'ayto</i>	Thread or cord made from sheep's wool.
<i>Wawa</i>	Fetus, baby or child.
<i>Wayra</i>	Illness that enters through the nails when a woman goes out in the wind. The woman's genitals swell up, her teeth fall out, and she may die; if she survives, she remains weak.

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## **APPENDIX 1**

**The Beliefs and Practices of the  
Quechua-Aymara Woman During the  
Various Stages of the Reproductive Cycle,  
with Emphasis on Time and Space**

<b>STAGE OF THE REPRODUCTIVE CYCLE</b>	<b>FIRST STAGE PREGNANCY</b>	<b>SECOND STAGE DELIVERY</b>	<b>THIRD STAGE DELIVERY OF PLACENTA</b>	<b>FOURTH STAGE POSTPARTUM</b>	<b>FIFTH STAGE NEWBORN</b>	<b>SIXTH STAGE BREASTFEEDING</b>	<b>SEVENTH STAGE FERTILITY &amp; FAMILY PLANNING</b>
<b>PRACTICE OR BELIEF</b>  <b>PROPER PLACEMENT</b>	In the stomach	Not transversed	Loose for expulsion. Not stuck to the back nor raised.	The uterus has not ascended, dirty blood has descended, the woman in bed.	Together with the mother and still	Milk which flows from the breasts without swelling.	Open uterus
<b>CRITICAL MOMENT</b>	The final months	The shorter the labor, the better	The faster the expulsion of the placenta, the better	The first 3 days	The first month	Breastfeed for at least 8 months and up to 18 months. There is a moment when the mother's milk no longer helps the baby's health and growth. Also the first few days of life, the mother's milk is not so important.	Birth spacing must be at least 2 years to allow the uterus to recuperate; consecutive births can cause "failures" and the mother's deterioration.
<b>OBJECTIVES RELATED TO BLOOD</b>	Conserve and accumulate	Bleeding helps push the infant and facilitates bleeding	Expelling all the "dirty blood" from the delivery, the back	Expel all the "dirty blood" from the delivery but control bleeding so as not to bleed to death	Clean the newborn's stomach and eyes of the "dirty blood" from delivery	Unknown	Make certain blood descends every month
<b>ENVIRONMENTAL CHARACTERISTICS</b>	Avoid spending time in the sun	Warm environment-Intimacy	Warm environment	There cannot be any cold air or ventilation; a closed room is best	Warm Environment although the infant is bathed immediately	Environment is not cold	Warm environment favors the monthly descension of blood and not pregnancy

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STAGE OF THE REPRODUCTIVE CYCLE	FIRST STAGE PREGNANCY	SECOND STAGE DELIVERY	THIRD STAGE DELIVERY OF PLACENTA	FOURTH STAGE POSTPARTUM	FIFTH STAGE NEWBORN	SIXTH STAGE BREASTFEEDING	SEVENTH STAGE FERTILITY & FAMILY PLANNING
ACTIVITIES TO ENSURE PROPER PLACEMENT	Rubbing, <i>manteo</i>	Squatting, kneeling or sitting at the foot of the bed, warm up the room	Maintain the delivery position, tie the woman around her waist, bury the placenta in a secret and shady place	Rest in bed for several days or even several weeks or a month, cover up and wrap her head and waist	Maintain the little body warm, dress the infant and place it with the mother	Breastfeed the infant for each feeding, breastfeed several times during the day and night, omit the "corta" (colostrum) and let the other milk descend into the breast	Stay away from the husband on the fertile days which include and surround menstruation
POSSIBLE PROBLEMS	The placenta can slip out of place, the fetus can be poorly positioned	Transversed fetus	Can be stuck to the back, its disposal may not have been appropriate, the umbilical cord can re-enter the body	Remain with "dirty" blood in the body, hemorrhage, allow air to enter the body	If the mother has gained too much weight, she might have too much fat on her body and can suffer from <i>arrebato</i>	She may have milk that is not good like <i>gatuna</i> or <i>colerina</i> milk, many women believe the <i>corta</i> (colostrum) is also no good	Using an unnatural method can cause illnesses such as weight gain, weight loss, pain, nervousness, cancer, hot flashes
PREVENTIVE PHYSICAL ACTIVITY	Do not lift heavy objects, continue working lightly and do not walk excessively	rubbing, walking, changing position during labor, <i>mantear</i>	Tie the umbilical cord to the big toe with a thread (not a universal practice)	Stay in bed for 3 days well covered with the head and chest slightly elevated, do not leave the bed, do not touch cold water, do not work	Clean the nose and mouth of grease and blood, clean the whole body with a rough cloth	Eat well and do not complain as this sours the milk	Take precautions using both natural family planning methods, they perceive abortion as a method of f.p.

STAGE OF THE REPRODUCTIVE CYCLE	FIRST STAGE PREGNANCY	SECOND STAGE DELIVERY	THIRD STAGE DELIVERY OF PLACENTA	FOURTH STAGE POSTPARTUM	FIFTH STAGE NEWBORN	SIXTH STAGE BREASTFEEDING	SEVENTH STAGE FERTILITY & FAMILY PLANNING
CAUSES OF POOR PLACEMENT	Lifting heavy objects	Supine gynecological position	Spending too much time in the sun, being close to hot objects	Air or cold enter the body, expulsion of blood from the delivery gets out of control	The entry of air into the body causes <i>arrebato</i> (fear)	Bad milk comes from a weak constitution and from poor eating habits, swelling comes from not covering up properly or touching cold water	Putting foreign objects into the body such as tablets, spirals and others
SYMPTOMS OF POOR LOCATION	Backache	Long labor	Delay in the expulsion of the placenta	There are 4 types of postpartum illnesses: <i>recaida, sobrepardo, pismo, and magre</i> -all are related with the entrance of cold air into the body, symptoms include headaches, backaches and swelling	Swelling	The mother's milk makes the infant sick (i.e. diarrhea), mother's swelling makes breastfeeding impossible	Failures which indicate a weak woman with a weak uterus
FOODS AND LIQUIDS WHICH SHOULD BE TAKEN	Cool and light, good eating habits	Warm liquids	Warm liquids and foods	Light ones such as broths, oregano tea, chocolate helps in the controlled descension of the <i>magre</i>	Anise water at birth, breast milk later, although initiation varies from a few hours to a few days later	Those which are good for the child or the production of milk such as broths and chocolate ____	There are teas which cause failures (eucalyptus, flowers, oregano, fig leaves, and others)

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## **APPENDIX 2**

### **Recommendations for Cochabamba Project Interventions**

## **Methodology for Development of Intervention Strategies**

## APPENDIX 2

### MotherCare Project/Cochabamba, Bolivia Methodology for Development of Intervention Strategies

A set of project planning tools developed by The Mantoff Group was used to formulate IEC, services and training strategies for the Cochabamba Project.<sup>1</sup> Following a presentation of the findings of the qualitative study, the project's planners and participating organizations worked together during a three-day workshop in Cochabamba to complete the attached matrices.

The first matrix--**General Strategy**--begins with a description of the **Problem Practices** to be changed. Then users are asked to define the **Ideal Practices** that would, from a public health perspective, result in improved health status. Because ideal changes are not always possible, the next column, **Proposed Actions/Objectives**, is meant to include a list of "feasible" behavioral objectives, or those changes that the planners expect to be able to achieve with their interventions. Based on this list, the next three columns, **Communications**, **Modifications in Health Services** and **Training**, are used to recommend 1) potential behavior-change messages, 2) changes in the content of the way that specific services are delivered, and 3) content and target audiences for training interventions. The result is a list of potential interventions in these three areas.

