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Assessing Safe Motherhood in the Community

A Guide to Formative Research

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Introduction

Growing awareness of the tragedy of 600 000 maternal deaths yearly in developing countries is leading increasing numbers of organizations worldwide to seek solutions to this problem. Although most of these deaths are avoidable with preventive measures and proper management of complications, the problem is complex. Behind each mother who dies and each of the millions of others who survive but suffer serious pregnancy-related disability, is a combination of sociocultural and health care factors that resulted in a tragic ending.

The causes of maternal mortality are multi-level and intertwined. They involve broad social forces such as poverty and gender inequity, as well as the more specific influences of cultural beliefs and practices. They include indirect health conditions such as malnutrition, and direct biomedical causes such as complications of labor. They entail technical aspects of quality of care, as well as a host of human and environmental factors that have to do with whether that care is utilized. Safe Motherhood encompasses not only the mother, but the newborn as well—and all those who influence whether they will survive and thrive: family members such as the husband or mother-in-law, and traditional health providers as well as those in the formal health establishment.

The complex nature of the problem means that Safe Motherhood programs must respond with a comprehensive package of interventions. Certainly Safe Motherhood programs must work to improve the quality of health care services and access to those services. Just as critical is attention to the sociocultural context—the mothers, families, and social and physical structures that make up *the community*. In many settings, adequate obstetric services will not be available for many years to come. In others, services are available but are underutilized. Over half of births in the developing world take place at home. Moreover, whether services are available or not, and whether those services are utilized or not, many actions that bear on maternal and newborn health take place within the home or within the community. In addition to service provision, strategies to reduce maternal mortality must involve actions with individuals, families, and communities.

Given the complexity of the problem, how do we determine the best actions to take?

Formative research—practical research to form or guide program decisions—is the first place to start. Formative research helps program planners understand problems so that strategies tailored to the circumstances of the beneficiary population can be designed. In addition to investigating community aspects of Safe Motherhood, a full formative research agenda would include assessment of the policy environment and an evaluation of health care services and provider training needs.¹

MotherCare has prepared this manual as a guide to assessing community aspects of Safe Motherhood. A well-conducted Community Assessment will show where intervention is needed to

¹ The WHO *Safe Motherhood Needs Assessment* provides guidance on how to assess policy and health care components. See Appendix A.

enable mothers and newborns to thrive—by preventing as many problems as possible, ensuring community recognition of problems, encouraging prompt and proper response to complications, and by providing for accessible, responsive, and competent care.

This Guide is intended primarily for investigators who have the responsibility for designing community research on Safe Motherhood, and for program managers who will work with them to ensure that the research is oriented toward program needs. We have geared this Guide to readers who already have experience with qualitative research methods and who have a basic understanding of health behavior change programs and other community-level interventions.

Consequently, we do not attempt here to provide training in formative research or qualitative methods. For example, we do not give instruction in how to conduct focus groups, how to take field notes, or how to pretest instruments.² Rather, this manual provides the tools for researchers, working in conjunction with program managers, to design formative research on community aspects of Safe Motherhood that will be of greatest benefit to the project.

There is no single best way to conduct a Community Assessment. Because settings and project needs vary, we have not included a finalized research plan or set of data collection instruments. Instead, we provide the essential information investigators will need to plan their own research and develop their own data collection protocols. We present a framework for looking at Safe Motherhood issues, provide background on the range of potential topics to explore, note special applications of Safe Motherhood to the basic research planning steps, and provide an inventory of research questions to guide the construction of instruments. We also suggest approaches to data analysis and discuss how to begin translating findings into program decisions.

This Guide represents MotherCare's experience and thinking to date. We expect to update and expand it and would like to include your feedback in the next edition. Please tell us of your experience using this guide and your suggestions for making it more useful. A form for your comments is found on the last page. We hope to hear from you.



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² Good resources on these generic research topics already exist, and for the reader who wants to learn more, we suggest some references in Appendix A.

Section I— Background to the Problem

The Scope of the Tragedy

Why is it important to have Safe Motherhood programs? Consider the following

- ◆ Each year, nearly 600,000 women die from pregnancy-related causes¹ and as many as 54 million women experience pregnancy or obstetric complications²
- ◆ Ninety-nine percent of this mortality occurs in developing countries,³ where one in every 48 women dies from such complications⁴
- ◆ In some regions of the developing world the risk of dying is even higher, in Africa, one in 16 women dies trying to become a mother. In comparison, in Northern and Southern Europe only one in 4,000 women dies as a result of pregnancy and childbearing. In North America the risk of a *maternal death*⁵ is only one in 3,700⁶
- ◆ A maternal death brings suffering to the entire family. As many as half of all motherless children under five years of age will die⁶ and those who live receive less health care and education than do children whose mothers are living.⁷ Throughout the world, families are increasingly dependent on women's work and earnings, so when a woman dies, families suffer economic as well as emotional consequences.
- ◆ Globally, there are over 7.6 million *perinatal deaths*⁸ each year. Ninety-eight percent of these deaths occur in the developing world.⁸
- ◆ For every woman who dies as a result of pregnancy, some 25 others will experience debilitating repercussions of childbirth that severely diminish their quality of life.

A *maternal death* is death from pregnancy related causes, occurring during the pregnancy or within 42 days of termination of the pregnancy, whether termination is by delivery or abortion.

The true tragedy of maternal deaths is that most are preventable.

⁵See *Glossary of Terms (Appendix C)* for definitions of italicized starred terms.

Maternal Issues

Risk of Maternal Death

Poverty, social and cultural norms, social inequalities, and gender inequities put women in developing countries at greater risk of death than women in the developed world. These forces affect access to information, decision-making about health, access to preventive and curative care, and the quality of care received. These factors also make women in developing countries more likely to become pregnant, more likely to experience pregnancy complications, and more likely to die from these complications.

There are two components to a woman's chance of maternal death—her risk of becoming pregnant and her risk of dying once pregnant. Family planning programs have focused on the first risk, assisting women in preventing, delaying, and spacing their pregnancies. Safe Motherhood interventions link with family planning programs but focus on the second risk.

Poverty and Maternal Deaths

The link between poverty and ill-health is well-established. Poverty influences maternal health in a variety of ways. Economic and social inequities constrain women's knowledge and choices, their decision-making authority, and their ability to access services. Yet, to regulate their own fertility, women must have knowledge and information, must be able to make reproductive decisions, and must have access to appropriate services and contraceptive methods.

Compared to their better-off counterparts, poor people experience more malnutrition and underlying health problems. They have less access to information and health facilities and, because they lack disposable income, may be unable to pay for health services.

Maternal mortality ratios demonstrate the stark contrast between rich and poor societies; the disparity in maternal deaths between more-developed and less-developed regions is greater than for *any* other major health indicator.

Sample Indicators	Bolivia	Guatemala	Indonesia	Uganda	United Kingdom	United States
Maternal Mortality Ratio (deaths per 100,000 live births), circa 1990*	650	200	650	1200	9	12
Infant Mortality Rate (deaths per 1,000 live births), circa 1990**	92	62	61	117	8	9
Female Under-5 Mortality Rate (deaths per 1,000 live births), circa 1990**	117	76	102	175	8	9

* Source: WHO and UNICEF, *Revised 1990 Estimates of Maternal Mortality: A New Approach* by WHO and UNICEF (Geneva, Switzerland: World Health Organization, 1996).

** Source: World Bank, *World Development Report 1993: Investing in Health* (Washington, DC: Oxford University Press, 1993).

Cultural Norms and Maternal Deaths

Cultural norms promoting early marriage and early childbearing—very common in much of the developing world—influence maternal death rates. In contrast to settings where childbearing is delayed and where *fertility rates** are low, *maternal mortality ratios** are higher in settings characterized by early marriage, early childbearing, and high fertility rates.

In most developing countries, half to three-quarters of all births occur less than two years after women enter their first union.⁹ In developing regions, on average, 40 percent of women give birth before reaching their twentieth birthday.¹⁰

Classification and Causes of Maternal Deaths

There are two types of maternal deaths—direct and indirect.

- ◆ *Direct maternal deaths** result from complications of pregnancy, delivery or the postpartum period, including complications of abortion.
- ◆ *Indirect maternal deaths** stem from preexisting medical conditions, such as malaria or anemia, which are aggravated by pregnancy or delivery.

In developing countries, the major direct causes of maternal death are

- ◆ bleeding (*hemorrhage**), including that which is a consequence of unsafe abortion.
- ◆ infection (*sepsis**), including that which results from unsafe abortion.
- ◆ *hypertensive disorders of pregnancy** (including *eclampsia**)
- ◆ *obstructed labor**¹¹

Excluding abortion complications, most maternal deaths occur during labor, delivery, or in the immediate postpartum period. While the relative importance of each of the direct causes varies by setting, collectively, they account for about 80 percent of all maternal deaths in developing countries.

Maternal Ill-health

Maternal deaths represent but the extreme outcome of the much larger problem of maternal ill-health. For every woman who dies as a result of pregnancy, an estimated 25 others experience debilitating and chronic disabilities associated with childbirth. One such condition is *uterine prolapse**, in which the uterus descends below its normal position, causing considerable pain and discomfort, and making future pregnancies risky for mother and fetus. Another chronic disability is *obstetric fistulae**, in which the vaginal wall leading to the bladder or rectum is torn, usually as a result of prolonged or obstructed labor. Women with this problem continually leak urine or feces from their vagina, which in turn can have dire social consequences.¹²

Perinatal and Newborn Issues

Perinatal and Newborn Deaths

Because a woman's health is intertwined with that of her fetus and newborn, many of the causes of maternal death and ill-health also influence the health and survival of the *perinate**. Globally, there are over 7.6 million *perinatal deaths** each year. Nearly 60 percent of these are *stillbirths** and about 40 percent are *early neonatal deaths**. Ninety-eight percent of all perinatal deaths take place in developing countries.

The leading causes of perinatal death—complications of *preterm birth**, *birth asphyxia**/*birth trauma** and bacterial infections—occur primarily during birth and in the first seven days of life.¹³ This fact is important because it implicates the quality of both routine and *essential obstetric care**. The large number of newborn deaths also indicates that families may have inadequate knowledge of basic *newborn** care and potential complications. Moreover, they may have difficulty reaching needed services when complications arise.

Perinatal and Newborn Survival

Child survival efforts historically have focused on causes of death for children beyond the newborn period. Until recently, little attention has been given to reducing perinatal or *neonatal mortality**. Recent interest in the topic has led to new efforts on this front. Such efforts require a two-pronged approach. It is not sufficient to improve maternal health during pregnancy, labor and delivery; adequate attention to the care and management of the newborn also is essential. The latter requires an understanding of how families and practitioners determine whether a baby is born alive or dead, and what they *do* for the infant immediately after birth.

The perinatal period begins at 22 completed weeks of gestation and ends seven completed days after birth.

A *stillbirth* is a death occurring between the start of the perinatal period and before the complete expulsion of the baby from its mother. Many babies who are born with the potential to live but die soon after birth are misclassified as stillbirths. Many of these so-called "stillbirths" are preventable.

A *neonatal death* is a death to a live born infant occurring within the first 28 completed days after birth. *Early neonatal deaths*, which occur within the first seven days after birth, are a subset of neonatal deaths. Many deaths classified as *stillbirths* are actually *early neonatal deaths*.

Throughout this document, the term *newborn* refers to babies born with the potential to live, regardless of whether they actually survive and regardless of whether they are later misclassified as a stillbirth.

Safe Motherhood Today

In 1987, the Safe Motherhood Initiative was launched by the World Health Organization (WHO), The World Bank, the United Nations Fund for Population Activities (UNFPA), the United Nations Development Programme (UNDP) and agencies from more than 45 countries. In recognition of the need to promote better maternal health and improve newborn survival, the goals of the Safe Motherhood Initiative have expanded since its inception. In its early years, concerned primarily with the unacceptably high number of maternal deaths, the central focus of the Initiative was to ensure prompt detection of and appropriate treatment for life-threatening complications.

While this focus remains at the core of Safe Motherhood, the goals have expanded beyond preventing maternal deaths to include reducing maternal illnesses and disabling conditions, and improving newborn health and survival.

Clearly, these issues are complex and interrelated. In the following chapter, we discuss a framework for looking at them and for organizing formative research to ensure that all important topics are covered.

Section II— Safe Motherhood Framework: The Pathway to Survival

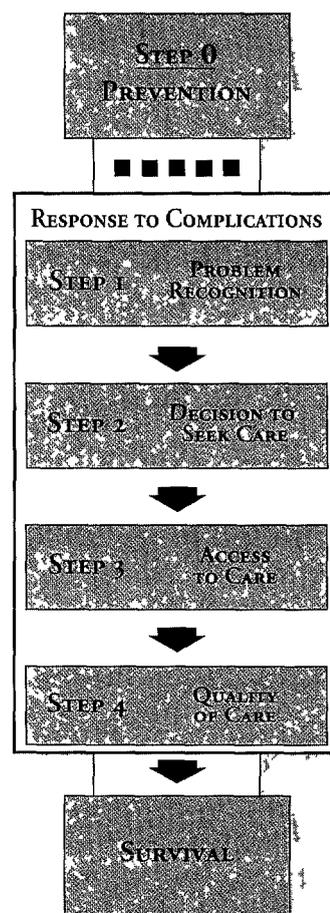
Given the multitude of factors that influence maternal and newborn health and survival how does one organize formative research in a systematic and manageable way?

This section presents a Safe Motherhood framework—the **Pathway to Survival**—for helping with that task. The Pathway simplifies the complex and interconnected issues that affect maternal and newborn outcomes, and it provides an organized inventory of issues to consider including in the research. By using the framework, you can make sure that all important subject areas are addressed in a logical manner. After introducing the framework, this Section then discusses the content of each of the component parts. The purpose of this discussion is to provide a complete overview of the range of potential issues to explore in Safe Motherhood community research.

The Pathway to Survival framework is used throughout this guide. Because Safe Motherhood is a multifaceted and complex topic, it is unlikely that your research will be able to cover all of the framework components in depth, and you will need to choose among topics. Section III, *Planning*, gives guidance for doing so. Once topics are selected, the research questions need to be defined, Section IV, *Topic Modules*, uses the Pathway to Survival as a structure for defining them. During analysis (Section V) the framework can be used as a diagnostic tool to highlight the weak steps in the Pathway. During intervention planning (Section VI), the weak steps in the Pathway can be targeted for intervention.

The Overall Framework

The Pathway to Survival includes two basic complementary approaches to improve maternal and newborn health and survival. The first is **prevention** and the second is **response to complications**.



I. Prevention—This approach entails preventing complications and mitigating underlying health problems that indirectly cause maternal deaths. We use the term ‘prevention’ to denote conditions and actions that affect maternal and newborn health outcomes. *The term encompasses both self-care and use of routine formal health care for normal pregnancy, labor/delivery, postpartum and newborn care*

Preventive measures, however, can avert only a small proportion of maternal complications. In the current state of the field, most such complications that arise are neither predictable nor preventable.

II. Response to Complications—The second approach is to ensure that when complications occur, they are detected early and treated promptly. Because most births in developing countries take place in the home, once complications arise, survival often hinges on a family’s ability to successfully respond by navigating the four steps in the Pathway.

- 1 Problem Recognition
- 2 Decision to Seek Care
- 3 Access to Care
- 4 Quality of Care

These four steps in the *response to complications* are interrelated. As an example, decision-making is influenced by the ability to recognize an emergent problem, by consideration of the availability and accessibility of various care options, and by perceptions of the quality of care various providers offer.

As the four steps of the Pathway demonstrate, if we hope to improve maternal and newborn health and survival, we cannot concentrate on the provision of health services *alone*. We must work with families and in communities to ensure that when complications do occur, they are recognized promptly, that appropriate and timely decisions about care are made, and that families have access to needed services.

Prevention

The first component of the framework is prevention and routine care, which we discuss separately for mothers and newborns. Again, *by prevention we mean conditions and practices that affect a woman's or newborn's overall health as well as practices related to care-seeking throughout the childbearing sequence.*

Maternal conditions and self-care includes issues related to diet and nutrition, alcohol and other drugs, vitamins, medicines and other home treatments, workload, hygiene, and female genital mutilation. Prevention practices also include care obtained during the childbearing process from *traditional health providers** and *formal health providers**, especially those formal health providers who are *professionally trained** in pregnancy, labor/delivery and postpartum (see box on following page).

For the newborn, prevention issues center on actions occurring around the time of birth, specifically, clearing infant's nose and mouth, infant drying, warming and cleaning, cord care, keeping mother and infant together, and infant feeding.

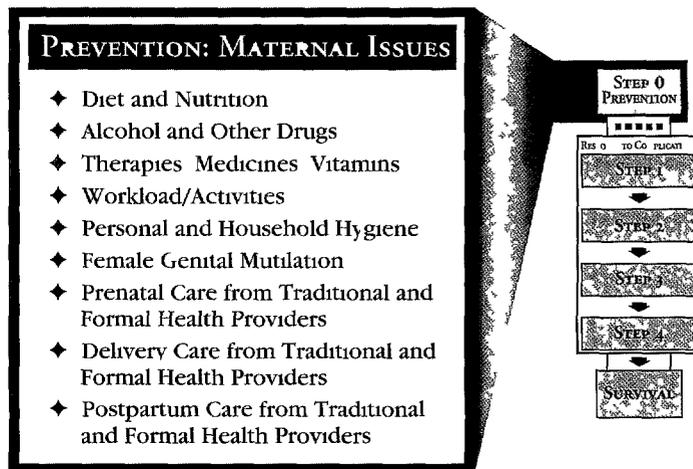
In the text that follows, we first discuss maternal prevention practices and then turn to the newborn.

Prevention. Maternal Issues

Diet and Nutrition

Protein-energy malnutrition, *anemia**, and possibly other micronutrient deficiencies contribute to high rates of maternal (and perinatal) deaths.

Cultural norms and taboos, along with gender discrimination, affect the quality and quantity of women's food consumption. Women may reduce food intake during pregnancy, fearing that a large baby will make delivery difficult. They also may restrict consumption of certain beneficial foods in pregnancy or postpartum because of culturally prescribed restrictions. Regardless of their pregnancy status, women's low social standing may mean that they eat less and eat fewer nutrient-rich foods than other family members of higher social status. Although women may know what foods constitute a healthy diet, poverty may prevent them from getting adequate nourishment. In Bolivia, one woman noted: "I feed myself with



Examples of foods Bolivian women reported were bad to eat during pregnancy

"Tangerines because they cause abortions"

"Lettuce, it makes you swell and causes you to have a bad birth"

"Foods with coloring are bad"

"Chicken, because it has too many hormones"

(Source: Johnson, BB, 1991, see Appendix A.)

what I can't do is a response typifying the situation many pregnant women face

In most cultures, the period after delivery is a special time in which certain practices are required, forbidden, or encouraged. Often these practices are diet-related. In many Latin American and Asian cultures, women avoid exposure to cold water or cold foods. In Guatemala, women seek hot foods, such as broths, chicken, and tortillas. Worried that cold foods will cause stomach pain and swelling in themselves and colic in their infants, Guatemalan women avoid beans, avocado, herbs, and fish.

Alcohol and Other Drugs

Alcohol and drugs, such as tobacco or betel nut, often are part of everyday life for women as well as men. Smoking, which increases the likelihood that women will suffer ill-health later in life, also affects fertility and pregnancy. Compared to women who do not smoke, those who do are more likely to have trouble getting pregnant, to miscarry, to deliver prematurely, and to have low birthweight babies. Alcohol, when abused, can exacerbate or cause nutritional deficiencies. Use of alcohol, especially in large quantities and early in pregnancy, increases the likelihood of permanent brain damage to the fetus. Aside from the immediate impact on the health of mother and fetus, alcohol and other drugs can have adverse indirect effects. When a woman's judgment is impaired by alcohol or drugs, she is more likely to engage in unprotected sex, thus increasing the chance of infection and unwanted pregnancy. Changing alcohol and drug use behavior is challenging not only because of the addictive nature of these substances, but because their use may be entrenched in cultural and social norms.

Therapies, Medicines, Vitamins

In many regions, various therapies, such as massage, baths, teas, and inhalation of vapors are either prescribed or proscribed during pregnancy, delivery, or the postpartum period. In addition, communities may have beliefs related to ingesting or injecting various medicines or vitamins. Fear

By *traditional health providers* we mean those who have received little or no professional training and have gained their skills primarily through experience. Examples of traditional health providers include

- ◆ TBA with no clinical training
- ◆ TBA who has taken a course on safe delivery
- ◆ Traditional healer (e.g., diviner, spiritualist, herbalist, *curandero*)

By *formal health providers* we mean those who have received at least some professional training. Examples include

- ◆ Professionally trained midwife who is qualified to provide routine and emergency obstetric care
- ◆ Nurse or nurse auxiliary working at the local health clinic who has received only limited obstetrical clinical training
- ◆ Pharmacist who has received some clinical training in Western medicine but is not qualified to provide routine or essential obstetric care
- ◆ Non-Western trained formal health provider such as ayurvedic and homeopathic doctor

By *professionally trained providers*, we mean *formal health providers* who have sufficient professional training to provide safe and appropriate routine and essential obstetric care during pregnancy, labor/delivery, the postpartum period, and to the newborn. Examples include

- ◆ Midwife who has received in-depth clinical training following a Western model
- ◆ Physician at a health facility or private practice who has received ob/gyn training at a medical institution

of a big baby (and consequently a difficult birth) was one of the most common reasons women from South Kalimantan, Indonesia and Bolivia gave for non-compliance with iron folate supplementation during pregnancy.² Beneficial medicines or vitamins may be underused because families cannot afford to purchase them or because they are in short supply. In Zimbabwe, research indicates that inadequate drug availability contributed to poor compliance with malaria prophylaxis programs.³

Some therapies, medicines or vitamins are beneficial or harmless. Others, such as *oxytocin**—a drug that induces forceful uterine contraction—can be harmful at or near delivery, especially when administered by untrained birth attendants. Sometimes therapies/medicines are innocuous in and of themselves but are used in lieu of or prior to other more effective treatments. When this happens, families may lose precious time, and the delay in seeking life-saving care can mean the difference between life and death.

Workload/Activities

Throughout their pregnancies, many women continue their usual demanding and strenuous activities, such as carrying heavy loads of water over long distances. In some cases, cultural norms promote heavy work until late in pregnancy. In South Kalimantan, Indonesia, men and women mentioned in focus group discussions that hard work until the eighth or ninth month of pregnancy will make for an easier and faster birth. Even in settings where husbands encourage their wives to restrict lifting and heavy chores, women who are worried about public disapproval may maintain a heavy workload and be reluctant to allow their husbands to perform additional household duties. Such was the case in South Kalimantan where women reported being embarrassed if their husbands did too many chores.⁴

Personal and Household Hygiene

Cleanliness and hygiene practices at the individual and household levels have significant effects on illness prevention. For instance, use of latrines and regular handwashing after defecation and before food preparation can help prevent infections. Vaginal douching may be associated with higher rates of reproductive tract infections.⁵ Hygienic practices during and immediately after delivery can help prevent infections in both mother and newborn. Where women and others involved in delivery or newborn care have little access to soap and water, they may be unable to keep their hands or genital area clean, thereby risking infection in themselves or the newborn.

In Guatemala, it is standard procedure to massage the womb to soften the woman's body in preparation for childbirth and to ensure that the baby is in a good position. *Temascal* or *tuj* [sweat baths] are also part of prenatal or postpartum care, and are thought to be good for chills [*escalofríos*], which may be signs of postpartum infection.

(Source: *MotherCare Community Research: Guatemala*, see Appendix A.)

"You have to keep working. When you're pregnant, you eat just the same. You also have to work at the creek, care for the cow, cook, support your husband."
—Mother, Bolivia

(Source: *MotherCare Community Research: Bolivia*, see Appendix A.)

Female Genital Mutilation

Female genital mutilation (FGM)* also called female circumcision is a traditional practice whereby part or all of the genitals of young girls are removed. It is most commonly performed in Africa and the Middle East, not only by traditional health providers but also by trained providers in health facilities. The long-term effects of FGM on reproductive health can be severe, as they render women vulnerable to infection and obstetric complications. Problems during pregnancy include increased risk of infection for mother and fetus. During delivery, the baby must pass through a restricted opening, potentially causing damage to the skull, birth asphyxia, or brain damage. Especially in its more extreme form, FGM increases the risk of prolonged labor. A woman who has been *infibulated** must be cut open to allow sufficient passage for the baby, a procedure involving a high degree of risk and requiring special skills of birth attendants. Where FGM is practiced, it is important to know what type of procedure is carried out (how extreme it is) and approximately what proportion of girls undergo it. In addition to attempting to discourage the practice, Safe Motherhood programs will need to address the special health and obstetric problems caused by this practice.

Prenatal Care from Traditional and Formal Health Providers

Aside from normal self-care practices, an important aspect of pregnancy care is prenatal care. Ideally, prenatal care should be initiated early (during the first trimester) and consist of several routine visits. At prenatal care sessions, formal health providers have the opportunity to

- ◆ counsel women on obstetric and neonatal danger signs
- ◆ detect and treat reproductive tract infections, many of which are associated with *spontaneous abortion**, *preterm birth**, premature rupture of the membranes, *low birthweight** (LBW), maternal *puerperal infections**, infections in the newborn, stillbirth, and *neonatal deaths**^o
- ◆ give women tetanus toxoid immunizations—a practice which helps prevent tetanus in the mother and newborn
- ◆ prevent or treat anemia—a condition affecting about half of all pregnant women⁷—by providing *all* pregnant women with iron tablets and by treating hookworm and malaria, two conditions that can cause or exacerbate anemia
- ◆ prevent nightblindness by helping women identify local foods rich in Vitamin A, and treat nightblindness where it exists
- ◆ counsel women on hookworm and malaria prevention, adequate nutrition, smoking and alcohol cessation, and reduced workload during pregnancy and beyond—factors that may improve women's overall health status and reduce the incidence of low birthweight due to *intrauterine growth retardation** (IUGR)

Women who seek prenatal care from either traditional or formal health providers often do so because they wish to confirm their pregnancy or get reassurance that their pregnancy is proceeding normally. As one woman stated in Bolivia, “we go to antenatal control to know if the baby is all right.”⁸ Other reasons women give for going for prenatal care are to determine the position and probable delivery date for the baby, get advice on care, workload, and diet,⁹ and receive special services such as massage, special baths¹⁰ or sonograms.¹¹ In some cases, formal health providers are preferred for many of these services and in others, women seek more traditional sources of care.

Although it is advisable for women to make regular visits to a formal provider of prenatal care, many of those who go at all attend only once. There are numerous barriers to women’s use of formal prenatal care and to their ability to follow whatever recommendations providers give them. Families with little disposable income may not be able to afford formal prenatal care¹² and those that can may not be able to pay for dietary supplements or recommended food items. Where roads are poor, or where women require their husband’s permission to travel, access to clinics may be difficult, if not impossible. In settings where maintaining modesty is paramount and formal prenatal care providers are mostly male, families may avoid the institutional health system altogether.

Delivery Care from Traditional and Formal Providers

Increasing the use of professionally trained birth attendants for delivery is one major objective of Safe Motherhood programs. The presence of a formally trained health professional at birth can help promote healthy behaviors, reduce potentially harmful practices, and most importantly, can help ensure that complications are managed and, if necessary, referred before they become life-threatening. But use of professional birth attendants remains low in some developing countries. In many places, skilled professionals are not available. Where available, the cost of retaining these attendants may be prohibitive to poor families. Even if professionally trained delivery attendants are available, affordable, and considered skilled, women may prefer to deliver with their husbands alone or with TBAs. In contrast to many health professionals and health facilities, TBAs typically provide woman-centered care in a comfortable birth environment. They respect local customs such as returning the placenta to the family, allowing the woman to remain partially clothed, permitting the mother to choose her birthing position, and letting mother and baby remain together after delivery. The personal touch offered by the TBA was one of the main reasons Bolivian, Guatemalan, and Indonesian women gave for preferring home deliveries with a TBA to a delivery in an institutional setting or with a professional birth attendant.¹³

Although it is more dangerous to give birth with a TBA, as there may be complications, it is better than the hospital, for she [TBA] talks to you and prepares hot soups.” —*Mother, Bolivia*

(Source: *MotherCare Community Research, Bolivia*, see Appendix A.)

“*Dukun* [TBAs] are more experienced, older, have helped deliver many babies. And TBAs also have received upgraded training.” —*Woman, Indonesia*

(Source: *MotherCare Community Research, Indonesia*, see Appendix A.)

Prior studies have identified many of the reasons women often prefer to deliver with traditional health providers rather than those in the formal health system. However, we have very little knowledge of specific practices in and around delivery. A better grasp of actions in this time period is required if we hope to prevent maternal and newborn deaths.

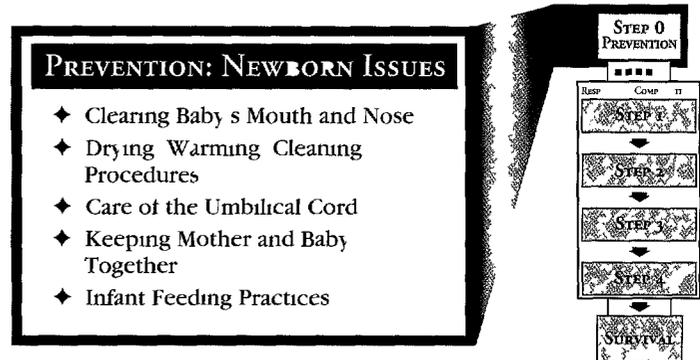
Postpartum Care from Traditional and Formal Health Providers

A number of factors influence whether women get postpartum care. There may be taboos related to exposure to non-family members, travel, and care-seeking. In South Kalimantan, Indonesia, Muslim women are forbidden to leave their homes in the postpartum period¹⁴—a requirement with implications for the provision of postpartum care. Although many postpartum beliefs and practices are beneficial or harmless, others may be harmful or result in failure to seek effective postpartum care. In Bolivia, families believe that exposure to anything cold (including air) results in *sobreparto*, a condition with symptoms suggestive of infection. Because *sobreparto* is thought to be caused by breaking postpartum rules, women do not use the institutional health system for treatment.

Prevention. Newborn Issues

Proper management of the newborn can have a critical impact on infant survival. Although perinatal morbidity and mortality can result from complications during pregnancy, many cases are caused or exacerbated by improper delivery procedures and inadequate or harmful newborn care practices.

Improving delivery practices and care of the newborn requires an understanding of how families and providers determine if the baby is alive or dead. Babies who are born alive but are not breathing and later die may be called stillbirths when in fact proper care procedures could have saved them.

