

PART FOUR

ACTIVITIES WITH MOTHERS AND CHILDREN

Most trainers of health workers agree that activities with mothers and children are the most important part of health work in a community. This is because . . .

- Women and children make up more than half the people (up to 75%).
- The health needs of mothers and children are especially great.
- Mothers and older children are the main providers of care for babies and younger children, whose needs are greatest of all.



Part Four of this book has three chapters:

In **Chapter 22**, we consider activities that help safeguard the health of pregnant women, mothers, and small children. We discuss the role of health workers in coordinating prenatal and ‘under-fives’ programs. But we also stress the importance of having local mothers and midwives take leadership in running these activities. Baby weighing is discussed. We explore creative teaching aids that help mothers understand Road to Health charts. Finally, we look at women’s special strengths.

In **Chapter 23**, we examine family planning. We include this as a separate chapter, not because we feel birth control should be separated from the rest of mother and child health care. Rather, we do this because of the confusing politics and abuses connected with family planning. Too often, in the many arguments concerning birth control, the interests of the poor are forgotten. In this chapter, we discuss the conflicts of interest that often exist, and consider ways in which health workers can help people plan their families on their own terms.

Chapter 24 is about “Children as Health Workers.” The material in this chapter is based on the CHILD-to-child Program. Many of the original CHILD-to-child activities were field tested by health workers and school teachers in Ajoya, Mexico. They include simple teaching aids and exciting approaches that help children discover things for themselves. The program attempts to bring schooling closer to children’s lives and needs, and to place the focus of education on helping one another. The health worker can play an important role in this process.

THE ROLE OF FATHERS IN CHILD CARE

Traditionally, in most areas, it is the mother who takes the main responsibility for small children. But fathers are also responsible—or should be. In some societies, fathers share part of the child care or even take the children to the under-fives clinic. Although in this part of the book we mainly refer to mothers, the participation of fathers in child care should be encouraged.

Since mothers are the ones who generally take the children to 'under-fives' activities, it may be a good idea to arrange special sessions for fathers, or for fathers and mothers together. That way, the fathers will be more supportive of new ideas about child care and nutrition that mothers learn in the under-fives program.



Not only mothers and fathers, but also older brothers and sisters have a very important role in the care of small children. This is the subject of Chapter 24.

Pregnant Women, Mothers, and Young Children

To help improve mothers' and children's health, health workers need to lead or organize activities in the following areas:

1. Prenatal care (for pregnant women)

- history and check-ups for problems
- health education with emphasis on nutrition and safety (and medicines that could harm the baby)
- tetanus vaccinations and other precautions (iron supplements when needed)



2. Birth—special care for 'high-risk' mothers and babies

- cooperation and learning with local midwives
- special precautions to prevent infection and hemorrhage
- referral to hospital for high-risk deliveries and complications
- care of the newborn



3. Mothers and young children

- observation of children's growth and health
- health education with a focus on nutrition, cleanliness, safety measures, and activities that help children's bodies and minds to grow strong and active
- oral rehydration
- vaccinations
- diagnosis and treatment of common health problems
- care and attention for children who have special problems



Health workers in Ajoya, Mexico leading mothers in a discussion about nutrition.

4. Child spacing or family planning



In this chapter, we do not go into the details of each of these areas. They are discussed in *Where There Is No Doctor, Where Women Have No Doctor*, and in many other books on mother and child health. Instead, we look at common difficulties that health workers encounter in promoting mother and child health activities. We explore approaches to training that help avoid or overcome some of these difficulties. And we give examples of methods and aids that health workers can use to help mothers learn about the health needs of their children.

Getting started: Have mothers and midwives take the lead

Health workers, especially if young, single, and from the village where they work, often have difficulty in promoting prenatal and mother and child activities. For them to be advising older women about pregnancy, birth, and child care may seem ridiculous or even insulting.

In such cases, it is a good idea for the young health worker to explain her problem to some of the respected older women, including local midwives. Rather than trying to tell these older women what to do (which might offend them), the health worker can ask them for their advice and help in organizing and running the prenatal or mother and child program. That way the young health worker does not lead the activities, but stays in the background, sharing the information and ideas that she learned during training.

DOÑA MARIA, I'M HAVING TROUBLE GETTING A MOTHER AND CHILD PROGRAM STARTED. THE PEOPLE TRUST AND LISTEN MORE TO YOU. CAN YOU HELP ME?



Asking people's help is the best way to win their cooperation.

If health workers are to seek advice and leadership from more experienced persons in their communities, it is best if they get used to doing this during their training. Encourage students to invite local mothers, midwives, and other experienced persons to take part in classes and in actual mother and child health activities conducted during the training course.

PRENATAL CARE

Education and health activities with pregnant women are among the most important areas of mother and child care.

You will find information concerning prenatal care on pages 250 to 253 of *Where There Is No Doctor*. Ideas for adapting prenatal advice about nutrition to local customs and beliefs are found in the story beginning on page 13-1 of this book.



Holding special prenatal clinics at a separate time or place from the children's clinic usually does not make sense. Most pregnant women already have small children, so it is more convenient (for them) if you **include prenatal care as part of an under-fives program. This can combine education, preventive care, and treatment for both women and children.**

Young women who are pregnant for the first time often will not come to any kind of clinic. But since first pregnancies involve more risk, special care is called for. Health workers can visit the homes of these women and win their trust and cooperation.

During their training, students may be able to visit pregnant women in the community, and help them take care of their needs. The women will feel better about this if the instructor or local midwife first asks them to help ‘teach’ the students. They can discuss their experiences of pregnancy and help the students learn to ask questions and give advice in ways that most women will appreciate.

Before beginning visits to pregnant women, it also helps if students practice with role plays in class. On page 21-13 there is an example of a role play of a prenatal check-up. In it, students act out how to examine a woman, and practice filling out the RECORD OF PRENATAL CARE.

Note: In a mixed group of students, the girls or women may be shy about role plays involving pregnancy or birth, especially if these involve physical examination. In such cases, encourage the male students to dress up and play the role. This not only makes the class more fun, it is also a valuable lesson for the male health workers to experience—if only in make believe—what a woman goes through during pregnancy, prenatal exams, and childbirth.



Here a male health worker in Ajoya, Mexico plays the role of a pregnant woman, complete with mask of pregnancy and swollen ankles. Other students ask questions and examine ‘her’.

