MODULE I:

MANUAL OVERVIEW

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BACKGROUND

Recent information on the pattern of infant mortality in Guatemala indicates that approximately 50% of all infant deaths occur during the first month of life, and the majority of those during the first week, indicating the urgent need for improved perinatal management. Using as a base the infant mortality rate (IMR) of 73.4 per 1000 live births reported in Guatemala in 1987, the aggregate intrapartum and neonatal mortality rate for the country has been estimated to be greater than 36 per 1000 live births. Results of investigations recently performed by the Institute of Nutrition of Central America and Panama (INCAP) confirm the high maternal mortality rate, which varies between 200 and 230 per 100,000 live births in 1989-1990. Official information at the national level demonstrated maternal mortality rates at the community level to be similar to those found in the Quetzaltenango study.

The care given during labor and delivery and to the newborn frequently occurs at home, especially in rural areas. Traditional Birth Attendants (TBAs) attend approximately 60 to 70% of all births in Guatemala, and this percentage rises to close to 90% in some of the rural highlands where the perinatal mortality and morbidity are higher. Because the Ministry of Public Health and Social Assistance facilities can attend only some 20% of births, one must accept that the TBA is a key element in any program to reduce peri-neonatal and maternal mortality, especially in rural areas.

The Ministry of Public Health and many other organizations that work in the health sector have conducted training programs for TBAs for many years. The impact of these programs in diminishing the rates of peri-neonatal and maternal mortality, however, has not been substantial. Why? This was one of the first questions the researchers asked when the Quetzaltenango Maternal and Neonatal Health Project began in 1988.

In search of ways to improve the care given to pregnant women and their newborn, a study was conducted jointly with the Quetzaltenango Health District, the Quetzaltenango General Hospital, regional TBAs and INCAP. Obstetrical and neonatal care was investigated by asking: What is actually being done by TBAs, health care personnel, families? How is it being done? When? Why? The principal causes of maternal and neonatal death were also investigated so that the intervention could be directed at these causes.

The study found that 92% of the direct obstetric deaths are due to three causes: hemorrhage, sepsis and pre-eclampsia. Peri-neonatal mortality is caused by one of three conditions in 96% of cases: asphyxia, neonatal sepsis and complications related to prematurity and low birthweight.

The study showed that, during training sessions, the TBAs received a large amount of information about how to attend a normal delivery, hygiene, cholera, the chain of command of the Ministry of Public Health and other topics. However, they usually did not receive specific information about how to detect and manage these complications. In the case of postpartum hemorrhage, for example, the TBAs were told that they should refer patients with postpartum hemorrhage to the hospital, but they did not receive information about how to detect it, how quickly women can die, and what immediate measures should be taken to improve the possibility that the woman will survive the trip to the hospital (massage the uterus, have the woman urinate, stimulate the nipple, give fluids).

Similarly, the majority of the TBA trainers had not received recent continuing education about the management of obstetric and neonatal complications and were therefore unable to transmit this knowledge to the TBAs. The TBA trainers had not received training in participatory methods adapted for teaching adults. Classes were usually lecture style, using very technical language in long sessions with little or no practical activities.

> The purpose of this manual is to train traditional birth attendants to take appropriate action to save the mother's and/or baby's life when threatened by obstetrical or perinatal emergencies.

Why did the researchers focus specifically on these complications and not others?

As mentioned, studies in Guatemala and other developing countries indicate that these are the causes of approximately 90% of the maternal mortality directly due to obstetrical causes, and 92% of the peri-neonatal deaths not caused by tetanus. The incidence of tetanus is very low in the Guatemalan highlands, whereas neonatal infections that can be fatal are common. The majority of these maternal, perinatal and neonatal deaths can be prevented by early detection and appropriate management that must begin in the community.

Why not provide education in other important areas, for example the use of delivery equipment or the cleaning of floors? This knowledge is or may be very useful in diminishing morbidity, but it does not help TBAs save the life of a mother or a baby when a complication arises.

The traditional risk-based approach which has been promoted in our country is not used in this manual. In the traditional risk-based approach, a series of variables or risk factors, such as age, primiparity, grand multiparity, malnutrition, illiteracy, and bad obstetrical history, are used to identify "high risk" women. If one applies this focus with these risk factors to the study's population, more than 80% will be high risk and will need to deliver in the hospital. If one refers only the "primigravida" (who represent 30% of all deliveries), the capacity of the nation's hospitals would be exceeded, as they can attend only 20% of the births nationwide.

For these reasons, this manual uses the "first-aid emergency" approach to prevent mortality due to the principal causes of death in mothers and babies. Only with the adequate management and referral of these cases can maternal and peri-neonatal death be significantly reduced.

In the past, these themes have been included in TBA education, but the instruction has not focused on detecting complications and managing them appropriately, thereby saving lives. In addition, the majority of TBAs in Guatemala are older and illiterate. It is difficult for them to retain the large amount of information presented in a training course. As all of the theories on adult education show, the contents of a training course must respond to the priorities identified by the TBAs themselves, must have a very specific focus, and must be constantly and continuously reinforced. The TBA is an adult who is trying to learn and improve herself. If the training focuses on a few key points that address the urgent problems that the TBAs face in their work, they will be motivated to learn. It is easier for them to retain the information when they see how useful the new knowledge is.

Because traditional educational methods have not been very effective, this training manual has been designed to help the educator use participatory training methods and inexpensive, easily constructed materials. Using this focus, we hope to reduce the rates of maternal, perinatal and neonatal mortality in our communities.

In some regions the patterns of maternal and peri-neonatal mortality are different due to other diseases, such as malaria and tetanus. The focus of any educational intervention must, of course, be adapted to the specific needs of each area. Similarly, the educator should use his or her own criteria in utilizing the tools provided in these modules. Everything does not need to be used.

Approximately two hours is needed to develop each lesson. The duration of each lesson depends on the characteristics of each group. In the Quetzaltenango experience, the total duration of the course was 25 to 30 hours. Daily sessions lasted 5-6 hours.

This manual does not include training on the safe birth kit, because there is no clear definition yet of the most appropriate birth kit. It is suggested that the equipment handed out to TBAs be individualized for each specific group based on their perceived needs, local circumstances and resources available. The training course should not revolve around the equipment; this distracts the TBAs' attention from technical content. Many experiences have shown that equipment is not always used appropriately or not used at all by the TBAs.

ORGANIZATION OF THIS MANUAL

This manual has six modules:

1. Manual Overview
2. Adult Education and Participatory Techniques for Group Education
3. Technical Information for Trainers of Traditional Birth Attendants
4. How to Create Visual Materials to Train Traditional Birth Attendants
5. Technical Information for Traditional Birth Attendants
6. Planning and Follow-up for Training Courses for Traditional Birth Attendants

To facilitate learning, the manual is subdivided into different modules and are ordered in logical progression, as follows:

• Why use this new method?	Module 1
• How to teach better	Module 2
• What to teach	Module 3 and Module 5
• What visual materials to use	Module 4
• How to follow-up training sessions	Module 6

WHO DEVELOPED THIS MANUAL?

The format, language and visual support material were tested in the Quetzaltenango Health District and were revised by health care personnel from other areas of Health Regions VI and VII. We received suggestions from graduate nurses, auxiliary nurses, doctors and rural health technicians and validated the material for this second edition with 500 traditional birth attendants. For the technical aspects of these modules, we had the support of anthropologists, adult education experts, obstetric nurses, obstetricians, pediatricians, neonatologists and perinatologists.

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