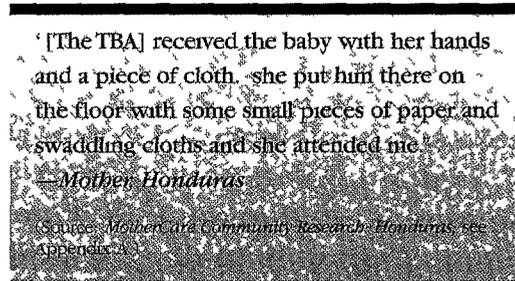


Clearing the Baby's Mouth and Nose

Once the baby's head is delivered, cleaning and, if necessary, suctioning the baby's nose and mouth can help the baby breathe on its own. Where this practice is neglected or unhygienically implemented, the baby can have difficulty breathing or may develop infections.

Drying, Warming, and Cleaning Procedures

Even in tropical climates newborns need to be kept dry and warm because they are not able to regulate their own body temperature well. Drops in body temperature can occur suddenly, endangering the newborn's life. Ascertaining if prompt and proper drying and warming procedures are carried out is an important first step in determining where preventive measures can be improved. Also important is learning how the baby is cleaned (e.g., wiped, bathed), how soon after birth this activity occurs, and whether the procedure is detrimental or beneficial. Where birth is viewed as a potentially life-threatening process for the woman, the newborn may not receive adequate attention and opportunities to improve the baby's chance for survival may be lost.



'[The TBA] received the baby with her hands and a piece of cloth. she put him there on the floor with some small pieces of paper and swaddling cloths and she attended me.

—Mother, Honduras

Source: *Mother and Community Research, Honduras, 1987*, Appendix A.

Cutting and Care of the Umbilical Cord

If an infant's umbilical cord is cut with dirty instruments, or if it is not kept clean, dry and free of any substances, newborns risk tetanus and other infections. In Honduras, some mothers treat the navel with homemade oil-based preparations, hot camphor, and talcum powder¹⁵ a potentially harmful practice. By learning how the cord is cut and cared for, beneficial behaviors can be reinforced and harmful ones discouraged.

Keeping Mother and Baby Together

Most mothers want to remain with their newborn, but many institutions separate mother and child for 12-48 hours. Mothers in Indonesia avoided giving birth in the hospital because they did not want their infant to be taken from them after delivery. There are biomedical as well as psychological reasons why infants should be kept with their mothers. "Skin-to-skin" contact can work as well as an incubator to keep an infant warm and its temperature regulated. Keeping the baby with the mother allows immediate initiation of breastfeeding and subsequent unrestricted access to the breast.

Infant Feeding Practices

Optimal infant feeding practices directly benefit the mother as well as the infant. There are several component practices that should be assessed: immediate initiation of breastfeeding after delivery, giving colostrum, exclusive breastfeeding (giving no other liquids or substances to the infant) and frequent, on-demand feeds.

Babies should be put to breast as soon as possible after delivery, preferably within one hour of birth. Early initiation may benefit the mother by helping to deliver the placenta, contract the

uterus and reduce blood loss. Immediate initiation protects the baby because colostrum, the mother's first milk, has important nutritional and immunological properties. Yet in many cultures colostrum is considered dirty and is discarded. Other substances (prelacteal feeds) are often given as a substitute while waiting for the milk to 'come in' or as a supplement to colostrum. In Honduras, some *parteras* (TBAs) let infants suck on small cloths dipped in oils, honey, or garlic sauce, in order to alleviate the baby's thirst' or provide the baby with a substitute until the 'breastmilk comes.'¹⁶ Giving the infant anything other than breastmilk increases the likelihood of exposure to infection-causing pathogens. Frequent on-demand breastfeeding helps ensure that the infant is getting an adequate quantity of milk and that the mother's milk supply is maintained. The newborn should continue to be breastfed *exclusively* for four to six months, but this practice is found in only a few parts of the world. Exclusive breastfeeding not only provides for the infant's full nutritional needs but it benefits the mother by delaying the return of her monthly menstrual cycles, thereby affording her a period of recovery before becoming pregnant again.

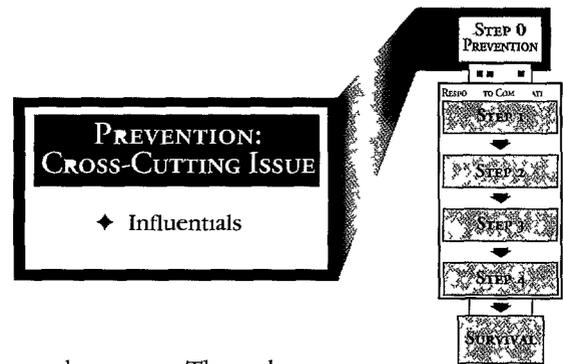
Prevention. Cross-Cutting Issue

Influentials

Adult family members, peers, neighbors, traditional and institutional health workers, and other individuals or groups can have an important influence on preventive and health-seeking behaviors. Husbands, grandmothers, or other

persons may play a vital role in determining care-seeking decisions. The relative influence of these players varies, depending on the setting and circumstance. Focus group discussions in Indonesia suggest that as the cost of the health-seeking behavior rises, husbands become more involved in decision-making.¹⁷ In Bolivia, participants in the community assessment reported that although women have decision-making power in pregnancy, this authority is ceded to the husband in labor/delivery, shared by the couple in the postpartum period, and reverts back to the woman for matters concerning the health of the newborn.¹⁸

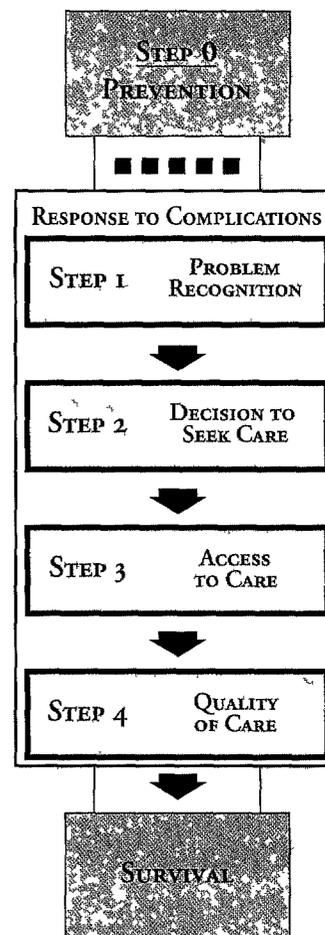
The role of family members and providers becomes paramount in the context of birth. During this time, women are consumed with the efforts of labor and delivery and may have little control over decisions regarding their own well-being or that of their newborn.



Response to Complications

Regardless of the efforts women, families, and providers make to protect the woman and newborn, complications still will occur.

In the developing world, most women deliver at home. With most life-threatening complications happening at or around the time of birth, survival often depends on the ability of families to seek and obtain care from a health facility capable of handling obstetric emergencies. Doing so means that families must navigate Steps 1-4 of the Pathway to Survival. That is, families must recognize the problem and take proper action. These are complex behaviors, requiring adequate knowledge, involving multiple players, and influenced by factors that are both internal and external to families. Once the decision is made to seek care, barriers such as lack of available transportation must be overcome to reach facilities or providers capable of handling the emergency. Finally, survival depends on the receipt of adequate and appropriate care.



Step 1—Problem Recognition

There are three components to problem recognition:

- A overall awareness of complications and recognition at the time of occurrence
- B perceived severity of the complication
- C knowledge of the appropriate life-saving action to address the complication

When a life-threatening complication appears, survival depends first on recognition of its signs, a step that may involve the woman, her family, or whoever else is present when the problem becomes manifest. Because many obstetric and neonatal complications require immediate action, recognition of signs must be prompt. The signs also must be perceived as severe enough to warrant seeking immediate help from a provider capable of handling the emergency.

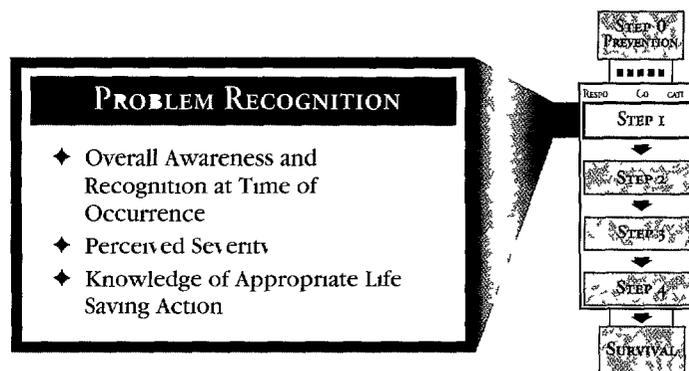
A. Overall Awareness of Complications and Recognition at Time of Occurrence

General awareness of complications can influence the degree to which families prepare for an emergency and the likelihood that the problem will be recognized when it arises. Yet overall awareness of complications often is low. In South Kalimantan, only about two-thirds of women could name even one danger sign associated with pregnancy and almost half were not aware that

fever or heavy bleeding during delivery indicated a serious problem¹⁹ Even when mothers can name a complication they may not be able to recognize the specific and possibly deadly condition when it appears As might be expected knowledge of specific danger signs often is contingent upon a family's own experience or familiarity with someone who has suffered a complication Moreover overall awareness that an obstetric or newborn problem could *potentially* occur is different from recognizing a complication when it actually happens

B. Perceived Severity of the Complication

Recognition of the signs of complications often is not sufficient reason to seek care Individuals who recognize the signs of a complication must perceive these signs to be severe enough to warrant seeking the help of a health professional Because women often lack decision-making power and because many of the more severe complications occur during labor and delivery—a time when a woman's condition may preclude her from making decisions—it is especially critical that husbands/partners and others with decision-making authority understand the severity of complications Yet as MotherCare research in Guatemala, Bolivia, and Indonesia demonstrates, many signs of complications are not viewed as severe, and some signs



PROBLEM RECOGNITION (STEP I) EXAMPLES FROM BOLIVIA

Overall Awareness of Complications

Even after prompting 95 percent of all women participating in the MotherCare community based survey did not recognize a previous cesarean section or multiple gestation as a potential risk factor for complications Even with prompting only *sobreparto*, a condition with symptoms similar to those found in postpartum infection was mentioned by nearly half of the women With the exception of *sobreparto* even the most frequently cited problems in pregnancy labor and delivery were mentioned unprompted by only about 15-20 percent of the women

(Source: *MotherCare/Bolivia Community Based Survey Report*, see Appendix A)

Perceived Severity of the Signs of Complications

While many women will experience swelling in their feet a normal condition in pregnancy others have swelling in their face and hands—signs of possible preeclampsia Families consider swelling of all kinds during pregnancy to be beneficial and an indication that the body is storing energy to facilitate the birth As one 56-year old mother of six said 'the way I see it, it's better if the feet swell In all the children I had, my feet and face swelled It's favorable'

(Source: *MotherCare Community Research Bolivia*, see Appendix A)

Knowledge of Appropriate Action

Sobreparto is widely recognized and regarded as serious Nonetheless, because families believe *sobreparto* is rooted in women's non-adherence to postpartum rules prohibiting exposure to cold air, cold foods or cold water, they turn to traditional providers rather than the institutional health system for help

(Source: *MotherCare Community Research Bolivia*, see Appendix A)

PROBLEM RECOGNITION (STEP 1) EXAMPLES FROM INDONESIA

Overall Awareness of Complications

As is the case in many settings, women and men participating in the MotherCare community based survey did not view pregnancy as a time of risk. Nearly two thirds of the women and over two-thirds of the men could not name unprompted even one danger sign associated with pregnancy. More respondents were able to name unprompted danger signs in labor and delivery. Still, many important danger signs were barely mentioned. Less than five percent of respondents mentioned fits and convulsions unprompted and even when prompted only about two thirds reported knowing about this problem. (Source: *MotherCare Indonesia Community Based Survey Report*, see Appendix A.)

Perceived Severity of the Signs of Complications

While the majority of the South Kalimantan women participating in the community assessment thought many of the signs of complications (e.g. hemorrhage postpartum, malposition of the fetus) were serious, few thought twins or signs of postpartum infection were worrisome. (Source: *Nachbar 1997*, see Appendix A.)

Knowledge of Appropriate Action

Data from the MotherCare community-based survey in South Kalimantan show that while about 90 percent of the women who mentioned retained placenta (unprompted) knew that seeking help from a health professional was the appropriate action, less than eight percent knew that they should go to a health professional for foul smelling vaginal discharge. Knowledge of the appropriate action for newborn problems generally was low. Substantially less than half the women who named unprompted certain newborn problems (i.e., baby too small, baby not sucking, baby has eye discharge) stated that help from a health professional should be sought for the problem.

(Source: *MotherCare Indonesia Community Based Survey Report*, see Appendix A.)



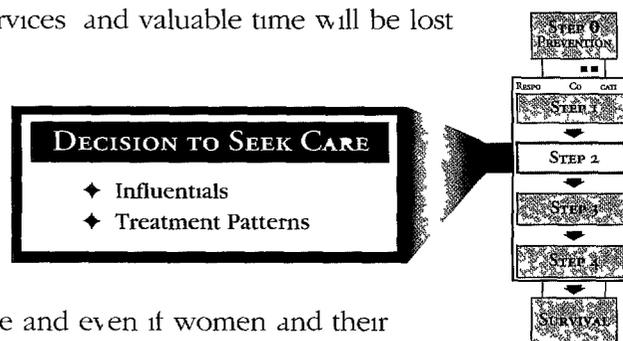
which indicate problems are considered favorable.²⁰ Conditions which become problems only in their extreme form—such as postpartum hemorrhage or prolonged labor—are particularly difficult to recognize. That is, it can be difficult to determine how much blood loss is ‘too much’ or when labor has been going on “too long”

C Knowledge of Appropriate Life-Saving Action

Even when a problem is considered serious, women and their families may not know the appropriate life-saving action to take. Alternatively, they may view the problem and its solutions, as falling outside the realm of the formal health system. In such cases, families will not turn immediately to institutional health services and valuable time will be lost.

Step 2—Decision to Seek Care

When families seek preventive or curative care for maternal or newborn complications, they may select traditional and/or formal health services. Once a problem is recognized, even if it is perceived to be severe and even if women and their families know what the appropriate life-saving action is, other factors influence the



decision to seek care. Whether families opt for help from traditional healers or from professional health providers, the decision entails two key considerations: physical and sociocultural access barriers, and perceptions of the quality of care. These issues are discussed in detail under **Step 3 Access to Care** and **Step 4 Quality of Care**. Although there is scant research on how decisions are made when obstetric or neonatal complications arise, some of the factors that bear on the decision-making process have been identified. These factors are discussed below.

Influentials

Although we have already discussed the importance of influential persons in decisions regarding preventive and routine health behavior, their decision-making role in emergency situations deserves special mention.

When obstetric or newborn complications arise during home births, multiple players often are involved, with husbands (or partners) playing a particularly vital role in many societies. Women may have significant authority to decide whether they will seek care during pregnancy and for the newborn, but they may still depend on the husband for permission or concurrence—for husbands often make final decisions about household expenditures or travel. In many settings, husbands, sometimes unassisted, are present at the majority of births. The intensity of labor and delivery, and the additional burdens of complications can incapacitate the woman, placing the husband in the key decision-making role.

Another critical decision maker, especially during labor and delivery, is the birth attendant, often a TBA, whose authority family members respect. Confronted with an emergency situation, husbands and other family members generally rely on the TBA's judgment. While the husband may have final say in health-seeking decisions, he may depend on the TBA and other family members, such as maternal or paternal grandmothers, for guidance in making these decisions when complications happen during labor, delivery, or immediately thereafter.

Treatment Patterns

The sooner women and newborns receive suitable treatment for complications, the better their chance for survival. When complications arise and families decide to take action, they may choose first to treat the problem at home, seek help from a traditional healer or TBA, or go to a professionally-trained provider locally or at a health facility. Efforts to manage complications at home often fail and contribute to delays in seeking care from providers who can manage complications effectively. Even TBAs who have received some clinical training and who practice clean and safe birthing procedures generally will be unable to handle serious complications when they occur. Yet, few Safe Motherhood programs have examined what

"The woman and her husband have to make the decision of where to go. Both are like one and neither can decide anything without consent of the other. —TBA, Bolivia

(Source: *Mothercare Community Research, Bolivia*, see Appendix A)

"A woman was alone, waiting for her family. She bled from four in the morning. She called the *partera* [TBA] and she [the *partera*] did *keoas* [special offering containing traditional herbs, mysterious substances, sweets and dyed sheep wool] and pushed on her head. Only at eleven in the morning did it occur to them to ask for help [at the clinic], but the woman died. —Mother, Bolivia

(Source: *Mothercare Community Research, Bolivia*, see Appendix A)

beneficial home measures might be taken while families are making arrangements to transport the woman or newborn to life-saving care. The time period between problem recognition and arrival at a health facility may provide an opportunity for intervention. We need to learn more about treatment patterns for complications if we hope to intervene effectively.

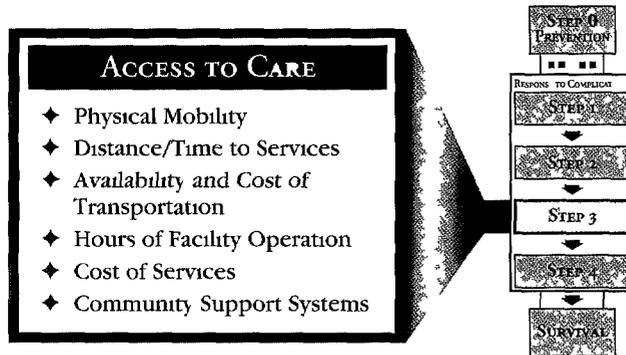
'Another danger sign is a stomach ache that lasts three days. The TBA helps all day and all night, then you call the midwife. The TBA tells you there is a problem.' —*Woman, Indonesia*
 (Source: *MotherCare Community Research, Indonesia*, see Appendix A.)

Step 3—Access to Care

The ability to access care can determine whether a mother or newborn lives or dies. When families make a decision to seek care, they consider the access barriers they will have to overcome. Survival often depends on physical mobility, distance/time to services, availability and cost of transportation, hours of facility operation, cost of services, and community support systems. We discuss each of these below.

Physical Mobility

In many societies, gender inequities and cultural norms constrain women's physical mobility. Travel, even for life-threatening conditions, may require a husband's permission, and adolescents may need parental consent. If a husband denies permission or is absent when the decision must be made, his wife may languish at home. Adolescents, fearing repercussions from their families for becoming pregnant or terminating a pregnancy, may be unable to travel to life-saving health services.



Distance/Time to Services

In many settings, especially in rural areas, facilities capable of handling obstetric or neonatal complications are located too far away to be accessible. Even when the actual distance to a health facility is minimal, mountainous terrain, poor road conditions, seasonal flooding, or the necessity of traversing water can considerably lengthen the time needed to make the journey.

Availability and Cost of Transportation

Transportation can be difficult to obtain, particularly when emergencies happen outside of business hours.

Getting to the hospital is always easy, but not when there are problems. Obviously, at times, there's no transportation. —*Father, Bolivia*
 (Source: *MotherCare Community Research, Bolivia*, see Appendix A.)
 It's difficult to go to the hospital. It is far. There is no transportation from here, no *klotok* (motorized boat) or land transportation. There is no road. —*Respondent, Indonesia*
 (Source: *MotherCare Community Research, Indonesia*, see Appendix A.)

Although public and private vehicles may run during the day, such transportation may operate irregularly or be completely unavailable at night. In communities where private vehicles are available, owners may not understand the gravity of the situation or may have other reasons for denying or delaying transport. Regular transportation costs may be affordable, but if emergencies happen when regular sources of transport are unavailable, alternative arrangements can be costly.

Hours of Facility Operation

Even where well-equipped facilities with trained personnel exist, they may not operate 24-hours a day, and if they do, a trained provider capable of handling obstetric or neonatal complications may not always be available. Women and their families may overcome other obstacles and travel long distances only to find that the facility is closed or that a professionally trained provider capable of handling the problem is absent.

Cost of Services

Service costs can be one of the most important barriers to use of routine and emergency obstetric services. Across and within countries, costs vary depending on whether services are provided by the public or private sector, on government policies and regulations, and on the type of service (e.g., antenatal care, normal delivery care, emergency obstetric care). In some countries, such as Bolivia, governments provide free or low-cost antenatal care services. Yet for the indigent, even minimal costs may preclude service use.

In some cases, hospitals and health facilities may report that they charge low fees¹ but families perceive service costs to be much higher.² The reason for this discrepancy is unclear: families may have misconceptions of the true cost of services, or the health facility officials may fail to consider the full cost of care when they report fees, medicines, food, room and board, and other incidentals. Regardless, if families perceive services costs as high—and in many cases, especially for emergencies, they are—or if decision-makers do not know true costs but fear they are exorbitant, then cost becomes a barrier to service use.

according to the husband, the woman began bleeding more heavily. The husband ran to borrow his neighbor's vehicle, but the neighbor said he had to take his goat to the market first, and then he could return to take the woman to the hospital.

Source: Iskandar, MBER, 1997, see Appendix A.

The doctor is not there especially on Fridays. He'd have gone to the city for the weekend. —Respondent, Indonesia

Source: Mothers Care Community Research, Indonesia, see Appendix A.

"For lack of money we sometimes don't take the woman to the hospital, it's that there, they charge us for everything, even the air we breathe. That's why sometimes we have to resign ourselves to losing our companion because we are poor." —Father, Bolivia

Source: Mothers Care Community Research, Bolivia, see Appendix A.

Community Support Systems

Even though service cost and lack of transport are widely recognized as barriers to service use, little has been done to assist families over these hurdles. Even when individual community members own transport or when individual contributions to a communal fund could help cover emergency costs, organizing such community-wide efforts requires community will and organizational capacities. Sometimes there is sufficient organizational infrastructure on which to build, if, for example, there is already a house of worship or women's group that undertakes socially beneficial activities. In other instances, the organizational effort must be initiated by the Safe Motherhood project.

Step 4—Quality of Care

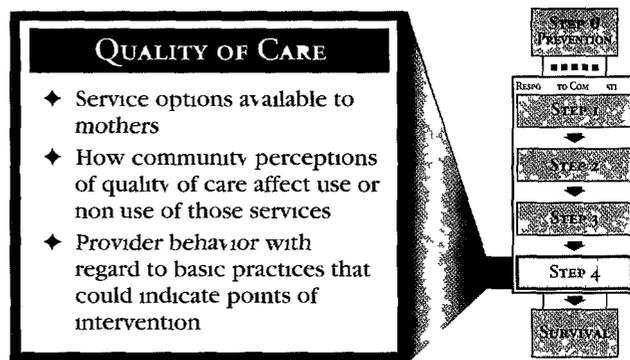
Quality of care issues are explored both in facilities/services assessments and in community studies. The main purpose of a facilities/services appraisal is to examine quality from the standpoint of Western biomedical concepts and standards. This technical evaluation of services and quality of care, including health facility capacity to provide routine and essential obstetric care, and provider training needs, should be conducted as a separate assessment by professionals with a health background. (See WHO's *Safe Motherhood Needs Assessment* in Appendix A.)

Quality of care in a *Community Assessment* looks mainly at the *client* perspective on services, as well as at some basic practices of providers. Specifically, examination of quality of care in the community context covers three areas:

- A. service options (traditional and modern) available to mothers
- B. how community perceptions of quality of care affect use or non-use of those services
- C. provider behavior with regard to basic practices that could indicate points of intervention

A. Service options available to mothers

As a preliminary step in understanding care-seeking, it is necessary to know what options for care exist in both the traditional and formal sector. In a *Community Assessment*, this information is gathered mostly for descriptive, contextual purposes, and includes a listing of available facilities, providers, and services. For



“TBAs only know to rub the stomach and nothing more. Sometimes they let the woman and child die. There is no way to trust them. On the other hand, the doctor knows and can save us. He gives injections and saves the mother. He’s studied how to do this, but the TBA hasn’t.”
 —Father Bolivia
 (Source: *MotherCare Community Research*, Bolivia, see Appendix A.)

example it is important to know what facility exists for obtaining prenatal care and if a health facility with emergency obstetric services is accessible. It is also pertinent to know the level of provider training, for both formal and traditional providers. Is the facility staffed by a nurse auxiliary or by a professionally trained midwife? Does the traditional birth attendant have any formal training and if so, how much and how recently was training given?

B How community perceptions of quality of care affect use or non-use of those services

One of the most important determinants of service use is *perceived* quality of care, which includes both technical and non-technical dimensions.

The *technical* dimension has to do with perceived efficacy of services. Families will seek care from those providers (traditional or professionally trained) who are considered capable of preventing or satisfactorily resolving problems. Provider experience and training are two aspects of technical competence families consider. For some family members, training may outweigh experience, for others, the reverse may be true. Regardless, unless families have faith in the technical competence of providers, they will not utilize services. Families may also make judgments based on availability of equipment or supplies.

The *non-technical* dimension of perceived quality of care has to do with cultural compatibility of services and the patient's overall level of comfort with the facility or provider. Practices accepted in the Western world may discourage local communities from using services. For example, requiring removal of clothes may breach local standards of modesty, the practice of certain medical procedures (such as episiotomies) or failure to return the placenta may make institutional deliveries undesirable, and not allowing the TBA or other family members to be present at the time of delivery may deter a woman from delivering outside her home.

Provider attitudes and interpersonal skills are other important non-technical aspects of care. Professionally trained providers may have insufficient interpersonal skills to communicate effectively or make their clients feel comfortable. Such deficiencies, irrespective of technical capacity, inhibit families from using institutional health services. Sometimes professionally trained providers come from another ethnic group or speak a different native language than their clients, adding cultural differences to communication barriers. In other cases, families may believe they will be chastised and otherwise mistreated. Often, such fears are borne out in reality. The role of insensitive treatment in discouraging use of emergency health services has not been assessed through quantitative studies. However, qualitative research suggests that these factors contribute substantially to low rates of use of routine services.

"In the community we always go to the TBA because she goes to the heart of things and knows what problems the patient has. She immediately gives us remedies and is very effective." —*Father, Bolivia*

(Source: *MotherCare Community Research, Bolivia*; see Appendix A.)

"I prefer village midwives [clinically trained]. Even though they are young, they have received proper medical training."

—*Woman, Indonesia*

(Source: *MotherCare Community Research, Indonesia*; see Appendix A.)

**C Provider behavior with regard to basic practices
that could indicate points of intervention**

Some aspects of actual quality of care—actual provider practices—need to be covered in the Community Assessment. In developing countries, most mothers deliver at home rather than in a maternity facility. In home births, a mother may deliver unattended; she may be attended by an untrained family member, she may be attended by a traditional birth attendant, either untrained or trained, or she may be attended by a professionally trained provider. It is important to understand basic delivery and newborn care practices to determine which are beneficial and should be supported, and which are detrimental and could be modified by intervention. For example, whether, when, and how the newborn is kept warm has a significant impact on survival. (See *Prevention: Newborn Issues* in Section II.)

Section III— Planning an Assessment of the Community

In this section, we review the basic steps involved in planning a *Safe Motherhood Community Assessment*. These steps are discussed in terms of their specific application to Safe Motherhood: reviewing any Safe Motherhood information that exists for your project area, defining the scope and objectives of your research, translating your research objectives into research questions, determining the study sample, selecting those methodologies best suited to answering the questions addressed in your research, and drafting your data collection instruments or field guides. This overview is not meant to substitute for good training and experience in planning field research. Many good references already exist for those wishing further instruction in that area. (See Appendix A for a selection of these references.)

These planning elements need not be carried out in this order. In fact, the planning process is not linear but iterative, with one decision affecting another. For example, reviewing existing research and defining the scope of your own study are intertwined processes. Or, in pilot-testing your field guides, you may find that more attention needs to be paid to a particular group, such as mothers-in-law, and that you need to develop a separate instrument and adapt your sampling plan accordingly. Recognizing that the planning process does not entail discrete steps, we nonetheless separate the five components here for discussion purposes.

PLANNING THE RESEARCH

- ◆ *Review existing information*
 - ◆ *Define scope and objectives of research*
 - ◆ *Define research questions*
 - ◆ *Determine sampling plan and select sites*
 - ◆ *Choose appropriate methodologies and develop instruments*
-



Review Existing Information

A critical review of existing information will help you determine the scope of the research and identify research questions. It can also help define your study population and geographic area of inquiry if not already specified by the project. Familiarity with what is already known on the topic can avoid duplication of effort and point you to issues not adequately covered by previous investigations. In the text that follows, we give some suggestions of where to look and what to look for.

Where to look

Information on Safe Motherhood topics has become more widely available in the past decade. In addition to published articles, student dissertations and project documents may provide especially

Publications, program documents, and people from related organizations	<ul style="list-style-type: none"> ◆ Obtain publications from organizations (MotherCare, World Health Organization, private voluntary organizations (PVOs), nongovernmental organizations (NGOs), and universities) who do work related to Safe Motherhood, Child Survival, and women's reproductive health and nutrition. Look for final reports, documents on lessons learned, research reports, project evaluations. ◆ Talk to people working in these organizations.
Peer-review or local journals	<ul style="list-style-type: none"> ◆ Search for articles related to your study population, topic area, or geographic area of interest. ◆ Look at the bibliographies or references to see if there are other publications that might be useful. ◆ Find these articles by talking to people involved in women's and children's health issues, by reviewing journals and/or by searching databases such as Medline and Popline. ◆ Review articles and commentaries on interventions, qualitative and quantitative studies, and training programs.
Masters' or doctoral dissertations	<ul style="list-style-type: none"> ◆ Locate student anthropological, public health, and nutrition-related dissertations on topics related to Safe Motherhood. These dissertations often explore a narrow topic with great depth and have an extensive literature review component, which can steer you to additional information. Find these documents in a university library.
National procedural norms and protocols	<ul style="list-style-type: none"> ◆ Review national materials on obstetric norms, procedural or treatment protocols for women and newborns.
Electronic information websites	<ul style="list-style-type: none"> ◆ Search the Internet for organizations working on Safe Motherhood topics. ◆ Search for publications on Safe Motherhood.
Surveys	<ul style="list-style-type: none"> ◆ Review Demographic and Health Surveys (DHS) for data on maternal health and on communication variables such as radio and TV ownership. ◆ Look for other national and regional data which may be available through the Ministries of Health, Census Departments, Bureaus of Statistics, and other similar entities.
Local experts	<ul style="list-style-type: none"> ◆ Talk with community leaders or others familiar with your study area and population (e.g., midwives, traditional birth attendants, women's group leaders, village heads). ◆ Speak with people who work locally on issues related to Safe Motherhood (e.g., family planning). They can provide valuable contextual information and may guide you to key articles, books, or other key informants.

valuable practical information. Many such documents are not formally published, and contacting organizations directly or searching specialized electronic databases often is the only way to locate these materials. It is also extremely useful to talk with people who have done similar work. The table on page 32 lists sources of information that may be useful. (See Appendices A and B for a list of some specific journals, publications, organizations, websites, and other references on Safe Motherhood.)