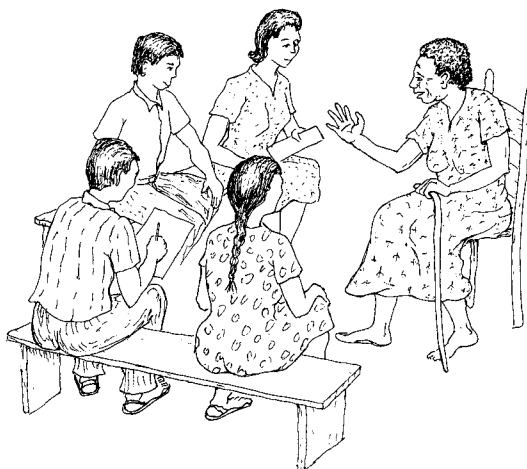
LEARNING ABOUT BIRTH

In a 2-month training course, health workers may not gain enough experience to be able to attend births alone (except in emergencies). Therefore . . .

**Prepare health workers to assist, learn from,
and share ideas with local midwives or birth attendants.**

A good way to do this is to **invite local birth attendants to take part in the classes on childbirth.** (See the next page.)

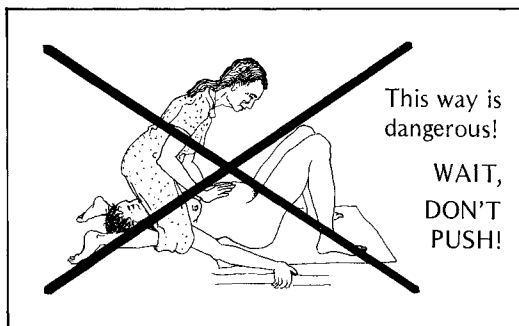
One of the most exciting classes we have seen took place when an old midwife from a neighboring village came to the Ajoya clinic. She had come with some questions of her own about 'modern methods' of midwifery. So one of the instructors invited her to a childbirth class for new health workers. Together, the students and the midwife explored what they knew, what she knew, and what each still wanted to learn. Together they drew up lists of information and ideas that they could share with each other (see below).



Not surprisingly, their ideas were not always in agreement. But each showed respect for the other. The midwife invited the students to attend births with her. And the students invited her to future classes.

EXAMPLES OF IDEAS AND INFORMATION THAT HEALTH WORKERS CAN SHARE WITH TRADITIONAL MIDWIVES:

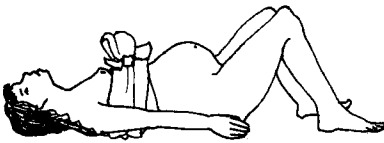
- Foods that will help make women stronger during childbirth.
- How to check for anemia and other danger signs during pregnancy.
- When to refer a woman to a hospital to give birth (before trouble starts, if possible).
- The importance of **not** sitting on the mother or pushing on her belly to get the baby out.
- The proper use of oxytocics (to control bleeding after birth, not to speed up labor!).
- How to prevent tetanus of the newborn (with special emphasis on helpful and harmful local traditions—see p. 184 of *WTND*, and p. 22-6 of this book).
- The need to hold the baby below the level of the mother until the cord is tied (this provides the baby with extra blood and makes him stronger).
- The importance of putting the baby to the breast right after birth (to help control bleeding and push out the placenta).
- The value of *colostrum* (the mother's first milk) for the baby.
- The importance of urging mothers to **breast feed**, not bottle feed their children.
- Signs of danger and aspects of care for the newborn.
- The importance of the mother eating a variety of nutritious foods following birth (and the danger of avoiding eggs, beans, meat, and fruit, as is the tradition in some places).
- Ways for midwives who cannot read to keep records and to send information with mothers or babies they refer to hospitals (see examples on page 22-7).



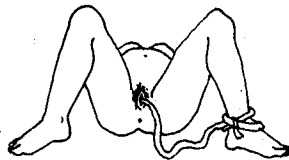
EXAMPLES OF INFORMATION AND EXPERIENCES THAT TRADITIONAL MIDWIVES CAN SHARE WITH HEALTH WORKERS:

- Personal experiences and insights from many years of attending births.
- How to respond to the common questions and concerns of pregnant women in terms of the local culture and language (see the story of Janaki and Saraswati, p. 13-1).
- How to feel the position and size of the unborn baby; doing this in a friendly, confidence-building way.
- Safe ways to help make labor easier and shorter:
 - Allow the woman in labor to eat a little, if she feels hungry.
 - Give her herbal teas and other drinks.
 - Permit the woman to get up and walk around, or to change to any position that is comfortable.
 - Show her real babies or pictures of babies happily nursing. The warm feeling this produces in the mother helps her womb contract strongly. If labor slows down, let a baby or caring person suck the woman's breasts.
- Ways to give comfort and to calm the fears that can slow or stop labor:
 - Avoid letting the room get too crowded with friends and relatives.
 - Avoid having those present discuss cases of death or misfortune in childbirth.
 - Reassure the woman, hold her, massage her, and comfort her. Let her feel your confidence that all is progressing well.
- The need of the woman in labor to have a kind and sympathetic person stay close to her and offer support. This person could be the midwife, or the woman's sister, mother, or close friend—or, if acceptable, her husband.*
- Knowledge of local beliefs and traditions relating to childbirth.

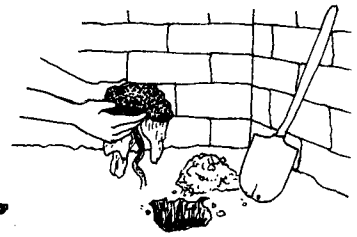
In Mexico, for example, some village women believe it is essential to take the following preventive measures:



Using a 'belly band' to prevent the baby from trying to come out through the mother's mouth.



Tying the umbilical cord to the mother's leg until the placenta comes out, to keep it from crawling back inside.



Burying the placenta in a corner of the room to protect the mother's spirit.

Traditional midwives can tell health workers about common local beliefs and discuss ways to respect them when attending births. If a belief is helpful, health workers can encourage it. If harmless, they can go along with the custom to help the family feel more confident and comfortable. If it is harmful, they should help people understand why. Or they may be able to build on local beliefs to help explain new and healthier ways. (See the story from Nigeria on the next page.)

*A study in the *New England Journal of Medicine* showed the importance of having a familiar, loving person present at childbirth. The average length of labor for first births in a Guatemalan hospital was 8.8 hours for mothers accompanied by a sympathetic woman, and 19.3 hours for women who were attended only by nurses and doctors. Also, those with companions had fewer birth complications and felt more warmly toward their new babies. Does this speak in favor of home births?

Adapting new ideas to old beliefs

In Lardin Gabas, Nigeria, health workers learn to teach new ideas through the local tradition of story telling (see p. 13-5). They also learn to adapt their health advice to local beliefs.