The second matrix--**IEC Strategy**--takes the objectives and behavior-change proposed in the General Strategy a step further. In this case, the **Behavioral Content** for messages is listed and the points that are most likely to motivate the desired changes in behavior (**Motivations**) are also discussed. Planners are also asked to identify potential **Barriers or Areas of Resistance** to the changes they propose; **Authority Figures** that might be the best channels of information to the target audience; and any other **Complimentary Messages** that might be important to include in a communications effort. The **Media** (radio, television, print, face-to-face, etc.) that would be the most appropriate for delivery of the messages is then specified, as are the potential **Formats**, i.e. spots, educational programs, dramas, posters, etc.

During the Cochabamba workshop, participants complete **General Strategies** for seven of the population and six of the health services practices that they had earlier designated for immediate intervention. In addition, small working groups completed **IEC Strategies** for a subset of these practices. Their draft strategies follow.

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<sup>1</sup>The Mantoff Group is a social communications and marketing firm, based in Washington, D.C., and a subcontractor to John Snow, Inc. on the MotherCare Project.

## **General Strategies**

## GENERAL STRATEGY

Problem (Population): Delay in initiating breastfeeding for 2-3 days postpartum. **EXAMPLE**

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION IN HEALTH SERVICES	TRAINING
Pregnant mother	<ul style="list-style-type: none"> <li>*They do not breast feed the newborn during the first 2-3 days.</li> <li>*they feed the newborns anise water for the first few days.</li> <li>*Some mothers use a bottle to feed the anise water to the newborns.</li> <li>*Withholding and discarding the colostrum.</li> </ul>	<ul style="list-style-type: none"> <li>*Breastfeed the newborn during the first 2 or 3 days.</li> <li>*Do not feed them anise water.</li> <li>*Do not use a bottle.</li> </ul>	<ul style="list-style-type: none"> <li>*Place the child at the breast at birth.</li> <li>*Give the child the colostrum.</li> <li>*Use a cup and spoon when feeding the newborn anise water.</li> </ul>	<ul style="list-style-type: none"> <li>*Maternal milk is the best nutrition and drink you can give the baby during the first 2 or 3 days.</li> <li>*Colostrum is not bad milk but rather a very special and good milk for your baby.</li> <li>*All mothers can have good milk.</li> <li>*Colostrum nourishes the baby, cleans the baby's stomach and help protect him/her against infection.</li> <li>*Place the child at the breast at birth.</li> <li>*Use of the bottle can cause serious ailments and even death.</li> </ul>	<ul style="list-style-type: none"> <li>*Recognize the traditional practices and beliefs of the mothers and instruct them about the initiation of breastfeeding.</li> <li>*In those deliveries attended by health care workers, help the mother to begin breastfeeding within the first hour of the child's birth.</li> <li>*Advise women to feed colostrum to their infants and help them feel comfortable.</li> <li>*For those mothers that insist on feeding their newborns anise water, provide them with cups and spoons and explain why this is better than the bottle.</li> </ul>	<ul style="list-style-type: none"> <li>*Train health care workers about:               <ul style="list-style-type: none"> <li>-basic knowledge about breastfeeding with emphasis on colostrum.</li> <li>-Andean ethnophysiology about breastfeeding.</li> <li>-motivational contents to help mothers initiate breastfeeding immediately following delivery.</li> <li>-techniques for breastfeeding.</li> <li>-dangers associated with the use of a bottle.</li> </ul> </li> <li>*Train groups of mothers &amp; fathers as well.</li> </ul>

**GENERAL STRATEGY**

Problem (Population): Failure to seek medical attention for the newborn with problems.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION IN HEALTH SERVICES	TRAINING
-Family -TBA -Healthcare personnel	*Not seeking medical attention for the newborn with problems.	*Seeking adequate and immediate medical attention at the first sign of abnormality in the newborn.	*Seek medical attention for children who appear:  -depressed -skinny -to have a stomach ache -difficult respiration -cold -agitated	*If you act quickly when your child has a problem, you will be providing him/her with the opportunity for a healthy life. Get medical attention.  *Give your child the opportunity for a healthy life - get medical attention.  *Seek medical attention if your baby cries a lot, is cold, does not suck properly	*Be aware of the traditional beliefs and practices regarding the newborn:  -skinny -frightened -stomach ache  *Use the indigenous terminology, do not reject it.	*of health personnel *of traditional birth attendants *of the family  in recognizing risks in the newborn.

## GENERAL STRATEGY

Problem (Population): In home births, cutting and tying the umbilical cord with non-sterile materials

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TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATIONS TO THE HEALTH SERVICES	TRAINING
Family	<p>*Cutting the umbilical cord with clay pot shards.</p> <p>*Tying the cord with unsuitable, unboiled materials.</p>	<p>*Cutting the cord with sterilized or boiled materials.</p> <p>*Tie the cord with boiled or sterilized threads.</p>	<p>*Cutting the cord with sterilized or boiled materials.</p> <p>*Tie the cord with boiled or sterilized threads.</p>	<p>*A dirty delivery can lead to death.</p> <p>*Thread that is not boiled can lead to infection and death of your baby.</p> <p>*Tetanus is a result of a dirty delivery.</p> <p>*By cutting the cord with an object which has not been boiled, you can cause tetanus or infection in you child.</p>	<p>*Recognize traditional beliefs and practices and teach about a clean delivery.</p> <p>*Maintain a stock of preventive supplies.</p>	<p>*Training of health personnel in: -clean delivery and complications of an inadequate delivery.</p> <p>*Training of TBAs by health personnel about complications and consequences of an unclean labor (tetanus for example).</p> <p>*Teach families: -how to boil water for an adequate time;  -about boiling the thread;  -about washing and disinfecting hands before using these materials.</p>

**GENERAL STRATEGY**

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Problem (Population): Failure to identify generalized edema during pregnancy as a problem and to seek medical attention when it occurs.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION OF HEALTH SERVICES	TRAINING
Pregnant mother	*lack of identification of edema during pregnancy as a problem	*Recognizing edema.  *Recognizing that edema can be dangerous to both mother and child.	*Looks for sign of edema in the mornings  *In case of morning edema or edema in face, hands, seeks medical attention  *Looks for signs of edema in face and hands.	*Swelling in the mornings can be dangerous "See a doctor".  *Swelling in hands and face can cause you to have "attacks".  *Swelling in face and hands or excessive swelling before six months can kill you and your child.	*Provide equipment in health service to detect:  -high blood pressure -weight -albuminuria (tape)	*Train in risk detection and management of edema during pregnancy.  *Develop educational module for risk detection.  *Community:  -video in the waiting room -community programs -educational messages on milk.

## GENERAL STRATEGY

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Problem (Population): low acceptance of modern contraceptive methods and the continuing reliance on induced abortion as a family planning method.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATIONS TO HEALTH SERVICES	TRAINING
Men and women of reproductive age	<ul style="list-style-type: none"> <li>*No use of family planning methods.</li> <li>*Misusage of family planning methods.</li> <li>*use of abortion as family planning method.</li> <li>*Distorted information regarding (natural methods).</li> <li>*Reasons:                             <ul style="list-style-type: none"> <li>-Fear</li> <li>-Cost</li> <li>-Discontent</li> <li>-Misinformation (other methods)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>*Conscientious use of modern family planning methods.</li> <li>*Shared responsibility (family planning)</li> <li>*Reduced use of abortion as family planning method.</li> </ul>	<ul style="list-style-type: none"> <li>*Conscientious use of modern family planning methods.</li> <li>*Shared responsibility (family planning).</li> <li>*Reduced use of abortion as family planning method.</li> </ul>	<ul style="list-style-type: none"> <li>*Every couple has the right to chose the number of children to have.</li> <li>*If you wish to plan your family, go to the nearest health center.</li> <li>*Every couple should elect its own family planning method.</li> <li>*It is not bad to plan your family.</li> </ul>	<ul style="list-style-type: none"> <li>*Increase accessibility of information &amp; services:                             <ul style="list-style-type: none"> <li>-availability</li> <li>-adequate cost</li> </ul> </li> <li>*Health services should have a sufficient stock of commodities on hand.</li> <li>*Health personnel should be trained in family planning.</li> <li>*Rescue the family planning practices of the community.</li> <li>*Establish a counseling and orientation unit for family planning.</li> </ul>	<ul style="list-style-type: none"> <li>*Train personnel about:                             <ul style="list-style-type: none"> <li>-natural, artificial, temporary, and permanent family planning methods.</li> <li>-risks, limitations, side effects, and effectiveness.</li> </ul> </li> <li>*Human relations training</li> </ul>