What to look for

As you look through available materials, the following questions can help guide your review in order to help you plan your own research.

What has been studied?	<ul style="list-style-type: none"> ◆ What studies are there on topics related to Safe Motherhood? Because scant Safe Motherhood research may exist for your geographical area, you may need to search related topics. Examples of related topic areas are anthropological studies of birthing practices, breastfeeding, reproductive health (including HIV/AIDS), family planning, general health seeking behavior, health facility assessments and quality of care. You also may need to expand the geographic focus of your search to include a larger geographic area than the one in which you work. ◆ What research questions have been asked?
Who has been studied?	<ul style="list-style-type: none"> ◆ What populations have been well studied? ◆ What populations have been excluded from Safe Motherhood related investigations (e.g., men, adolescents, migrant populations, village women who don't seek care at existing health facilities)?
Where have studies been done?	<ul style="list-style-type: none"> ◆ What geographic areas have been well-researched? ◆ What geographic areas have been omitted from research?
What is the approach and quality of the studies?	<ul style="list-style-type: none"> ◆ Are the studies well-conceived and implemented? How credible are the findings? Where do the data come from? Are the data drawn from population based household surveys or from facility or provider records?¹ ◆ What methods—qualitative or quantitative—were used? If quantitative methods were employed, is a qualitative study on the same topic useful to give more in depth understanding? ◆ Are findings current or might they be out of date?
What are the findings?	<ul style="list-style-type: none"> ◆ What problems, behaviors, care-seeking practices (for women generally and for pregnant/delivering and postpartum women) have been studied and what barriers/enablers to obtaining adequate care have been identified? ◆ What other research questions have been answered? ◆ What pertinent research questions remain unanswered or were inadequately answered?

Define Scope and Objectives of Research

As Section II shows, Safe Motherhood is a vast and complex issue, involving broad social issues, such as gender and class. Safe Motherhood entails not just one behavior, but different clusters of behaviors at different stages in the pregnancy-labor-postpartum sequence. It involves making decisions under duress, decisions that take into account multiple actors and a host of cultural and logistical factors. At the core of community Safe Motherhood is maternal survival, the essence of which is getting prompt, appropriate care for complications of pregnancy, labor/delivery, and the immediate postpartum period. But Safe Motherhood has evolved to include preventive issues and newborn health and survival. Within these broad categories, there are subtopics which could be the focus of separate studies in themselves: reproductive tract infections, abortion, female genital mutilation, maternal nutrition (especially anemia), and breastfeeding. Although we do not provide full research protocols for these latter topics, such protocols already exist for some of them. (See Appendix A.) Those research topics that are covered in this Guide are listed in the table below.

Topic Area	Community Research Issues Covered
Maternal Prevention Issues	Diet/nutrition, alcohol and other drugs, therapies/medicines/vitamins, workload/activity, personal/household hygiene, female genital mutilation, care from traditional and professionally trained health providers during pregnancy, labor/delivery, and postpartum, influentials.
Response to Maternal Complications	Recognition of complications in pregnancy, labor/delivery, postpartum, including awareness, perceived severity, and knowledge of appropriate action.
	Decision-making/care-seeking during birthing and for complications, including influentials and treatment patterns.
	Barriers and enablers to accessing life-saving care, including physical mobility, distance/time to services, availability and cost of transportation, hours of facility operation, cost of services and incidentals, community support systems.
	Available service options, including those from the traditional and formal health sectors, perceptions of quality of care from a technical standpoint (i.e., perceived efficacy of the services) and from a non-technical standpoint (i.e., cultural compatibility, interpersonal communication), how these perceptions affect service use, actual quality of care, especially of community providers, with regard to basic practices (particularly around labor/delivery, and with the newborn).
Newborn Prevention Issues and Response to Complications	Care and management of the newborn, including clearing the baby's mouth and nose, drying, warming, and cleaning procedures, cord cutting and care, keeping mother and baby together, and infant feeding practices, response to complications, including recognition of complications, decision-making/care-seeking, barriers and enablers to accessing life-saving care, quality of care.

A separate assessment of health facilities should be conducted to look at quality of care from a technical and medical standpoint. But a community diagnosis should be used to look at community *experiences with* and *perceptions of* care, both of which play a critical role in determining whether families decide to utilize institutional health services.

COMMUNITY ASSESSMENTS AND SERVICES ASSESSMENTS HAVE AREAS OF OVERLAP

There is no clear cut boundary between where a community assessment ends and a services assessment begins. Some topics straddle both assessment areas. Quality of care is such a topic with the two types of assessments used to examine different aspects of the issue. The community assessment would concentrate on identifying available service options, documenting some basic care behaviors, understanding the local or client perspective of the health facility and services, and on all of the features that encourage or discourage client use. The health services assessment would concentrate on evaluating quality of care from the Western biomedical standpoint. Here are some examples of the types of topics that fall under each.

Community Assessment

- ◆ Types and locations of health providers and health facilities available to the community
- ◆ Perceptions of the kinds of problems that are best treated within the formal health system
- ◆ Perceptions of quality of care or efficacy of treatment received
- ◆ Perceptions of positive and negative consequences of using the formal health system compared with those of using traditional sources of care
- ◆ Perceptions of barriers to access, e.g., how difficult it is to reach the facility
- ◆ Perceptions of service affordability
- ◆ Experiences interacting with health providers
- ◆ Actual practices of community providers related to basic care (especially in labor/delivery and with the newborn)

Health Services Assessment

- ◆ Organization of health services and cadres of health providers
- ◆ Institutional staffing, physical infrastructures, equipment, and supplies, case loads
- ◆ Qualifications and skill of providers
- ◆ Availability and quality of training curricula
- ◆ National policies or protocols
- ◆ Fee structures
- ◆ Health outcomes

In the *Community Assessment*, quality of care issues can be explored by interviewing service users and non-users, and by talking with and observing traditional care providers and those in the institutional health system. Just because a *Community Assessment* is focused on understanding community aspects of Safe Motherhood, this does not preclude observations and/or interviews in health facilities. Such observations or interviews can be critical to understanding the *family's experience* in the facility and how that experience bears upon her care seeking behavior. The key is that while some basic provider practices are explored, the focus of the *Community Assessment* is on the *client perspective* rather than on conducting a highly technical assessment of medical facilities and services. (For guidance on conducting an assessment of facilities and services, see the World Health Organization's *Safe Motherhood Needs Assessment* listed in Appendix A.)

No project will be able to address all Safe Motherhood topics in depth (Think about the daunting task of researching all of the issues listed in Section II, *Safe Motherhood Framework: The Pathway to Survival!*) In order to make the topic scope manageable, you can take one of two approaches (1) cover the basic issues for most or all topics, but not in-depth, or (2) focus the research on those areas most important for the project. In some instances you may combine approaches by covering one or two areas in-depth and gathering more general information on some of the other topics. In most cases *it is best to focus the research*. Unless the subject has already been well researched, you will always want to cover “response to complications” topics in depth, and add related topics according to project needs and resources.

In order to define the research objectives, you will want to consider project goals, the results of your literature review, and resource and logistical factors.

Project Goals

To what extent are project or research goals defined? What is the overall orientation of the organization that will use the information for developing interventions? Some may be more oriented toward food and nutrition, some toward supporting facilities, some toward community development and mobilization. Formative research is practical research for making program decisions, so the investigation should be shaped by the needs of the project.

Sometimes project mandates provide an automatic focus for the research. These mandates can direct emphasis to particular topic areas or target populations. For example, in Indonesia, the government requested that MotherCare work with their professionally trained midwives serving in health centers or in villages. Therefore, investigation of how community members perceived midwives was more extensive in Indonesia than it was in other countries. In addition, prior research in Indonesia had highlighted anemia as a significant problem in South Kalimantan, so the Ministry of Health put anemia as a top priority on the formative research agenda. In other cases, a primary project goal might be to reduce perinatal mortality, and the formative research

Most Indonesian mothers give birth at home, attended by traditional birth attendants and maternal mortality ratios are high (in 1992, 420 per 100,000 live births). The Indonesian Ministry of Health decided to try to increase the number of births attended by a clinically trained health provider, whether at a facility or in the home. The government trained some 54,000 young women, with the objective of placing one in each village. But because of their youth and their limited training and experience, these village midwives lacked confidence and adequate skill, and mothers were reluctant to use their services. MotherCare adopted a dual strategy of upgrading skills and promoting community acceptance of these providers. Formative research in the community centered on response to complications and anemia, but paid special attention to community perceptions of midwives, reasons for use or non-use of midwifery services, and on behaviors midwives could adopt to become more culturally acceptable to community members. As a result, the training intervention emphasized both technical and culturally appropriate interpersonal skills. At the community level, the Information Education and Communication (IEC) campaign focused not only on increasing family awareness of and preparation for complications, but also on promoting the image of midwives and encouraging use of their services.

would include issues relevant not only to maternal health, but also to the health and management of newborns. In the design of one country intervention, MotherCare and a child survival project pooled experiences to focus on newborn deaths.

Often project goals are quite general— Safe Motherhood’ —and an important function of the formative research is to help focus the project on the key problems in the catchment area. In this case, initial research could be broad but would quickly focus on important problem areas as they come to light. The *Community Assessment* can help identify the key actionable measures that should be included in an intervention plan.

Results of Literature Review

The literature review described in the prior section will tell you what is already known about particular aspects of Safe Motherhood and where the gaps are. For example, if much is already understood about women’s knowledge of and perception of pregnancy and delivery complications, you may choose to emphasize other topics such as care-seeking behavior in pregnancy and childbirth or barriers to using health facilities for prenatal and delivery care. If existing studies have not investigated men’s beliefs and practices, then you may wish to make a special effort to determine their role in decisions about finances and transport. Perhaps key problems already have been identified in prior studies, but there may be little understanding as to why they occur, or how they can best be overcome.

Resource and Logistical Factors

The extent to which you will need to focus the scope of the research also depends on a number of logistical and resource factors.

Time Line When is the information needed? The shorter the time line, the fewer the number of topics you can cover well.

Population Heterogeneity The more diverse the population under study, the larger the sample size and the more time and financial resources necessary. Given probable resource constraints, the more heterogeneous the population, the more topic-focused you will need to be.

Qualifications of Research Team The team will be composed of persons with diverse backgrounds. Some may have a clinical background, some may have experience in community health interventions, others may be experienced in qualitative research but have no background in Safe Motherhood issues. All team members will need to master a base of technical information and an adequate level of skill in qualitative research before beginning the field work. Particularly if team members have little prior qualitative research experience, you will need to keep the research as simple and manageable as possible.

QUALIFICATIONS OF THE RESEARCH TEAM

The research team should be composed of persons with complementary areas of expertise such as clinical medicine, social science, community work, and qualitative research in health promotion. The physicians or professionally trained midwives on the team can serve as medical resource persons. Social scientists with a background in health behavior or communication for behavior change are particularly useful for ensuring that those factors that influence behavior and that need to be considered in intervention design are covered in the research. Team members with prior experience working in the project area communities can help the group understand the research context and establish rapport with community members. Persons who have solid qualitative research experience can assist others in learning the methodologies and can help assure the quality of research design and data collection. Ideally, the team will consist wholly or largely of local persons.

*Size of
Research Team*

With how many people will you be working? Usually teams of three to six people are optimal. If fewer people are available, the pace of the research may be very slow. If more are involved, training and coordination of members becomes more complicated, and more than one vehicle will be required to transport the team.

Travel

How much time will travel take from your fieldwork schedule? Will the team stay at the research sites? If not, how far away from these sites will the team be lodged? How dispersed are sites? In what condition are the roads and vehicles? How long will it take to travel to and between sites?

Budget

Financial constraints will affect the overall amount of time that can be spent on the research and the number of sites that can be covered.

Define Research Questions

Once the overall scope and broad objectives of the research are established, you will need to define the specific questions the research intends to answer. Clearly defined research questions will help bring you to the heart of what you want to learn and keep you on track. If an objective is to explore community members' response to maternal complications, approach this topic *systematically* by covering all the key questions that are relevant to your research objectives. The Pathway to Survival framework in Section II provides an inventory of such factors and related issues.

To facilitate the process of defining your research questions, Section IV *Topic Modules*, covers prevention/normal care as well as response to complications, both for the mother and for the newborn.

By referring to the Topic Modules in Section IV, you can select the relevant research questions for your study. For example, if your research scope includes maternal diet and nutrition in pregnancy, specific research questions, taken from Module 1A (Maternal—Prevention Issues and Normal Care), might be

- ◆ What foods/drinks do women take/avoid in pregnancy?
- ◆ When are specific foods/drinks taken/avoided in pregnancy?
- ◆ What are the reasons women give for taking/avoiding specific foods/drinks in pregnancy?
- ◆ Do women change the overall quantity of food they consume when they are pregnant?

Note that these are *research questions* and not the *actual field questions* to be asked of respondents. Field questions represent the operationalization of the research questions, and may be answered by a variety of means. Section IV further explains this distinction and gives a more detailed discussion of how to use the Topic Modules as a basis for developing instruments.

Determine Sampling Plan and Select Sites

This overview covers special sampling considerations that a *Safe Motherhood Community Assessment* entails. You probably will have a small, purposive sample and for the most part, will follow standard sampling practices for qualitative research. (For those readers seeking guidance on standard practices, some references are listed in Appendix A.)

Overall, the primary consideration in determining sample size is *homogeneity* of the population under study. The more expected variation, the larger the size of your sample. If the geographical area you will cover includes only one ethnic group, your sample can be much smaller than if there are multiple ethnic groups. If your project catchment area is exclusively rural, your sample can be smaller than if you have both urban and rural populations.

Qualitative, formative research usually involves two basic levels of sampling: sampling of units and sampling of individuals.

Sampling of Units

This level of sampling entails selection of primary sampling units, such as districts, health facilities, and villages. Your overall objective is to select units that will cover the probable variation in practices associated with Safe Motherhood and that will reflect important subpopulations. Identifying communities usually is a multi-stage process. If, for example, you selected districts as sampling units and your research is organized around health facility catchment areas, you would first select districts, then the health facilities, then villages/communities. Examples of other large units that may form the basis of your plan are geographical regions such as coastal, mountain, plateau, major ethnic groups, or main religious groups such as Muslim and Christian.

In order to decide which units might be relevant, draw upon other research on the topic and talk to those with knowledge of local geography and cultures. Is ethnicity likely to be a major factor? Access to services? Urban versus rural residence? Religion?

In selecting the specific villages or communities in which you will work, you should again refer to the research questions to develop selection criteria. If you are looking at how access to a health facility providing essential obstetric care (EOC) affects care-seeking behavior, it will be important to select some villages within the catchment area that are near to the facility and some that are far away. Once you establish your selection criteria, be consistent in how you apply it. If the definition of a “far-away” village is one that is at least two-hours’ drive from the health facility, all “far-away” villages should meet this criterion.

Generally you will want to exclude atypical health facilities and villages from the sample. One exception to this rule might be where a health facility is atypical because it provides EOC. Health facilities and villages to consider excluding are those that have been the focus of an intensive project, villages in areas that have recently had an influx of refugees who will temporarily change Safe Motherhood patterns (unless refugees are a primary beneficiary population of your Safe Motherhood program) and areas that have recently experienced a natural disaster. You may also

want to avoid villages that have already been the site of other studies, especially if a lot of interview time was involved

Usually, the number of units selected (ethnic groups, health facilities, etc.) should reflect their approximate proportion in the population under study. For example, if about 3/4 of the population belongs to one ethnic group and 1/4 to another, you probably will want to maintain that approximate proportion when selecting your sites. There are always exceptions to this rule of thumb, however. If quite a bit is already known about certain areas/institutions/populations, you may want to over-sample from others about which little is known. Perhaps studies have already been conducted in the capital city, but there have been none among rural groups. Or perhaps a doctoral dissertation has been written about a particular ethnic group, but others have not been studied. Before accepting that an issue or population has “already been covered,” you do want to make sure that existing studies addressed the same questions as yours and that you have confidence in the quality of the research.

Sampling of Individuals

You will want to define what population segments to include in the research. Community research on Safe Motherhood studies by definition include women of reproductive age. But, depending on your purposes, you may wish to further subdivide into groups such as pregnant women, postpartum women, and adolescents.

The intent of your sampling strategy is to gain a good understanding of the population your project intends to serve, with respect to your research questions. Your sample should *represent* the population, but need not be *representative* in the strict statistical sense. In fact, you may want to concentrate on particular subgroups or situations that will shed the most light on your research questions. For example, if you want to understand what prevents women who have complications from seeking care from a professionally trained health provider, you may want to include in your sample women who had complications and sought such care, and those who had complications but did not do so. Sampling in this way will help you identify those factors that account for differences in care-seeking behavior. Proportionally, the percentage of women who sought care might be small, but since the purpose of selecting these women is to learn what enabled them to seek appropriate care, the degree to which they are typical of the population is not relevant.

POTENTIAL STUDY POPULATION SEGMENTS

- ◆ Women of Reproductive Age (WRA)
 - Pregnant women
 - Postpartum women
 - Adolescents
- Mothers
- ◆ Fathers and other men
- ◆ Grandmothers (mothers of WRA and mothers-in-law)
- ◆ Professionally trained providers (midwives, physicians)
- ◆ Traditional birth attendants (untrained and trained)

In your research you will want to include other people who influence mothers and/or play a role in their care. For instance, in some countries, mothers-in-law are decisive figures determining many aspects of the young mother's life—from workload, to diet, to the type and timing of care for health needs. In other countries, husbands make critical care-seeking decisions, while in other settings it is the mothers themselves and their immediate circle of female relatives who do this. Those familiar with the setting (key informants) can give you a general idea of the situation so that you can make initial plans as to who should be included in the research. During the research, you will want to verify your understanding of who is influential, and if necessary, modify your sampling plan accordingly.

Choose Appropriate Methodologies and Develop Instruments

Once research questions are defined, decisions can be made about what methods to use. We present here an overview of methods and how each might be applied to Safe Motherhood topics, but we are not prescriptive in our suggestions. Your choice of methods will depend on the purpose of the research, the questions the research is designed to answer, and your own preferences for certain techniques.

The research can be approached as a participatory activity, as a rapid assessment, or as a more comprehensive and traditional qualitative research study. Within those approaches are many methodological choices. The interview is the basic social science research tool, but there are a number of types of interviews: they can be group or individual, and they can range in the degree of structure they entail and the extent to which they are participatory and active. There also are non-interview methods such as observation.

Some methods are better suited to answer certain kinds of questions than others. As an example, focus group discussions, which can yield valuable data on normative beliefs, attitudes, and practices, may not be as suited to obtaining information on actual behavior. For examining complex or serial decision-making—care-seeking, for example—it is better to look at actual decisions made (behavior) and the specific set of circumstances that led to each particular decision than to ask groups about hypothetical situations. In other cases, the sensitive nature of the topic may require individual discussion in a private setting.

In Honduras, MotherCare's researchers conducted in-depth interviews, rather than focus groups, with mothers and fathers of babies who had died within the first three months of their life. Focus groups were not considered appropriate for this sensitive topic.

Usually the intent of formative research is to gain an in-depth understanding of a situation, making qualitative methods more appropriate than quantitative surveys. However, methods may be combined; you may want to gather certain information systematically and produce counts (e.g., number of prenatal visits) while still exploring other information in-depth (e.g., why some women decided to go for prenatal care). And it is useful to quantify some of your *qualitative* data, but primarily for the purpose of verifying trends rather than reporting precise percentages.

The following table lists a variety of methods, gives a brief description of each, and provides examples of applications to Safe Motherhood topics. Further guidance on selecting suitable methods is found in the following Section (IV). We have not, however, included instruction on how to carry out each method, on the assumption that the researcher is already skilled in this area. Those who want to learn more about how to carry out particular methodologies are referred to the resources listed in Appendix A.

METHODOLOGICAL OPTIONS AND SAFE MOTHERHOOD APPLICATIONS			
Method	Level	Purpose	Sample Safe Motherhood Application
Group discussion or interview	Group	Shows in the early phases of your research what issues warrant further exploration provides understanding of the overall community context, identifies possible future respondents	<ul style="list-style-type: none"> ◆ Types and locations of various service providers ◆ Maternal and newborn health issues of concern to the community ◆ Important people in the community
Focus group discussion (FGD)	Group	Shows what respondents know about specific topics gathers normative information on non-sensitive topics	<ul style="list-style-type: none"> ◆ Types of care women seek during pregnancy ◆ TBA assessment of why women use their services ◆ Midwives' perceptions of barriers to care women/families face
Individual in-depth or semi-structured interview	Individual	Shows what respondents think about/know/do regarding specific topics, gathers information on actual behavior more useful than focus groups for getting information on sensitive topics	<ul style="list-style-type: none"> ◆ Foods consumed and avoided during last pregnancy ◆ Reasons these foods were consumed/avoided ◆ Woman's experience going to prenatal care ◆ Husband's/partner's actions during last delivery
Complication narrative/ Case study	Individual	Describes a sequence of events/behaviors especially suitable for understanding care-seeking actions and decision-making processes	<ul style="list-style-type: none"> ◆ How a complication was first noticed ◆ Sequence of actions taken for that complication ◆ Persons performing each action ◆ Time lapse between actions ◆ Results of each action ◆ Factors considered before taking each action
Free list	Individual or group	Generates list of items that respondents perceive as belonging to the same group	<ul style="list-style-type: none"> ◆ Complications/signs of complications in the newborn ◆ Foods avoided during the postpartum period ◆ Reasons for preferring specific providers
Pile sort	Individual or group	Shows how respondents categorize items according to particular characteristic(s)	<ul style="list-style-type: none"> ◆ Signs of complications grouped according to severity ◆ Access barriers grouped according to degree of difficulty in overcoming them ◆ Complications grouped according to treatment modality

METHODOLOGICAL OPTIONS AND SAFE MOTHERHOOD APPLICATIONS *(continued)*

Method	Level	Purpose	Sample Safe Motherhood Application
Taxonomy	Group	Shows how items in a free list are classified according to key characteristics	<ul style="list-style-type: none"> ◆ Newborn complications classified according to perceived cause severity and treatment modality
Ranking and Rating	Individual or group	Indicates how respondents order items according to particular characteristic(s) can indicate preference	<ul style="list-style-type: none"> ◆ Complications ordered according to perceived severity ◆ Provider characteristics ordered according to importance ◆ Available providers ordered according to perceived ability to manage a particular complication
Classification matrix	Individual or group	Shows how respondents order items according to multiple characteristics can indicate preference because multiple variables are assessed at the same time can indicate the weight respondents give to each variable	<ul style="list-style-type: none"> ◆ Different types of providers assessed according to experience proximity expense ability to resolve problem respectfulness ◆ Types of barriers to care assessed according to difficulty in overcoming frequency experienced, overall importance ◆ Foods assessed according to availability cost perceived benefit to woman during postpartum
Paired comparison	Individual	Indicates how respondents order items according to a particular characteristic	<ul style="list-style-type: none"> ◆ Community preferences among various provider options (for treatment of specific problems, such as fits and convulsions hemorrhage postpartum infection) ◆ Perceived severity of complications ◆ Difficulty in overcoming 4-5 identified barriers to services
Community and social map	Group	Generates visual depiction of the study area and its relevant characteristics	<ul style="list-style-type: none"> ◆ Geographic context (e.g. roads bus stops crops water sources) ◆ Health context (e.g. clinics provider residences pharmacies kiosks houses where pregnant women live houses where woman/baby experienced a complication) ◆ Economic/social context (e.g. transportation resources ethnicity/religion/wealth of families participation in women's groups)
Body map	Group	Identifies/depicts perceptions of anatomy and bodily functions/processes	<ul style="list-style-type: none"> ◆ Reproductive organs and fetal growth ◆ Body changes during pregnancy

METHODOLOGICAL OPTIONS AND SAFE MOTHERHOOD APPLICATIONS <i>(continued)</i>			
Method	Level	Purpose	Sample Safe Motherhood Application
Calendar (seasonal daily pregnancy, postpartum)	Individual or group	Shows change in/gives detailed description of variable over time	<ul style="list-style-type: none"> ◆ Activities woman undertakes on an average day (e.g. work in fields, get water, clean house, prepare food, wash clothes, care for child, eat, sleep) ◆ Activity level during each month/trimester of pregnancy ◆ Food consumption during the postpartum period ◆ Visits to various providers during pregnancy ◆ Breastfeeding on an average day (e.g. number of times, amount of time spent)
Direct Observation	Individual or Group	Provides information on actual behaviors	<ul style="list-style-type: none"> ◆ Topics discussed during client-provider visit ◆ Sanitation in home ◆ Behavior of gatekeepers when women come for prenatal care ◆ Sanitation/availability of supplies in birthing facility
Survey question	Individual	Gives standardized quantifiable information on knowledge, attitudes practices	<ul style="list-style-type: none"> ◆ Number of complications recognized ◆ Number of prenatal care visits made ◆ Number of living children in family
Trial of Improved Practices (TIPS)	Individual	Provides feedback on feasibility of new behaviors	<ul style="list-style-type: none"> ◆ Iron pill consumption during pregnancy ◆ Immediate initiation of breastfeeding and giving of colostrum, avoidance of pre-lacteal feeds

The next step is to develop your instruments. To facilitate that process, the Topic Modules in the following Section provide an inventory of research questions and include suggestions on methods that could be used to address them.

Section IV— Topic Modules

At this point you have reviewed the Pathway to Survival framework (Section II) and are familiar with the issues that bear on maternal and newborn health and survival. You have also made decisions about the scope and objectives of your research (Section III). Now you are ready to define your research questions and select methods for collecting your data so that you can construct your instruments. This Section assists you with that process.

Organization of the Modules

In this Section we present a series of Modules that list potential research questions for each major topic area: prevention/normal care and response to complications, for both the mother and for the newborn.

Both the maternal and newborn response to complications topics are separated into two Modules, one that lists research questions suitable for group or individual methods and one that lists research questions that must be answered by individual interview. The latter set of questions comprises a narrative of an actual situation and is meant to elicit information on *actual behavior*. The narrative is applicable only to those who have experienced a complication and to family members/providers who played a key role at the time of occurrence.

SAFE MOTHERHOOD TOPIC AREAS COVERED

Maternal

- ◆ Prevention Issues/Normal Care
- ◆ Response to Complications

Newborn

- ◆ Prevention Issues/Normal Care
- ◆ Response to Complications

In addition to Safe Motherhood topics, Modules for a community description and for communication issues are also included, in order to offer a complete package of research questions. Therefore, the full set of Modules is as follows:

- Module 1A** *Maternal*—Prevention Issues and Normal Care
- Module 1B** *Maternal*—Response to Complications (individual and/or group methods)
- Module 1C** *Maternal*—Response to a Complication (individual complications narratives)

- Module 2A** *Newborn*—Prevention Issues and Normal Care
- Module 2B** *Newborn*—Response to Complications (individual and/or group methods)
- Module 2C** *Newborn*—Response to a Complication (individual complications narratives)

- Module 3** Community Description

- Module 4** Communication

The issues covered in each Module are summarized in the following tables:

MATERNAL MODULES <i>[Maternal Modules apply to all stages—pregnancy, labor/delivery, postpartum]</i>		
Topic Area	Issues Covered	Level
<p>Module 1A</p> <p>Prevention Issues and Normal Care</p> <p>Pathway to Survival Step 0</p>	<p>General health and self care diet/nutrition alcohol and other drugs therapies/medicines/vitamins workload and activities personal and household hygiene female genital mutilation</p> <p>Care from traditional and professionally trained health providers provider and service preferences perceived service accessibility perceived quality of care provider basic care behaviors</p> <p>Decision making/care seeking generally including influentials</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Group and/or Individual</p>
<p>Module 1B</p> <p>Response to Complications</p> <p>Pathway to Survival Steps 1-4</p>	<p>Overall awareness and knowledge regarding recognition of signs perceived severity of each sign knowledge of appropriate action</p> <p>Decision making/care seeking for complications including influentials and treatment patterns</p> <p>Range of actions taken and providers consulted for complications</p> <p>Barriers and enablers to accessing life-saving care including physical mobility distance/time to services availability and cost of transportation hours of facility operation cost of services and incidentals community support systems</p> <p>Available service options including those from the traditional and formal health sectors perceptions of quality of care from a technical standpoint (i.e. perceived efficacy of the services) and from a non-technical standpoint (i.e. cultural compatibility interpersonal communication) how these perceptions affect service use actual quality of care especially of community providers with regard to basic practices (especially around labor/delivery)</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Group and/or Individual</p>
<p>Module 1C</p> <p>Response to a Complication</p> <p>Pathway to Survival Steps 1-4</p>	<p>Background and context when and where complication occurred</p> <p>Recognition of actual complication</p> <p>Sequence and timing of decision making/care seeking actions taken probes to elicit all factors that bore on decisions made</p> <ul style="list-style-type: none"> ◆ Perceived severity ◆ Persons who influenced decisions taken ◆ All actions taken outcome ◆ Barriers and enablers to accessing life saving care including physical mobility distance/time to services availability and cost of transportation hours of facility operation cost of services and incidentals community support systems <p>Provider actions taken outcome</p> <p>Perceptions of quality of care received both from a technical standpoint (i.e. perceived efficacy of the services) and from a non technical standpoint (i.e. cultural compatibility interpersonal communication)</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Individual Complications Narrative</p>

NEWBORN MODULES		
Topic Area	Issues Covered	Level
<p>Module 2A</p> <p>Prevention Issues and Normal Care</p> <p>Pathway to Survival Step 0</p>	<p>General perceptions and beliefs related to healthy newborns and newborns with problems</p> <p>Care and management of the newborn including clearing the baby's mouth and nose drying warming and cleaning procedures cord cutting and care keeping mother and baby together infant feeding practices</p> <p>Decision-making/care seeking generally including influentials</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Group and/or Individual</p>
<p>Module 2B</p> <p>Response to Complications</p> <p>Pathway to Survival Steps 1-4</p>	<p>Overall awareness and knowledge regarding recognition of a healthy baby and of complications perceived severity of each sign knowledge of appropriate action</p> <p>Decision making/care-seeking for complications including influentials and treatment patterns</p> <p>Barriers and enablers to accessing life saving care including physical mobility distance/time to service availability and cost of transportation hours of facility operation cost of services and incidentals community support systems</p> <p>Available service options including those from the traditional and formal health sectors perceptions of quality of care from a technical standpoint (i.e. perceived efficacy of the services) and from a non technical standpoint (i.e. cultural compatibility interpersonal communication) how these perceptions affect service use actual quality of care especially of community providers with regard to basic practices</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Group and/or Individual</p>
<p>Module 2C</p> <p>Response to a Complication</p> <p>Pathway to Survival Steps 1-4</p>	<p>Background and context when and where complication occurred</p> <p>Recognition of actual complication</p> <p>Sequence and timing of decision making/care-seeking actions taken probes to elicit all factors that bore on decisions made</p> <ul style="list-style-type: none"> ◆ Perceived severity ◆ Persons who influenced decisions taken ◆ All actions taken outcome ◆ Barriers and enablers to accessing life saving care including physical mobility distance/time to services availability and cost of transportation hours of facility operation cost of services and incidentals community support systems <p>Provider actions taken outcome</p> <p>Perceptions of quality of care received both from a technical standpoint (i.e. perceived efficacy of the services) and from a non technical standpoint (i.e. cultural compatibility interpersonal communication)</p> <p>Solutions to access barriers and quality of care problems</p>	<p>Individual Complications Narrative</p>

SUPPLEMENTARY MODULES		
Topic Area	Issues Covered	Level
<p>Module 3</p> <p>Community Description</p>	<p>Demographics including information on population size and type ethnic groups languages</p> <p>Geographic context including information on climate seasons terrain village size community type</p> <p>Infrastructure including information on roads transportation water sources sanitation</p> <p>Social context including information on dwellings neighborhood characteristics markets family organization and male/female unions social support and religious organizations</p> <p>Economic context including information on income generating activities material used for dwellings appliance and animal ownership income levels and wealth distribution crops and animals</p> <p>Health resources including information on health facilities/structures and providers from the traditional and formal health sectors</p>	<p>Group and/or individual</p>
<p>Module 4</p> <p>Communication</p>	<p>Literacy levels</p> <p>Ability to interpret pictures</p> <p>Sources of information</p> <p>Influential persons</p> <p>Interpersonal networks and community organizations</p> <p>Existing and potential channels of communication mass media print materials counseling including recall of messages</p>	<p>Group and/or individual</p>

Use of the Modules

The purpose of the Modules is to serve as a basis for developing your research instruments. In order to do that, you need to (1) select your research questions, (2) select the most suitable methodologies for answering them, (3) operationalize your research questions, and (4) put together the overall research protocol. The Modules are tools to help with this process.