An example is a story they tell to help mothers and midwives learn about the prevention of tetanus in newborn babies. Midwives in Lardin Gabas traditionally rub dry dirt or cow dung into the end of a baby's cut cord to prevent bleeding. The result is that babies often die of tetanus from the infection that enters through the cord. But people think the illness is caused by a certain kind of bird that lands above the baby. They believe that when the bird sings, the spirit of the baby flows out through the cord, causing the baby's body to stiffen with spasms.

The story the health workers tell describes how a village midwife learned to prevent this form of infant death. After carefully washing her hands, she would tightly tie the baby's cord with clean strips of cloth, then cut it with a boiled bamboo knife. Later, when the bird landed over the baby and sang, the baby's spirit could not escape because the cord was tightly tied.



Questions for discussion:

If you tell this story to a group of health workers-in-training, have them discuss its strengths and weaknesses. Ask questions like these:

- In what ways does this story help mothers and midwives gain greater understanding and learn healthier practices?
- In what ways does the story mislead people or block their understanding of important causes of disease?
- Which is more likely to help people gain control of the events that affect their health and lives, a magical or a scientific understanding of causes and results?
- What are some problems that might result from the fact that the story makes it seem like tying the cord, rather than cleanliness, is the key to preventing tetanus? Can you retell the story in a way you think is better?

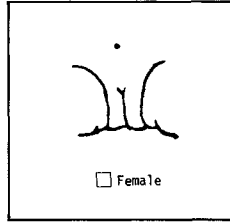
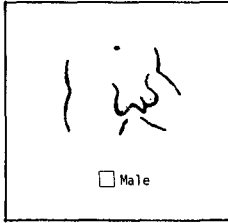
Reporting information about births

Keeping records of prenatal care and providing accurate information when referring emergency births or complications to a hospital is an important part of any birth attendant's job. On page 10-8, we discuss the need to keep such forms simple and useful. Health workers and midwives who can read may want to use the RECORD OF PRENATAL CARE (*WTND*, p. 253). But for those who cannot read, other solutions are needed.

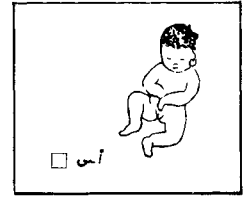
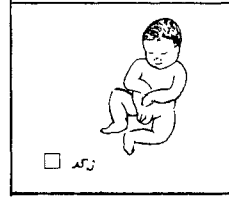
Health workers in Ecuador have developed a reporting system for midwives, using different colored cards. Local midwives learn to associate each color with a specific problem: red if the mother is hemorrhaging, white if she is very *anemic* (pale), blue if the baby has delayed or difficult breathing, and yellow if he is *jaundiced* (yellow).

In Indonesia, a birth report form using pictures was developed for midwives who cannot read. The form was later adapted for use in Egypt, with the help of a group of traditional midwives. Here are some of the changes they suggested.

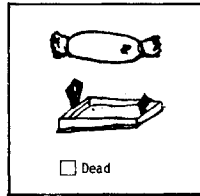
The Egyptian midwives found these drawings on the Indonesian form too abstract.



They said it would be better to draw the whole baby, with an earring for the girl (since all baby girls in Egypt are given earrings).



They thought this → Indonesian drawing of a dead baby looked more like a sweet wrapped in paper.



They suggested that the dead baby be shown wrapped like a mummy, as is often done in Egypt.



And they suggested changing the red cross on the ambulance



to the red crescent used on Egyptian ambulances.



The revised Egyptian form is shown below. Read it from right to left. → start here

وسائل منع الحمل التي سوف تستخدمها الأم بعد الولادة	حصول الأم للمستشفى	حالة الأم بعد الولادة	كمية الدم أثناء وبعد الولادة	حالة المولود (ت)	وزن ونسب المولود (ت)	نوع العنق
<input type="checkbox"/> حبوب		 <input type="checkbox"/> طبيعية		 <input type="checkbox"/> طبيعي	 أكثر من ٤٥٠٠ جم	 <input type="checkbox"/> بالقصة
<input type="checkbox"/> لولب		 <input type="checkbox"/> ارتفاع في الحرارة		 <input type="checkbox"/> غير طبيعي	 أقل من ٤٥٠٠ جم	 <input type="checkbox"/> بالعمدة
<input type="checkbox"/> حاجز مهبل (عجلة)	<input type="checkbox"/> حوت للولادة أو بسبب مضاعفات	 <input type="checkbox"/> وفاة الأم		 <input type="checkbox"/> وفاة المولود (ت)	 <input type="checkbox"/> تذكر	 <input type="checkbox"/> مستعرض
<input type="checkbox"/> غطاء واقي (كوبت)		 <input type="checkbox"/> وفاة المولود (ت)		 <input type="checkbox"/> أني	 <input type="checkbox"/> توأم	
<input type="checkbox"/> حقنة	<input type="checkbox"/> لم تحوّل	 <input type="checkbox"/> وفاة المولود (ت)	<input type="checkbox"/> حدث نزيف	 <input type="checkbox"/> أني	 <input type="checkbox"/> توأم	
<input type="checkbox"/> لم تتطلب استخدام أي وسيلة						

Reporting form for traditional birth attendants in Egypt, adapted from an Indonesian form with the help of local midwives. (Taken from *Salubritas*, American Public Health Association, July, 1980.)

TEACHING AIDS FOR LEARNING ABOUT BIRTH

In a short training course in a village setting, health workers usually do not have a chance to attend many births. Good teaching aids are therefore essential. The more lifelike they are, the better. But it is important that the aids used be ones that the students can make themselves at low cost. That way they can use them for health education with mothers and midwives in their own villages.

On page 11-3, we showed 3 models for teaching about childbirth: one made of plastic, one of cardboard, and one a real person. Of these, the plastic model is least appropriate because it cannot be duplicated by the health workers.

The cardboard box model is appropriate because of its simplicity. Also, the back flap can be cut to form breasts, so students can practice putting the baby to the breast right after birth. This is important because it helps to prevent hemorrhage and to push out the placenta.



A male health worker in the Philippines 'delivers a baby'.

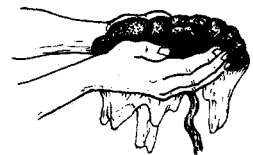
An even more appropriate teaching model (where culturally acceptable) is a real person with a doll baby hidden inside her clothing. The person wears a pair of pants with the crotch cut to form a 'birth opening'. This way, the 'mother' and the birth attendant can act out all the emotions and events of childbirth.