**GENERAL STRATEGY**

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Problem (Population): In home births, lack of care to the newborn immediately following delivery.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTION/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATIONS TO HEALTH SERVICES	TRAINING
Expectant mother, family, community	Lack of attention to the newborn immediately following delivery.	<ul style="list-style-type: none"> <li>*Provide warmth.</li> <li>*Cover the newborn.</li> <li>*Cut the cord with a sterile utensil.</li> <li>*Place the child next to the mother's body.</li> <li>*Do not bathe immediately.</li> </ul>	<ul style="list-style-type: none"> <li>*A family member, or someone other than the person assisting in the delivery, should care for the newborn.</li> <li>*Provide warmth.</li> <li>*Cover the newborn.</li> <li>*Cut the cord with a sterile utensil.</li> <li>*Place the child next to the mother's body.</li> <li>*Do not bathe immediately.</li> </ul>	<ul style="list-style-type: none"> <li>*Cutting the cord with un-clean materials can kill your child.</li> <li>*Not covering the newborn immediately after delivery can kill him.</li> <li>*Both mother and child need to be covered and warm.</li> </ul>	<ul style="list-style-type: none"> <li>*Shared beds.</li> <li>*Avoid having rooms for healthy newborns.</li> <li>*Immediately place the child next to the mother.</li> <li>*Avoid routine bathing of the newborn.</li> </ul>	<ul style="list-style-type: none"> <li>Training modules and courses for healthcare personnel regarding immediate care of newborns.</li> <li>*Spread messages about immediate care and "risk free" newborns.</li> </ul>

## GENERAL STRATEGY

Problem (Health Services): Requiring women to be in the supine, gynecological position for delivery; women's rejection of services as a result.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION TO HEALTH SERVICE	TRAINING
Women	*Reject the supine position for delivery.	*Women submit to or accept position when necessary for exam, episiotomy, forceps delivery, etc.	*Follow health providers' instructions.	*The gynecologic or seated position is the most appropriate for the safety of women and their infants.	*Include counseling on this topic during prenatal care.  *Explain why, if the gynecological position is necessary.	
Health care workers	*Insist that women assume the supine gynecological position for delivery.	*Permit alternative positions for normal deliveries, such as seated or semi-upright.	*Monitor laboring women carefully.  *Use birthing chair.  *Attend normal births with women in seated or semi-upright positions.	*Women feel uncomfortable in the supine gynecological position. They prefer the traditional upright or squatting position.  *Upright position can facilitate the labor while a supine position goes against gravity.  *Scientific studies have shown that an upright position is preferable in normal births.	*Close monitoring of women in labor.  *Introduction of birthing chairs.  *Adaptation of aseptic techniques to alternative birthing positions.	*Teach health care workers the traditional practices of the patient and the rationale behind them.  *Teach how to conduct births in an alternative position

\*Note: In this case, workshop participants felt that both women and health providers would have to change their attitudes and practice. There are circumstances in which a supine, gynecological position is necessary for the adequate care of the woman and infant. In these cases, the woman must be educated or convinced by the health providers. In normal births, a seated or semi-seated position was recommended because it would put the attendant in the position to act quickly if an episiotomy or other intervention were to become necessary. Also, in this position, the group felt that "aseptic" standards could still be maintained.

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### GENERAL STRATEGY

Problem (Health Services): Mistreatment of patients by health care personnel during prenatal visits and delivery.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS	COMMUNICATION MESSAGES	MODIFICATIONS IN HEALTH SERVICES	TRAINING
	<p>*Mistreatment of patients in prenatal health care:</p> <ul style="list-style-type: none"> <li>-health care workers lack orientation regarding treatment of patients;</li> <li>-do not pay attention to the patient during prenatal visit;</li> <li>-spend very little time with each patient;</li> <li>-make fun of what the patient says;</li> <li>*During delivery:               <ul style="list-style-type: none"> <li>-physical and verbal abuse during labor;</li> <li>-procedures used are rude, repetitious and unnecessary.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>*More humane treatment of the patient.</li> <li>*Pay attention to the patient.</li> <li>*Give each patient a set amount of time for each visit.</li> <li>*Do not laugh or make fun of what the patient has to say.</li> <li>*Persuade the patient.</li> <li>*Only conduct necessary procedures and be sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>*All health care personnel should be courteous.</li> <li>*Listen to each patient's problems.</li> <li>*Fulfill the 4 patient per hour schedule.</li> <li>*Respect each patient's form of expression.</li> <li>*Calm the patient with words or medication.</li> <li>*Reduce the amount of unnecessary touching, exams, etc.</li> <li>*Allow the patients to give information.</li> </ul>	<ul style="list-style-type: none"> <li>*The pregnant patient requires understanding and affection.</li> <li>*Cordial treatment inspires trust.</li> <li>*Good medical attention will attract more patients.</li> </ul> <p>DELIVERY:</p> <ul style="list-style-type: none"> <li>*a trusting patient cooperates with the doctor.</li> <li>*A calm patient will deliver a vibrant child.</li> </ul>	<ul style="list-style-type: none"> <li>*Sensitize health care workers to improve human relations.</li> <li>*Respect each patients customs.</li> <li>*Conduct audits and medical supervision procedures.</li> <li>*Use audiovisual materials in prenatal visit rooms.</li> <li>*Demand and supervise humane treatment of the patients.</li> <li>*Promote the development of manuals and procedures.</li> </ul>	<ul style="list-style-type: none"> <li>*Promote human relations and public relations courses at all health centers.</li> <li>*Make future professionals aware of their social responsibility through medical and nursing schools.</li> <li>*Include human relations in medical training.</li> <li>*Educate the health services about the Andean culture.</li> </ul>

**GENERAL STRATEGY**

Problem (Health Services): Not returning the placenta to the family for ritual disposal.

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TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATIONS IN HEALTH SERVICES	TRAINING
Health care workers	<ul style="list-style-type: none"> <li>*Not returning the placenta.</li> <li>*They make fun of this custom.</li> <li>*They disregard this aspect of our culture.</li> </ul>	<ul style="list-style-type: none"> <li>*Return the placenta.</li> <li>*Stop making fun of this custom.</li> <li>*Become aware of the importance of this custom.</li> </ul>		<ul style="list-style-type: none"> <li>*Respect people's beliefs.</li> <li>*The placenta is important because total or partial retention can endanger the life of the patient.</li> <li>*Burying the placenta is related to fertility and holds spiritual connotations for the Andean culture.</li> </ul>	<ul style="list-style-type: none"> <li>*Provide bags for the placenta.</li> </ul>	<ul style="list-style-type: none"> <li>*Courses about the ethnophysiology related to the placenta.</li> </ul>