Select the Research Questions

Having reviewed the framework in Section II, you have been introduced to the range of potential topics that might be included in your research. Turn to the Modules that fall within the scope of your research and select the research questions relevant to your work. The topics listed in the Modules parallel the Pathway to Survival framework discussed in Section II. Therefore, for any research question listed, you can refer to the framework section for a review of the issue if you are unsure whether or not it should be included in your research.

Select Methodologies

The methodologies you select will depend on the research purpose, the questions to be answered, and your own experience with and preferences for certain techniques. A variety of types of studies can be developed from the Modules—from participatory assessments to rapid appraisals, to more comprehensive studies using traditional qualitative methods. Regardless of the type of study conducted, there are usually several ways to obtain an answer to a given research question. You may wish to refer back to the table of methodological options in the *Planning* Section (III) as a reminder of the variety of methods that can be employed in this kind of field research.

Even though a variety of methods exist, some methods are better suited to answering some kinds of questions than others. Therefore, we have also included methodological recommendations in this Section, both for the Topic Module as a whole, and for individual research questions.

Generally speaking, focus groups are an efficient means of gathering information about normative beliefs and behaviors—that is, beliefs and behaviors that represent the social standards and cultural expectations of the community. Group methodologies are also recommended where interaction among participants is desired, as, for example, when debate would quickly highlight a range of viewpoints on an issue, or where characteristics of the interaction itself are of interest (who speaks and who doesn't, extent to which people feel free to express divergent opinions). Sensitive topics are not usually suitable to discuss in groups.

Focus groups can also incorporate other methods for examining particular questions. Standard focus groups consist of guided discussion. There is no reason why discussion cannot be combined with participatory activities that address specific issues. For example, during a focus group discussion on recognition of complications and perceptions of severity, participants could be asked to sort a set of cards with pictures/labels of complications on them into piles to indicate which ones they believe to be not serious, somewhat serious, or very serious. Or during a discussion on provider preferences, the group could rank providers according to a number of characteristics, such as access, cost, competence to solve the problem, and friendliness.

The majority of research questions can be answered by group and/or individual methods, with group methods tending to elicit more normative information in an efficient way, and individual methods tending to elicit more variety and detail but in a time-intensive way. Some questions, however, must be examined at the individual level. This is the case when only some individuals in the population have direct knowledge or experience with the situation the questions address. It is also the case when behavior depends on the particular circumstances of the situation, and where circumstances vary. Serial decision-making always falls into this category. For these reasons, *it is our strong recommendation that, to gather information on decision-making and actions taken in response to complications, individual interviews in the form of a Complications Narrative be conducted with persons who were involved in the complication.* A Complications Narrative is an individual case study of an actual complication and what was done about it. The narrative can be conducted in a very open and free-form way with probing at appropriate points, or it can be semi-structured. However it is structured, it is only by looking at *actual behavior* and the particular set of circumstances that led to a particular decision at each stage of the process that a complete understanding of how decisions are made can be gained. A group discussion of a hypothetical situation cannot yield this kind of understanding. It is for this reason that both the maternal and newborn complications topics are divided into two Modules: one that contains questions suited to group and/or individual methods, and one that focuses on decision-making in response to an actual complication that is suited to individual methods. There is some overlap in the topics covered, as some aspects of understanding complications can be addressed by either group or individual techniques. It is in fact desirable to obtain information via both means, since using multiple methods ('triangulation') will help improve the likelihood of reducing bias and obtaining valid data.

Operationalize the Research Questions

When you develop instruments, **it is important to remember that the *research questions* you select from the Modules are not the same as the *actual questions* you will ask of respondents** The research questions must be operationalized so as to obtain the needed information For example

Research questions

- ◆ What foods/drinks do women take/avoid in pregnancy?
- ◆ What are the reasons women give for taking/avoiding specific foods/drinks in pregnancy?
- ◆ Do women change the overall amount of food they consume when they are pregnant?

Actual interview questions

- ◆ Are there any foods you are avoiding because you are pregnant? (If yes, ask respondent to list all the foods she can think of that she is avoiding)
- ◆ What can happen if you eat [food mentioned] when you are pregnant?
- ◆ Are there any drinks you are avoiding because you are pregnant? (If yes, ask respondent to list all the drinks she can think of that she is avoiding)
- ◆ What can happen if you drink [drink mentioned] when you are pregnant?
- ◆ Are there any foods you are eating more of because you are pregnant? (If yes ask respondent to list all the foods she can think of that she is eating more of)
- ◆ Why are you eating more [food mentioned]?
- ◆ Are there any drinks you are taking more of because you are pregnant? (If yes, ask respondent to list all the drinks she can think of that she is taking more of)
- ◆ Why are you drinking more [drink mentioned]?
- ◆ How much food are you eating during your pregnancy? Would you say more food, less food or about the same amount of food as usual?

You can operationalize your research questions in other ways as well As an illustration, to determine whether diets changed during pregnancy, you can ask a woman to sort different foods (e g , listed or pictured on flash cards or otherwise represented) into piles

Pile 1 Foods she ate more of during pregnancy than before pregnancy

Pile 2 Foods she ate less of during pregnancy than before pregnancy

Pile 3 Foods she ate about the same amount of before pregnancy and during pregnancy

Then, you can follow up with questions such as “Tell me the reasons you ate more [foods in Pile 1] during your pregnancy than you did before?”

Other research questions might be answered without asking respondents questions at all, as when observation is used.

Put Together an Overall Research Protocol

You will want to develop a set of instruments that comprise the overall research protocol. The instruments represent the operationalization of a set of research questions. Each instrument can be created to address a certain topic area and population segment, or each can be developed for use with a particular methodology. For example, you could develop the following set of instruments to administer in each village/community you choose to sample.

1 Community Context Instrument

<i>Purpose</i>	Understand the physical and social context of the study area and identify individual interviewees (e.g., mothers who experienced complications, TBAs, village midwife)
<i>Population</i>	Cross-section of community members
<i>Methodology</i>	Community interview with a social mapping activity

2 Normal Pregnancy, Labor/Delivery, and Postpartum Care Instrument

<i>Purpose</i>	Gather general information about normal care practices during pregnancy, labor/delivery, and the postpartum period, and ascertain overall awareness and perception of complications during these stages
<i>Population</i>	Women of reproductive age
<i>Methodology</i>	Focus group discussion with a free-listing and ranking activity to gather information on recognition of complications and perceptions of severity, pregnancy calendar also could be constructed to show when visits to providers are made and how activity levels change or remain the same over time

3 Men’s Focus Group

<i>Purpose</i>	Obtain information on men’s recognition of complications and decision-making about care, as well as their potential role in getting women promptly to medical care
<i>Population</i>	Husbands/partners of women of reproductive age
<i>Methodology</i>	Focus group with free list of barriers to accessing care, and paired comparison to determine the relative significance of each of these barriers

4 Complications Narratives

- Purpose* Determine how the complication was identified document the sequence and timing of actions in response to a complication, and obtain detailed information on decision-making
- Population* Women who have experienced a complication and others who played a key role at the time of the complication (e.g. their husbands/partners)
- Methodology* Semi-structured narrative that asks respondent to recall what led her to determine she had a complication, and to recount in sequence everything that was done in response, and why it was done

5 Facility Observations and Interviews

- Purpose* Learn the nature of client-provider interactions in prenatal care sessions and ascertain client recall of counseling messages and feasibility of advice
- Population* Clients in local health facility
- Methodology* Observation of client-provider interactions, short exit interview with client to provide data on recall and feasibility of acting on recommendations (The WHO *Safe Motherhood Needs Assessment* has modules that potentially can be adapted for these purposes See Appendix A)

6 Provider Interviews

- Purpose* Learn basic care practices for labor/delivery and immediate care of the newborn, ascertain recognition of signs of complications and learn what is done in response
- Population* Traditional birth attendants and professionally-trained midwives
- Methodology* Individual interview

It is useful to begin each instrument with specification of the purpose, population, and methodology, as is done in the examples above. Under purpose the specific research questions that the instrument is designed to answer would be listed. Then the actual field questions or observation protocol or participatory activity you have developed to answer the research questions would follow. By laying out your instruments in this manner, you can help ensure that all necessary topics are covered and that you stay focused on your research objectives.

Module 1A

Maternal—Prevention Issues and Normal Care

- ◆ ***Pathway to Survival Step 0***
- ◆ ***Group- and/or Individual-level Information***

Research Objectives

To obtain information on knowledge, behavior, attitudes, and perceptions related to normal pregnancy, labor/delivery, and postpartum, including

- ◆ General health and self-care practices: diet and nutrition, alcohol and other drugs, therapies, medicines, vitamins; workload and activities; personal and household hygiene, female genital mutilation
- ◆ Care from providers: provider and service preferences; perceived service accessibility, perceived quality of care, provider basic care behaviors
- ◆ Influentials
- ◆ Solutions to access barriers and quality of care problems

Potential Study Populations

- ◆ Women of reproductive age (WRA)
- ◆ Mothers
- ◆ Adolescent girls
- ◆ Women who have experienced at least one pregnancy
- ◆ Husbands/partners
- ◆ Grandmothers (i.e., mothers-in-law, mothers of WRA)
- ◆ Traditional birth attendants (TBAs)
- ◆ Trained midwives
- ◆ Other health personnel (e.g., nurses, doctors)
- ◆ Other influentials (e.g., brothers, uncles)
- ◆ Other community leaders and decision-makers (e.g., chiefs, mayors, health authorities)

Potential Methods

- ◆ Focus group discussion
- ◆ Individual interview
- ◆ Free list
- ◆ Pile sort
- ◆ Ranking
- ◆ Paired comparison
- ◆ Classification matrix
- ◆ Body map
- ◆ Seasonal, daily pregnancy, and postpartum calendar
- ◆ Observation

Most of the research questions in this Module have to do with overall customs and practices, and are suited to either group or individual methods. It is likely that you will want to use *both* individual and group techniques for some of the topics (e.g., diet during pregnancy, workload and activities in the postpartum period). Questions posed during focus group discussions will help establish the range of behavior and cultural expectations, and questions in individual interviews on the same topics can (and should) be posed so that you get information on actual behavior. Topics that are unshaded can be addressed by group and/or individual interviews. Shading indicates that the research question should be addressed *only* by individual interview.

For many of the questions in this Module participatory methods are especially effective and can be integrated into a focus group discussion. Where these techniques are appropriate they are listed under Supplemental Methods and Methodological Notes in the last column of the Module.

Most of the questions in this Prevention Issues and Normal Care Module apply to all of the childbearing stages: pregnancy, labor/delivery, and the postpartum period. For example, a question about signs that indicate that things are proceeding normally can and should be asked in reference to each stage. It is best to organize the discussion by stage, asking first all questions that have to do with pregnancy, then labor/delivery, and then postpartum—rather than, for example, asking about signs for all stages, then self-care for all stages, then providers for all stages, etc. The order of your questions should represent a logical flow and will deviate from the order the topics are presented in these Modules.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.
- ◆ Shading indicates research questions are suited only to individual rather than group methods.

Module 1A

MATERNAL—Prevention Issues and Normal Care [applies to pregnancy, labor/delivery, and postpartum period]		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
General	At what point is pregnancy revealed/talked about with others?	Pregnancy calendar
	What are the signs known to/believed to indicate labor has started?	Free list of signs indicating labor has started
	What are the names/local terms for these signs?	Get a full list of local terms for each sign mentioned
	What do women believe they should or should not do during P/L D/PP? ¹	Free list of behaviors Generate separate free list for each childbearing stage
	What are the reasons these things should or should not be done?	Ask separately for each behavior mentioned
	What are the special self-care practices during P/L D/PP and when are these things done?	Body map pregnancy calendar postpartum calendar Ask separately for each childbearing stage
	What are the reasons for doing these things?	Ask separately for each action mentioned
	What do women believe about what happens to the body during P/L D/PP?	Body map pregnancy calendar postpartum calendar Ask separately for each childbearing stage
	What do women believe about fetal development during pregnancy?	Pregnancy calendar body map
	What are the signs believed to indicate that P/L D/PP is proceeding normally?	Free list of signs Ask separately for each childbearing stage
	What are the names/local terms for these signs?	Get a full list of local terms for each sign mentioned
	At what point after the baby comes out is the postpartum period considered to begin? Are delivery and the immediate postpartum period considered to be separate processes or part of the same process? What is the length of the postpartum period? What is the name/local term for the postpartum period?	Postpartum calendar

¹P/L D PP = pregnancy/labor delivery/postpartum

Module 1A (continued)

MATERNAL—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Diet and Nutrition	What foods/drinks do women take/avoid in P/L-D/PP?	Free list pregnancy calendar daily calendar postpartum calendar
	When how much how often are these substances taken/avoided?	Ask separately for each childbearing stage
	What are the reasons women take/avoid [food/drink]?	Ask separately for each substance mentioned
	Do women change the overall quantity of food they consume when they are pregnant?	Pregnancy calendar
Alcohol and Other Drugs	What alcohol/tobacco/other drugs are used/avoided in P/L D/PP? When how much how often are these substances used/avoided? How do women take these substances (i.e. smoked ingested injected inhaled)?	Pregnancy calendar daily calendar postpartum calendar Ask separately for each childbearing stage If the topic is sensitive in this culture individual interviews may be more appropriate than group sessions
	What are the reasons for taking/avoiding [alcohol/tobacco/other drug]?	Ask separately for each substance mentioned
Therapies, Medicines, Vitamins	What medicines/vitamins/pills/injections/therapies do women consume/avoid in P/L-D/PP? When how much and how often are these substances used? (If not mentioned probe for use of tetanus toxoid iron tablets in pregnancy and for oxytocics massage in delivery)	Free list pregnancy calendar daily calendar postpartum calendar Ask separately for each childbearing stage
	What are the reasons for taking/avoiding [medicine/vitamin/pill/ injection/therapy]?	Ask separately for each substance mentioned
	Who administers these?	Ask separately for each substance mentioned
Workload and Activities	Which work/activities are continued/stopped during pregnancy? When are they stopped?	Pregnancy calendar seasonal calendar daily activity calendar
	What work/activities are started/avoided in the first day after delivery? In the first few days? First week? First few weeks? First month?	Postpartum calendar seasonal calendar daily activity calendar
	What are the reasons for continuing/stopping/starting/avoiding [work/activity]?	Ask separately for each activity mentioned
Personal and Household Hygiene (General)	How/where is cooking done?	Observation
	What are the sanitary conditions (water supply latrines and their placement)?	Observation Supplement with data from Community Description Module

Module 1A (continued)

MATERNAL—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Personal and Household Hygiene in Pregnancy	What douching or other personal hygiene practices are followed in pregnancy? When do such practices occur?	Pregnancy calendar daily calendar
	What are women's handwashing practices (determine if and when handwashing occurs)?	Observation
Personal and Household Hygiene in Delivery	<p>What hygienic actions are taken by providers/others present during delivery?</p> <ul style="list-style-type: none"> ◆ Handwashing practices during delivery (determine if and when handwashing occurs) ◆ Washing/cleaning of genital area (determine if this occurs and with what) ◆ Where delivery takes/took place (description of birthing area) ◆ Materials used in delivery and how/with what they are/were cleaned (e.g. paper linens table) ◆ How if at all birthing area was cleaned 	Observation of household or birthing site
Personal and Household Hygiene in Postpartum	<p>What hygienic actions are taken in the postpartum period?</p> <ul style="list-style-type: none"> ◆ Washing/cleaning of genital area (determine if this occurs with what and how often) ◆ Changing/washing of any pads or cloths (determine how often this occurs, whether materials are reused and if so whether they are washed/boiled and dried in the sun) ◆ Handwashing practices (determine if and when handwashing occurs) 	Observation (for handwashing practices)
Female Genital Mutilation (FGM)	What types of FGM are practiced if any?	<p>Given the sensitivity of the issue it may be best to find good key informants who can provide information about this topic</p> <p>Supplement with data from Community Description Module</p>
	What is the approximate proportion of girls who undergo this procedure? (Purpose is to understand the extent to which FGM is an issue in your study area not to get exact percentages)	
	What is the availability of birth attendants who have special skills to handle FGM related delivery problems?	
Prenatal, Delivery and Postpartum Care from Traditional and Formal Health Providers (Some questions still apply even if delivery took place without a provider)	From whom do women get care during P/L-D/PP (traditional and institutional providers)?	Ask separately for each childbearing stage and each provider
	When during pregnancy do women get prenatal care? How many times during pregnancy?	Pregnancy calendar
	Where do women deliver?	
	When do women get postpartum care? How many times during the postpartum period?	Postpartum calendar
	What do P/L D/PP care providers do (services/actions)? (E.g. give massage give vapors check position of fetus check blood pressure give medicines examine placenta)	<p>Observation</p> <p>Ask separately for each childbearing stage and each provider</p>

Module 1A (continued)

MATERNAL—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Prenatal, Delivery and Postpartum Care from Traditional and Formal Health Providers (continued) (Some questions still apply even if delivery took place without a provider)	What are the reasons for going/not going to the [provider/health facility] for care in P/L D/PP?	Free list Ask separately for each childbearing stage and each provider/facility
	What is the relative importance of these reasons?	Ranking paired comparison pile sort classification matrix
	What things might keep a woman from getting the care she wants? Make it easier for a woman to get the care she wants?	Free list Ask separately for each provider/facility
	Which are the most common?	Ranking paired comparison pile sort classification matrix
	Which are the most difficult to overcome? Least difficult to overcome?	
	What are the positive/negative aspects of the care received from [provider/facility]?	Free list Ask separately for each childbearing stage and each provider/facility
	How do these positive/negative aspects rank in terms of importance?	Ranking paired comparison pile sort classification matrix
	What are the preferences/taboo regarding aspects of behavior/care during P/L D/PP (e.g. invasive procedures provider gender modesty/clothing presence of other family members birthing position handling/return of placenta exposure to cold travel bathing/cleaning)?	Free list Ask separately for each childbearing stage
	What is believed to happen if taboos are violated?	
	What is the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for P/L D/PP care?	Observation Ask separately for each childbearing stage Appropriate also to ask of providers
	What are the things the [provider/facility] does to respect/disrespect local customs/beliefs?	Observation May be appropriate to ask separately about each childbearing stage Appropriate also to ask of providers
	What is the perceived competence/preparedness of [provider/facility] to provide care during P/L-D/PP?	Ranking paired comparison pile sort classification matrix Ask separately about each childbearing stage Appropriate also to ask of providers
	What characteristics do women/families think make [provider/facility] well prepared/poorly prepared to provide care for P/L-D/PP?	Free list Ask separately for each childbearing stage and each provider/facility Appropriate also to ask of providers

Module 1A (continued)

MATERNAL—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Prenatal, Delivery and Postpartum Care from Traditional and Formal Health Providers (continued) (Some questions still apply even if delivery took place without a provider)	What mode of transportation is used to reach provider?	
	What is the relative ease/difficulty in locating transportation for P/L D/PP care?	Compare with data from Community Description Module
	What is the cost of transportation?	Compare with data from Community Description Module
	How much of a burden are these costs?	
	What was the cost of P/L D/PP care (per visit for various services medicines other incidental expenses total)?	Compare with data from Community Description Module
	How much of a burden are these costs?	
	When is the facility open and when does it offer care for P/L-D/PP?	Compare with facility/provider data from Community Description Module
Influentials	With whom do women/families talk about P/L D/PP?	May be appropriate to ask separately for each childbearing stage
	Who makes decisions about expenditures for routine P/L-D/PP care for women (travel purchases foods)?	Explore whether different people make decisions about different things and at different stages
	Who makes decisions about where and from whom P/L D/PP care is obtained?	May be appropriate to ask separately for each childbearing stage
Overcoming Access Barriers and Improving Quality of Care	What suggestions do community members have about how to overcome problems in accessing routine care?	Appropriate also to ask of providers
	What suggestions do community members have to improve the quality of routine P/L D/PP care?	
	What community resources or support systems exist to assist women in getting care? How best could these resources and support systems be mobilized?	Compare with facility/provider data from Community Description Module

Module 1B

Maternal—Response to Complications

- ◆ ***Pathway to Survival Steps 1-4***
- ◆ ***Group- and/or Individual-level Information***

Research Objectives

To obtain information on general knowledge, attitudes, perceptions, and on normative behavior for topics related to **response to complications** of pregnancy labor/delivery, and the postpartum period, including

- ◆ Awareness of signs of complications their causes and level of severity
- ◆ Decision-making about care-seeking
- ◆ Range of actions taken and providers consulted for complications
- ◆ Barriers to care
- ◆ Perceived quality of care
- ◆ Solutions to access barriers and quality of care problems

Potential Study Populations

- ◆ Women of reproductive age (WRA)
- ◆ Women who have experienced at least one pregnancy
- ◆ Mothers
- ◆ Husbands/partners
- ◆ Grandmothers (i.e., mothers-in-law, mothers of WRA)
- ◆ Traditional birth attendants (TBAs)
- ◆ Trained midwives
- ◆ Other health personnel (e.g., nurses, doctors)
- ◆ Other influentials (e.g., brothers, neighbors)
- ◆ Other community leaders and decision-makers (e.g., chiefs, mayors, health authorities)

Potential Methods

- ◆ Focus group discussion (FGD)
- ◆ Free list
- ◆ Pile sort
- ◆ Ranking
- ◆ Paired comparison
- ◆ Classification matrix
- ◆ Taxonomy
- ◆ Pregnancy and postpartum calendar
- ◆ Observation

As in the prior Module, most of the research questions in this Module have to do with overall customs and practices, and are suitable for either group or individual methods. For example, a question such as, ‘What does a women do if she finds she is bleeding during pregnancy?’ could be asked in a focus group or in an individual interview. However, most women will not have actually experienced bleeding, so the responses to the question will reflect the general level of knowledge about bleeding and community expectations about appropriate actions to take. Therefore, there is probably little benefit in spending time conducting individual interviews on this topic with women who have no direct experience and group methodologies are probably more efficient than individual interviews to get this kind of information. (In contrast, the following Module, 1C is meant for women who have experienced a complication and gathers individual-level information on what was actually done when the complication appeared.)

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.

For many of the questions in this Module, participatory methods are especially effective and can be integrated into focus group discussions. Where these techniques are appropriate, they are listed under ‘Supplemental Methods’ in the last column of the Module.

Module 1B

MATERNAL—Response to Complications [applies to pregnancy, labor/delivery, and postpartum period]		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 1 Problem Recognition (awareness)	What are the signs believed to indicate there is a problem/complication in P/L D/PP? ¹	Free list with follow up probe on important complications that were not mentioned record which were prompted and which were not Can also ask in standardized quantifiable form Ask about signs of complications separately for each stage of childbearing
	What are the names/local terms for these signs/complications?	Free list get a full list of local terms
	What do people believe causes [complication/sign]?	Taxonomy
	When do people believe [complication/sign] can happen (e.g. number of hours/days/weeks after delivery)?	Pregnancy calendar postpartum calendar
Step 1 Problem Recognition (perceived severity)	What is the perceived/relative severity of [complication/sign]? Which signs are considered indicative of normal P/L D/PP?	Pile-sort ranking paired comparison classification matrix taxonomy Can also ask in standardized quantifiable form
Step 1 Problem Recognition (knowledge of appropriate action)	What do people think should be done if anything about [complication/sign]?	Taxonomy
	What are the reasons for doing [action] for [complication/sign]?	
Step 2 Decision to Seek Care	How is a decision made whether to seek care?	
	What might keep a woman from deciding to seek care?	
	Who is involved in the decision to seek care?	
	What people/providers (traditional/institutional) are usually sought for care for [complication/sign]?	
	What things does [provider] do for [complication/sign]?	

¹P/L D/PP = pregnancy/labor-delivery, postpartum

Module 1B (continued)

MATERNAL—Response to Complications		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 3 Access to Care [and Step 4 (quality of care)]	What providers/facilities are available for treating [complication/sign]?	Ranking pile sort paired comparison classification matrix taxonomy Compare with data from Community Description Module
	What do these providers do (services/actions)?	Ask separately for each sign/complication and each provider
	What are the reasons for going/not going to the [provider/health facility] for care for complications/signs?	Free list May be appropriate to ask separately for each complication and each provider/facility
	What is the relative importance of these reasons?	Ranking paired comparison pile sort classification matrix
	What things might keep a woman from getting the needed care for a complication? Make it easier for a woman to get the care she needs for a complication?	Free list Ask separately for each provider/facility
	Which are the most common?	Ranking paired comparison pile sort classification matrix
	Which are the most difficult to overcome? Least difficult to overcome?	
	What are the positive things about being treated by [provider/facility] and what are the negative things?	Classification matrix Ask separately for each provider/facility
	How do these positive/negative aspects rank in terms of importance?	Ranking paired comparison pile sort classification matrix
	How far away is provider/facility? Does the family perceive distance to be an access barrier?	Compare with data from Community Description Module
	What transportation is available and how much does it cost?	
	How much of a burden are these costs to the family?	
	How much do families think care from [provider/facility] costs for complications in P/L D/PP?	May be appropriate to ask separately for each complication/sign and each provider/facility Compare with facility/provider data from Community Description Module
	How much of a burden are these costs to the family?	
What preferences/taboo are there regarding care for complications (e.g. invasive procedures modesty/clothing provider gender presence of other family members birthing position handling/return of placenta exposure to cold travel bathing/cleaning)?	May be appropriate to ask separately for each childbearing stage and each complication	

Module 1B (continued)

MATERNAL—Response to Complications		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 4 Quality of Care	What things does the provider do to respect/disrespect local customs/beliefs when handling a P/L D/PP complication?	
	What is the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for care for complications	Observation Ask separately for each provider/facility
	What is the perceived competency/preparedness of [provider/facility] to handle P/L-D/PP complication?	Ranking paired comparison pile sort classification matrix Ask separately for each complication and each provider/facility
	What characteristics do women/families think make [provider/facility] well prepared/poorly prepared to provide care for P/L-D/PP complications?	Free list Ask separately for each childbearing stage and each provider/facility Appropriate also to ask of providers
Overcoming Access Barriers and Improving Quality of Care	What suggestions do community members have about how to overcome problems in getting care for complications in P/L D/PP?	Appropriate also to ask of providers
	What suggestions do community members have to improve the quality of care for complications in P/L-D/PP?	
	What community resources or support systems exist to assist women in getting care?	Compare with data from Community Description Module

Module 1C

Maternal—Response to a Complication

- ◆ ***Pathway to Survival Steps 1-4***
- ◆ ***"Complications Narrative"***

Research Objectives

To obtain information on experience with and **actual behavior** during a maternal complication in pregnancy, labor/delivery or the postpartum period including information on

- ◆ Background and context of the complication
- ◆ Signs that indicated a complication, timing of recognition, perceived severity of signs
- ◆ Sequence and timing of actions taken, decision-making process and reasons for actions
- ◆ Factors that facilitated or impeded appropriate care-seeking (including access issues)
- ◆ Perceived quality of care received
- ◆ Future actions
- ◆ Opinions on solutions to access barriers and quality of care problems

Study Populations

- ◆ Women who experienced/perceived they experienced a complication during their last pregnancy labor/delivery postpartum period
- ◆ Other individuals who were with the woman when the complication occurred

When researching many complications especially those happening in *labor/delivery*, it is important to talk with other people who were present at the time of occurrence as they may be able to give more details about the experience than the woman who had the complication. You may wish to interview the provider who handled the complication, but the provider should be interviewed separately from the mother.

Methods

Since the purpose of this Module is to gather information on actions taken in response to an actual complication the questions in this Module can only be answered by interviewing an individual who experienced the complication and if possible others who were directly involved in the situation. We recommend that the interview be in the form of a Complications Narrative (See introduction to Section IV, which further explains why individual rather than group methods should be used.)

An illness narrative asks the respondent to tell the story of an illness event. Because we are asking specifically about complications, we are terming this application of the narrative technique a “Complications Narrative.” Narratives can range in their degree of structure, but the general approach is to start by asking the respondent what she noticed that made her think there was a problem, and then elicit the sequence of events that followed by asking what happened next, next, etc. The interviewer can probe during the process to make sure that there is an understanding of why each action was taken and what factors led to each decision along the way. The research questions in this Module are organized according to the Pathway to Survival and are probably best used as probe topics in the narrative process.

It may also be useful to construct some kind of calendar with the interviewee—a pregnancy postpartum or daily calendar, depending on the situation—to establish timing and sequence of actions taken.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.