Women may be embarrassed to act out childbirth before a mixed group. But even when they are not, it is a good idea to have a man act the part! This way, men become more sensitive to the woman's situation during labor.

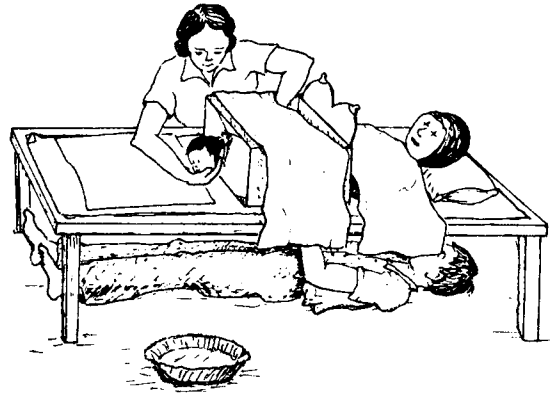
Babies for these demonstrations can be made of cloth stuffed with rags or straw, or children's dolls can be used.



The placenta can be made of red cloth sewn so that the lobes can be spread and inspected. Make the membrane of thin plastic (cellophane).



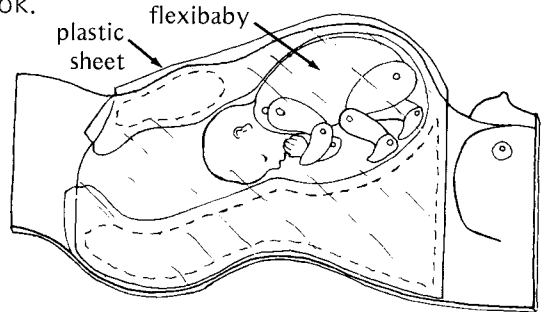
If having a real person act out childbirth is not culturally acceptable in your area, try using the cardboard 'birth box' instead. To make the demonstration more lifelike, you can put the box on a cot, and have a person lie underneath.



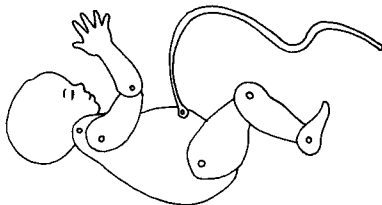
The person underneath can push on the box to show contractions of the womb, and make panting and groaning sounds and talk as the 'woman' gives birth.

A teaching aid to help health workers and mothers see the position of the baby inside the womb was invented by Pablo Chavez, the village health worker who has done some of the drawings for this book.

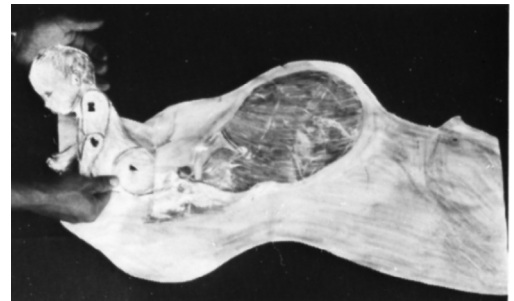
Pablo made a cardboard figure of a woman's body, with a window cut out to show the inside of the womb. This he covered with a clean piece of old X-ray film to form a transparent pocket.



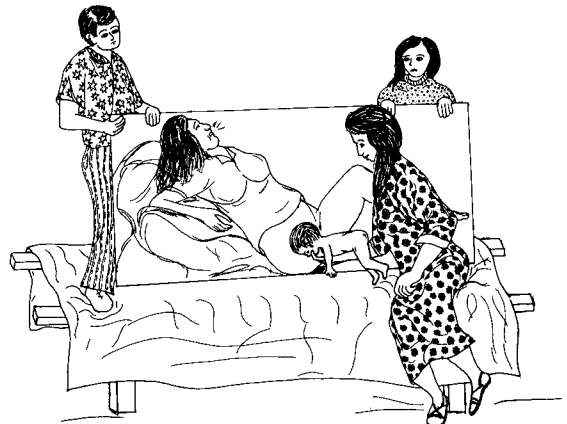
He also made a flexible baby model from pieces of cardboard and some rivets.



The 'flexibaby' can be placed in the 'womb' in any position, and then used to demonstrate the different presentations of birth (head first, butt first, foot or hand, etc.).

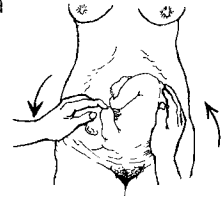


Another way to show the different birth positions is to use a real baby together with a drawing of a woman giving birth. A mother holds her baby in front of the picture, and shows how it would be delivered in various positions. (See also p. 12-7.)



Learning about complications of childbirth

Sideways babies: Village midwives are sometimes able to turn a baby that is sideways in the womb by *gently* handling the woman's belly. But this takes skill and great care (see *Where There Is No Doctor*, p. 267). The birth attendant must **never use force**, as this could tear the womb and cause the mother to bleed to death. Usually it is best to try to get the mother to a hospital.



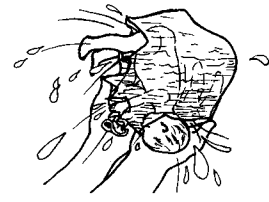
To help health workers recognize the danger in trying to turn the baby, and the need to be very gentle, the Ajoya health team invented this teaching aid:



They put a small plastic doll inside a balloon and filled the balloon with water. (It is hard to get the doll into the balloon. You could try using a plastic bag instead.)



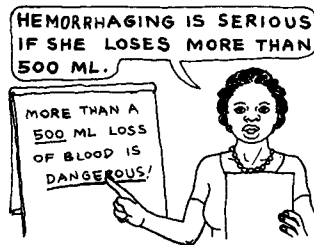
They asked students to pretend it was a baby in a womb. Students then tried to turn the baby to line it up with the opening.



Although they were careful, the balloon popped! So they learned that the womb, like the balloon, can tear easily if not handled with extreme care.

Dangerous bleeding: Health workers and midwives need to be able to tell the difference between normal bleeding after childbirth and dangerous blood loss.

LESS APPROPRIATE



Instructors often teach that it is normal to lose up to half a liter of blood after giving birth, but that to lose more is dangerous.

It helps if students actually see the quantity of blood.

MORE APPROPRIATE



EVEN MORE APPROPRIATE



But on a rag or sheets, a little blood can look like a lot. Students can easily misjudge. So first show them the quantity, then spill it over cloths or rags. Use red-colored water. To make it thick like blood, use tomato juice or mix some red gelatin powder into the water. Or use blood from a freshly killed animal. (Add sodium oxalate or juice of wood sorrel to delay clotting.)