**GENERAL STRATEGY**

Problem (Health Services): Presence of many medical students, auxiliary personnel, cleaning staff, etc. during delivery and prenatal visits.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATIONS IN HEALTH SERVICES	TRAINING
Health team	<p>*Presence of many students and residents during examinations.</p> <p>*Inappropriate behavior and attitudes during examinations, i.e. comments, jokes;</p> <p>*No attempt to advise patients of reasons for procedures or what is entailed, prior to execution of procedure.</p> <p>*Entrance and exit of many people.</p>	<p>*presence of physician and nurse.</p> <p>*Presence of husband and/or family member.</p>	<p>*Limit the number of people in the prenatal visit and in the delivery room.</p> <p>*Improve behavior and attitude towards the patient.</p> <p>*Whenever possible, inform the patient of the examination to take place, and explain the reasoning behind each procedure.</p>	<p>*Human respect.</p> <p>*Fear, sensitivity, and modesty are all part of human nature and should be taken into consideration during medical exams.</p> <p>*The excessive number of people and lack of respect keep patients away from the health services.</p> <p>*Understanding of the doctor's STRESS and his need for alleviation from it; appropriate non-offensive ways to alleviate stress.</p>	<p>*Modification in teaching methods; i.e. use of pelvic models instead of patients for practicing techniques.</p> <p>*Explain the reason for the students' presence to the patient.</p> <p>*Limit the number of students per patient.</p> <p>*Greater control over and supervision of the residents and students by the educators.</p> <p>*Supervise compliance with institutional norms and regulations.</p>	<p>*To improve awareness of clients perspective, for:</p> <p>-teaching centers;</p> <p>-residents;</p> <p>-nursing personnel</p> <p>-service providers</p> <p>-Heads of services, Directors and Administrators.</p>

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**GENERAL STRATEGY**

Problem (Health Services): Lack of information for the mother during prenatal visits.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION OF HEALTH SERVICES	TRAINING
Health care workers	<p>*Inadequate or ineffective doctor-patient information and communication.</p> <p>*Procedures during prenatal visits that do not promote true communication.</p>	<p>*Provide adequate and exact information regarding her pregnancy to each woman.</p> <p>*Courteous, respectful and trusting treatment.</p> <p>*Providing orientation and education to each patient.</p>	<p>*Good doctor-patient relationship.</p> <p>*Use of illustrations and graphs for information &amp; education.</p>	<p>*Every woman should have at least 3 prenatal visits.</p> <p>*The obstetric procedures (rejected by women) are for the benefit of the woman &amp; baby.</p> <p>*Not all pregnancies are the same.</p> <p>*Counsel the mothers about the three food groups.</p>	<p>*Continuous training in human relations.</p> <p>*Development and use of IEC posters.</p> <p>*Demand punctuality from the health care workers.</p>	<p>*Train health care workers in:</p> <p>-interpersonal communication skills.</p> <p>-Andean ethnophysiology on prenatal care.</p> <p>*Train groups of mothers/fathers on the need for prenatal care.</p>

## GENERAL STRATEGY

Problem (Health Service): Maintaining the delivery rooms in hospitals and clinics cold and ventilated.

TARGET POPULATION	BEHAVIOR			INTERVENTIONS		
	PROBLEM PRACTICES	IDEAL PRACTICES	PROPOSED ACTIONS/ OBJECTIVES	COMMUNICATION MESSAGES	MODIFICATION IN HEALTH SERVICES	TRAINING
Health Team	<p>*Maintain the delivery room cold and ventilated.</p> <p>-temperature -air</p> <p>*Making women only wear light-weight gowns.</p>	<p>*Environment should be similar to the patient's homes:</p> <p>-closed, -warm, -woman clothed and covered</p>	<p>*Warm the delivery room.</p> <p>*Maintain the doors and windows shut.</p> <p>*Provide heavier clothing, socks and a blanket.</p>	<p>*Our patients feel more comfortable and calm in a warm environment during delivery.</p> <p>*The patient will be more cooperative with the medical team if she is warm and calm.</p> <p>*The possibility of hypothermia will be reduced and the baby will be born in a healthier environment.</p> <p>*Please close the doors and windows to keep the environment warm.</p> <p>*If it is done this way, demand will increase and morbimortality will decrease.</p>	<p>*Use: -blankets; -socks; -heavier robes in the delivery room.</p> <p>*Put a heater in the delivery room.</p> <p>*Establish norms to control the environment in the delivery room.</p> <p>*Place posters requesting cooperation of the health team.</p>	<p>*Initial instruction and continuing education for health team.</p> <p>*Content:</p> <p>a)the population's beliefs regarding hot and cold;</p> <p>b)the effects of hot and cold in the health system;</p> <p>c)negative effects of the cold on the newborn.</p> <p>d)established norms.</p>

## **IEC STRATEGIES**

ELEMENTS OF THE COMMUNICATION STRATEGY

EXAMPLE

TARGET POPULATION	MESSAGES					MEDIA	
	BEHAVIORAL CONTENTS	MOTIVATIONS	PRINCIPAL BARRIERS AND AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
*Pregnant mothers	<p>*Place the child on the breast at birth.</p> <p>*Give the newborn the colostrum.</p> <p>*If you want to feed your child anise water, use a cup and spoon</p>	<p>*The newborn who receives colostrum is better nourished and better protected against infection.</p> <p>*Colostrum cleans the newborn's stomach (intestine).</p> <p>*Children that do not receive the bottle are healthier.</p> <p>*Breastfeeding a child at birth will help the mother produce milk and decrease placenta and the hemorrhaging as well as help the dirty blood exit the body.</p>	<p>*Beliefs that:</p> <p>-colostrum is poisonous/kill's/is harmful/is not nourishing.</p> <p>-breast fill up with ripe milk during the 2nd or 3rd day after delivery.</p> <p>-anise water cleans the intestines and protects against digestive illnesses.</p> <p>*The mother or mother-in-law's beliefs.</p> <p>*It takes longer to feed using the cup and spoon.</p> <p>*Cups and spoons are not available at the services.</p>	<p>*Mothers of the pregnant women.</p> <p>*Mothers-in-law.</p> <p>*Nurses.</p>	<p>*The messages should emphasize that the newborn does not need any nourishment other than the mother's milk during the first days and months.</p> <p>*The faster the child is placed at the mother's breast, the faster the milk will come in and the dirty blood will exit the body.</p> <p>*Where to get information on breastfeeding.</p> <p>*Who to contact to resolve problems.</p>	<p>*Radio</p> <p>*Television</p> <p>*Printed material.</p>	<p>Spots</p> <p>Dramas</p> <p>Educational programs</p> <p>Posters in the health center</p>

### ELEMENTS OF THE IEC STRATEGY

Desired Behavior (Home births): To cut and tie the umbilical cord with sterilized (prepared) instruments.

TARGET POPULATION	MESSAGES					MEDIA	
	BEHAVIORAL CONTENTS	MOTIVATION	PRINCIPLE BARRIERS OR AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
<p>*Family</p> <p>*TBAs</p> <p>*Health care workers</p>	<p>*Knowing that home birth is the norm, health care workers should provide sterile materials to cut and tie the umbilical cord</p> <p>*When cutting the umbilical cord make sure the instruments are properly boiled.</p> <p>*To tie the cord use thread that has been boiled properly.</p> <p>*Before cutting and tying the umbilical cord, wash your hands.</p>	<p><b>FAMILY:</b></p> <p>*Cutting and tying the umbilical cord with sterilized materials and clean hands protects the child from sickness.</p> <p>*Cutting and tying the cord properly will make your child healthy and strong.</p> <p><b>HEALTH PERSONNEL:</b></p> <p>*You can contribute to reducing newborn tetanus and infections by giving the pregnant woman sterilized instruments.</p> <p>*By confiding in your patient and giving her sterile materials to tie the cord, you identify with her and gain her confidence.</p>	<p>*Lack of knowledge regarding: -tetanus -importance of sterilization -preparation of the materials.</p> <p>*The illusion and obsession of the health system to capture all potential patients for institutional birth.</p>	<p>*Husband *Mothers *Grandmothers *Mothers in law *Godmothers *TBAs</p> <p>Health Service: -Evaluators and consultants from international organizations.</p>	<p>*How to boil the instruments to cut and tie the cord.</p> <p>*Watch for signs of infection in the cord and look for health services.</p> <p>*Explain techniques for a clean delivery.</p> <p>*Explain the cause of neonatal tetanus. Describe tetanus and its consequences.</p>	<p>*Focus groups (TBAs and women's groups).</p> <p>*Take advantage of immunization campaigns to spread information about neonatal tetanus.</p> <p>*Talks and educational materials.</p>	<p>*Talks with audiovisual materials.</p> <p>*Dramas</p> <p>*Posters and educational materials</p>

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### ELEMENTS OF THE IEC STRATEGY

Desired Behavior (Home births): Not using augmenters (ergometrine, oxytocin, etc.) during labor.