Module 1C

MATERNAL—Response to a Complication [applies to pregnancy, labor/delivery, and postpartum period]		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Background and Context	When and where did complication appear? What were the general circumstances? (If problem happened in delivery or immediately after delivery determine where birth took place who was present who delivered the baby)	
Step 1 Problem Recognition (awareness)	What were the signs that indicated woman was having problems/complications in P/L-D/PP? ¹	
	What is the name/local term for sign/complication woman had?	Get a full list of local terms for each sign mentioned
	At what point in time did the signs first appear reappear worsen?	Pregnancy calendar postpartum calendar daily calendar
Step 1 Problem Recognition (perceived severity)	What was the perceived severity of complications/signs when they first appeared?	
	What was the perceived severity of signs over time?	
Step 2 Decision-making (influentials)	Who was present at the time complication first appeared?	Determine all people involved in decision and their roles
	With whom was problem/complication discussed?	
	What advice did each individual give?	
	What person/people made decision about what to do first next next?	
Step 2 Decision-making (Treatment Decisions)	What did woman/influentials/providers do once signs of the complication appeared? Get information on <ul style="list-style-type: none"> ◆ home/family actions (e.g. herbal remedies massage ceremonies) ◆ providers consulted (institutional and traditional) ◆ who sought these providers who stayed with the woman ◆ what actions were taken for the woman while deciding what to do while waiting for transportation or for provider to arrive 	
	In what order were these actions taken?	
	At what point in time (after complication first appeared) was each action taken?	
	What were the reasons for doing [action]? What were the reasons for choosing [provider]?	Get information on belief in service efficacy ease of access perceived quality of care as factors in decision-making
	What are the preferences/taboo regarding aspects of behavior/care for complications in P/L D/PP (e.g. preference to die at home presence of other family members)?	
	What things are believed to happen if taboos are violated?	

¹P/L D/PP = pregnancy/labor delivery postpartum

Module 1C (continued)

MATERNAL—Response to a Complication		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 3 Access to Care	What were the problems the woman/family faced in reaching [provider/facility] (e.g. cost transport distance roads lack of decision lack of child care)?	
	What actions were taken to overcome problems?	
	What mode of transportation was used?	
	What was the relative ease/difficulty in locating transportation at time when complication occurred?	
	How long did it take to secure transportation? What was the cost of transportation used?	
	How much of a burden were these costs to family?	
	How long did it take to reach the place where care for complication was obtained?	Supplement with data from Community Description Module
	Who was on duty when woman/family arrived who was available to handle complication at time of arrival?	
	How long did it take to be examined by a provider?	
Step 4 Quality of Care	What did the provider do first? Next? Next?	
	What was the result of [action]?	
	What is it about the [provider/care] the woman/influentials particularly liked/disliked?	
	What are the positive/negative aspects of the care received from [provider/facility]?	
	Which of these are the most important?	Ranking paired comparison pile sort classification matrix
	What was the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for care for complications?	Get information on how woman/family was received explanations given for procedures etc
	What things did [provider] do to respect/disrespect local customs/beliefs?	
	What is the perception of the characteristics that made [provider/facility] well-prepared/poorly prepared to provide care for the complication?	
Future Actions	What if anything would woman/family do differently if the same thing happened again?	
Overcoming Access Barriers and Improving Quality of Care	What suggestions does mother/family have about how to overcome problems in getting care for complications in P/L D/PP?	
	What suggestions does mother/family have to improve the quality of care for complications in P/L D/PP?	

Module 2A

Newborn—Prevention Issues and Normal Care

- ◆ ***Pathway to Survival Step 0***
- ◆ ***Group- and/or Individual-level Information***

Research Objectives

To obtain information on knowledge, behavior, attitudes, and perceptions related to **prevention of complications and routine care** in the newborn, including

- ◆ Perceptions and beliefs related to healthy newborns and newborn deaths
- ◆ Beliefs, preferences, and behaviors related to immediate care of the newborn, clearing of newborn nose/mouth, drying/warming/cleaning, cord cutting and care, keeping mother and baby together, infant feeding
- ◆ Care from providers: provider and service preferences, perceived service accessibility, perceived quality of care, provider basic care behaviors
- ◆ Influentials
- ◆ Solutions to access barriers and quality of care problems

Potential Study Populations

- ◆ Women who have experienced at least one delivery (whether the infant was born alive or dead)
- ◆ Husbands/partners of women who have experienced at least one delivery (whether the infant was born alive or dead)
- ◆ Traditional birth attendants (TBAs)
- ◆ Trained midwives
- ◆ Other health personnel who deliver babies in the study community
- ◆ Other influentials who are present at birth (e.g., grandmothers)

Potential Methods

- ◆ Focus group discussion
- ◆ Individual interview
- ◆ Free list
- ◆ Pile sort
- ◆ Ranking
- ◆ Paired comparison
- ◆ Classification matrix
- ◆ Newborn, daily calendar
- ◆ Observation

Most of the research questions in this Module have to do with overall customs and practices regarding newborn care, and are suited to either group or individual methods. Focus group discussions are best used to get information on normative beliefs/behaviors and individual interviews can be used to pose questions about actual behavior. It is likely that you will want to use *both* individual and group techniques for the topics you feel are particularly important to understand.

For many of the questions in this Module participatory methods are especially effective and can be integrated into a focus group discussion. Where these techniques are appropriate they are listed under

Supplemental Methods in the last column of the Module.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.

Module 2A

NEWBORN—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
General	What signs are believed to indicate the newborn is normal?	Free list of signs indicating normal newborn
	What are the names/local terms for these signs?	Get a full list of local terms for each sign mentioned
	How is health/death of a newborn perceived? What explanations for health/death are given and to what extent are newborn deaths viewed as preventable/fated?	
Overall Actions	What are the things done to the baby when it is born? What is the sequence and timing of these actions? (See also sections on clearing baby's mouth/nose drying/warming/cleaning cutting/care of umbilical cord infant feeding)	Especially appropriate to ask of TBAs other providers or people attending a birth
	What are the reasons for doing [action]?	
	What is provider's rationale for these actions and what is the mother's view of these actions?	Ask providers separately from mother/family
	Which person/people do these things?	
	How is the baby examined what parts of the body are examined?	Especially appropriate to ask of TBAs other providers or people attending a birth
	Which person/people examine the baby?	
	Which person/people take care of the baby immediately after it is born?	
	Which person/people take care of the baby while the placenta is being delivered?	
Clearing Baby's Mouth/Nose	How are the baby's mouth and nose cleared? What materials are used for clearing and when is such action taken?	Especially appropriate to ask of TBAs other providers or people attending a birth
	What are the beliefs about the significance if any of meconium?	
	What actions are taken when meconium is present?	

Module 2A (continued)

NEWBORN—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Drying, Warming, and Cleaning Procedures	How is the baby dried (where, with what when)?	If interviews are conducted at site where baby was born ask to see where baby was delivered washed/cleaned placed
	How is the baby cleaned (where with what when)?	
	How is the baby wrapped immediately after birth?	
	Where is the baby placed immediately after birth?	
	What is the timing of drying warming and cleaning procedures?	
Cutting of Umbilical Cord and Ongoing Care	What things were done to the umbilical cord immediately after birth?	
	In what way and with what is the umbilical cord cut and tied?	Especially appropriate to ask of TBAs other providers or people attending a birth
	Who is the person who keeps the cord?	
	What are the beliefs about what should happen to the cord and how the cord should be cared for?	
	How is the cord cared for (e.g. any substances placed on it cleaning/drying procedures)?	
	What are the reasons for use of substances if any are used?	
Keeping Mother and Baby Together	Does the newborn remain with the mother or is it separated? If separated how soon after birth does this happen? Where is the infant kept/put? For how long is the infant separated from the mother?	Especially appropriate to ask of TBAs other providers or people attending a birth
	What are the preferences/beliefs regarding keeping the mother and baby together?	
	What do facilities do about keeping mother and baby together?	Compare family responses with those of providers/facilities
Infant Feeding Practices	What are the names/terms for colostrum or first milk ?	Get a full list of local terms
	Do mothers give colostrum to the infant? Is it used for other purposes (e.g. put in eye)? What are the reasons for doing these things?	
	What are the beliefs about benefits/drawbacks of colostrum?	
	At what point in time after baby is born is breastfeeding initiated?	Newborn calendar
	What is the time quantity duration and frequency of each breastfeed? Is feeding on demand or scheduled? Are there night feeds?	Newborn or daily calendar
	What is the duration of time women breastfeed their infants? For how long do women exclusively breastfeed their infants?	DHS has data on this
	What are the beliefs about adequacy of milk supply?	

Module 2A (continued)

NEWBORN—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Infant Feeding Practices (continued)	What substances other than breastmilk are given to the newborn?	Observation
	At what points in time are these substances given?	Newborn calendar
	What quantity is given?	Matrix
	How are these substances given (e.g. with a finger in a bottle on a cloth with a spoon)?	
	What are the names/local terms for these substances?	
	What are the reasons for giving these substances?	
Newborn Care from Traditional and Formal Health Providers	What types of providers are sought for immediate newborn care (when baby is born)?	Free list
	What are the benefits/disadvantages to the newborn of having a trained (formal) provider present when the baby is born? Of having a traditional provider?	
	What is the relative importance of these reasons?	Ranking paired comparison pile sort classification matrix
	What are the positive/negative attributes of [providers]?	Free list Ask separately for each provider mentioned
	What is the relative importance of these provider attributes?	Ranking paired comparison pile sort classification matrix
	What are the preferences/taboo regarding newborn/care of the newborn (e.g. breastfeeding naming ceremonies)?	Free list
	What things are believed to happen if taboos are violated?	
	What types of providers are used for follow up newborn care?	Free list
	What is the number/timing of visits for follow up newborn care?	Newborn calendar
	Where do these follow up visits occur (e.g. home health center)?	
	What do providers do at these visits?	Observation Ask separately for each provider
	What things might keep a woman/family from getting desired follow up newborn care? Make it easier for a woman/family to get desired follow up newborn care?	Free list Ask separately for each provider/facility
	Which are the most common?	Ranking paired comparison pile sort classification matrix
	Which are the most difficult to overcome? Least difficult to overcome?	

Module 2A (continued)

NEWBORN—Prevention Issues and Normal Care		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Newborn Care from Traditional and Formal Health Providers <i>(continued)</i>	What are the positive/negative aspects of the care received from [provider/facility]?	Free list Ask separately for each provider/facility
	How do these positive/negative aspects rank in terms of importance?	Ranking paired comparison pile sort classification matrix
	What is the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for newborn care?	Observation
	What are the things the [provider/facility] does to respect/disrespect local customs/beliefs?	Observation
	What is the perceived competence/preparedness of [provider/ facility] to provide care for the newborn?	Ranking paired comparison pile sort classification matrix
	What characteristics do women think make [provider/facility] well prepared/poorly prepared to provide care for the newborn?	Ask separately for each provider/facility
	What mode of transportation is used to get routine care for the newborn?	
	What is the relative ease/difficulty in locating transportation for newborn care?	Compare with data from Community Description Module
	What is the cost of transportation?	Compare with data from Community Description Module
	How much of a burden are these costs?	
	What is the cost of newborn care (per visit for various services medicines other incidental expenses total)?	Compare with facility/provider data from Community Description Module
	How much of a burden are these costs?	
	When is the facility open and when does it offer newborn care?	Compare with facility/provider data from Community Description Module
Influentials	With whom do women/families talk about newborn care/issues?	
	Who makes decisions about health expenditures for newborn care (e.g. travel breastfeeding)?	Explore whether different people make decisions about different things
	Who makes decisions about where and from whom newborn care is obtained?	
Overcoming Access Barriers and Improving Quality of Care	What suggestions do community members have about how to overcome problems in accessing newborn care?	Appropriate also to ask of providers
	What suggestions do community members have to improve the quality of newborn care?	
	What community resources or support systems exist to assist women in getting care for their newborns?	Compare with data from Community Description Module

Module 2B

Newborn—Response to Complications

- ◆ ***Pathway to Survival Steps 1-4***
- ◆ ***Group- and/or Individual-level Information***

Research Objectives

To get information on general knowledge, attitudes, perceptions, and on normative behavior for topics related to **response to complications in the newborn**, including

- ◆ Awareness of signs of complications, their causes and level of severity
- ◆ Decision-making about care-seeking
- ◆ Range of actions taken and providers consulted for complications
- ◆ Barriers to care
- ◆ Perceived quality of care
- ◆ Solutions to access barriers and quality of care problems

Potential Study Populations

- ◆ Women of reproductive age (WRA)
- ◆ Women who have experienced at least one pregnancy
- ◆ Mothers
- ◆ Husbands/partners
- ◆ Grandmothers (i.e., mothers-in-law, mothers of WRA)
- ◆ Traditional birth attendants (TBAs)
- ◆ Trained midwives
- ◆ Other health personnel (e.g., nurses, doctors)
- ◆ Other influentials (e.g., brothers, neighbors)
- ◆ Other community leaders and decision-makers (e.g., chiefs, mayors, health authorities)

Potential Methods

- ◆ Focus group discussion (FGD)
- ◆ Free list
- ◆ Pile sort
- ◆ Ranking
- ◆ Paired comparison
- ◆ Classification matrix
- ◆ Taxonomy
- ◆ Pregnancy and postpartum calendar
- ◆ Observation

Most of the research questions in this Module have to do with overall customs and practices with regard to responding to complications in the newborn, and are suited to either group or individual methods. For example, a question such as “What is done if a newborn stops breathing at birth?” could be asked in a focus group or in an individual interview. However, most women will not have actually experienced this problem in their newborn, so the responses to the question will reflect the general level of knowledge about the condition and community expectations about appropriate actions to take. Therefore, there is probably little benefit in spending time conducting individual interviews on this topic with women who have no direct experience, and group methodologies are probably more efficient than individual interviews to get this kind of information. (In contrast, the following Module 2C is meant for women whose newborns had a complication and gathers individual-level information on what was actually done when the complication appeared.)

For many of the questions in this Module, participatory methods are especially effective and can be integrated into focus group discussions. Where these techniques are appropriate, they are listed under “Supplemental Methods” in the last column of the Module.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.

Module 2B

NEWBORN—Response to Complications		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 1 Problem Recognition (awareness)	What signs are believed to indicate there is a problem/complication in the newborn? How do people tell if the newborn is alive or dead?	Free list with follow up probe on important complications not mentioned record which were prompted and which were not Can also ask in standardized quantifiable form Ask about signs of complications separately for each stage of childbearing
	What are the names/local terms for these signs/complications?	Free list get a full list of local terms
	What do people believe causes [complication/sign]?	Taxonomy
	When do people believe [problem/complication/sign] can happen (e.g. number of hours/days/weeks after delivery)?	Postpartum calendar newborn calendar daily calendar
Step 1 Problem Recognition (perceived severity)	What is the perceived/relative severity of [complication/sign]?	Pile sort ranking paired comparison classification matrix taxonomy Can also ask in standardized quantifiable form
Step 1 Problem Recognition (knowledge of appropriate action)	What do people believe should be done if anything about [complication/sign]?	Taxonomy
	What are the reasons for doing [action] for [complication/sign]?	
Step 2 Decision to Seek Care	How is a decision made whether to seek care?	
	What might keep a woman from deciding to seek care?	
	Who is involved in the decision to seek care?	
	What people/providers (traditional/institutional) are usually sought for care for [complication/sign]?	
	What things does [provider] do for [complication/sign]?	

Module 2B (continued)

NEWBORN—Response to Complications		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 3 Access to Care [and Step 4 (Quality of Care)]	What providers/facilities are available for treating [complication/sign]?	Ranking, pile sort, paired comparison, classification matrix taxonomy Compare with data from Community Description Module
	What do these providers do (services/actions)?	Ask separately for each sign/complication and each provider
	What are the reasons for going/not going to the [provider/health facility] for care for complications/signs?	Free list may be appropriate to ask separately for each complication and each provider/facility
	What is the relative importance of these reasons?	Ranking paired comparison pile sort classification matrix
	What things might keep a newborn from getting needed care for a complication? Make it easier for a newborn to get needed care for a complication?	Free list ask separately for each provider/facility
	Which are the most common?	
	Which are the most difficult to overcome? Least difficult to overcome?	
	What are the positive things about being treated by [provider/facility] and what are the negative things?	Classification matrix Ask separately for each provider/facility
	How do these positive/negative aspects rank in terms of importance?	Ranking paired comparison pile sort classification matrix
	How far away is provider/facility? Does the family perceive this distance to be an access barrier?	Compare with data from CommunityDescription Module
	What transportation is available and how much does it cost?	
	How much of a burden are these costs to the family?	
	How much do families think care from [provider/facility] costs for newborn complications?	May be appropriate to ask separately for each complication/sign and each provider/facility Compare with facility/provider data from Community Description Module
	How much of a burden are these costs to the family?	
What preferences/taboo are there regarding care for newborn complications (e.g. procedures presence of other family members exposure to cold travel)?	May be appropriate to ask separately for each complication	

Module 2B (continued)

NEWBORN—Response to Complications		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 4 Quality of Care	What things does provider do to respect/disrespect local customs/beliefs when handling a newborn complication?	
	What is the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for newborn care for complications?	Observation May be appropriate to ask separately for each complication and each provider/facility
	What is the perceived competency/preparedness of [provider/place] to handle newborn complication?	Ranking paired comparison pile sort classification matrix Ask separately for each complication and each provider/facility
	What do community members think are the characteristics that indicate that [provider/facility] is well prepared/poorly prepared to handle a newborn complication?	Free list Ask separately for each provider/facility Appropriate also to ask of providers
Overcoming Access Barriers and Improving Quality of Care	What suggestions do community members have about how to overcome problems in getting care for complications in the newborn?	Appropriate also to ask of providers
	What suggestions do community members have to improve the quality of care for complications in the newborn?	
	What community resources or support systems exist to assist women in getting care?	Compare with data from Community Description Module

Module 2C

Newborn—Response to a Complication

- ◆ ***Pathway to Survival Steps 1-4***
- ◆ ***"Complications Narrative"***

Research Objectives

To obtain information on experience with and **actual behavior in response to complications in the newborn**, including

- ◆ Background and context of the complication
- ◆ Signs that indicated a complication, timing of recognition, perceived severity of signs
- ◆ Sequence and timing of actions taken, decision-making process and reasons for actions
- ◆ Factors that facilitated or impeded appropriate care-seeking (including access issues)
- ◆ Perceived quality of care received
- ◆ Future actions
- ◆ Opinions on solutions to access barriers and quality of care problems

Study Populations

- ◆ Women who experienced/perceived they experienced a complication with their newborn within the past year
- ◆ Other individuals who were with the woman when the complication in the newborn occurred

For newborn complications occurring during or immediately after *labor/delivery*, it is important to talk with other people who were present at the time of occurrence, as they may be able to give more details about the experience than the woman whose infant had the complication. You may wish to interview the provider who handled the complication, but the provider should be interviewed separately from the mother.

Methods

Since the purpose of this Module is to gather information on actions taken in response to an actual complication the questions in this Module can only be answered by interviewing an individual whose newborn had a complication and, if possible, others who were directly involved in the situation. We recommend that the interview be in the form of a Complications Narrative (See introduction to Section IV, which further explains why individual rather than group methods should be used.)

An illness narrative asks the respondent to tell the story of an illness event. Because we are asking specifically about complications, we are terming this application of the narrative technique a ‘Complications Narrative.’ Narratives can range in their degree of structure, but the general approach is to start by asking the respondent what she noticed that made her think there was a problem, and then elicit the sequence of events that followed by asking what happened next, next, etc. The interviewer can probe during the process to make sure that there is an understanding of why each action was taken and what factors led to each decision along the way. The research questions in this Module are organized according to the Pathway to Survival and, once converted to field questions, are probably best used as probes in the narrative process.

To facilitate the interview process, it may be useful to construct some kind of calendar with the interviewee—a newborn or daily calendar depending on the situation—to establish timing and sequence of actions taken. To get responses to some of your probes, additional techniques (e.g., a ranking) also may be useful.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.

Module 2C

NEWBORN—Response to a Complication		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Background and Context	Where did birth take place?	Observation
	Who helped deliver baby who was present at the delivery?	
	What was mother's perception of ease/difficulty of birth?	
	What things made her think the birth was easy/difficult?	
	What was the perception of baby's health when first born?	
What were all the routine things done to the baby immediately after it was born at what point in time were these things done? (Probe for cleaning/drying/placement of baby cord care infant feeding practices see also Newborn— Prevention Issues and Normal Care)		
Step 1 Problem Recognition (awareness)	What were the signs that indicated newborn was having problems/complications?	
	What is the name/local term for sign/complication newborn had?	Listen for terms used probe for definition if necessary
	At what point in time did sign of complication first appear reappear worsen?	Calendar of first seven days Determine if signs were present from birth
Step 1 Problem Recognition (perceived severity)	How severe did mother/family/provider think [complication/sign] was when it first appeared?	
	What was the perceived severity of [complication/sign] over time?	
Step 2 Decision making (influentials)	Who was present at the time complication first appeared?	Determine all people involved in decision and their roles
	With whom was problem/complication discussed?	
	What advice did each individual give?	
	Who made the decision what to do first next next?	

Module 2C (continued)

NEWBORN—Response to a Complication		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 2 Decision-making (treatment decisions)	What did woman/influentials/providers do once signs of the complication appeared? Get information on <ul style="list-style-type: none"> ◆ home/family actions (e.g. herbal remedies, massage, ceremonies) ◆ providers consulted (institutional and traditional) ◆ what actions were taken while deciding what to do while waiting for transportation or for provider to arrive 	
	In what order were these actions taken?	
	At what point in time (after complication first appeared) was each action taken?	
	What were the reasons for doing [action]?	Get information on belief in service efficacy, ease of access, perceived quality of care as factors in decision-making
	What were the reasons for choosing [provider]?	
What was the result of [action]?		
Step 3 Access to Care	What were the problems the woman/family faced in reaching [provider/facility] (e.g. cost, transport, distance, roads, lack of decision, lack of childcare)?	
	What actions, if any, were taken to overcome problems?	
	How difficult/easy was it to overcome problems?	
	What mode of transportation was used?	
	What was the relative ease/difficulty in locating transportation at time when complication occurred?	Compare with data from Community Description Module
	How long did it take to secure transportation?	
	What was the cost of transportation used?	Compare with data from Community Description Module
	How much of a burden were these costs to family?	
	How long did it take to reach place where care for complication was obtained?	Compare with data from Community Description
	What was the cost of care for the complication (per visit for various services, medicines, lodging, food, other incidental expenses, total)?	Compare with facility/provider data from Community Description Module
	How much of a burden were these costs to the family?	

Module 2C (continued)

NEWBORN—Response to a Complication		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Step 4 Quality of Care	Who was on duty when woman/family arrived who was available to handle complication at time of arrival?	
	How long did it take to be examined by provider?	
	What did the provider do first? Next? Next?	
	What was the result of [action]?	
	What is it about the [provider/care] the woman/influentials particularly liked/disliked? What are the positive/negative aspects of the care newborn received from [provider/facility]?	
	Which of these are the most important?	Ranking paired comparison pile sort classification matrix
	What was the behavior of health facility staff (including gatekeepers/providers) toward women/families coming for care for newborn complications?	Get information on how woman/family was received explanations given for procedures etc
	What things did [provider] do to respect/disrespect local customs/beliefs?	
	How competent/prepared does woman/family believe provider/facility was to handle complication?	
	What is the perception of the characteristics that made [provider/place] well prepared/poorly prepared to provide care for the complication?	
Future Actions	What if anything would woman/family do differently if the same thing happened again?	
Overcoming Access Barriers and Improving Quality of Care	What suggestions does mother/family have about how to overcome problems in getting care for complications in the newborn?	
	What suggestions does mother/family have to improve the quality of care for complications in the newborn?	

Module 3

Community Description

Research Objectives

To obtain a general description of the study communities including

- ◆ general demographic characteristics
- ◆ basic geographic context
- ◆ information on infrastructure
- ◆ social and economic context
- ◆ health resources

Suggested Study Population

- ◆ Cross-section of the community population

Potential Methods

- ◆ Community discussion
- ◆ Individual interview (key informant)
- ◆ Community map
- ◆ Social map
- ◆ Transect walk
- ◆ Social/wealth ranking
- ◆ Observation

Information contained in this Module should be gathered when you first start work in a given community. Having a community discussion is a good way to introduce your research team to the community and for the team to become familiar with the community. The topics here elicit basic information about the setting in which you will be working. You can also set up some of the logistics for your subsequent field work, by recruiting people for focus groups or by identifying people with whom you want to conduct individual interviews.

It is by no means necessary to cover all of the subtopics listed here, but you will want to address at least some subtopics within each main topic area. The ones you select will depend on the level of detail you need to answer your Safe Motherhood research questions.

Module 3

COMMUNITY CONTEXT		
Topic Area	Subtopic	Sample Supplemental Methods and Methodological Notes
Demographic Context	Population size <ul style="list-style-type: none"> ◆ total size (number) ◆ total women (number/percent) ◆ total men (number/percent) ◆ total women of reproductive age (number/percent) ◆ total children 0-5 (number/percent) 	<ul style="list-style-type: none"> ◆ Census data ◆ Surveys ◆ Community map ◆ Community discussion ◆ Individual (key informant) interview
	Population type <ul style="list-style-type: none"> ◆ permanent ◆ migratory ◆ seasonal ◆ nomadic ◆ semi-nomadic ◆ refugee 	<ul style="list-style-type: none"> ◆ Census data ◆ Community discussion
	Ethnic groups <ul style="list-style-type: none"> ◆ various types ◆ percent of each type 	<ul style="list-style-type: none"> ◆ Census data ◆ Surveys ◆ Community discussion
	Languages <ul style="list-style-type: none"> ◆ types ◆ percent of each type 	<ul style="list-style-type: none"> ◆ Census data ◆ Surveys ◆ Community discussion
Geographic Context	Climate	<ul style="list-style-type: none"> ◆ Observation ◆ Community discussion
	Seasons <ul style="list-style-type: none"> ◆ number ◆ type (rainy dry hot cold) 	<ul style="list-style-type: none"> ◆ Observation ◆ Community discussion
	Terrain <ul style="list-style-type: none"> ◆ type (mountains plains desert plateau lowlands) 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation
	Size of village <ul style="list-style-type: none"> ◆ distance and length of time from point to point boundaries 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Community discussion
	Type of community <ul style="list-style-type: none"> ◆ urban ◆ peri urban ◆ rural 	<ul style="list-style-type: none"> ◆ Observation ◆ Census data ◆ Transect

Module 3 (continued)

COMMUNITY CONTEXT		
Topic Area	Subtopic	Sample Supplemental Methods and Methodological Notes
Infrastructure	Roads <ul style="list-style-type: none"> ◆ number ◆ condition ◆ seasonal variation 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion
	Transportation <ul style="list-style-type: none"> ◆ types ◆ locations ◆ cost ◆ regularity/availability 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion
	Water sources <ul style="list-style-type: none"> ◆ types ◆ uses (drinking washing) ◆ potability ◆ distances ◆ percent houses with piped water 	<ul style="list-style-type: none"> ◆ Census data ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion
	Sanitation <ul style="list-style-type: none"> ◆ latrines (location type) ◆ percent of dwellings with one latrine 	<ul style="list-style-type: none"> ◆ Census data ◆ Community map ◆ Transect ◆ Observation
Social Context	Dwellings <ul style="list-style-type: none"> ◆ number ◆ type 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation
	Neighborhoods <ul style="list-style-type: none"> ◆ groupings of dwellings ◆ relationship of neighbors ◆ poorer areas ◆ richer areas ◆ ethnic/religious or other divisions 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Community discussion ◆ Individual (key informant) interview
	Markets <ul style="list-style-type: none"> ◆ location ◆ type ◆ days of operation 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion ◆ Individual (key informant) interview
	Family organization and male/female unions <ul style="list-style-type: none"> ◆ extended ◆ nuclear ◆ marriage/partnerships loose unions 	<ul style="list-style-type: none"> ◆ Observation ◆ Community discussion ◆ Individual (key informant) interview

Module 3 (continued)

COMMUNITY CONTEXT		
Topic Area	Subtopic	Sample Supplemental Methods and Methodological Notes
Social Context <i>(continued)</i>	Social support/religious organizations <ul style="list-style-type: none"> ◆ churches mosques temples ◆ women s/youth/school groups ◆ NGOs/PVOs 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion ◆ Individual (key informant) interview
Economic Context	Income generating activities <ul style="list-style-type: none"> ◆ main types ◆ gender specificity ◆ place of work 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation ◆ Community discussion
	Type of materials used for dwellings <ul style="list-style-type: none"> ◆ roofing ◆ flooring ◆ overall construction 	<ul style="list-style-type: none"> ◆ Community map ◆ Transect ◆ Observation
	Ownership <ul style="list-style-type: none"> ◆ appliances ◆ animals 	<ul style="list-style-type: none"> ◆ Community map ◆ Social/wealth ranking ◆ Transect ◆ Observation ◆ Individual (key informant) interview
	Income levels and wealth distribution <ul style="list-style-type: none"> ◆ overall levels ◆ gender differences ◆ geographic differences within area neighborhoods dwellings 	<ul style="list-style-type: none"> ◆ Census data ◆ Community map ◆ Transect ◆ Social/wealth ranking (conducted with an individual or select few individuals)
	Crops and animals <ul style="list-style-type: none"> ◆ main types ◆ distribution ◆ seasonality 	<ul style="list-style-type: none"> ◆ Community maps ◆ Transect ◆ Observation ◆ Community discussion

Module 3 (continued)

COMMUNITY CONTEXT		
Topic Area	Subtopic	Sample Supplemental Methods and Methodological Notes
Health Resources	Health facilities/structures <ul style="list-style-type: none"> ◆ type (health post health center hospital pharmacy kiosk drugstore) ◆ number ◆ location ◆ privately owned/government ◆ distance ◆ hours of operation ◆ types of services offered ◆ cost of services and incidentals (e.g. prenatal care normal vaginal delivery complicated delivery) 	<ul style="list-style-type: none"> ◆ Ministry of Health data ◆ Interviews with health district management team health facility staff (see also WHO <i>Safe Motherhood Needs Assessment</i> in Appendix A) ◆ Community map ◆ Transect ◆ Facility records
	Formal health providers (e.g. professionally trained midwives physicians nurses nurse auxiliaries) Traditional/ community providers (TBAs diviners spiritualists masseuses injectionists community health workers) <ul style="list-style-type: none"> ◆ types available/level of training ◆ numbers ◆ location ◆ distance ◆ business hours ◆ types of services offered ◆ cost of services and incidentals 	<ul style="list-style-type: none"> ◆ Ministry of Health data ◆ Interviews with health district management team health facility staff (see also WHO <i>Safe Motherhood Needs Assessment</i> in Appendix A) ◆ Community map ◆ Transect

Module 4

Communication

Research Objectives

Because formative research is meant to guide intervention development and because communication is a central element in interventions, it is important to gather data on communication topics related to intervention planning. Overall, the research objectives are to obtain information on

- ◆ General literacy levels
- ◆ Availability and use of various channels of communication: electronic media, print media, and interpersonal channels
- ◆ Persons who influence mother's beliefs and practices related to pregnancy, labor/delivery, and the postpartum period
- ◆ Experience with counseling from health providers

Potential Study Populations

- ◆ Women of reproductive age (WRA)
- ◆ Husbands/partners
- ◆ Grandmothers
- ◆ Traditional birth attendants (TBAs)
- ◆ Other health personnel

Potential Methods

- ◆ Community discussion
- ◆ Individual interview
- ◆ Pictorial interpretation
- ◆ Free list

Topics concerning general media availability and use can be covered in a focus group and could be part of a community description instrument. Individual interviews are best for questions on decision-making and for experience with counseling and recall of information messages. Some communication areas will have been covered when investigating other topics. For example, when asking about decision-making you may have already learned whom the mother consulted for advice about complications.