MOST APPROPRIATE



USE OF THEATER TO CORRECT HARMFUL PRACTICES

Many traditional midwives are more skilled at some aspects of childbirth than are many modern doctors. Some, for example, can successfully turn babies that are sideways or butt first (see p. 22-10).

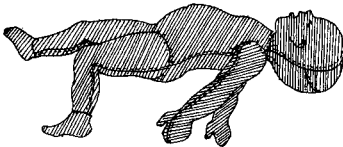
Unfortunately, however, a few commonly accepted practices by midwives are harmful. For example, in Latin America many midwives now use injections of *pituitrin* or *ergotrate* to speed up labor and “give the mother strength.” This can cause the womb to tear and the mother to quickly bleed to death. Or it can cause the blood vessels in the womb to contract so much that the baby suffers brain damage or dies from lack of oxygen.

This new custom is hard to change. Both midwives and mothers believe it is right and modern to use the injections. Midwives argue that if they do not use them, mothers will go to another midwife who does.

To make people aware of the dangers of misusing these strong injections during childbirth, village health workers in Ajoya staged a short skit before the whole community.

In the first scene, Maria begins to have labor pains. She is about to send for her favorite midwife. But a gossipy neighbor tells her that the midwife is old-fashioned. She convinces Maria to call for a modern midwife who uses injections. The modern midwife attends the birth and injects Maria with *pituitrin* to speed things up. The baby is born blue and never breathes.

In the second scene, one year later, Maria is in labor again. But this time she calls her favorite, trusted midwife, Doña Julia. When Maria feels exhausted during the long labor, she begs for an injection “to give me strength.” But Julia explains why that would not be safe. She helps Maria to relax. Soon the baby is born healthy and ‘pink’. Everyone is glad that Julia did not use the medicine.



The baby born dead.
(Made of blue cloth.)



The baby born healthy.
(They used a child's doll.)

At the end of the play, a health worker holds up both dolls and repeats the message:

THERE IS NO SAFE MEDICINE FOR
GIVING STRENGTH TO THE MOTHER
OR FOR MAKING THE BIRTH QUICKER
AND EASIER.

IF YOU WANT TO HAVE STRENGTH
DURING CHILDBIRTH, EAT GOOD FOODS
DURING PREGNANCY: BEANS,
GROUNDNUTS, DARK GREEN LEAFY
VEGETABLES, EGGS, AND CHICKEN.



MOTHERS AND YOUNG CHILDREN—'UNDER-FIVES' CLINIC

The first years of life are when a child's health is most delicate and when good nutrition, cleanliness, and other protective measures are critical. For this reason, many health programs conduct special 'under-fives' clinics. But as with any other health activities, unless the approach is adapted to the local situation, problems are likely to occur.

Two common mistakes:

1. Some under-fives programs focus only on baby weighing, health education, and preventive measures such as vaccination. For curative care, mothers must bring their babies back on a different day. This separation of prevention and cure is unfortunate. Most mothers are busy or have to come a long way to the health center. For many, it is difficult to bring their babies one day for weighing and another day for treatment.



2. Other under-fives programs use curative medicine as a 'magnet'. They attract mothers to monthly baby weighings by giving away colorful cough syrups, diarrhea 'plugs', or other unnecessary medicines. To get the free medicines, mothers sometimes tell health workers that their babies have a cough or diarrhea—even when they do not. This use of 'medicine as a magnet' is wasteful, dishonest, and creates dependency. (Giving out free milk is even worse. It leads mothers to bottle feed rather than breast feed. See p. 27-31.)



To avoid these mistakes, help health workers learn to organize under-fives activities in an appropriate way:

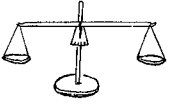
- **Deal with preventive, curative, and educational needs at the same place and time.**
- If there are more children than you could attend on one day, divide them into 2 or more groups and have them come on different days.
- **Do not use either medicine or food giveaways to attract mothers.** Instead, make the educational activities so exciting that mothers will not want to miss them.



WEIGHING BABIES— WHAT PURPOSE DOES IT SERVE?

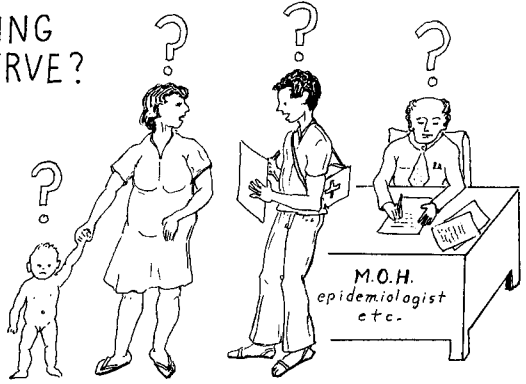
The periodic weighing of babies has become a standard feature of many health programs. But the purpose it actually serves differs greatly from program to program. Instructors and health workers would do well to ask themselves questions like the following:





WHOSE PURPOSE DOES OUR BABY-WEIGHING PROGRAM SERVE?

- What is the real reason that most health workers weigh babies?
- What effect, if any, does this have on the children's health?
- How could the program be improved?
- By whom?



M.O.H.
epidemiologist
etc.




At best, baby weighing serves a valuable purpose. It helps health workers and mothers to discover problems in children's growth and correct them before they become too severe. So **baby weighing helps to protect and improve children's health.**

But in many health programs we have visited, there is little evidence that baby weighing has any real effect on children's health. The purposes it serves may be quite different.

- In some programs, baby weighing has become a mysterious ritual. Or it is done only to fulfill a requirement or impress the supervisors. Little use is made of the weights that are so religiously (and often inaccurately) recorded.
- In other programs, the main purpose of baby weighing seems to be to provide statistics for the health authorities. If babies are only weighed once every 3 or 4 months, statistics are generally the only purpose served. To be of much benefit to the mothers and children, weighing needs to be done more often. About once a month is best.
- In some programs, the chief purpose of the baby-weighing ceremony seems to be social. It gives mothers a chance to come together and talk. (This can be a valuable function of a baby-weighing program, but should not be its only purpose.)

Weighing babies can serve many purposes. But its main goal should be to help meet the health needs of the children. On the next page is an outline of appropriate reasons for weighing babies and how health workers can help achieve the goals they set.