TARGET POPULATION	MESSAGE				MEDIA		
	BEHAVIORAL CONTENT	MOTIVATION	PRINCIPLE BARRIERS OR AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
<p>*Pregnant Mothers</p> <p>*Family Members</p> <p>*Women of Reproductive Age</p>	<p>*Avoid pharmaceutical augmenters, whether they are tablets or injectables.</p> <p>*Do not recommend nor use biomedical augmenters.</p> <p>*Offer an antispasmodic substitute or harmless home teas.</p>	<p>*There are augmenters which are effective and not harmful.</p> <p>-Examples of home remedies: orange blossom, carrot or manzanilla teas.</p> <p>-Pharmaceutical examples: spasmodics</p> <p>*These augmenters can help delivery without hurting the mother or the child.</p>	<p>*The women want a fast and easy delivery.</p> <p>*The market favors the use of augmenters.</p> <p>*The traditional custom of using augmenters.</p>	<p>*Traditional Birth Attendants</p> <p>*The mother of the pregnant woman</p> <p>*The mother-in-law</p> <p>*The rural teacher</p> <p>*The health promoter</p>	<p>*The augmenters are more useful after delivery to help lose some of the "dirty" blood without hemorrhaging.</p> <p>*If you use augmenters which are not recommended, your child could be slow for the rest of his life.</p> <p>*If you use augmenters which are not recommended, they can rip your uterus and kill you.</p>	<p>*Radio</p> <p>*T.V.</p> <p>*Community talks</p> <p>*Printed materials</p> <p>*Secondary schools</p>	<p>*Time slots</p> <p>*Dramas</p> <p>*Posters</p>

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### ELEMENTS OF THE IEC STRATEGY

Desired Behavior: Care for the newborn immediately after delivery in the home.

TARGET POPULATION	MESSAGE					MEDIA	
	BEHAVIORAL CONTENT	MOTIVATION	PRINCIPLE BARRIERS O AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
Pregnant mothers, family and community	<ul style="list-style-type: none"> <li>*The newborn should be looked after by a family member or someone other than the person assisting the delivery</li> <li>*Cut the cord with a clean instrument.</li> <li>*Cover and keep the child warm.</li> <li>*Place the child next to the woman's body.</li> </ul>	<ul style="list-style-type: none"> <li>*The newborn that is cared for since birth will be strong.</li> <li>*During delivery both the mother and the newborn need to be covered and warm.</li> <li>*When we cut the cord with a clean instrument we keep the child from getting sick.</li> </ul>	<ul style="list-style-type: none"> <li>*The mother's life is more important than the child's.</li> <li>*The mother belongs to the warm side and the child to the cold side.</li> <li>*The concept of clean and dirty.</li> </ul>	<ul style="list-style-type: none"> <li>*Grandmother</li> <li>*TBAs</li> <li>*Mothers and Mothers-in-Law</li> </ul>	<ul style="list-style-type: none"> <li>*Emphasize that the newborn requires special and immediate attention.</li> <li>*To keep the child warm he must be completely dried and clothed.</li> <li>*So that the instrument to cut the umbilical cord is clean, it must be washed with soap and boiled.</li> </ul>	<ul style="list-style-type: none"> <li>*radio</li> <li>*Village meetings</li> </ul>	<ul style="list-style-type: none"> <li>*slots</li> <li>*dramatization</li> <li>*Training of:                             <ul style="list-style-type: none"> <li>-promoters</li> <li>-leaders</li> </ul> </li> </ul>

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### ELEMENTS OF THE IEC STRATEGY

Desired Behavior: Improve the treatment of the patients at the health services during prenatal visits and delivery

TARGET POPULATION	MESSAGES					MEDIA	
	BEHAVIORAL CONTENT	MOTIVATION	PRINCIPLE BARRIERS OR AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
Health Personnel	<ul style="list-style-type: none"> <li>*All health personnel should provide courteous treatment.</li> <li>*Listen to the problems of each patient.</li> <li>*Fulfill the four patient per day schedule.</li> <li>*Respect the way each patient expresses herself.</li> <li>*Calm the patient using persuasive words or medication.</li> <li>*Decrease unnecessary vaginal examinations.</li> </ul>	<ul style="list-style-type: none"> <li>*Good treatment attracts patients.</li> <li>*Being courteous does not make you any less courageous.</li> <li>*A smile does not cost anything.</li> <li>*All mothers - yours and mine deserve our affection.</li> <li>*No mother should die here.</li> <li>*Today for you, tomorrow for me.</li> <li>*A calm patient cooperates with the doctor.</li> <li>*Fewer vaginal exams mean fewer infections.</li> <li>*Fewer vaginal exams means less bother with gloves.</li> </ul>	<ul style="list-style-type: none"> <li>*Lack of motivation.</li> <li>*Low salaries.</li> <li>*Lack of medical supervision.</li> <li>*Social and cultural prejudices.</li> <li>*Personal limitations.</li> <li>*Administrative inefficiency which affects personal relations.</li> </ul>	<ul style="list-style-type: none"> <li>*Unions</li> <li>*Administrative hierarchy.</li> </ul>	<ul style="list-style-type: none"> <li>*Creating awareness is education.</li> <li>*Education and advancement will provide you with a better position.</li> </ul>	<ul style="list-style-type: none"> <li>*Medical supervision (direct observation).</li> <li>*Surveys of the beneficiaries.</li> <li>*Continuing education programs.</li> <li>*Printed materials</li> </ul>	<ul style="list-style-type: none"> <li>*Development of personal achievement schemes.</li> <li>*Forms.</li> <li>*Courses.</li> <li>*Brochures.</li> </ul>

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### ELEMENTS OF THE IEC STRATEGY

Desired Behavior: Give the mother information during prenatal visits (about the baby's weight, position, etc.)

TARGET POPULATION	MESSAGES					MEDIA	
	BEHAVIORAL CONTENT	MOTIVATION	PRINCIPLE BARRIERS OR AREAS OF RESISTANCE	AUTHORITY FIGURE FROM WHOM THEY ACCEPT ADVICE	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
Health Personnel	<ul style="list-style-type: none"> <li>*Establish an adequate relationship with the patients so that they will return.</li> <li>*Provide good information about the importance of prenatal care.</li> </ul>	<ul style="list-style-type: none"> <li>*The patient is a human being who needs our understanding.</li> <li>*The patient who receives the most information about the progress of her pregnancy will trust you.</li> </ul>	<ul style="list-style-type: none"> <li>*Limited time.</li> <li>*Lack of sensibility on behalf of the health personnel.</li> <li>*Lack of economic resources (salary, material)</li> </ul>	<ul style="list-style-type: none"> <li>*Director.</li> <li>*Labor organization.</li> </ul>	<ul style="list-style-type: none"> <li>*The messages should emphasize that the patient deserves good information and attention regarding the progress of her pregnancy.</li> <li>*A place to train health personnel about human relations.</li> </ul>	<ul style="list-style-type: none"> <li>*Printed materials.</li> <li>*Inter-personal.</li> <li>*Alternatives.</li> </ul>	<ul style="list-style-type: none"> <li>*Posters</li> <li>*Signs</li> <li>*Talks</li> <li>*Instructions and flyers from authorities.</li> </ul>

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**ELEMENTS OF THE IEC STRATEGY**

Desired Behavior: Limit the number of medical residents in the delivery room and in the prenatal visits.