REMEMBER!

- ◆ The research questions listed in the Module are not the same as the interview questions asked of respondents. The research questions must be operationalized. See discussion in the introduction to these Modules.
- ◆ Shading indicates research questions are suited only to individual rather than group methods.

Module 4

COMMUNICATION		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
General	What is women s literacy level?	Group general question about years of school completed Individual ask years of school completed or ask respondent to read simple sentence
	What is men s literacy level?	Group general question about years of school completed Individual ask years of school completed or ask respondent to read simple sentence
	What is women s ability to interpret pictures?	Pictorial interpretation
	What is men s ability to interpret pictures?	Pictorial interpretation
	Who are the national influential public figures role models?	Free list
	Who are local opinion leaders community leaders?	
	Who are credible sources of information on care during pregnancy?	Stages need to be asked about separately since sources may be different
	Who are credible sources of information on labor/delivery?	
	Who are credible sources of information during the postpartum period?	
	Who are credible sources on problems with the newborn?	
	What are the organizations in the community for men and women?	
	What is the purpose/mission of these organizations?	
	Who participates in these organizations and who does not?	
	How frequent are meetings?	
	What other periodic gatherings (e g markets sports events) are there?	
	Are educational sessions given at clinics?	
What topics are covered?		
Who attends these sessions and who does not?		
Mass Media	Who/how many own televisions?	Check if DHS has information
	Television What are the preferred viewing times for health information?	
	Television What are the preferred programs?	
	[If TV spots/programs on maternal health already exist] What do people recall of messages?	Best asked individually
	Who/how many own radios?	Check if DHS has information

Module 4 (continued)

COMMUNICATION		
Pathway Topic Area	Research Question	Sample Supplemental Methods and Methodological Notes
Mass Media (continued)	Who/how many own working radios (i.e. have batteries or electricity)?	
	Radio What are the preferred listening times for health information?	
	Radio What are the preferred programs?	
	[If radio spots/programs on maternal health already exist] What do people recall of messages?	Best asked individually
	Who/how many read newspapers?	
	What are the preferred newspapers and topics (news sports etc.)?	
	Who/how many read magazines? What are the preferred magazines?	
Posters	What is the location and number?	Observation
	What are the topics?	Observation
	What do people recall of message/s?	Individual
Counseling	Do women receive counseling on signs of complications of pregnancy/labor and delivery/postpartum and with the newborn?	Can be asked in groups but may be preferable to ask individually especially to obtain valid recall information Ask separately for each stage of childbearing and for each counseling topic (e.g. breastfeeding)
	Who counsels (TBA nurse etc.)?	
	What do people recall of counseling on signs of complications of pregnancy/labor and delivery/postpartum and with the newborn?	
	Is counseling given on prevention and normal care practices for pregnancy/labor and delivery/postpartum and with the newborn? (E.g. for diet/nutrition reproductive tract infections postpartum family planning breastfeeding cord care)	
	What do people recall of counseling on prevention and normal care practices?	
	Are families able to follow counseling advice? What enables them to do so/prevents them from doing so?	
	What counseling materials and other communication aids on these topics are available in the health facility?	Ask of health providers
What counseling materials and other communication aids on these topics are desired by health workers?		

Section V— Analyzing the Data

Researchers have different approaches for analyzing qualitative data and there are a number of good references on the topic (See Appendix A.) We give some suggestions here on (1) conducting ongoing analysis activities while in the field, (2) coding text data, (3) analyzing and displaying the data, and (4) using the Pathway to Survival as an analysis tool.

Conducting an Ongoing Analysis in the Field

For this and any other qualitative study, it is extremely useful to conduct a *daily analysis session* with the entire team after each day's field work, rather than a single and separate analysis activity at the end of data collection. Ongoing analysis captures information while it is fresh, allows the team to see emerging patterns, shows where information gaps persist, and keeps field workers grounded in the purpose of the research. Daily analysis sessions also allow you to make any necessary adjustments in future data collection efforts.

The daily analysis discussion would be organized around the research questions that were addressed on that particular day. For example, if complications narratives were carried out, then the discussion would be organized around the specific research questions those interviews were designed to address. In general, the daily exchange would cover

- ◆ what was learned, i.e., what the findings are
- ◆ emerging issues, or topics that perhaps warrant investigation but were not included in the original protocol
- ◆ how these findings compare to other communities already covered—how similar or different the findings are

Your findings may have implications for the field work. Do you need to shift emphasis among research topics? Add a new question or topic? Are there additional people with whom you now want to speak? How can the next day's activities be planned so that gaps in your findings are addressed?

You will want to write summaries of your conclusions and note decisions made about any changes in the research protocol. The daily analysis sessions and write-ups serve as the basis for your final analysis conducted at the end of data collection.

Coding Text Data

You will want to code the data in a way that organizes the information you have collected by topic so that you will be able to examine issues at each step of the Pathway and identify patterns. Your coding list will reflect your research questions and any other important issues brought out by your investigation. If your notes are entered in a computer, then all information pertinent to a particular code can be copied into separate topic files. You can develop a list of basic codes before collecting data, but you will probably add codes as the research progresses and new issues are uncovered. What you put into your coding list will depend on the topics covered in the research and the findings your efforts produce.

The following are examples of broad coding topics for qualitative (text) data:

- ◆ Self-care during pregnancy
- ◆ Care from providers during pregnancy
- ◆ Perceived complication of pregnancy
- ◆ Specific actions taken for complication
- ◆ External barriers to care (transportation, roads, distance, time, cost)
- ◆ Perceived efficacy of services for antenatal problems

Analyzing and Displaying the Data

The specific analyses you conduct will depend on your research questions. We provide here some suggested analyses that are common to Safe Motherhood *Community Assessments*.

Free List with Follow-up Question

You can organize your responses to free list questions according to the item mentioned and also include any secondary question you asked as a follow-up to that item. For example, if you explored maternal prevention practices, perhaps you conducted a focus group discussion in which you asked respondents to generate a list of all the things they believe a woman should or should not do to take care of herself while she is pregnant. For each item on the list, you may have asked why it is good/not good for a woman to do "X." A table illustrating their responses can be generated as shown at the top of the next page.

If you conducted free lists with *individual* women, you can generate quantitative information to show the proportion of respondents who mentioned a particular item or category of items. You may decide to generate such data to see which signs of complications are mentioned most often or which providers are most often visited for newborn problems, or which negative provider characteristics (e.g., does not speak same language, yells at clients) are mentioned most often by women.

SAMPLE FREE LIST AND FOLLOW-UP QUESTION REGARDING PRACTICES DURING PREGNANCY	
Things women should do/not do during pregnancy	Reasons women should do/not do these things
Eat more fruits and vegetables	Everything the woman eats is what the baby eats
Visit the <i>partera</i> [TBA]	She can use herbs or massages to make sure the baby is in the right position
Avoid exposing unborn baby to lunar eclipse	Eclipse will cause birth defects in baby
Avoid tight clothes	Tight clothes create problems in delivery and hurt the baby
Avoid alcohol	Alcohol reaches the blood of the baby and causes abnormalities

(Adapted from *MotherCare Community Research Honduras* see Appendix A.)

Terminology and Taxonomy

You may have obtained information on local terms used for complications during pregnancy, delivery, postpartum or with the newborn and then the causes, severity and recommended treatment of each. Data can be displayed in the following manner:

SAMPLE TAXONOMY OF NEWBORN COMPLICATIONS, CAUSE, SEVERITY, AND TREATMENT				
Name of Complication (local term)	Symptoms/Description	Cause	Severity	Treatment
<i>niño ahogado</i> [suffocated baby]	the baby cannot breathe and does not cry; phlegm is suffocating the baby	<i>niño enmantado</i> [covered baby] prolonged labor	very severe; baby will not be able to breast-feed or will die	hang the baby upside down and hit the baby in the back; suck the phlegm from the baby's mouth; blow air in the nose
<i>niño helado</i> [frozen baby]	the baby does not feel warm; the baby does not have heat in the blood	change of environment from the womb to the outside; lack of maternal heat at birth; the baby is not covered	very severe; the baby could die	wrap and cover the baby with warm clothing; give the baby heat from the mother's body; give the baby warm camphor or chamomile; take the baby to the hospital where s/he will get treatment
<i>niño amarillo</i> [yellow baby]	the baby has yellow eyes and skin	hepatitis or malaria in the mother during pregnancy	severe; baby will get sick or could die	put the baby in the sun; take the baby to the doctor; give the baby water with sugar

(Adapted from *MotherCare Community Research Honduras* see Appendix A.)

Comparing Rankings of Respondent Groups

You may have asked several respondent groups to generate a free list on a topic and then rank the items on the list on the basis of some criterion. For example, you may have asked women of reproductive age (WRA), men, and traditional birth attendants (TBAs) to name all the complications of pregnancy they could think of and then rank them in order of severity. To compare responses, the data can be displayed as follows:

SAMPLE RANKING OF PREGNANCY COMPLICATIONS BY RESPONDENT TYPE		
WRA	Men	TBAs
1 hemorrhage 2 pains in abdomen	1 hemorrhage 2 weakness	1 swelling of face 2 hemorrhage 3 infection

Factors that Facilitate or Hinder Various Practices

As a summary of findings about a particular behavior, and as preparation for developing intervention strategies, it is useful to sort out what the community perceives are the advantages and disadvantages of a behavior. This analysis can be conducted on a number of behaviors, such as going for prenatal care, having a midwife-assisted (rather than TBA-assisted) birth, or taking iron pills.

SAMPLE TABLE OF PERCEIVED ADVANTAGES AND DISADVANTAGES OF GOING FOR PRENATAL CARE	
Advantages/Facilitating Factors	Disadvantages/Barriers
<ul style="list-style-type: none"> ◆ Woman can see if baby is all right ◆ Woman can know if delivery may be difficult or easy ◆ Woman can find out if there are problems ◆ Service used to cost money but now it is free 	<ul style="list-style-type: none"> ◆ There is no need to go if pregnancy is normal and woman is not having problems ◆ Health post is cold ◆ Attitude of nurses is poor they do not speak local language ◆ Women do not want private parts to be touched ◆ Center is far away ◆ There is lack of child care for children at home

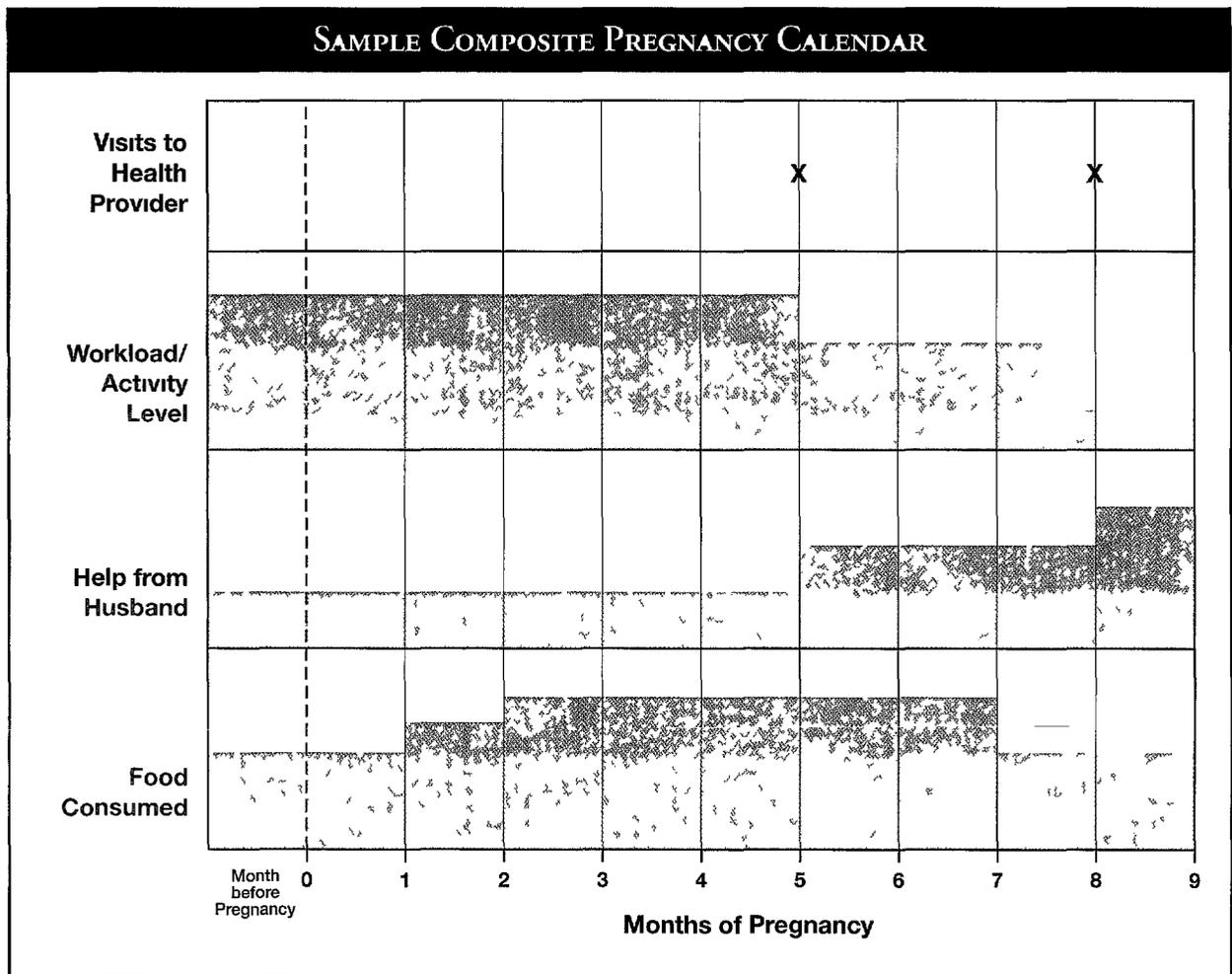
Classification Matrix

If you have chosen to do a classification matrix during data collection—perhaps to help you understand which providers are preferred for handling a given complication, or to learn how people rank birth attendants—you already have set up your analysis table the matrix itself. Your matrix will show ranking of providers according to specific characteristics and overall. (Note that the overall ranking, done by participants when they first start or finish constructing the matrix, is not a summation of the total scores for the specific characteristics.) In your analysis, you will want to note more than just the ranking of providers according to specific characteristics and overall. You will want to interpret the matrix. For example, did some participants indicate that cost was the most important consideration? Did all participants seem to agree? What discussion was generated as a result of disagreement about the rankings? Is there one provider who scored low on many characteristics, but was ranked highest overall? How did your participants explain this?

SAMPLE CLASSIFICATION MATRIX—CLASSIFICATION OF PROVIDERS ACCORDING TO IDENTIFIED IMPORTANT CHARACTERISTICS (lower number = higher rating)							
Provider	Affordable	Accessible	Experienced	Respectful	Skilled at handling complication	Speaks same language	Overall
Trained TBA	3	2	1	1	4	1	1
Untrained TBA	2	2	2	1	5	1	3
Clinically-trained village midwife	4	3	5	2	3	2	2
Clinically-trained midwife at government health center	5	4	3	3	2	2	6
Doctor at government hospital	6	5	4	4	1	2	5
Mother-in-law	1	1	6	1	6	1	4
Husband	1	1	7	1	7	1	1

Composite Pregnancy Calendar

If you have worked with women to create calendars to depict various aspects of their lives over time (e.g., immediately before and during pregnancy), you can represent each of these topic areas together in one calendar. You may, for example, have asked women to (1) illustrate the amount of food they consume over time, (2) depict the amount of help from their husband they receive over time, (3) tell you the number and timing of any visits to the health provider (or when the health provider visited the house), (4) indicate any changes in workload or activity levels over time. Each of these separate topics can be illustrated in the following way:



Comparison of Community and Provider Perspectives

To help understand differences in provider and client perspectives that lead to low service use, it is useful to identify discrepancies between community preferences and the way services are provided. For example:

SAMPLE COMPARISON OF COMMUNITY AND PROVIDER PERSPECTIVES ON DELIVERY SERVICES		
Factors in Health Facility Delivery	Community Beliefs/Practices	Facility Practices
Room temperature	Cold environments expose women to danger	Rooms are cold
Ventilation	Air currents especially cold ones expose women to danger	Rooms are ventilated
Family members/attendants	Husbands, mothers-in-law and TBAs should be present	No family members or TBAs are allowed in the delivery room Doctors, nurses, and interns are present
Clothing	Modesty should be maintained and woman should remain partially clothed Woman should be kept warm	Women cannot remain partially clothed and must wear a light, loose gown
Labor position	Women remain vertical and walk around	Women are horizontal
Delivery position	Women choose their delivery position Women have strong preference for kneeling	Women are supine
Care of placenta	Placenta should be returned so it can be buried or burned near the home	Placenta is discarded
Overall desires/concerns	Modesty, privacy, well-being of woman, adherence to customs, safe delivery for woman	Proper biomedical and aseptic techniques, well-being of infant, safe delivery for woman

(Adapted from Winnard K (1993). *Applying Social Marketing to Maternal Health Projects: The MotherCare Experience*. Washington, DC: MotherCare/JSI and the Manoff Group, page 56.)

Using the Pathway to Survival as an Analysis Tool

Your research has been framed around the Pathway to Survival and you can use the Pathway as an overall analytic guide as well. Your final analysis sessions with the team can be organized by each component of the Pathway. For example, you would start your analysis with Pathway Step 0 (Prevention Issues and Normal Care) and then proceed through the rest of the steps and associated topics. A primary objective would be to identify the problem areas in each step, and to identify the weakest component(s) of the Pathway. The intervention, then, would target the most important weak areas of the Pathway. This latter process is explored more fully in the next Section (VI), *Translating Findings into Action*.

Section VI— Translating Findings Into Action

The main purpose of conducting a *Community Assessment* is to obtain information that will serve as a basis for designing effective interventions. This Section provides an overview of how to organize information to do so. The five-step process described in this Section is a method for using the Pathway—the same framework that has guided the organization of your research and analysis—to help ensure that intervention decisions are linked to the research. This section is meant to be illustrative rather than comprehensive; there is no substitute for solid social marketing, behavioral analysis, and program design experience!

As noted in the introduction, the *Community Assessment* is one part of a full formative research package. The other two components assess health care services and policy. (See WHO's *Safe Motherhood Needs Assessment* in Appendix A.) A comprehensive program brings together the findings from all investigations and involves interventions at three levels:

- ◆ **Individual/family/community level.** health behavior change targeting women of reproductive age and those who influence them, such as husbands, mothers-in-law, and village elders, health behavior change targeting the practices of community providers such as traditional birth attendants, family-based actions such as decision-making, community mobilization and community-wide interventions such as community distribution systems or pooled resources for emergency transport
- ◆ **Institutional and provider level** quality of care improvements in infrastructure (facilities, equipment and supplies), in systems (organization of services, referral systems, access for clients), in providers (behavior change in interpersonal interaction, upgraded medical skills)
- ◆ **Policy level** Ministry of Health organization of Safe Motherhood efforts, increased coordination among agencies that deal with Safe Motherhood, data collection and monitoring, policy and protocol development to increase families' access to services and improve the quality of care they receive

This Guide focuses on the first area—the community—and this Section discusses how to translate findings from the *Community Assessment* into interventions. But because the three levels represent different aspects of a complex whole, the boundaries among them are not always sharp, and there are interactions among them. *Community Assessment* findings can have implications for action with institutions or providers, or for policy development. A health services assessment can indicate points of intervention with families or community providers. For example, if women are

not using health services because their customs are ignored, then interventions will have to work on making health care services protocols, and policies more family-centered

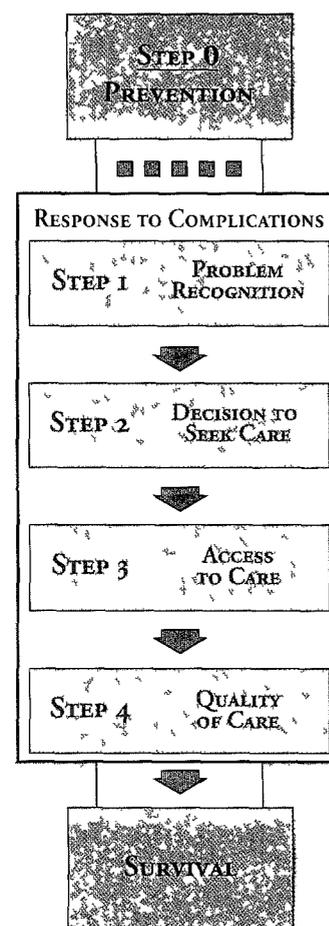
This Section presents a way of organizing research findings as a first step in program planning. It also includes a list of potential intervention components at the community, facility, and policy levels and describes various interventions undertaken by MotherCare. There are many other aspects to planning interventions, such as message design, choosing the most appropriate communication channels, pretesting messages and materials, setting up monitoring systems, and planning an evaluation. These topics are outside the scope of this Guide.

Organizing Findings for Intervention Planning

The approach taken here once again draws on the 'Pathway to Survival'. The framework is used as a diagnostic tool for identifying weak points in the Pathway that need to be strengthened by intervention. As a reminder, the framework is once again presented here.

Using the Pathway to develop intervention strategies involves the following five steps.

1. Assess the services context for the Pathway to determine an overall strategy.
2. Look at each step of the Pathway in turn. Identify the specific problems within each of the steps.
3. Prioritize specific problems to be addressed by the intervention. Convert each to the "flip side"—the desired behavior or outcome.
4. Identify the factors that are barriers to each desired outcome, and the factors that enable each desired outcome.
5. Select interventions that reduce the barriers and build on the enabling factors.



1. Assess the services context for the Pathway to determine an overall strategy

One of the key things to look at in determining an overall Safe Motherhood strategy is the accessibility of health care services and patterns of their use. In settings where services are not accessible, the program will want to work to make them available, this however, is a long-term activity and other actions can be taken to address Safe Motherhood problems in the short term. In these cases, the initial strategy might be to focus on prevention (e.g., improving nutrition and encouraging social support to ease workloads) and on improving the ability of community birth attendants to carry out a clean, safe delivery and to address a newborn's immediate needs. In other settings, adequate obstetric services may be available, but utilization may be low because the

facilities require women to contravene cultural customs. In this case, the overall strategy could focus on making facilities more welcoming and culturally compatible, and on promoting the use of such services. Assessing the broad services context is just the first step in reviewing your research findings. Once an overarching strategy has been defined, decisions can be made about specific intervention components.

2. Look at each step of the Pathway in turn Identify the specific problems within each of the steps

Whether adequate services exist or not, the other steps in the Pathway need to be in place. In addition to taking preventive measures, adult family members need to recognize a complication when it appears and take the best action possible under the given circumstances.

Take each Pathway step in sequence (prevention, problem recognition, decision making, access to care, and quality of care) and list the problems within each. Be specific. For example, you may have found that the health facility does not respect some local customs. Instead of entering "health center does not respect local customs," state the specific problem: "providers do not let women remain partially clothed during exams."

Much of this work will have been done during analysis of findings and laid out in the research report. The "Problem" column in the sample grid on page 113 gives an example of what is done under this step.

3. Prioritize specific problems to be addressed by the intervention Convert each to the "flip side"—the desired behavior or outcome

The research is likely to uncover many problems, and the intervention will not be able to address all of them—at least not right away. It will be necessary to give priority to certain problems. In deciding which should be given priority, consider two main criteria: (1) health impact of overcoming the problem, and (2) feasibility of overcoming the problem. Assessment of feasibility will take into account how complex the problem is to change and the resources required to change it.

For problems that are specific behaviors, it is useful to define in exact terms what you are asking the person (mother, husband, TBA, etc.) to do. Often, behaviors involve several steps. Break down the behavior into its component parts and assess the difficulty of each part, taking into account the constraints under which those performing the behavior are operating. The following table lists characteristics of behaviors that make them more amenable to change, and therefore feasible to address.

CHARACTERISTICS THAT MAKE BEHAVIORS EASIER TO CHANGE

- ◆ Positive consequences are immediate or at least easily linked to the behavior
- ◆ Positive consequences are visible
- ◆ Positive consequences outweigh negative consequences
- ◆ Behavior is compatible with existing beliefs and values
- ◆ Behavior is perceived as acceptable or expected by others whose judgment is valued
- ◆ *Not* doing the behavior is perceived as risky
- ◆ Behavior is simple to understand does not require complex or technical understanding
- ◆ Behavior requires no unusual skill or training
- ◆ Behavior can be easily tried out
- ◆ Financial cost is low
- ◆ Time costs are low
- ◆ There are no major access barriers to needed products or services

4. Identify the factors that are barriers to each desired outcome, and the factors that enable each desired outcome

The research should have uncovered the factors that discourage and those that encourage a given practice or outcome. It is useful to lay these out as a basis for planning intervention components and messages. Barriers may be internal (knowledge, beliefs, perceived disadvantages, lack of skills) or external/structural (lack of transport, lack of basic services, high costs). Enabling factors include anything that facilitates the desired change. These factors can also be internal (perceived advantages, positive attitudes toward behavior, behavior fulfills cultural expectations) or external/structural (easy access to needed products or services, low financial or social costs). The sample grid on page 113 shows, for the pregnancy period, examples of barriers and enablers for problem points in each step of the Pathway to Survival.

5. Select interventions that reduce the barriers and build on the enabling factors

There is an array of potential actions that can be taken to comprise an intervention package. These actions can be grouped generally into policy, institutional/provider, and community interventions. The following table provides an overview of these interventions.

OVERVIEW OF INTERVENTIONS

Individual/Family/Community Level

- ◆ Mobilizing communities to make Safe Motherhood a community concern and responsibility
- ◆ Using various channels (radio print, interpersonal) to increase awareness and knowledge of Safe Motherhood issues, and to motivate behavior change
- ◆ Developing contingency plans for obstetric or neonatal emergencies both at the family and community level
- ◆ Instituting community distribution networks for reproductive health products and information

Institutional/Provider Level (Quality of Care)

- ◆ Upgrading infrastructure and equipment
- ◆ Maintaining adequate supplies and pharmaceuticals
- ◆ Strengthening and updating pre service and in service medical training
- ◆ Establishing monitoring and supervision systems
- ◆ Strengthening referral mechanisms
- ◆ Improving attitudes interpersonal communication and other aspects of behavior
- ◆ Creating and using information education and communication (IEC) materials such as counseling cards
- ◆ Making services more client-oriented and culturally compatible
- ◆ Creating means of obtaining input from communities and of maintaining sensitivity to community needs

Policy Level

- ◆ Making Safe Motherhood a priority on the national health agenda (advocacy)
- ◆ Creating a national coordinating committee that includes members from all relevant health and program areas
- ◆ Organizing meetings for sharing and disseminating updated technical and program information
- ◆ Delineating provider roles and responsibilities at the national regional local or facility levels
- ◆ Developing treatment protocols (norms)
- ◆ Coordinating donor activity and funding

Bringing it all Together

To facilitate the organization of findings and decisions about interventions, the steps outlined in this Section can be brought together in a grid. The following is a hypothetical example showing, for the pregnancy period, how problems would be grouped according to the Pathway, what their respective barriers and enablers are, and which interventions might overcome barriers and draw on enablers to foster the desired outcome.