ASPECTS OF AN APPROPRIATE BABY-WEIGHING PROGRAM

Purposes	Who is Most Served	How It Is Done
To find which babies are underweight, and to help mothers correct the underlying problem in time.	Baby (and mother) 	Weigh each baby every month. Explain the weight and what it means to the mother. Seek out and invite 'high-risk' mothers and babies.
To teach mothers about child health and nutrition.	Mother (and baby)	Give appropriate advice, demonstrations, and skits when mothers come to weigh babies. Follow up with home visits as needed.
To encourage self-reliance and responsibility of mothers and other members of the community. 	Mothers (and community health workers)	<ul style="list-style-type: none"> • Have mothers keep children's health charts and learn to interpret them. • Use low-cost or homemade scales and teaching aids made by members of the community. • Build on local customs, values, and home care. • Let some mothers take increasing responsibility for running the baby-weighing program.
To bring mothers together to discuss common problems, explore their causes, and work together toward change.	Mothers (and children, and the whole community)	Lead discussions to analyze needs. Encourage mothers to take part in planning and conducting the weighing program and related activities.
Information or <i>data</i> collection, for determining nutritional needs in community and evaluating progress.	Health team (and community, and health authorities)	Carefully record and periodically analyze the weight records of all children in the community (every 6 months or each year).
To provide an occasion for related preventive and curative activities.	Children and mothers 	If possible, provide at the same time and place: <ul style="list-style-type: none"> • vaccinations • early identification and treatment of health problems • prenatal care • opportunity for family planning

As with almost any aspect of health care, **the way health workers learn about baby weighing during their training will affect how they approach it in their communities.** At worst, a baby-weighing program can be a meaningless and humiliating experience for mothers. At best, it can help bring people—especially mothers—together to better understand and solve their common problems. It can help strengthen their capacity for working together toward change.

The teaching methods used for helping health workers learn about weighing babies will serve a double purpose. Health workers can later use these same methods to explain growth charts to mothers in their villages.

The following ideas for learning about baby weighing and the use of growth charts have been developed by village workers in western Mexico. They have proven especially useful in that region, but may need to be adapted for use in other areas.

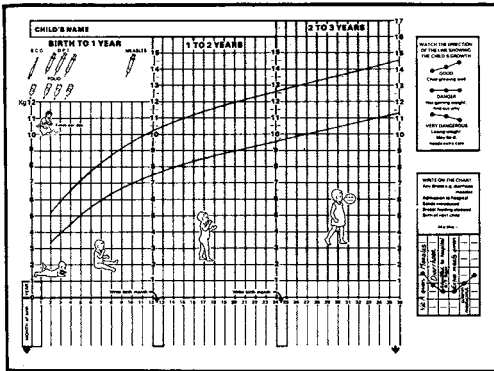
LEARNING TO USE AND UNDERSTAND GROWTH CHARTS

Health workers who are not used to reading charts and graphs may at first have difficulty recording babies' weights accurately or interpreting what they mean. But with appropriate teaching methods, health workers can quickly learn to understand and use weight charts. They also can learn to teach non-literate mothers to follow the growth of their children on the 'Road to Health'.

Choosing an appropriate chart

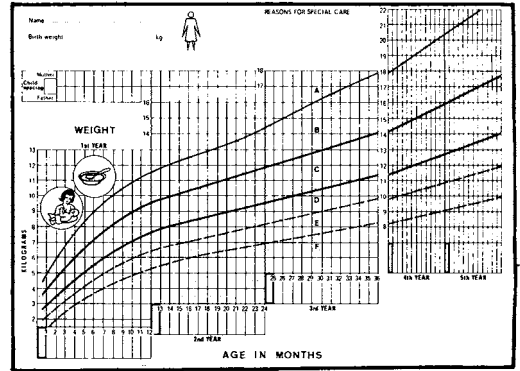
Different types of age-weight charts are used by different programs. We prefer David Morley's 'Child Health Chart' because of its simplicity (see page 25-9 or **Where There Is No Doctor**, p. 299). But others prefer more complex charts.

Preferred by mothers and those who work with mothers



Morley's Child Health Chart has only two curved lines. The lines clearly form a 'road', the 'Road to Health'. Even mothers who cannot read can learn to see whether their children are growing well or falling below the 'Road to Health'.

Preferred by health authorities and data experts



Other charts have additional lines for estimating different degrees of malnutrition. Although perhaps more useful for conducting large surveys, these charts are often confusing to mothers.

Charts for teaching

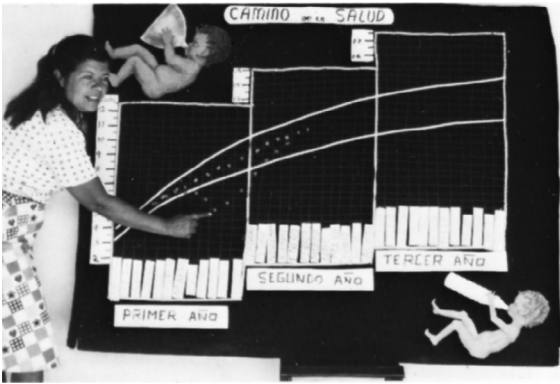
The basic teaching aid for learning to use a growth chart is the chart itself. **Practice charts** can be copied at relatively low cost. Copies of the 'Road to Health' chart are available from TALC (see p. **Back-3**).

A large flannel-board chart is particularly useful for group practice. These can be purchased from TALC—or better still, they can be made by the student health workers or a mothers' group.

If students are not used to drawing, but have experience in sewing, they can make the chart by sewing strings and ribbons onto a flannel cloth. That way they build on skills they already have, rather than struggling with an activity that is foreign to them. (This idea was discussed on page 11-4.)



Sewing a 'Road to Health' chart. (Ajaya, Mexico)



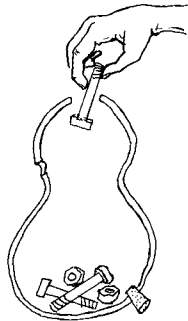
On the large flannel-board Road to Health chart, students can take turns placing small flannel spots representing the ages and weights of children. Use different colored spots to show the growth patterns of different children.

The flannel-board chart in this photo compares the growth patterns of a breast-fed baby and a bottle-fed baby. (See *WTND*, p. 304.)

Making the practice weighing and use of charts seem real—and making it fun!

If model 'babies' and role playing are used, then practice in weighing babies, using growth charts, and giving advice to parents can be fun. At the same time, everyone will learn about child nutrition, diarrhea, and the dangers of bottle feeding.

Make a 'baby' out of clay, a plastic bottle, or a gourd. You can use the same 'gourd baby' used for teaching mothers and children about dehydration (see page 24-18).

