PART THREE

LEARNING TO USE THE BOOK, *WHERE THERE IS NO DOCTOR*

A book on basic health care is a tool for sharing ideas and knowledge. If clearly and simply written, it can be used by anyone who knows how to read. However, if persons are given suggestions and guided practice in use of the book, it will usually serve them better.

In Part Three of this book, we give many suggestions for helping people learn to use the village health care handbook, ***Where There ts No Doctor (WTND).*** But many of these suggestions apply to any health or "how-to-do-it" manual.

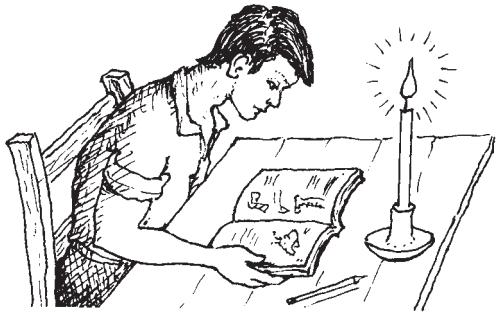
"Book learning" for health workers has 2 objectives:

- To help health workers themselves learn to use their books effectively.
- To help health workers learn how to help others use the book, or to use the ideas and information it contains.

We know an old folk healer who cannot read. But she has her 8-year-old granddaughter read to her from ***WTND*** while she studies the pictures.

Instruction in "use of the book" can take place in many ways. It may be a key part of a 2- or 3-month health worker training course. It may take place in weekly meetings of village mothers led by a health worker. Or it may be only a brief explanation given by a health worker to a folk healer or midwife from a distant village.

LEARNING TO USE BOOKS RATHER THAN RELYING ON MEMORY:



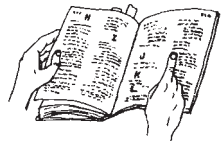
If training helps health workers learn to use reference books effectively, they will continue to learn and study long after the course is over.

A community health worker needs to know how to do many things. A wide range of information and skills are needed in his work. But he cannot be expected to keep all the necessary information in his head. Therefore...

Training should not focus on memorizing a lot of information, but on LEARNING HOW TO LOOK THINGS UP.

Combining literacy training with health skills: Because being able to look things up is such an important skill, some programs—especially in Africa—link learning to read with practice in solving health problems. Health workers-in-training who can already read and write help teach those who are learning. Thus, a book like *Where There Is No Doctor* in the local language helps people learn health skills and literacy skills at the same time. (For more ideas on combining literacy training with health skills and critical awareness, see Chapter 26.)

SCHEDULED CLASSES ON "USE OF THE BOOK" DURING HEALTH WORKER TRAINING



In the 2-month training course in Ajoya, Mexico, "Use of the Book" is a regular class that takes place twice a week throughout the course. The first classes help students become familiar with what is in each chapter and each of the special sections of the book. They practice looking things up using the index, list of contents, charts, and page references. Later classes focus on using the book to help solve problems acted out in role plays.

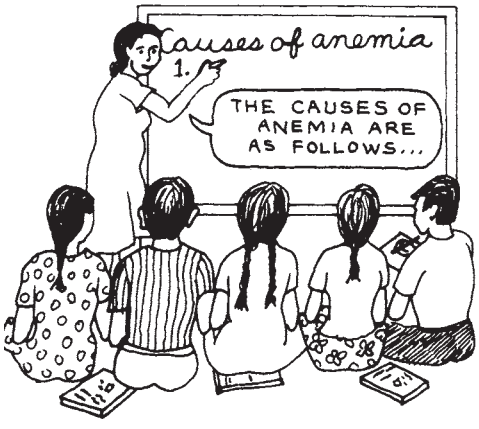
As much as possible, these classes on "Use of the Book" are coordinated with the other classes, clinical practice, and community visits. They provide related study, lifelike practice, and review. Scheduling is kept flexible so that if students encounter an important problem in clinical practice or community activities, they can explore it further in their next "Use of the Book" class.