Stage—Pregnancy

STEP 0—PREVENTION PRACTICES				
Problem	Desired Practice or Outcome	Barriers	Enablers	Interventions
Women maintain a normal workload	Reduce workload especially carrying of heavy water containers	<ul style="list-style-type: none"> ◆ Family needs water every day ◆ It is culturally unacceptable for men to carry water 	<ul style="list-style-type: none"> ◆ Husbands already help women with chores in the 9th month of pregnancy ◆ Husbands want a healthy baby 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy include episodes with men starting to help earlier
Use of prenatal care is low (0 or 1 visit)	At least 3 prenatal care visits per pregnancy	<ul style="list-style-type: none"> ◆ No benefit is seen if pregnancy is normal ◆ Health providers treat mothers roughly during physical exam ◆ There are long travel distances ◆ There are long waits for care 	<ul style="list-style-type: none"> ◆ Women want to know when their baby will arrive ◆ Women want to know if the position of the baby is okay ◆ Families want a healthy baby ◆ Women want other health services 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy affirm that women will learn due date and baby's position ◆ Create more comfortable seating provided in waiting area ◆ Make health information available for mothers to look at while they wait ◆ Train and encourage providers to praise women for traveling far to take care of themselves ◆ Explore ways of bringing some basic services closer to the community mobilize community to support local services
Few women take iron tablets	All pregnant women take iron in correct dose	<ul style="list-style-type: none"> ◆ Supply at clinic is irregular ◆ Full supply is not always given ◆ Women are not certain how to take them 	<ul style="list-style-type: none"> ◆ Pills are perceived as making the blood stronger ◆ Women consider weakness a problem 	<ul style="list-style-type: none"> ◆ Establish checklist of counseling points on iron pills developed for providers ◆ Give pregnancy calendar to mother to take home ◆ Train facility staff to give earlier notice to Ministry of Health (MOH) about low supplies make larger periodic allocations

STEP 1—PROBLEM RECOGNITION				
Problem	Desired Practice or Outcome	Barriers	Enablers	Interventions
A small amount of bleeding not considered serious	Women/men know that any bleeding requires care	<ul style="list-style-type: none"> ◆ Women/men are unaware of potential significance of bleeding 	<ul style="list-style-type: none"> ◆ Sign is visible/evident ◆ Heavier bleeding is considered serious 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy teach signs, link light bleeding to heavy bleeding ◆ Integrate teaching on danger signs into women's group ◆ Train community health workers (CHWs) to counsel on danger signs
Swelling of hands and face is considered positive	Women/men know that swelling of hands and face requires care	<ul style="list-style-type: none"> ◆ Women believe swelling indicates the body is storing blood which will give strength during delivery 	<ul style="list-style-type: none"> ◆ A few women are knowledgeable, one is an opinion leader 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy teach signs ◆ Integrate teaching on danger signs into women's group involve opinion leader

STEP 2—DECISION TO SEEK CARE				
Problem	Desired Practice or Outcome	Barriers	Enablers	Interventions
Care is not sought for light bleeding	Care sought immediately for even light bleeding	<ul style="list-style-type: none"> ◆ Light bleeding is not recognized as serious ◆ Facility is far away ◆ Families worry about cost 	<ul style="list-style-type: none"> ◆ Sign is visible/evident ◆ Heavier bleeding is considered serious 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy include segment where woman seeks care for bleeding and problem is resolved ◆ Encourage TBA to refer cases to facility
Care is not sought for swelling of face and hands	Care immediately sought for swelling of face and hands	<ul style="list-style-type: none"> ◆ Swelling of face and hands is seen as sign of health ◆ Light swelling is not so detectable ◆ Swelling of feet is common and usually not a danger sign 	<ul style="list-style-type: none"> ◆ Families want healthy baby ◆ Husbands/partners worry about losing their wives 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy include segment where woman thought sign was favorable but learned when a friend had fits and almost died that swelling can be serious ◆ Encourage TBA to refer cases to facility

STEP 3—ACCESS TO CARE

Problem	Desired Practice or Outcome	Barriers	Enablers	Interventions
Husband's permission is needed for travel	Husbands give permission in advance, especially if they will be absent	<ul style="list-style-type: none"> ◆ Husbands are not aware of signs of complications ◆ Husbands worry about cost of service 	<ul style="list-style-type: none"> ◆ Husbands/partners give permission when condition perceived as serious ◆ Husbands worry about losing their wives 	<ul style="list-style-type: none"> ◆ Develop radio series on healthy pregnancy make appropriate/interesting for men include episode related to men giving prior permission for travel and expenditures ◆ Enlist village leader/religious figure to encourage men to give permission in advance
Facility is far bus service is irregular	Reliable means of transport is available for emergencies	<ul style="list-style-type: none"> ◆ People who have cars worry about their cars being overused/misused ◆ Cars are costly to operate 	<ul style="list-style-type: none"> ◆ Two cars are available in this community and two in adjacent community 	<ul style="list-style-type: none"> ◆ Through church help raise awareness of importance of prompt care ◆ Secure agreement of car owners to cooperate ◆ Establish emergency fund through church to pay for gas and/or other compensation ◆ Promote idea in radio series on healthy pregnancy
Facility is not open in evenings	Facility remains open 24 hours for emergencies	<ul style="list-style-type: none"> ◆ Extending service hours costs extra money ◆ Concept of client-centered care is new 	<ul style="list-style-type: none"> ◆ MOH has made Safe Motherhood a priority 	<ul style="list-style-type: none"> ◆ Work with MOH to modify policy on hours ◆ Work on cost issue either through MOH or via community mobilization

STEP 4—QUALITY OF CARE				
Problem	Desired Practice or Outcome	Barriers	Enablers	Interventions
Services are seen as ineffective in saving lives	Services are perceived as effective	<ul style="list-style-type: none"> ◆ Actual quality of care for complications of pregnancy is poor ◆ Women who go to the facility die or lose fetus (owing to delays in getting to the facility and also to poor quality of care but the perception is that something about the care kills) 	<ul style="list-style-type: none"> ◆ Providers want refresher training ◆ Some women with serious complications were successfully treated 	<ul style="list-style-type: none"> ◆ Upgrade actual skills of providers ◆ Develop radio series on healthy pregnancy promote importance of prompt treatment, use testimonials of women whose lives were saved
Mothers who have not come previously for prenatal care and now seek care for a complication are scolded and therefore hesitate to use services	Mothers receive praise for coming in to be treated	<ul style="list-style-type: none"> ◆ Providers overall attitude toward clients is condescending ◆ Providers lack of concept of client-centered care ◆ Providers lack understanding of how their attitude toward clients affects service use 	<ul style="list-style-type: none"> ◆ Most providers want to do a good job ◆ Providers already know that women have to overcome barriers to get to the health facility 	<ul style="list-style-type: none"> ◆ Link client comfort with idea of professionalism and service use ◆ Upgrade interpersonal skills along with technical skills ◆ Encourage providers to praise women for coming to get treatment

Examples of Mothercare Interventions Undertaken

In order to provide a more concrete idea of intervention possibilities, a sampling of interventions undertaken by MotherCare programs is listed below

Individual/Family/Community Actions

Information, Education & Communication (IEC) Strategy

In Bolivia, MotherCare developed a 60-chapter radio soap opera, which airs on regional radio stations. A major goal of the radio campaign is to increase recognition of the signs of complications and to encourage families to take action.

Contingency Plan

In Indonesia, radio spots and flyers are used to encourage women and families to save money and plan for emergencies. In Guatemala, organized groups of women discuss how to plan for emergencies and overcome problems of cost, transportation, and child care.

Community Mobilization

In Guatemala, one community—eager for a hospital resident to join their community maternity—organized to provide housing and support for the resident. In return, the resident works closely with local TBAs, encouraging them to bring their patients to deliver at the maternity center and to remain with their charges while the delivery occurs.

Institutional and Provider Actions

Counseling Materials

MotherCare and Hipnosis—a Bolivian graphics/media organization—developed a flip chart for Bolivian health care providers to help them counsel and inform clients. Providers use the flip chart, which contains clear and simple language, to help women and their families understand the complication they are experiencing and the steps that will be taken to resolve the problem.

- Cultural Compatibility** In response to community complaints that the health centers serve cold foods immediately postpartum (a practice found in formative research to be taboo) the Honduran Ministry of Health (MOH) is working with hospital health staff to change menus so that foods are culturally acceptable and desirable, while still nutritious
- Technical and Interpersonal Skills** In Indonesia, clinically trained village midwives receive a two-week training that includes not only technical skills, but also counseling skills and techniques that are designed to promote the acceptance of midwives in their communities and to improve provider-client rapport
- Policies/Protocols** In Bolivia, health providers are modifying their behavior to be more in accordance with the wishes of Quechua and Aymara women their main clients Changes include keeping delivery rooms warm, returning the placenta to the family allowing husbands and TBAs to be present at deliveries and letting the woman choose her own delivery position
- Training Curriculum** In Guatemala, providers needed to improve not only their technical skills, but also their ability to communicate with their clients in a culturally-sensitive manner MotherCare, with assistance from the American College of Nurse Midwives (ACNM), developed a competency-based training curriculum for physicians and nurses In addition to technical skills, the curriculum addresses interpersonal communication and counseling
- Training** MotherCare collaborated with the MOH and the Indonesian Midwives Association to develop a Training/Continuing Education System for the Province of South Kalimantan Currently, hospital- and health center-based midwives receive training in Life Saving Skills (LSS), adapted to the specific situation in South Kalimantan with support from ACNM Village midwives receive a two-week training in selected aspects of LSS and on interpersonal counseling skills All the training involves practical, hands-on experience and is competency-based

Policy and Protocol Development

Provider Roles/ Responsibilities

In Ghana, where unsafe abortion is a major cause of maternal death, the MOH integrated post abortion care (PAC) into its National Safe Motherhood Programme. Before 1996, clinically trained midwives were not allowed to give PAC, which includes manual vacuum aspiration to treat the complications of unsafe and incomplete abortions. But in the 1996 National Reproductive Health Service Policy and Standards, the MOH authorized clinically trained midwives to provide PAC, thereby giving women access to life-saving services in their own communities.

National Strategies

Responding to a MotherCare study in seven Bolivian hospitals in which 4.3% of the mothers or newborns were found to have syphilis, the STD/HIV/AIDS National Program of the Bolivian MOH along with the General Bureau of Epidemiology and the Unit for Maternal and Child Health designed a National Plan for the elimination of congenital syphilis. Key activities of the Plan include health provider and lab technician training in case detection and management, counseling, surveillance, monitoring, supervision, and evaluation.

Policies/Protocols

MotherCare collaborated with the National Secretariat of Health in Bolivia to develop practice protocols for handling obstetric and neonatal complications at health posts, health centers, and district hospitals. The protocols, which have been distributed to public sector health providers, international organizations, and non-governmental organizations (NGOs) throughout the country, combine guidelines on technical management procedures with those on interpersonal counseling.

Monitoring and Supervision

In Indonesia, district health teams make periodic visits to health centers, and health center staff routinely visit village midwives. These encounters have resulted in improved reporting of community- and facility-level data (e.g., the number of pregnant women in the community). The supervisory visits also are a mechanism to ensure that midwives have adequate equipment and supplies. Deficiencies are addressed at regular Maternal and Child Health Management meetings at the District and Provincial levels.

**Multi-level Problem
Identification and
Resolution**

MotherCare has worked closely with Indonesia's District and Provincial MOH to implement the Maternal and Perinatal Audit (MPA). Village midwives conduct a "verbal autopsy" of maternal and perinatal deaths. The results are then reviewed at the MPA meeting, in which staff from health centers, District MOHs, district hospital, and TBAs (if involved in the case) participate. The MPA is a way to increase understanding of the factors contributing to maternal deaths, including not only community-level constraints, but also deficiencies in clinical management and facility capacity.

Other Approaches to Developing Interventions

Use of the five-step process outlined here does not preclude use of other communication planning and behavior change approaches. For example, social marketing, with its emphasis on "the four Ps"—product, price, place, and promotion—can be brought to bear on each of the major behaviors targeted for change. Behavioral theory can be used to conduct a more detailed analysis of individual behaviors and the key factors needed to promote them. A 'Stages of Change' analysis shows where a community is with regard to readiness to make a given behavior change. It is assumed that program design will be carried out by someone familiar with these techniques. No matter what planning approach is used, the preliminary analysis described here will provide the foundation for further intervention design decisions that move us toward the goal of improving the health and survival of mothers and their newborns.

References & Notes

Section I—Background to the Problem

- 1 World Health Organization (WHO) and UNICEF *Revised 1990 Estimates of Maternal Mortality A New Approach by WHO and UNICEF* (Geneva, Switzerland WHO, 1996)
- 2 WHO Making Maternity Care More Accessible, *Press Release No 59* (Geneva, Switzerland WHO, 1993)
- 3 WHO and UNICEF, 1996
- 4 WHO and UNICEF, 1996
- 5 WHO and UNICEF, 1996
- 6 J Senderowitz Adolescent Health Reassessing the Passage to Adulthood, *World Bank Discussion Papers #272* (Washington, DC The World Bank, 1995)
- 7 The World Bank *World Development Report 1993 Investing in Health* (Washington, DC Oxford University Press, 1993)
- 8 WHO *Perinatal Mortality A Listing of Available Information* (Geneva WHO, 1996)
- 9 The Alan Guttmacher Institute (AGI) *Hopes and Realities Closing the Gap Between Women's Aspirations and Their Reproductive Experiences* (New York 1995) Appendix Table 5, 48-49, and CD Westoff, AK Blanc and L Nyblade Marriage and Entry into Parenthood, *DHS Comparative Studies No 10* (Calverton, MD Macro International Inc 1994) As cited in S Singh and R Samara Early marriage among women in developing countries, *International Family Planning Perspectives* 22 (4) 148-157, 175 (1996)
- 10 Population Reference Bureau *1998 Women of Our World* (Washington, DC Population Reference Bureau, 1998)
- 11 A Tsui, J Wasserheit and J Haaga, eds *Reproductive Health in Developing Countries Expanding Dimensions, Building Solutions* (Washington DC National Academy Press, 1997)
- 12 UNICEF *The Progress of Nations* (New York UNICEF, 1996)
- 13 WHO, 1996

Section II—Safe Motherhood Framework: The Pathway to Survival

- 1 BB Johnson *Control Program of Anemia in Pregnant Women The Results of the Qualitative Investigation* (Arlington, VA OMNI/JSI, 1996)
- 2 JM Stirling and L Zizic Working Paper on the Community Diagnosis MotherCare Safe Motherhood Project South Kalimantan 1996 (Jakarta PATH and MotherCare/JSI, Inc, 1998)
- 3 P Taylor and S Matumbu Compliance with Malaria Chemoprophylaxis Programmes, *Acta Trop* 44 (1987) 423-431 as cited in R Galloway and J McGuire Determinants of Compliance with Iron Supplementation Supplies Side Effects or Psychology? *Social Science and Medicine* 39, no 3 (1994) 381-390
- 4 JM Stirling, 1998

- 5 KA Forrest et al Vaginal Douching as a Possible Risk Factor for Pelvic Inflammatory Disease *Journal of the National Medical Association* 81(1989) 159-65 as cited in A Germain et al *Reproductive Tract Infections Global Impact and Priorities for Women's Reproductive Health* (New York NY Plenum Press 1992)
- 6 RC Brunham KK Holmes and JE Embree Sexually Transmitted Diseases in Pregnancy in KK Holmes et al eds, *Sexually Transmitted Diseases Second Edition* (New York McGraw-Hill, 1990), 771-802
- 7 National Academy of Sciences, National Research Council Healthy Pregnancy and Childbearing in AO Tsui, JN Wasserheit and JG Haag, eds *Reproductive Health in Developing Countries Expanding Dimensions, Building Solutions* (Washington, DC National Academy Press, 1997) 116-145
- 8 GS Seoane VM Kaune and JM Cordova *Diagnostico Barreras y Viabilizadores en la Atencion de Complicaciones Obstetricas y Neonatales (Estudio Cualitativo en Comunidades y Servicios de Salud de Cinco Distritos de Salud en La Paz y Cochabamba)* (La Paz Bolivia MotherCare/John Snow Inc and Marketing S R L 1996)
- 9 E Hurtado *Informe Final Investigacion Cualitativa Formativa para el Diseño de la Estrategia Comunicacion Social Proyecto MotherCare/Guatemala* (Guatemala City Guatemala MotherCare/John Snow Inc , 1995)
- 10 E Hurtado 1995
- 11 Social Planning Analysis and Administration Consultants (SPAAC) *MotherCare/Egypt Diagnostic Research in the Governorates of Aswan and Luxor of Egypt* (Cairo, Egypt MotherCare/John Snow Inc , 1998)
- 12 GS Seoane VM Kaune , and JM Cordova, 1996
- 13 E Hurtado 1995 JS Marsaban 1997 GS Seoane, VM Kaune and JM Cordova 1996
- 14 JM Stirling, 1998
- 15 E Hurtado 1995
- 16 Secretaria de Salud Programa de Desarrollo para la Infancia y la Mujer Save the Children de Honduras y Liga de la Lactancia Materna de Honduras *Investigacion Cualitativa de la Morbilidad y Mortalidad Neonatal en el Area Rural de Las Regiones de Salud 1 2 y 3 Informe Global* (Honduras Secretaria de Salud, 1997)
- 17 JM Stirling, 1998
- 18 GS Seoane, VM Kaune, and JM Cordova, 1996
- 19 T Marshall et al *South Kalimantan Baseline Survey Preliminary Report* (Washington, DC MotherCare/JSI Inc , 1997)
- 20 E Hurtado 1995, JS Marsaban 1997, GS Seoane, VM Kaune and JM Cordova 1996
- 21 M Koblinsky Personal communication, 1997
- 22 T Marshall et al , 1997

Section III—Planning an Assessment of the Community

- 1 For guidance on assessing the quality of data see references for Oona Campbell Wendy Graham and Veronique Filippi in Appendix A

Appendix A— Books, Publications, Journals, Websites

Resources for Conducting and Analyzing Formative Research—General

Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory

Anselm Strauss and Juliet Corbin 1998

Sage Publications Inc
2455 Teller Road
Thousand Oaks CA 91320 USA
ph 805 499-0721/fax 805 499-0871
URL <http://www.sagepub.com>

Collecting and Interpreting Qualitative Materials

Edited by Norman K Denzin and Yvonna S
Lincoln, 1998

See above for Sage Publications Inc contact
information

Computer Programs for Qualitative Data Analysis A Software Sourcebook

Eben A Weitzman and Matthew B Miles 1995

See above for Sage Publications Inc contact
information

Cultural Anthropology Methods (CAM) Newsletter Home page

URL <http://www.lawrence.edu/~bradley/c/cam.html>

(Other related websites are
URL <http://www.lawrence.edu/~bradley/c/cam.html#camvisit>
URL <http://www.ualberta.ca/~jrmorris/qual.htm>)

Doing Qualitative Research Research Methods for Primary Care Volume 3

Benjamin F Crabtree and William L Miller 1992

See above for Sage Publications, Inc contact
information

Empowering Communities Participatory Techniques for Community based Programme Development (CAFS)

Berengere de Negr Elizabeth Thomas, Aloys
Illinigungumugabo and Itya Muvandi, 1997

CAFS
PO Box 60054
Nairobi Kenya
ph 254 2 448618/fax 254 2 448621
E mail info@cafs.org

The Focus Group Kit

Edited by David L Morgan and Richard A
Krueger, 1997

See above for Sage Publications Inc contact
information

The Focus Group Manual

Susan Dawson, Lenore Manderson and Veronica
L Tallo 1993

WHO/Special Programme for Research and
Training in Tropical Disease
ISBN# 0 9635522-2-8
Attn Jocelyne Bruyere
ph +1 22-791 3725/fax +1 22-791 4854
URL <http://www.who.ch/tdr/publicat/list.htm>

Getting it in Focus A Learner's Kit for Focus Group Research

AED HealthCom and USAID, **NEED YEAR**

Academy for Educational Development (AED)
1255 23rd Street N W
Washington DC 20037 USA
ph 202 884 8700/fax 202 884 8701
URL <http://www.aed.org>

Interpreting Qualitative Data Methods for Analyzing Talk, Text, and Interaction

David Silverman 1993

See above for Sage Publications Inc contact
information

InterViews An Introduction to Qualitative Research Interviewing

Steinar Kvale, 1996

See above for Sage Publications, Inc contact information

The Landscape of Qualitative Research

Edited by Norman K Denzin and Yvonna S Lincoln, 1998

See above for Sage Publications Inc contact information

Making Sense of Qualitative Data Complementary Research Strategies

Amanda Coffey and Paul Atkinson, 1996

See above for Sage Publications Inc contact information

Participatory Research in Health Issues and Experiences

Edited by Korrie de Koning and Marion Martin 1996

Zed Books
7 Cynthia Street
London N1 9JF UK
ph 44 171-837 4014/fax 44 171 833 3960
E-mail sales@zedbooks.demon.co.uk

URL <http://www.zedbooks.demon.co.uk/home>

Population and Reproductive Health Programmes Applying Rapid Anthropological Assessment Procedures

Lenore Manderson

UNFPA Technical Report
Available on internet at
URL <http://www.undp.org/popin/books/reprod/content.htm>

PRA Field Handbook for Participatory Rural Appraisal Practitioners

The PRA Programme Egerton University

PRA Programme
Egerton University
PO Box 536
Njoro Kenya
fax 254 37 61527 (specify PRA Programme)

Qualitative Data Analysis An Expanded Sourcebook

Matthew B Miles and A Michael Huberman 1994

See above for Sage Publications Inc contact information

Qualitative Evaluation and Research Methods

Michael Quinn Patton, 1990

See above for Sage Publications Inc contact information

Qualitative Interviewing The Art of Hearing Data

Herbert J Rubin and Irene S Rubin, 1995

See above for Sage Publications Inc contact information

Qualitative Research for Health Programmes

Patricia M Hudelson, 1994

Unpublished copies can be requested from
Lydia Kurkcuoglu
WHO/MNH at kurkcuoglu@who.ch
Reference Number WHO/MHN/PSF/94.3

Qualitative Researching

Jennifer Mason 1996

See above for Sage Publications Inc contact information

Rapid Assessment Procedures Qualitative Methodologies for Planning and Evaluation of Health Related Programmes

Edited by Nevin S Scrimshaw and Gary R Gleason, 1992

International Nutrition Foundation for
Developing Countries (INF)
Charles Street Station
P O Box 500
Boston MA 02114 0500 USA
ph 617 227 8747/fax 617 227 9405
E mail unucpo@zork.tiac.net

Research Design Qualitative and Quantitative Approaches

John W Creswell, 1994

See above for Sage Publications Inc contact information

**Research Methods in Anthropology,
Qualitative and Quantitative Approaches**

H Russell Bernard, 1994

See above for Sage Publications Inc contact information

**RRA Notes, Number 16 Special Issue on
Applications for Health**

International Institute for Environment and
Development Sustainable Agriculture Programme
1992

International Institute for Environment and
Development
3 Endsleigh Street
London WC1 0DD UK

Strategies of Qualitative Inquiry

Edited by Norman K Denzin and Yvonna S
Lincoln 1998

See above for Sage Publications Inc contact information

**Resources for Conducting
and Analyzing Formative
Research—Women's Health**

**Rapid Assessment Procedures (RAP)
Ethnographic Methods to Investigate
Women's Health**

Joel Gittelsohn Pertti Pelto, Margaret Bentley
Karabi Bhattacharyya and Joan Russ, publication
forthcoming

See above for INF contact information
preliminary version available from
Renuka Agarwal
Ford Foundation
55 Lodi Estate
New Delhi India
fax 91-11-462 7147
E mail ragarwal@fordfound.org

Safe Motherhood Needs Assessment

World Health Organization 1998

World Health Organization
1211 Geneva 27
Switzerland
ph +1 22 791-21-11/fax +1 22 791 07 46
Reference Number WHO/RHT/MSM/96 19

**Women's Health Network (WHEN) Protocols
Ethnographic Methods to Investigate
Women's Health**

Joel Gittelsohn Pertti J Pelto, Margaret E Bentley,
Karabi Bhattacharyya and Joan Russ, 1995

Department of International Health
The Johns Hopkins University
615 N Wolfe Street
Baltimore MD 21205 USA
ph +10 955-3552

**Resources for Conducting
and Analyzing Formative
Research—Nutrition and
Breastfeeding**

**Community Assessment of Natural Food
Sources of Vitamin A Guidelines for an
Ethnographic Protocol**

Lauren Blum, Pertti Pelto, Gretel Pelto and Harriet
Kuhnlein, 1997

See above for INF contact information

**Designing by Dialogue A Program Planners
Guide to Consultative Research for Improving
Young Child Feeding**

Kate Dickin Marcia Griffiths and Ellen Piwoz,
1997

See above for AED contact information

**A Guide to Qualitative Research for
Improving Breastfeeding Practices**

Michael Favin and Carol Baume, 1996

Manoff International
2001 S Street N W
Washington DC 20009 USA
ph 202 265 7469/fax 202-745 1961

**Rapid Assessment Procedures for Nutrition
and Primary Health Care Anthropological
Approaches to Improving Programme
Effectiveness**

Susan C M Scrimshaw and Elena Hurtado 1987

UCLA Latin American Center
University of CA Los Angeles
+05 Hilgard Avenue 10343 Bunche Hall
Los Angeles CA 90095 1+47 USA
ph 310 825-4571/fax 310-206-6859
http //www.isop.ucla.edu/lac/reference.htm

Resources for Conducting and Analyzing Formative Research—STDs/HIV/AIDS

Rapid Anthropological Approaches for Studying AIDS Related Beliefs, Attitudes and Behaviours

Susan C M Scrimshaw Manuel Carballo, Michael Carael, Laura Ramos and Richard G Parker

See above for INF contact information

The Manual for Targeted Intervention Research on Sexually Transmitted Illnesses with Community Members

Deborah L Helitzer Allen and Hubert A Allen Jr 1994

Office of Evaluation Center for Health Promotion
University of New Mexico 251 Surge
Albuquerque NM 87131 5311 USA
Attn Deborah L Helitzer
ph 505 272 4462

Situation Assessment Ethnographic Methods in AIDS Intervention Programmes

Pertti J Pelto

WHO/UNAIDS Currently unavailable photo-copies circulate

Resources for Conducting and Analyzing Formative Research—Family Planning

Qualitative Research for Family Planning Programs in Africa

Compiled and edited by Adrienne Kols

Center Publications
Johns Hopkins Center for Communication Programs (JHUCCP)
111 Market Place Suite 310
Baltimore MD 21202-4024 USA
ph 410 659 6300/fax 410 659 6266
URL <http://www.jhuccp.org/occastwo.stm>

Tools to Assess Family Planning Counseling A Compendium of Field Tested Survey Instruments from JHU/PCS Executive Summary

Young Mi Kim and Cheryl Lettenmaier

See above for JHUCCP contact information

MotherCare Community Research

Bolivia

Diagnóstico Barreras y Viabilizadores en la Atención de Complicaciones Obstétricas y Neonatales

Guillermo Seoane Flores Veronica Kaune Moreno and Julio Cordova Villazon 1996

MotherCare Project
John Snow Inc
1616 N Ft Myer Drive 11th floor
Arlington VA 22209 USA
ph 703 528-7474/fax 703 528 7480
E mail mothercare_project@jsi.com
URL <http://www.jsi.com/intl/mothercare>

Egypt

MotherCare/Egypt Diagnostic Research in the Governorates of Aswan and Luxor of Egypt Final Report

Social Planning Analysis and Administration Consultants, 1998

See above for MotherCare contact information

Guatemala

Investigación Cualitativa Formativa para el Diseño de la Estrategia Comunicación Social Proyecto MotherCare/Guatemala

Elena Hurtado, 1995

See above for MotherCare contact information

Honduras

Investigacion Cualitativa de la Morbilidad y Mortalidad Neonatal en el Area Rural de Las Regiones de Salud 1, 2 y 3 Informe Global

Secretaria de Salud Programa de Desarrollo para la Infancia y la Mujer Save the Children de Honduras Liga de la Lactancia Materna de Honduras 1997

See above for MotherCare contact information

Indonesia**Working Paper on the Community Diagnosis
MotherCare Safe Motherhood Project, South
Kalimantan**

Julie Marsaban Stirling and Lara Zizic 1996

See above for MotherCare contact information

**MotherCare Community-based
Survey Research**

Bolivia**Estudio de linea de base en salud materna y
perinatal Bolivia 1996 Investigacion cuantita-
tiva de salud materno perinatal en una mues-
tra de hogares de cinco Distritos de Salud de
Bolivia**Ramiro Eguiluz, Cindy Stanton, Guillermo Seoane
and Colleen Conroy, 1998

see above for MotherCare contact information

Indonesia**Maternal and Neonatal Health in Indonesia
Baseline Findings from a Community Survey**Tom Marshall, Ali Zazri Idrus Jus at Endang
Achadi and Zahidul A Huque, 1998

see above for MotherCare contact information

**Other Safe Motherhood
Publications**

**Asking Questions About Women's
Reproductive Health Guidelines on Scope
and Content**Wendy J Graham, Oona M R Campbell
Veronique G A Filippi, Elizabeth Goodburn, Tom
Marshall, Carine Ronsmans and Caroline Shulman
1994London School of Hygiene and Tropical
Medicine (LSHTM)
Maternal and Child Epidemiology Unit
London WC1E 7HT UK
ph 44-171 636 8636/fax 44 171 436 5389**Life-Saving Skills Manual for Policy Makers
and Trainers**American College of Nurse Midwives
818 Connecticut Avenue NW Suite 900
Washington DC 20006 USA
ph 202 728 9860/fax 202 728 9897
URL <http://www.acnm.org>**Listening to Women Talk About their Health
Issues and Evidence from India**Joel Gittelsohn, Margaret E Bentley, Pertti Pelto
Moni Nag, Saroj Pachauri, Abigail Harrison, Laura
Landman, 1994Department of International Health Division of
Human Nutrition
Johns Hopkins University School of Hygiene and
Public Health
615 North Wolfe Street
Baltimore MD 21205 USARenuka Agarwal Ford Foundation
55 Lodi Estate
New Delhi India
fax 11 4627147
E-mail ragarwal@fordfound.org**Measuring the Determinants of Maternal
Morbidity and Mortality Defining and
Selecting Outcomes and Determinants, and
Demonstrating Associations**

Oona M R Campbell and Wendy J Graham, 1991

See above for LSHTM contact information

**Measuring Maternal Mortality and Morbidity
Levels and Trends**

Oona M R Campbell and Wendy J Graham, 1991

See above for LSHTM contact information

**Mother Baby Package Implementing Safe
Motherhood in Countries**

World Health Organization 1994

See above for WHO contact information
Reference Number WHO/FHE/MSM/94.11 Rev 1**Program for the Control of Anemia in
Pregnant Women Report on the Results of
the Qualitative Research**

Brian B Johnson, 1996

Opportunities for Micronutrient Interventions

(OMNI) Community and Infant Health Care Project (CCH) MotherCare and the National Department of Health see above for MotherCare contact information

Report on the Use of the Community Diagnosis to Explore Safe Motherhood A Two country Comparison and Methodological Critique (Technical Paper #6)

Nancy Nachbar 1997

See above for MotherCare contact information

Unraveling the Mysteries of Maternal Death in West Java. Reexamining the Witnesses

Meiwita B Iskandar Budi Utomo, Terence Hull Nick G Dharmaputra and Yuswardi Azwar 1996

Center for Health Research
Research Institute University of Indonesia
Depok Indonesia

Utilizing Survey Data on Maternity Care in Developing Countries An Illustrative Study

Veronique G A Filippi Wendy J Graham and Oona M R Campbell, 1990

See above for LSHTM contact information

Journals

Acta Obstetrica et Gynecologica Scandinavica

(Supplement also available)

238 Main Street
Cambridge MA 02142 USA
ph 617 547 7665/fax 617 547 7489
email fsub@mail.munksgaard.dk

American Journal of Clinical Nutrition

9650 Rockville Pike
L 2310
Bethesda MD 20814 3998 USA
ph 301 530 7026/fax 301-530 7001
email staff@dues.faseb.org

American Journal of Obstetrics and Gynecology

11830 Westline Industrial Drive
St Louis MO 63146 3318 USA
ph 800 325 4177
ph 314-872 8370/fax 314 432-1380
telex 44-2402

Bulletin of the World Health Organization

World Health Organization
Distribution and Sales
1211 Geneva 27
Switzerland
fax 44 22-791 4857
URL <http://www.pll.who.ch/programmes/pll/das/serials/bull.html>

European Journal of Obstetrics & Gynecology and Reproductive Biology

Elsevier Science Ireland Ltd
PO Box 85
Limerick Ireland
ph 353 61 471944/fax 353 61 472144

Family Planning Perspectives

Alan Guttmacher Institute
120 Wall Street
New York NY 10005 USA
ph 212 248 1111/fax 212 248-1951

Food and Nutrition Bulletin

United Nations University Press
The United Nations University
53 70 Jingumae 5-chome Shibuya-ku
Tokyo 150 Japan
ph 03 3499 2811/fax 03-3406 7345
E-mail sales@hq.unu.edu

Health Policy and Planning

Journals Subscriptions Department
Oxford University Press
Great Clarendon Street
Oxford OX2 6PD UK
ph +4 1865 267907/fax +4 1865 267485
telex 837330