TARGET POPULATION	MESSAGES					MEDIA	
	BEHAVIORAL CONTENT	MOTIVATION	PRINCIPLE BARRIERS OR AREAS OF RESISTANCE	AUTHORITY FROM WHOM ADVICE IS ACCEPTED	COMPLEMENTARY MESSAGES AND OTHER ELEMENTS	MEDIUM	FORMAT
Health Team	<ul style="list-style-type: none"> <li>*Limit the number of people in the prenatal visit and in the delivery room.</li> <li>*Improve behavior in front of the patient.</li> <li>*Let the patient know what is going to be done to her and why.</li> </ul>	<ul style="list-style-type: none"> <li>*The fewer the people, the better the treatment of the patient.</li> <li>*The fewer the people, the calmer and more cooperative the patient.</li> <li>*Greater respect for modesty will increase demand for services.</li> <li>*Greater demand decreases morbimortality.</li> <li>*Become familiar with examples of other countries.</li> </ul>	<ul style="list-style-type: none"> <li>*Students have to learn/practice on real patients</li> <li>*Cleaning the delivery room allows for the entry and exit of people.</li> <li>*Inadequate infrastructure for the flow of personnel.</li> <li>*Because of his education, the doctor pays biomedical attention to the patient but forgets the psychological aspects.</li> <li>*Few supervisors, many students.</li> <li>*Difficult customs to change (work patterns).</li> <li>*Stress affects the doctor's behavior towards the patient.</li> </ul>	<ul style="list-style-type: none"> <li>*Director of the health unit or the Chief of Ob/Gyn services.</li> <li>*Those who supervise clinical experiences of students (model clinics).</li> <li>*Scientific societies.</li> </ul>	<ul style="list-style-type: none"> <li>Respect towards the patient: she is also a human being.</li> <li>*"Do unto others as you would have them do unto you".</li> <li>*Modesty and sensitivity is part of human nature.</li> <li>*Medical practices must be aware.</li> <li>*Use of teaching models will reduce the use of the patient as a practice instrument.</li> </ul>	<ul style="list-style-type: none"> <li>*Scientific Society</li> <li>*Continuing medical education</li> <li>*Written rules and norms</li> <li>*Video</li> </ul>	<ul style="list-style-type: none"> <li>*Short courses</li> <li>*Workshops</li> <li>*Monthly meetings</li> <li>*Short courses/workshops</li> <li>*Flyers</li> <li>*short courses</li> <li>*Women discuss their problems</li> </ul>

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**IN DEPTH INTERVIEW QUESTIONNAIRE FOR MOTHERS**

ENTREVISTA EN PROFUNDIDAD  
HOJA DE RECLUTAMIENTO: MADRES

NOMBRE:

EDAD:

LUGAR:

DIRECCION:

ESTADO CIVIL:

NUMERO DE EMBARAZOS:

NUMERO DE HIJOS NACIDOS VIVOS:

NUMERO DE PARTOS INSTITUCIONALES:

NUMERO DE VISITAS PRENATALES DURANTE EL ULTIMO EMBARAZO:

GRADO DE INSTRUCCION: ninguno, primaria, secundaria, superior

ESTA EMBARAZADA AHORA?:

CUANTOS MESES?:

DIO A LUZ DENTRO DEL ULTIMO AÑO?:

CUANDO?:

CUANTO TIEMPO HA VIVIDO EN COCHABAMBA?:

PERTENECE AL GRUPO DE REFERENCIA /\_/ O GRUPO DE ESTUDIO/\_/

PERTENECE A ALGUN CLUB DE MADRES? Si\_ NO\_ CUANTO TIEMPO?

PERTENECIO A ALGUN CLUB DE MADRES? Si\_ No\_ CUANTO TIEMPO?

## ENTREVISTA EN PROFUNDIDAD

Fecha de la entrevista:

Hora que comenzò:

Hora que terminò:

I - EMBARAZO: (Recuerde su último embarazo o embarazo actual)

1. COMO SUPO UD. QUE ESTABA EMBARAZADA?

a. CONFIRMO SU EMBARAZO?

b. COMO?

c. MAS O MENOS EN QUE MES DEL EMBARAZO SE DIO CUENTA QUE ESTABA EMBARAZADA?

-----  
2. CUANDO SUPO QUE ESTABA EMBARAZADA, QUE PENSO O SINTIO UD.? (alegria, temor, preocupaciòn, nada)

a. QUE PENSO SU ESPOSO?

b. QUE PENSO SU MADRE/SUEGRA/VECINOS?

c. SE SINTIO UD. IGUAL EL RESTO DE SU EMBARAZO? SI NO COMO SE SINTIO?

-----  
3. CREE QUE EL EMBARAZO ES UN PERIODO MUY DISTINTO (ESPECIAL) EN LA VIDA DE LA MUJER? POR QUE Y EN QUE ES DIFERENTE?

a. QUE COSAS NO SE DEBEN HACER DURANTE EL EMBARAZO? POR QUE?

b. QUE COSAS NO HIZO UD.?

c. QUE COSAS SE DEBEN HACER?

d. QUE COSAS ESPECIALES HIZO UD.?

e. CAMBIO ALGO EN SU TRABAJO? COMO? QUE COSAS?

4. HAY ALIMENTOS QUE LA EMBARAZADA NO DEBE COMER?

- a. CUALES? POR QUE? QUIEN LE DIJO?
- b. QUE ALIMENTOS EVITO UD. DURANTE EL EMBARAZO?
- c. ES BUENO ENGORDAR DURANTE EL EMBARAZO? POR QUE?

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5. QUE ALIMENTOS DEBE COMER MAS UNA EMBARAZADA?

- a. POR QUE? QUIEN LE DIJO?
- b. QUE ALIMENTOS COMIA UD. MAS DURANTE SU EMBARAZO?

-----  
6. SABE SI AUMENTO DE PESO DURANTE SU EMBARAZO? COMO SABE?  
CUANTO CREE UD. QUE AUMENTO? CUANTO LE GUSTA AUMENTAR  
DURANTE EL EMBARAZO?

- a. CREE QUE ES MEJOR AUMENTAR MUCHO O POCO DURANTE  
EL EMBARAZO? POR QUE?

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7. CREE QUE UNA MUJER DEBE HACERSE CONTROLAR (CONTROL PRENATAL)  
DURANTE EL EMBARAZO?

- a. (si no) POR QUE NO?
- b. (si si) AUNQUE NO TENGA NINGUNA MOLESTIA? POR QUE?  
CUANTAS VECES? CUANDO SE DEBE IR LA PRIMERA VEZ?

-----  
8. SE HIZO UNO O MAS CONTROLES PRENATALES EN SU ULTIMO (O  
ACTUAL) EMBARAZO?

- a. (si no) POR QUE NO?
- b. (si si) POR QUE? DONDE? CUANDO? CON QUIEN?  
QUE PASO EN LAS CONSULTAS? COMO FUE? COMO  
RESULTO? CUANTO PAGO POR SUS CONTROLES? LE  
PARECE CARO O BARATO? QUEDO SATISFECHA CON EL  
CONTROL PRENATAL? POR QUE SI O NO?

-----  
PRIMERA | POR | CUANDO? | DONDE? | CON | QUE | COMO | CUANTO | LO | SATISF  
CONSULTA | QUE? | | | QUIEN? | PASO? | RESULTO? | PAGO? | CREE  
| | | | | | | | | CARO? |  
-----

SEGUNDA  
CONSULTA

TERCERA  
CONSULTA

- c. UD. RECIBIO TABLETAS DE HIERRO (MOSTRAR LAS TABLETAS) DURANTE SU EMBARAZO? LAS TOMO TODAS? POR QUE O POR QUE NO? QUE EFECTO TUVIERON ESTAS TABLETAS? PARA QUE SIRVEN ESTAS TABLETAS? ES IMPORTANTE TOMARLAS?
- d. RECIBIO UD. INYECCIONES DURANTE SU ULTIMO EMBARAZO? CUANTAS? PARA QUE FUE CADA INYECCION? RECIBIO UD. UNA O MAS VACUNAS CONTRA EL TETANO (PASMO DE OMBLIGO) DURANTE SU EMBARAZO? (si si) COMO FUE ESTA EXPERIENCIA? CREE UD. QUE ESTA VACUNA ES IMPORTANTE? POR QUE?
- e. UD. RECIBIO ALIMENTOS SUPLEMENTARIOS DURANTE SU ULTIMO EMBARAZO? DONDE? CUANTO? QUE ALIMENTOS? LOS COMIO UD. U OTRAS PERSONAS?