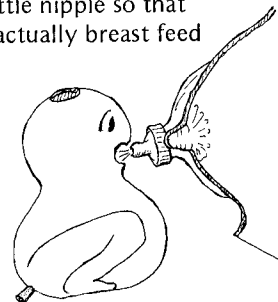


To make the gourd's weight be similar to that of a young baby, put some heavy objects in it. The 'baby' can actually be made to gain weight each 'month'. Simply add increasing amounts of water between weighings.

To make practice more realistic and fun, make a life-size model of a breast-feeding 'mother'. You can use a cardboard carton and a plastic bottle filled with water.



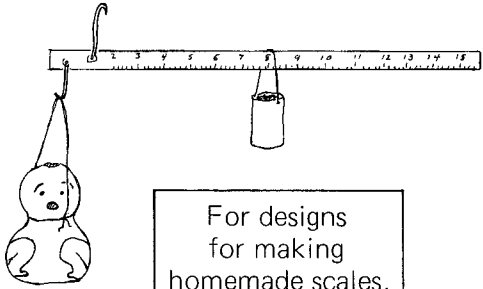
Attach a baby-bottle nipple so that the 'mother' can actually breast feed the gourd baby.



In order to let the 'milk' run quickly into the gourd baby, cut a large hole in the rubber nipple.

Using these teaching aids, the students (or mothers) practice the monthly weighing of the 'baby'. Between weighings, the 'mother' breast feeds the gourd baby so that it gains weight each time.

It helps to hang a calendar on the wall and change it to the next month before each weighing. This helps everyone understand that the skit represents a period of several months.

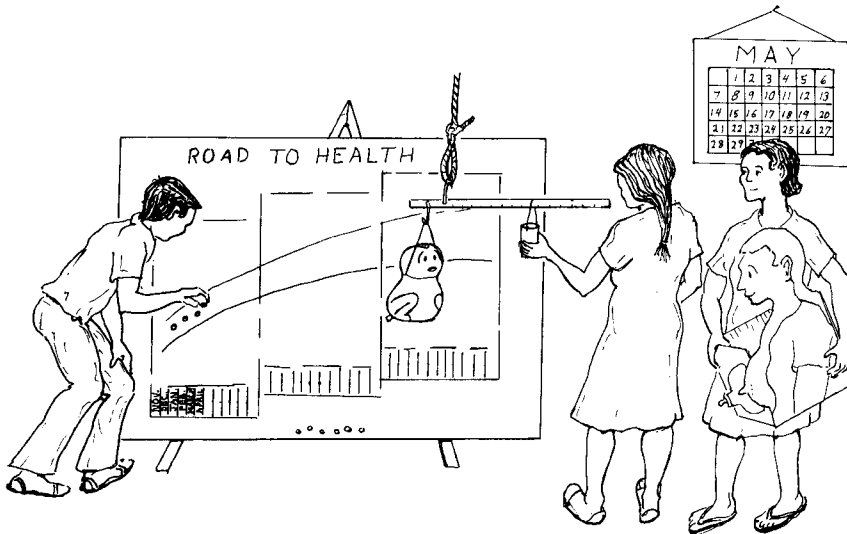


For designs for making homemade scales, see page 16-2.

MARCH										
			1	2	3	4				
5	6	7	8	9	10	11				
12	13	14	15	16	17	18				
19	20	21	22	23	24	25				
26	27	28	29	30	31					



Each 'month', as the baby is weighed, the health workers or mothers take turns recording the baby's age and weight on the flannel-board Road to Health chart.



In this way, everyone sees how the baby's weight goes up each month, and how the baby advances along the Road to Health.

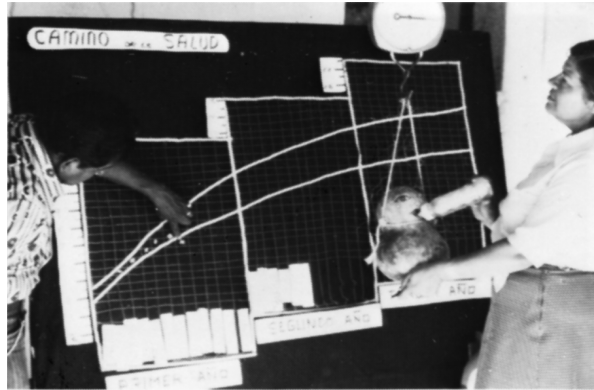
The group can also act out various nutritional or health problems that could affect the baby's weight, and show how these appear on the chart.

For example, have the group act out what can happen when a baby is changed from breast to bottle feeding.

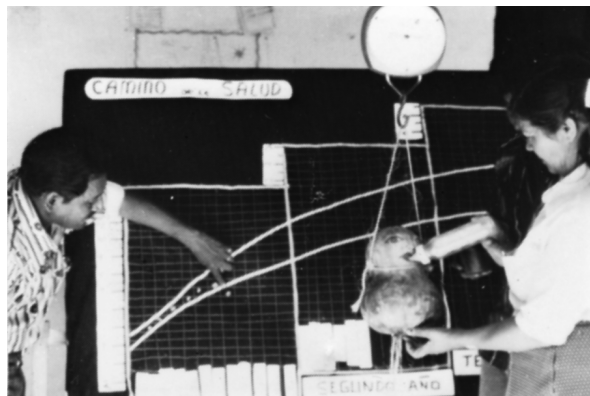
As long as the baby breast feeds, he gains weight well and moves up on the Road to Health.



But when the baby is changed to bottle feeding at 6 months, he stops gaining weight. (Plug the nipple of the bottle so that liquid comes out very slowly.) The dots showing his weight on the Road to Health chart stay at the same level.