International Family Planning Perspectives

Alan Guttmacher Institute
120 Wall Street
New York NY 10005 USA
ph 212 248 1111/fax 212-248 1951

International Journal of Gynaecology and Obstetrics

(International Federation of Gynaecology and Obstetrics)

Elsevier Science
Regional Sales Office
PO Box 945
New York NY 10159 0945 USA
ph 212 633-3730/fax 212-633 3680

Journal of Nurse-Midwifery

(American College of Nurse-Midwives)

Elsevier Science Inc
PO Box 945
New York NY 10159 0945 USA
ph 212 633 3730/fax 212-633 3680
telex 420643
E-mail usinfo f@elsevier.com
URL <http://www.elsevier.nl/>

Journal of Obstetrics and Gynaecology

Carfax Publishing Co
PO Box 25
Abingdon, Oxon
OX14 3UE UK
ph 44-1235 401000/fax 44 1235-401550
E mail enquires@carfax.co.uk

The Lancet

The Lancet Ltd
655 Avenue of the Americas
New York NY 10010 USA
ph 212 633 3800/fax 212 633 3850

Medical Anthropology

Gordon and Breach Science Publishers
c/o International Publishers Distributor
PO Box 3054
Langhorn PA 19047 3054 USA
ph 215 750 2642/fax 215 750 6343

Medical Anthropology Quarterly

(Society for Medical Anthropology)

American Anthropological Association
4350 North Fairfax Drive Suite 640
Arlington, VA 22203 1621, USA
ph 703-528 1902

Midwifery

Churchill Livingstone
Robert Stevenson House
13 Baxter's Place
Leith Walk Edinburgh
EH1 3AF Scotland
ph 0131 556 2424/fax 0131 535 1704
URL <http://www.churchillmed.com>

New England Journal of Medicine

PO Box 9140
Waltham MA 02254 9881 USA
ph 800 THE NEJM/fax 617 893 0413

Nutrition Reviews

Allen Press Inc
PO Box 1897
Lawrence KS 66044 USA
ph 913 843-1234/fax 913 843-1274

Obstetrics and Gynecology

(American College of Obstetricians and Gynecologists)

Elsevier Science Inc
PO Box 945
New York NY 10159 0945 USA
ph 212-633 3730/fax 212 633 3680
Telex 420643
E mail usinfo f@elsevier.com
URL <http://www.elsevier.nl/>

Reproductive Health Matters

29-35 Farringdon Road
London EC1M 3JB UK
ph +4-171 242 8686/fax 44-171 242 9696

Social Science and Medicine

Elsevier Science Inc
PO Box 945
New York NY 10159 0945 USA
ph 212 633-3730/fax 212 633 3680
telex 420643
E mail usinfo f@elsevier.com
URL <http://www.elsevier.nl/>

Tropical Doctor

Royal Society of Medicine
1 Wimpole Street
London W1M 8AE UK
ph 44-1712-902028

Tropical Journal of Obstetrics and Gynaecology

(International Federation of Gynaecology and Obstetrics)

Fourth Dimension Publishing Co Ltd
House 16 Fifth Avenue
PMB 011164
City Layout New Haven
Enugu State Nigeria
ph 234 42 459969/fax 234 42 45329

Appendix B— Organizational Resources

Academy for Educational Development (AED)

AED is a non-profit organization conducting domestic and international programs in education, training analysis and research in the areas of health and nutrition, family planning and youth development (among others)

1875 Connecticut Avenue NW Suite 900
Washington DC 20009 USA
ph 202-884-8000/fax 202 884 8400
E mail admindc@aed.org
URL <http://www.aed.org>

African Medical and Research Foundation (AMREF)

Included among AMREF activities are provision of medical services to remote areas training of village health workers production of information, education and communication (IEC) materials and research

19 West 44th Street Room 1708
New York NY 10036 USA
ph 212 768 2440/fax 212-768 4230
E mail admindc@aed.org
URL <http://www.amref.org>

Africare

Africare's activities in health include the provision of supplies, construction of facilities, training of personnel production of health materials and planning and organization of health systems

440 R Street NW
Washington, DC 20001 USA
ph 202 462 3614/fax 202-387 1034
E mail africare@f1104.n109.z1.fidonet.org
URL <http://www.africare.org>

Aga Khan Foundation USA

The Aga Khan Foundation assists in the development of health systems, trains personnel manages community-oriented programs and produces educational materials

1901 L Street NW Suite 700
Washington DC 20036
ph 202 293 2537/fax 202 785 1752
E mail 71075.1561@compuserve.com
http www.interaction.org/mb/akf_usa.html

American College of Nurse-Midwives (ACNM)

ACNM is a professional organization for certified nurse-midwives in the United States that works to develop and support the profession of nurse-midwifery in order to promote the health and well-being of women and infants within their families and communities

818 Connecticut Avenue NW Suite 900
Washington DC 20006 USA
ph 202 728 9866/fax 202-728 9897
E mail info@acnm.org
URL <http://www.acnm.org/educ/fenmacnm.htm>

American ORT

American ORT offers technical assistance to health care programs

817 Broadway
New York NY 10003 4756 USA
ph 212 677 4400/fax 212 979 9545
E mail rgreene@escape.com
<http://www.waort.org>

2025 I Street NW Suite 320
Washington DC 20006 USA
ph 202 293 2560/fax 202 293-2577
E-mail ORTDC@aol.com

American Red Cross International Services (ARC)

In addition to maintaining its traditional role in disaster relief, ARC is active in health education

Office of International Services
2025 E Street NW
Washington DC 20006 USA
ph 202 728-6600/fax 202 728 6404
E mail jones@USA.RED.CROSS.org
<http://www.redcross.org>

American Refugee Committee (ARC)

Aside from giving emergency assistance to refugees, ARC also conducts trainings of health workers

2344 Nicollet Avenue South, Suite 350
Minneapolis MN 55404 USA
ph 612 872 7060/fax 612 872 4309
E mail kraus024@maroon.tc.umn.edu
URL <http://www.archq.org>

Amigos de las Americas

Amigos de las Americas provides health education to communities in Latin America

5618 Star Lane
Houston TX 77057 USA
ph 800-231-7796/ph 713-782-5290
fax 713 782-9267
E mail info@amigoslink.org
URL <http://www.amigoslink.org>

Appropriate Technology International (ATI)

ATI helps improve the productivity and income of small business owners by giving expert advice, increasing access to credit, improving technologies and enhancing access to markets

1828 L Street NW Suite 1000
Washington DC 20036 USA
ph 202 293-4600/fax 202 293 4598
E mail Econet_atinl@igc.apc.org
URL <http://www.interaction.org/mb/ati.htm>

CARE (Cooperative for Assistance and Relief Everywhere)

CARE conducts education programs in maternal and child health, nutrition, HIV/AIDS and family planning and also provides training of health care workers

151 Ellis Street NE
Atlanta GA 30303 2439 USA
ph 404 681 2552/fax 404-577 5977
E mail info@care.org
URL <http://www.care.org>

Washington Liaison Office
2025 I Street NW Suite 1024
Washington DC 20006 USA
ph 202 223 2277/fax 202 296 8695

Catholic Relief Services (CRS)

CRS programs support local health clinics and train health care workers

209 West Fayette Street
Baltimore MD 21202 3443 USA
ph 410 625-2220/fax 410-685 1635
E mail CRSHQ@DCD1CR.DAS.NET
URL <http://devcap.org/crs/index.html>

CEDPA (The Centre for Development and Population Activities)

CEDPA is a women-focused nonprofit international organization that works to empower

women at all levels of society to be full partners in development CEDPA's Strategies include building the capacities of development institutions and networks, mobilizing women's participation at the policy level, linking reproductive health services and women's empowerment, and making youth an integral part of the development agenda All CEDPA activities are designed to advance gender equity

1717 Massachusetts Avenue, NW Suite 200
Washington DC 20036 USA
ph 202 667-1142/fax 202 332-4496
E-mail cmal@cedpa.org
URL <http://www.cedpa.org>

Center for International Health Information (CIHI)

CIHI is a USAID information management activity which works to provide timely, reliable, and accurate information on the Population Health, and Nutrition (PHN) sector in developing countries assisted by USAID

1601 N Kent Street Suite 1014
Arlington VA 22209
ph 703 247 5887/fax 703 243 4669
E mail info@cihi.com
URL <http://www.cihi.com>

Center to Prevent Childhood Malnutrition (NURTURE)

NURTURE supports local-level, self-help programs that aim to improve nutrition and disseminate nutrition-related information

4948 St Elmo Avenue Suite 208
Bethesda MD 20814 USA
ph 301-909 8601/fax 301-909 8603
E mail nurture@clark.net
URL <http://www.nurture.bc.ca>

Centers for Disease Control and Prevention (CDC)

An agency of the Department of Health and Human Services, the CDC works to promote health and quality of life by preventing and controlling disease, injury, and disability

1600 Clifton Road NE
Atlanta GA 30333 USA
ph (404) 639 3311
E mail netinfo@cdc.gov
URL <http://www.cdc.gov>

Child Health Foundation (CHF)

CHF provides information to health care professionals and mothers on inexpensive effective methods to improve child survival and it supports clinical research in this area

10630 Little Patuxent Parkway
Century Plaza Suite 325
Columbia, MD 21044, USA
ph +10 992 5512/ph 301 596-4514/fax 410 992 5641
E mail chf@ChildHealthFoundation.org
URL <http://childhealthfoundation.org>

Children's Survival Fund, Inc (CSF)

CSF provides food, medical supplies and other needed items to support community development and child-oriented programs

P O Box 3127
Carbondale IL 62902 USA
ph 618 549-7873/fax 618 549-8320
E mail inad@ix.netcom.com
URL <http://www.inadnet.com/cal/ccf.htm>

Christian Children's Fund (CCF)

Through affiliated groups CCF supports health projects in nutrition, education health care provider training and sanitation improvement, among others Some direct medical and dental services are also provided

2821 Emerywood Parkway
P O Box 26484
Richmond VA 23261 6484 USA
ph 804 756-2700/fax 804 756 2718

Concern/America

Concern/America works in developing countries, providing community development assistance and supporting women in development programs through training, technical assistance and material support

P O Box 1790
2024 North Broadway Street Suite 104
Santa Ana CA 92702 1790 USA
ph 714 953 8575/fax 714-953 1242
E mail concern.america.inc@charitiesusa.com

Doctors of the World USA

This agency provides training primary health care services and education to geographic areas in need

625 Broadway 2nd floor
New York NY 10012 USA
ph 212 529 1556/fax 212 529 1571
URL
<http://www.energopolimit/development.ORG/di1348.htm>

Family Health International (FHI)

In the areas of AIDS/HIV/STD, family planning reproductive health and women's studies FHI provides research, education and services in order to improve the health and well-being of populations worldwide

P O Box 13950
Research Triangle Park NC 27709 USA
ph (919) 544 7040/fax (919) 544 7261
URL <http://www.fhi.org>

Healthlink Worldwide

Healthlink Worldwide works to improve the health of poor and vulnerable communities by strengthening the provision, use and impact of information through communicating about health issues promoting the development of good policy and practice providing training in information management and dissemination and supporting sustainable partner activities

Farringdon Point
29 35 Farringdon Road
London EC1M 3JB UK
ph 44-171 242-0606/fax 44 171-242-0041
E mail info@healthlink.org.uk
URL <http://www.ahrtag.org/mission.html>

Helen Keller International (HKI)

Working with national governments and local communities, HKI seeks to prevent needless blindness through direct eye care services nutrition education and training

90 Washington Street 15th floor
New York NY 10006 2214 USA
ph 212 943 0890/fax 212 943 1220
E-mail info@hki.org
URL <http://www.hki.org>

Interaction American Council for Voluntary International Action

Interaction provides a forum for communication and collaboration among the NGOs working in international development

1717 Massachusetts Avenue NW Suite 801
 Washington DC 20036 USA
 ph 202-667 8227/fax 202-667 8236
 fax 202 667-4131
 E-mail ia@interaction.org
 URL <http://www.iwhc.org>

International Aid, Inc

International Aid provides medical supplies and equipment, trains health care providers, and designs and manages integrated health care projects

17011 West Hickory
 Spring Lake MI 49456 9712 USA
 ph 616 846 7490/fax 616 846 3842
 E mail 74152 +22@compuserve.com

International Center for Research on Women (ICRW)

ICRW supports women in development initiatives through research at the policy-level program support and information dissemination

1717 Massachusetts Avenue NW Suite 302
 Washington DC 20036, USA
 ph 202-797-0007/fax 202-797-0020
 E-mail ICRW@IGC APC ORG
 URL <http://www.icrw.org/content.htm>

International Eye Foundation (IEF)

Through training information dissemination and distribution of vitamin A IEF aims to reduce blindness in the developing world

7801 Norfolk Avenue
 Bethesda, MD 20814 USA
 ph 301-986-1830/fax 301-986-1876
 E-mail info@ief.permanet.org
 URL <http://www.rockefeller.edu/irfcec/post-doc.html>

International Reading Association

The Association seeks to improve literacy through the support of reading research and a 90,000 world-wide member association committed to the cause

800 Barksdales Road
 PO Box 8139
 Newark DE 19714 8139 USA
 ph 302 731 1600/fax 302 731 1057
 URL <http://www.reading.org>

International Rescue Committee (IRC)

In the area of health IRC provides direct medical services as well as medical training to refugees and IDP's This organization also supports public health projects such as immunizations and improved sanitation

122 East 42nd Street, 12th floor
 New York NY 10168-1289, USA
 ph 212 551-3000/fax 212 551-3184
 E mail irc@irc.com
 URL <http://www.intrescom.org/donation.htm>

International Women's Health Coalition (IWHC)

Working on a national and international level through research and public education, IWHC aims to ensure women's reproductive health by providing grants and technical assistance to NGOs in developing countries working in related areas

24 East 21st Street 5th floor
 New York NY 10010 USA
 ph 212 979 8500/fax 212 979 9009
 E mail iwhc@igc.apc.org

INTRAH

A program of the School of Medicine at the University of North Carolina at Chapel Hill, INTRAH assists health agencies in developing countries to improve the delivery of reproductive health services through improved preparation and utilization of their human resources

The INTRAH Program
 208 North Columbia St CB#8100
 Chapel Hill NC 27514 USA
 ph 919 966-5636/fax 919 966 6816
 E-mail intrah@med.unc.edu
 URL <http://www.med.unc.edu/intrah>

Islamic African Relief Agency USA (IARA USA)

IARA-USA provides funding and training for programs immunization nutrition counseling, prenatal care and other health-related activities

PO Box 7084
 Columbia MO 65205 7084 USA
 ph 314 443 0166/fax 314-443 5975
 E mail 3911862@MCIMAIL.Com

John Snow, Inc (JSI)

JSI works to improve the quality and accessibility of health care and human services around the

world by providing technical expertise training and research assistance to public and private agencies JSI partners with organizations to investigate, develop, and implement improved management processes and systems in order to increase the efficiency and effectiveness of their operations

1616 North Ft Myer Drive 11th floor
Arlington, VA 22209, USA
ph 703 528 7474/fax 703 528 7480
URL [http //www jsi com](http://www.jsi.com)

JHPIEGO Corporation

An affiliate of Johns Hopkins University, this non-profit organization works to improve the health of women and families globally by increasing the availability of high quality reproductive health services with an emphasis on family planning services JHPIEGO reaches its goal by promoting, initiating and supporting activities that lead to increased numbers of health professionals trained in reproductive health

1615 Thames Street Suite 200
Baltimore MD 21231 3447 USA
ph +10 955 8558/fax 410-955 6199
E mail info@jhpiego.org
URL [http //www jhpiego jhu edu](http://www.jhpiego.jhu.edu)

Johns Hopkins Center for Communication Programs (JHUCCP)

Part of the Johns Hopkins School of Hygiene and Public Health, JHUCCP works with many international agencies, foundations, governments and nongovernmental organizations in the US and overseas to promote healthy behavior by developing and implementing effective communication programs

111 Market Place Suite 310
Baltimore MD 21202 4024 USA
ph 410 659 6300/fax 410 659 6266
E mail webadmin@jhuccp.org
URL [http //www jhuccp org](http://www.jhuccp.org)

Manoff Group Inc

The Manoff Group is a private social marketing agency specializing in behavior-oriented planning and communications for maternal and child health nutrition and family planning programs

2001 S Street NW Suite 510
Washington DC 20009 1125 USA
ph 202 265 7469/fax 202-745 1961

Map International

MAP International provides medicines and medical supplies to Christian hospitals and clinics and offers medical assistance through a network of medical students

2200 Glynco Parkway
P O Box 215000
Brunswick, GA 31521 5000 USA
ph 912 265 6010/fax 912 265 6170
E mail M.MOSELY@MAPINTMHS.COM
PUSERVE.COM
URL [http //www map org](http://www.map.org)

Margaret Sanger Center International (MSCI)

MSCI provides medical services training and grants to local programs working in reproductive health

26 Bleecker Street
New York NY 10012 2413 USA
ph 212 274 7200/fax 212 274 7299
E mail p.purdy@pipeline.com
URL [http //www interaction org/mb/msci.html](http://www.interaction.org/mb/msci.html)

Médecins Sans Frontières USA (MSF USA)

MSF USA provides medical services and helps set up health care systems It also frequently supplies food basic hygienic services, vaccinations and conducts health-related information education and communication activities

11 East 26th Street 19th floor
New York NY 10010 USA
ph 212 679 6800/fax 212 679 7016

Medical Care Development Inc (MCD)

MCD designs and manages programs in a variety of medical and public health areas, including ORT promotion family planning and training of health care professionals MCD also conducts research as well as health policy analysis

International Division
1742 R Street NW
Washington DC 20009 USA
ph 202-462 1920/fax 202-265-4078
E mail MCDI@DELPHI.COM

Domestic Division
11 Parkwood Drive
Augusta ME 04330 USA
ph 207 622 7566/fax 207 622 3516

Mercy Corps International

Mercy Corps provides medicine, medical supplies and staffing for clinics and training in areas such as immunization and nutrition

3030 SW First Avenue
Portland OR 97201 4796 USA
ph 503 242 1032/fax 503 796 1032
E mail mercy_corps@igc.apc.org

National Council for International Health (NCIH)

This membership organization provides training education, and opportunities for networking and information exchange among public health professionals through seminars, workshops and conferences

1701 K Street NW Suite 600
Washington DC 20006 USA
ph 202-833 5900/fax 202 833 0075
E mail ncih@access.digex.net

Outreach International

Outreach supports health care worker trainings nutrition and home economic centers, and school lunch and fluoride programs

P O Box 210
Independence MO 64051 0210 USA
ph 816 833-0210/fax 816 833-0103
E mail JNYC37A@PRODIGY.COM
URL <http://www.rlds.rctx.org/outreach/outreach.htm>

Overseas Development Council (ODC)

Through information, education and communication activities, ODC helps to improve American understanding of issues confronting developing countries and how they impact the United States

1875 Connecticut Avenue NW Suite 1012
Washington DC 20009 USA
ph 202 234 8701/fax 202 745 0067
E mail [\[last name\]@gateway.odc.org](mailto:[last name]@gateway.odc.org)
URL <http://www.odc.org>

Oxfam America

Oxfam programs train health workers provide mobile medical units and conduct health education

National Office
26 West Street
Boston MA 02111 USA

ph 617 482-1211/fax 617 728 2594
E mail oxfamusa@igc.apc.org
URL <http://www.oxfamamerica.org>

Pan American Development Foundation (PADF)

PADF runs health education programs and ships donated medical supplies and equipment to needy areas in Latin America and the Caribbean

1889 F Street NW
Washington DC 20006 USA
ph 202-458 3969/fax 202-458 6316
E mail garcia@lia.org

PATH (Program for Appropriate Technology in Health)

Addressing primarily maternal and child health, reproductive health and family planning, communicable diseases and health financing, PATH works to assess health problems and implement effective solutions

1990 M Street NW Suite 700
Washington DC 20036 USA
ph 202 822-0033/fax 202 457-1466

Pathfinder International

Through grants and technical assistance to related programs Pathfinder seeks to increase the availability and accessibility of family planning services

9 Galen Street
Suite 217
Watertown MA 02172-4501 USA
ph 617 924 7200/fax 617 924 3833
E mail Information@pathfind.org
URL <http://www.pathfind.org>

Population Action International (PAI)

PAI works to ensure access to family planning and health services with its information communication and advocacy efforts

1120 19th Street NW Suite 550
Washington DC 20036 USA
ph 202-659-1833/fax 202-293-1795
E-mail qbellamy@popact.org
URL <http://www.populationaction.org>

Population Communication

Through information, education and communication, Population Communication

works to create awareness of the problems of and possible solutions to population issues

1489 East Colorado Boulevard Suite 202
Pasadena CA 91106 USA
ph 818-793 4750/fax 818-793-4791
URL <http://www.population.org>

Population Reference Bureau (PRB)

PRB is an educational organization working with public- and private-sector partners to increase the amount, accuracy and usefulness of information concerning changes in population and the impact those changes may have

1875 Connecticut Avenue, NW Suite 520
Washington DC 20009 5728 USA
ph 202-939-5423/fax 202 328 3937

Population Services International (PSI)

PSI seeks to improve world health through social marketing. PSI provides low-income people with affordable health products in the following areas: child survival, family planning, AIDS prevention, women's empowerment, adolescent pregnancy and youth protection.

1120 Nineteenth Street NW Suite 600
Washington DC 20036 USA
ph 202 785 0072/fax 202 785 0120
E-mail PSIWash.org

Project Concern International (PCI)

Dedicated to saving the lives of children and mothers worldwide with basic medical care, nutritious food, clean water and health education, PCI emphasizes education of local volunteers.

3550 Afton Road
San Diego CA 92123 USA
ph 619 279 9690/fax 619 694 0294

Save the Children

Save the Children's diverse program activities include child survival, women's health care, family planning and nutrition program initiatives.

54 Wilton Road
Westport CT 06880 USA
ph 203 221 4000/fax 203 454-3914
URL <http://www.oneworld.org>

1200 G Street, NW Suite 800
Washington DC 20005 USA
ph 202-434 8976/fax 212 637 9362

New York Office
333 East 43rd Street
New York NY 10017 USA
ph 212 682 6881/fax 212-661 3438

Unitarian Universalist Service Committee (UUSC)

UUSC provides support to local projects, including community health worker initiatives, as well as research, information and counseling in reproductive health.

130 Prospect Street
Cambridge MA 02139 1813 USA
ph 617 868 1813/fax 617-868 7102
E-mail postmaster@uusoc.org

World Concern Development Organization (WCDO)

The provision of medical services, equipment, medicines and nutrition education are part of WCDO's activities.

19303 Fremont Avenue north
Seattle WA 98133 USA
ph 206-546 7201/fax 206 546-7269
E-mail tdl@crista.wa.com

World Education

Among World Education's many information education and communication programs are several activities in maternal and child health education.

210 Lincoln Street
Boston MA 02111 USA
ph 617 482 9485/fax 617 482-0617
E-mail jennifer_bohn@wpooffice.jsi.com

World Health Organization (WHO)

The objective of WHO is the attainment by all peoples of the highest possible level of health. In support of this objective, WHO promotes technical cooperation, assists governments in strengthening health services, furnishes technical assistance, promotes the improvement of nutrition and hygiene, establishes international health standards and makes recommendations on public health practices.

Avenue Appia 20
1211 Geneva 27
Switzerland
ph 41 22 791 21 11/fax 41 22 791 07 46
E-mail info@who.ch
URL <http://www.who.int>

World Relief Corporation (WRC)

WRC designs and manages child survival programs and other preventative health programs

PO Box WRC
Wheaton, IL 60189 USA
ph 708 665-0235/fax 708 653 8023
E mail 71211 1134@compuserve.com

201 Route 9W North
Congers, NY 10920 1797 USA
ph 914 268-1797/fax 914 268 2271

World SHARE

World SHARE provides resources to support community institutions

6950 Friars Road
San Diego CA 92108-1137 USA
ph 619-686-5818/fax 619 686 5815
E mail mtruax@wshare.com

World Vision Relief & Development

World Vision's health activities include support and technical assistance to training, education, nutrition and disease control programs. This organization places special emphasis on maternal and child health.

919 West Huntington Drive
Monrovia CA 91016 USA
ph 818 357-7979/fax 818 303-7651
E mail bseiple@mary.wvus.org

International Headquarters
101 West Huntington Drive
Monrovia CA 91016 USA
ph 818 303 8811/fax 818 301 7786

Washington Office
220 I Street, NE
Washington DC 20002 USA
ph 202 547 3743/fax 202 547 4834
E mail tdewey@mary.wvus.org

Appendix C **Glossary of Terms**

Anemia

A condition in which there is a reduction in the number of red blood cells or in the amount of hemoglobin present in them

Birth Asphyxia

Lack of pulse, impaired or absent breathing in the newborn

Birth Trauma

This category includes infant injuries sustained at birth or during the birthing process, including cuts and bleeding, injuries to the central and peripheral nervous systems, scalp, skeleton and certain other organs

Early Neonatal Death

A death occurring to an infant between birth and the first completed 7 days after birth

Eclampsia

A condition particular to a pregnant or newly delivered woman, characterized by convulsions, followed by more or less prolonged coma. The woman usually has hypertension (high blood pressure), edema (swelling from retention of watery fluid) or proteinuria (abnormal amounts of protein in the urine). The convulsions may occur in the before, during, or immediately after birth

Essential Obstetric Care (EOC)

The World Health Organization defines EOC as the minimum package of health care interventions needed to manage complications of pregnancy and delivery. EOC includes manual procedures (e.g.,

removal of the placenta), medical treatment (e.g., of infection, eclampsia, anemia), management of women with problem pregnancies (intensified antenatal care), and surgical obstetrics (e.g., cesarean delivery)

Female Genital Mutilation (FGM)

Traditional surgical practice of cutting away all or part of the external genitalia of a girl or woman. This practice has three basic types. In the first, the clitoris is partly or completely removed. In the second, the clitoris along with small skin folds of the outer genitals are removed. In the third type, infibulation, the outside genitals are cut away and the vagina is sewn shut. A small hole is left through which urine and blood can pass.

Fertility Rate

The average number of children a woman is expected to bear in her lifetime given the current birth rate.

Formal Health Provider

In this Guide, a formal health provider is a health provider working in the formal health establishment and who has received at least some clinical training. This definition excludes traditional birth attendants who may or may not have received some clinical training.

Hemorrhage

The escape of blood from blood vessels. Antepartum (prenatal) hemorrhage is that which occurs after the 20th week of gestation but before delivery of the baby. Postpartum hemorrhage is the loss of 500ml or more of blood from the genital tract after delivery of the baby.

Hypertensive Disorders of Pregnancy

High blood pressure occurring as a result of pregnancy.

Infibulation

See female genital mutilation

Intrauterine Growth Retardation (IUGR)

When a baby does not grow normally while in the uterus as when the mother is malnourished, has malaria, tuberculosis anemia, or smokes tobacco

Low Birthweight

Refers to an infant who at birth, weighs less than 2500 grams

Maternal Death

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the site or duration of that pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Maternal deaths can be classified as direct or indirect

Maternal Death, Direct

The death of a woman from complications of pregnancy (including abortion), delivery, or the postpartum period or from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above

Maternal Death, Indirect

The death of a woman from a preexisting disease or a disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by the pregnancy

Maternal Mortality Ratio (MMR)

Number of maternal deaths per 100 000 live births in a given population in a given period of time. The maternal mortality ratio reflects a woman's risk of dying each time she becomes pregnant

Neonatal Death/Neonatal Mortality

The death of an infant between birth and the first completed 28 days after birth

Newborn/Neonate

Refers to a baby in the period immediately succeeding birth and continuing through the first 28 days of life. In this Guide, the term, newborn refers to babies born with the potential to live, regardless of whether they actually survive and regardless of whether they are later misclassified as a stillbirth

Obstetric Fistulae

An opening or hole between the vagina and the bladder or rectum. Women with this problem continually leak urine or stools from their vagina

Obstructed Labor

A labor in which normal progress is arrested by mechanical factors, requiring operative intervention

Oxytocics

Drugs which stimulate forceful uterine contractions in order to induce or accelerate labor and to prevent or treat postpartum hemorrhage

Perinate

The perinate is a term referring to a fetus or newborn in the perinatal period. The perinatal period begins at 22 completed weeks (154 days) of gestation (the time when the fetus generally weighs 500 grams) and ends seven completed days after birth

Perinatal Death

Death occurring between 22 completed weeks (154 days) of gestation through the first seven completed days after birth. Perinatal deaths include stillbirths and early neonatal deaths

Preterm Birth

A birth occurring at less than 37 completed weeks (259 days)

Professionally Trained Provider

In this Guide professionally trained provider refers to doctors (specialist or non-specialist) and/or persons with midwifery skills who can diagnose and manage obstetric and newborn complications as well as normal deliveries. These providers have sufficient professional training to provide safe and appropriate routine and essential obstetric care during pregnancy, labor and delivery, in the postpartum period, and with the newborn. Professionally trained providers are a subset of formal health providers.

Puerperal Infection

Infection that occurs during the period after childbirth. See also puerperal sepsis.

Puerperal Sepsis/Sepsis

Infection of the genital tract occurring to a woman any time between onset of rupture of the membranes or labor and 42 days postpartum. In addition to fever, at least one of the following must also be present: pelvic pain, abnormal vaginal discharge (e.g., presence of pus), foul or abnormal smelling

discharge, or a delay in the rate at which the uterus reduces in size.

Spontaneous Abortion

Loss of a fetus which occurs before 22 weeks of gestation (or when the fetus weighs less than 500 grams) and which occurs without instrumentation or medical intervention.

Stillbirth

Birth of an infant who shows no evidence of life (e.g., does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles).

Traditional Health Provider

Health providers who work in the community and who have gained their skills primarily through experience rather than through professional clinical training following a Western medical model. Traditional birth attendants are one type of traditional health provider.

Uterine Prolapse

A condition where the uterus protrudes into the vaginal canal.

Comments Please!

We want to hear from you! Please tell us how you used the manual, how useful you found it, and give us any suggestions you have for improving it

Please tell us your contact information.

Name _____ Organization _____

Phone _____ E-mail _____

Address _____

I am a researcher a program planner other _____

Your comments

You don't have to use this form, but we are especially interested in knowing

Whether you used this Guide to plan and conduct Safe Motherhood field work. If so, please describe:

Other purposes for which you used this Guide:

How useful it was for your purpose:

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What was least useful:

Suggestions for changes/any other comments:

You can get in touch with us by...

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Fax (703) 528-7480

Mail MotherCare/JSI
1616 N Fort Myer Drive, 11th floor
Arlington, VA 22209
USA

Thank You!

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