9. CONOCE UD. ALGUNAS COMPLICACIONES O PROBLEMAS DEL EMBARAZO, QUE PONGAN EN PELIGRO LA VIDA DE LA MADRE O EL NIÑO? QUE COMPLICACIONES O PROBLEMAS? MUCHAS EMBARAZADAS TIENEN ESTOS PROBLEMAS?
- a. A QUIEN DEBE CONSULTAR UNA MUJER CON COMPLICACIONES O PROBLEMAS DEL EMBARAZO? POR QUE?
- b. CREE UD. QUE SE PUEDEN PREVENIR LOS PROBLEMAS DEL EMBARAZO? COMO?
- c. CREE UD. QUE ALGUNAS MUJERES TIENEN MAS RIESGO QUE OTRAS? CUALES? POR QUE?
- d. CONOCE SI HAY SEÑALES DE PROBLEMAS EN EL EMBARAZO? CREE QUE SE DEBE BUSCAR UNA CONSULTA SI TIENE LAS SIGUIENTES SEÑALES?: MUCHA SANGRE? HINCHAZON DE LOS PIES O PIERNAS? PERDIDA DE PESO? (si si) POR QUE?

10. HA TENIDO UD. ALGUNA COMPLICACION O PROBLEMA EN EL EMBARAZO?
- a. (si no) NINGUNA MOLESTIA?
  - b. (si si) QUE PROBLEMA? QUE PASO? A QUIEN AVISO PRIMERO? QUE DIJO ESA PERSONA? QUE HIZO UD.? QUE PASO?
  - c. (si si o no) CONOCE UD. ALGUNA MUJER QUE TUVO COMPLICACIONES? QUE PROBLEMAS? QUE HIZO ELLA? QUE PASO?

- 
11. EN SU BARRIO LAS PARTERAS VISITAN A LAS EMBARAZADAS ANTES DEL PARTO?
- a. POR QUE? QUE HACEN?
  - b. UD. FUE ATENDIDA POR UNA PARTERA? CUANDO HIZO SU CONTACTO INICIAL CON LA PARTERA? UD. FUE VISITADA POR UNA PARTERA ANTES DEL PARTO? CUANDO? QUE PASO? SE QUEDO SATISFECHA CON ESA VISITA?

- 
12. ES FACIL PARA UD. LLEGAR A UNA CLINICA U HOSPITAL? COMO VA UD.?
- a. (si no) POR QUE NO?
  - b. (si si) COMO LLEGA UD. A LA CLINICA? CUANTO TARDA? SON CONVENIENTES LAS HORAS DE ATENCION?

- 
13. HA IDO A ALGUNA CLINICA U HOSPITAL CUANDO TUVO UN PROBLEMA DE SALUD?
- a. (si no) POR QUE NO? QUE HACE ENTONCES?
  - b. (si si) POR QUE PROBLEMA? QUE SERVICIO DE SALUD? POR QUE ESCOGIO ESE SERVICIO? PREFERE UN SERVICIO DEL GOBIERNO O PARTICULAR? POR QUE? QUE PASO EN SU CASO? SE QUEDO SATISFECHA CON EL CUIDADO? POR QUE?
  - c. QUE COSAS QUISIERA QUE CAMBIEN EN LA CLINICA U HOSPITAL?

II - PARTO Y PUERPERIO: (para su último parto)

1. COMO SUPO UD. QUE IBA A EMPEZAR EL PARTO?
  - a. QUE SINTIO CUANDO LLEGO ESE MOMENTO?
  - b. QUE COSAS HIZO UD. PARA PREPARARSE PARA EL PARTO?
  - c. A QUIEN LLAMO PARA QUE LE AYUDARA?
  - d. QUIEN DECIDIO A QUIEN LLAMAR O DONDE IR PARA QUE LE ATIENDAN EL PARTO?
  - e. SE DECIDIO EN ESE MOMENTO O YA TENIA UN PLAN?

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2. CONOCE UD. ALGUNOS PROBLEMAS QUE PUEDE TENER LA MUJER O EL NIÑO DURANTE EL PARTO?
  - a. CUALES?
  - b. CUALES SON SERIOS Y POR QUE?
  - c. SE PUEDE MORIR EN EL PARTO?
  - d. CONOCE UD. A ALGUIEN QUE MURIO EN EL PARTO? QUE PASO? CREE UD. QUE LA MUERTE PODRIA HABERSE EVITADO? COMO?

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3. TUVO UD. ALGUNO DE ESOS PROBLEMAS EN SUS PARTOS? CUALES? QUE HIZO UD.? QUIEN LE AYUDO? QUE PASO? TARDO O FUE DIFICIL LLEGAR AL LUGAR DE ASISTENCIA? COMO? SE QUEDO SATISFECHA CON LA ATENCION? POR QUE SI O NO?

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4. CONOCE UD. HIERBAS O MATES ESPECIALES QUE AYUDAN A QUE EL PARTO SEA MAS FACIL?
  - a. (si si) CUALES SON? PARA QUE SIRVEN? CUALES USAN MUCHAS MUJERES?
  - b. CUALES HA USADO UD? CON QUE RESULTADO? QUIEN LE ACONSEJO A USARLOS?

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5. CONOCE UD. DROGAS O INYECCIONES DE LA FARMACIA QUE AYUDAN A QUE EL PARTO SEA MAS FACIL?
  - a. (si si) CUALES SON? PARA QUE SIRVEN? CUALES



- e. AYUDO A QUE SALGA LA PLACENTA? COMO? QUE HIZO CON LA PLACENTA? CREE UD. QUE ESO ES IMPORTANTE?
- f. COMO SE SINTIO CON ESTA EXPERIENCIA?
- g. TIENE ALGUNA SUGERENCIA DE COMO SE PODRIA MEJORAR LA ATENCION EN CASA?
- h. DARA A LUZ EN SU CASA LA PROXIMA VEZ? POR QUE SI O NO?

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10. (preguntas sobre su último parto institucional, si tuvo uno) LE GUSTO O NO SU ATENCION EN EL HOSPITAL? POR QUE?

- a. CUANTO PAGO? LE PARECE CARO O BARATO?
- b. COMO SE VISTIO AL RECIEN NACIDO? DESPUES DE CUANTO TIEMPO LE DIERON LA WAWA A UD.? COMO CORTO Y AMARRO EL CORDON UMBILICAL?
- c. AYUDO A QUE SALGA LA PLACENTA? COMO? QUE HIZO CON LA PLACENTA?
- d. COMO SE SINTIO CON ESTA EXPERIENCIA?
- e. TIENE ALGUNA SUGERENCIA DE COMO SE PODRIA MEJORAR LA ATENCION EN EL HOSPITAL?
- f. DARA LUZ EN EL MISMO LUGAR LA PROXIMA VEZ? POR QUE SI O NO?

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11. DESPUES DEL PARTO HAY ALGUNOS CUIDADOS QUE DEBE TENER LA MUJER?

- a. CUALES SON? POR CUANTO TIEMPO?
- b. UD. SE CUIDO? POR QUE SI O NO?
- c. CUANTO TIEMPO DEBE PASAR ANTES QUE LA MUJER VUELVA A SU TRABAJO NORMAL? POR QUE?
- d. QUE HIZO UD.?
- e. DESPUES DEL PARTO HABIA ALGUNOS ALIMENTOS O BEBIDAS QUE EVITO O BUSCO MAS? CUALES? POR QUE? QUIEN LE ACONSEJO?