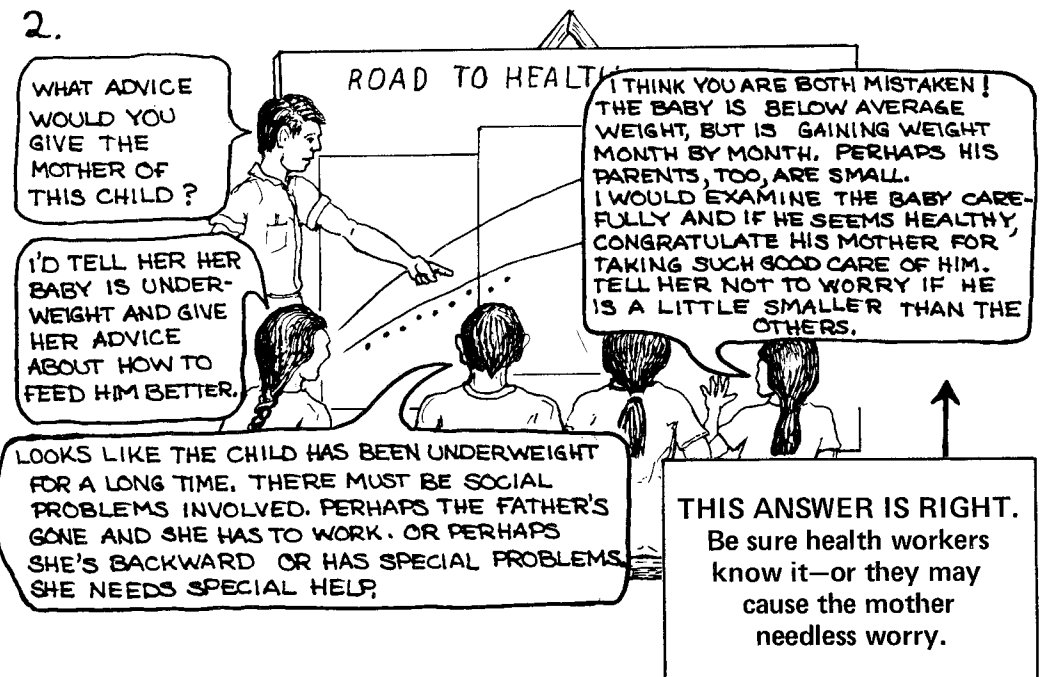
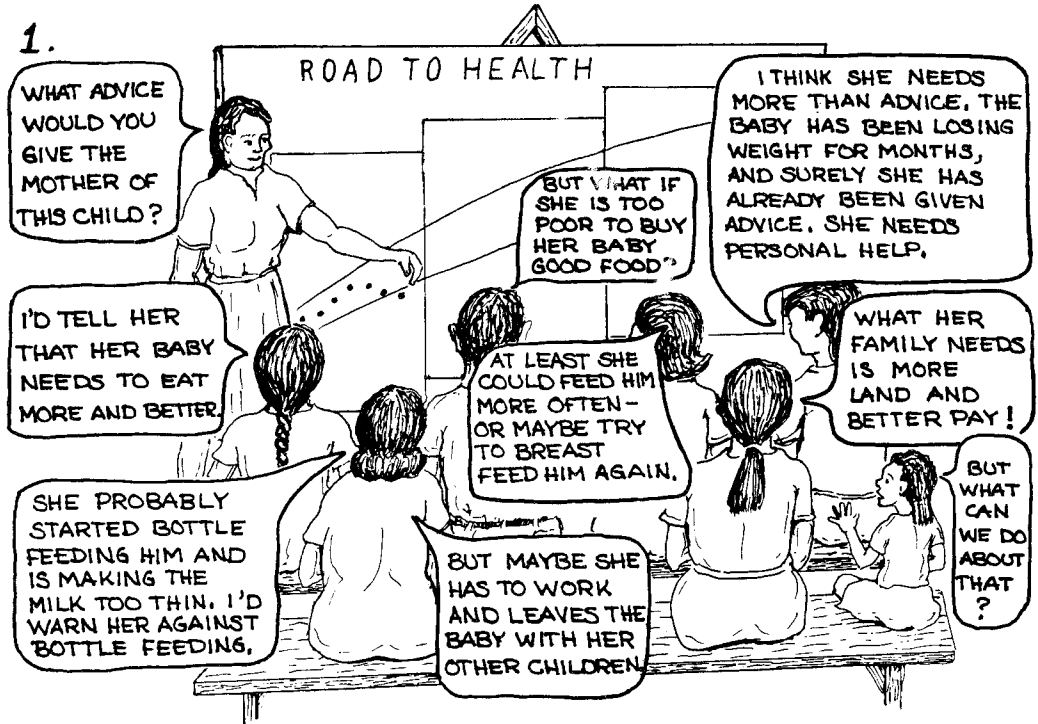
Then, because the baby bottle has germs on it, and the baby is not as well nourished, he gets diarrhea (pull the plug). The baby's weight goes down.



Note: The use of the gourd baby and cardboard mother is only one idea for teaching the use of weight charts. It was developed by village instructors and students during a training program, and that was part of what made it a success. We hope you and your students will think of new and even better teaching ideas.

Follow-up discussions and further learning

Flannel-board Road to Health charts can be used to start many lively discussions, and to help health workers or mothers learn to interpret the charts correctly. Here are two examples:



WOMEN'S HEALTH— AND STRENGTHS



Traditionally, childbirth and women's health problems have been attended to mostly by women. But in many parts of the world, modern medical knowledge is now kept mainly in the hands of men. Even doctors who specialize in women's needs are mostly men!

This is unfortunate, because women have many health problems that men never experience. No man has been pregnant, had a vaginal discharge, or suffered from a painful abscess during breast feeding.

Of course there are exceptions, but in general, male health workers are not as sensitive to women's problems. "A man just doesn't seem to listen," many women say.

For this reason, more and more women have begun to feel that self-care is a wise idea. Health workers, whether men or women, can help groups of women get together, learn about each other's needs, and begin to care for and help one another. The Hesperian book *Where Women Have No Doctor* has many good suggestions regarding women's self-care.

When health workers meet with groups of women to discuss health problems, it helps if they **ask the women what they want to learn about**. Women in different areas will have different concerns. Here is a list of topics that a village women's group in Latin America wanted to discuss and learn more about:

- 'bad blood' (sexually transmitted infections) and infertility
- 'burning urine' and other urinary and vaginal problems
- a girl's first bleeding and related problems
- failure to bleed every month, and other menstrual problems
- miscarriage and abortion
- pain when having sex
- rape, abuses by men, and self-protection
- how to avoid unwanted pregnancy
- diet during pregnancy and following childbirth
- causes of 'eclipsed' babies (birth defects)
- specific problems and 'modern practices' related to childbirth
- care of newborn babies and young children
- breast pain and abscess when breast feeding
- cancer, how to avoid it and how to recognize it
- 'change of life' (*menopause*)

Where mothers' clubs or traditional women's groups already exist, encourage health workers to look for ways to work with them, and ask for their help.

Some women's groups are active in the struggle for social change. We know of villages in 3 Latin American countries where women have organized to prevent abuses by local authorities. Sometimes this happened in situations where the men were too frightened to speak out or take action. (In many countries, officials are less likely to use violence against women.) In Honduras, for example, a group of teen-age boys was jailed recently for helping to take over farmland that the government had promised to poor families and then refused to give them. The boys' fathers were afraid to act, so a local women's group organized over 4000 women, stormed the jail, and managed to release them—with no violence or injury!

When women awaken to their power of collective action, they can do a lot! (See the women's theater presentation on page 27-19.)