12. CONOCE ALGUNOS PROBLEMAS QUE PUEDE TENER LA MADRE DESPUES DEL PARTO?

- a. CUALES?
- b. QUE SE DEBE HACER?
- c. TUVO UD. (O ALGUIEN QUE UD. CONOCE) ALGUNO DE ESOS PROBLEMAS?
- d. QUE HIZO? QUE PASO?
- e. SABE POR QUE SE PRESENTO ESE PROBLEMA? ES POSIBLE PREVENIRLO? COMO?

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13. CONOCE UD. ALGUNAS ENFERMEDADES QUE PUDIERA TENER EL NIÑO RECIEN NACIDO EN LOS PRIMEROS DIAS DE VIDA?

- a. QUE PROBLEMAS?
- b. QUE SE PUEDE HACER?
- c. TUVO SU WAWA ALGUNO DE ESOS PROBLEMAS? QUE HIZO? QUE PASO?
- d. TUVO LA WAWA DE ALGUIEN QUE UD. CONOCE ALGUNO DE ESOS PROBLEMAS? QUE HIZO LA MADRE? QUE PASO?

### III LACTANCIA MATERNA

1. LE DIO ALGO DE TOMAR AL BEBE DURANTE LA PRIMERA HORA DESPUES DE SU NACIMIENTO?

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2. LE DIO ALGO DE TOMAR AL BEBE DURANTE SU PRIMER DIA DE VIDA?

- a. (si si) QUE? CUANDO? QUIEN LO RECOMENDO? COMO SE LO DIO?
- b. (si no) POR QUE NO?

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3. LE DIO ALGO DE TOMAR AL BEBE DURANTE EL SEGUNDO O TERCER DIA DE VIDA?

- a. (si si) QUE? CUANDO? QUIEN LO RECOMENDO? COMO

SE LO DIO?

b. (si no) POR QUE NO?

4. QUE DIO DE TOMAR AL BEBE DURANTE SU PRIMER DIA DE VIDA?

a. QUIEN LE RECOMENDO?

b. COMO SE LO DIO?

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5. (si la mujer no mencionò el pecho) LE DIO PECHO?

a. (si si) CUANDO COMENZO? CUANTAS VECES AL DIA?  
DE LOS DOS SENOS POR IGUAL? POR CUANTO TIEMPO  
CADA VEZ? QUIEN LE RECOMENDO?

b. (si no) POR QUE NO?

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6. CUANDO BAJO SU LECHE?

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7. ANTES QUE LE BAJE LA LECHE, LE SALIA ALGO DE SU PECHO?  
COMO SE LLAMA ESO? SE LO DIO A SU WAWA?

a. (si si) POR QUE SE LO DIO? SE LO RECOMENDO ALGUIEN?

b. (si no) QUE HIZO CON ESE LIQUIDO?

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8. TUVO UD. ALGUN PROBLEMA PARA DAR DE MAMAR? (si si) CUAL?  
QUE HIZO UD.? SE LO ACONSEJO ALGUIEN? MEJORO LA  
SITUACION?

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9. QUE EDAD DEBE TENER LA WAWA CUANDO SE LE DA DE TOMAR O  
DE COMER APARTE DE LA LECHE MATERNA? QUE EDAD TENIA SU  
ULTIMA WAWA? QUE LE DIO? CUANDO? POR QUE?

#### IV - PLANIFICACION FAMILIAR

1. CREE UD. QUE UNA PAREJA DEBE DECIDIR CUANDO QUIERE TENER  
UN EMBARAZO? POR QUE SI O NO?

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2. CUANTO TIEMPO PIENSA QUE DEBE PASAR ENTRE UN EMBARAZO Y  
OTRO? POR QUE?

3. UD. Y SU ESPOSO CONVERSAN SOBRE CUANDO VAN A TENER SUS HIJOS?
- a. UD. BUSCA EMBARAZARSE O SE EMBARAZA SIN DARSE CUENTA?
  - b. CUANTOS HIJOS QUISIERA TENER EN TOTAL? POR QUE? Y CUANTOS QUISIERA TENER SU ESPOSO? POR QUE?
  - c. CUANTOS HIJOS TIENE?
  - d. CONVERSA UD. SOBRE ESO CON OTRAS PERSONAS? CON QUIEN? QUE LE ACONSEJAN?

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4. QUE METODOS CONOCE UD. PARA NO EMBARAZARSE? COMO FUNCIONAN?

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5. HA USADO UD. O SU ESPOSO ALGUN METODO ANTICONCEPTIVO?

- a. (si no) POR QUE? NO QUIERE CONTROLAR SUS EMBARAZOS? TIENE MIEDO? DE QUE? NECESITA MAS INFORMACION?
- b. (si si) CUAL? CUAL HA SIDO SU EXPERIENCIA? HA TENIDO ALGUN PROBLEMA? QUE? QUE HIZO? PRETENDE CONTINUAR CON EL METODO? POR QUE SI O NO?

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6. HA CONVERSADO CON ALGUIEN SOBRE METODOS ANTICONCEPTIVOS?

- a. CON QUIEN? QUE LE DIJO?
- b. CONVERSO CON SU ESPOSO SOBRE ESO? QUE LE DIJO? POR QUE?

#### V - MEDIOS DE COMUNICACION

1. UD. MIRA LA TELEVISION?

- a. CUANTAS VECES POR SEMANA? QUE DIAS? QUE HORAS?
- b. QUE TIPO DE PROGRAMA LE GUSTA MAS?
- c. A VECES MIRA UD. ALGO SOBRE SALUD EN LA TELEVISION? QUE?
- d. LE GUSTA VER ESTAS COSAS EN LA TELEVISION?

2. UD. ESCUCHA LA RADIO?
  - a. CUANTAS VECES POR SEMANA?
  - b. QUE TIPO DE PROGRAMA LE GUSTA MAS?
  - c. ESCUCHA INFORMACION SOBRE LA SALUD EN LA RADIO? QUE?
  - d. LE GUSTA ESTAS COSAS EN LA RADIO?

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3. UD. SABE LEER?
    - a. UD. HA VISTO AFICHES O PANFLETOS SOBRE TEMAS DE SALUD? CUALES?
    - b. PUEDE ENTENDERLOS BIEN?
    - c. QUE TIPO LE GUSTA MAS? POR QUE?
    - d. QUE REVISTAS, LIBROS O AFICHES TIENE UD. EN SU CASA AHORA?

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4. UD. ASISTE A FIESTAS U OTRAS REUNIONES EN SU COMUNIDAD?
    - a. CUALES? CUANDO?
    - b. CUANTAS VECES POR SEMANA VA UD. AL MERCADO?

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5. HAY ALGUNA AUTORIDAD SOBRE SALUD (EN LA RADIO, LA TELEVISION, O LA COMUNIDAD) QUE UD. RESPETA MUCHO? QUIEN? POR QUE?

**VI - CONFIANZA/PERSPECTIVAS HACIA EL FUTURO** (nombre y edad del hijo mas joven)

1. QUE QUIERE UD. PARA SU(S) HIJOS?
2. QUE TIPO DE PERSONA ESPERA QUE SEA SU HIJO?
3. COMO CREE QUE EL SE GANARA LA VIDA?

4. QUE TIENE QUE PASAR PARA QUE ESO SUCEDA?
5. QUE PRETENDE UD. HACER PARA QUE ESO SUCEDA?
6. CREE QUE LA VIDA SEA MAS FACIL O MAS DIFICIL PARA SUS HIJOS DE LO QUE ES PARA UD.? POR QUE?
7. QUE TIENE UD. QUE HACER PARA TENER BUENA SALUD? CUAL DE LAS SIGUIENTES ES LA MAS IMPORTANTE Y POR QUE? TENER FE EN DIOS? SEGUIR LAS INDICACIONES DE LAS PERSONAS DE SU COMUNIDAD O PARIENTES (EVITAR MAL DE OJO, ETC.)? ESCUCHAR EL CONSEJO DEL MEDICO?