Building "Use of the Book" into other classes and activities

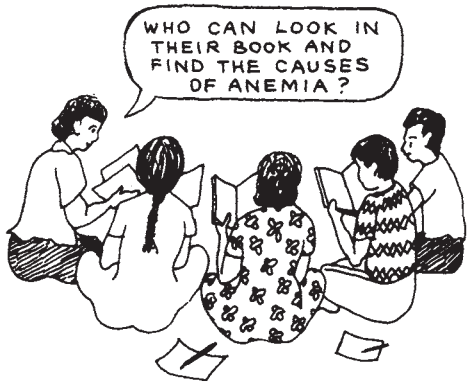
It is important that learning to use the book not be limited to specific classes. Practice in looking things up and using the book as a tool needs to be built into many areas of study and learning. This means that...

During any class, if you have a choice between telling students something or having them find and read it out loud from their books, have them read it from their books!

LESS APPROPRIATE: TELLING



MORE APPROPRIATE: FINDING OUT



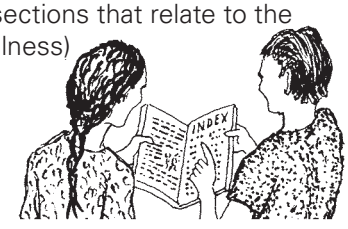
Do not tell the students things that they can learn to look up for themselves.

WAYS HEALTH WORKERS CAN USE THEIR BOOK

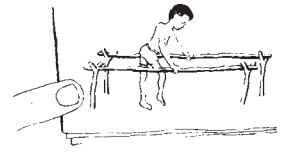
1. As a **reference book for** diagnosing, treating, and giving advice on specific health problems.

2. As a **tool for teaching** any of the following:

- families of sick people (reading sections that relate to the illness)

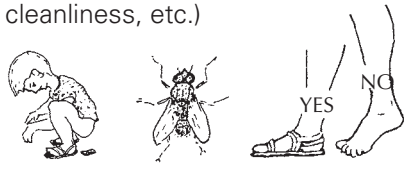


- persons who cannot read (reading to them, discussing pictures with them)



"You can make it like this."

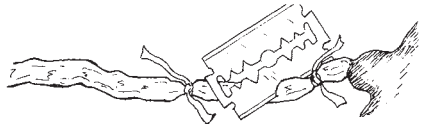
- children (games and discussions about the guidelines for cleanliness, etc.)



- mothers (about children's growth and nutrition, women's health, etc.)

BREAST IS BEST

- midwives (sterile technique, etc.)

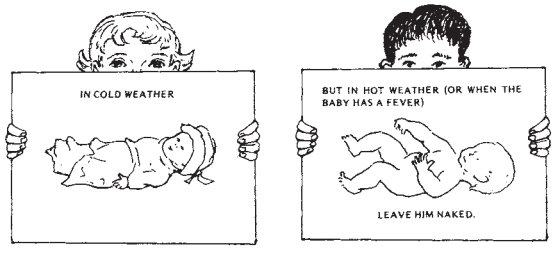


- farmers (experimenting with different methods)

- shopkeepers and others who sell medicines (see *WTND*, p. 338)

REMEMBER: MEDICINES CAN KILL

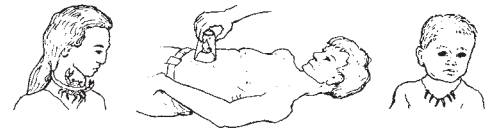
3. As an **idea book** for making teaching materials such as posters.



4. As a **source of information** for conducting health activities such as . . .

- under-fives clinics
- check-ups for pregnant women
- nutrition programs
- public health measures

4. As a **guide** for discussing and exploring traditional forms of healing.



SHARING THE BOOK:

EXAMPLES FROM DIFFERENT COUNTRIES

By looking things up in her book together with people, a health worker takes some of the mystery out of medicine. This puts the health worker and other people on equal terms, and gives people more control over their own health.

A health worker in Ajoya, Mexico shows 2 children the pictures of worms in ***WTND*** and asks them what kind they have.

Pictures from ***WTND*** have been used for posters in the CHILD-to-child program (see Chapter 24). Here a child shows the importance of keeping poisons out of reach.

Here health workers in the Philippines use *WTND* to learn about fractures, bleeding, and shock in a role play.

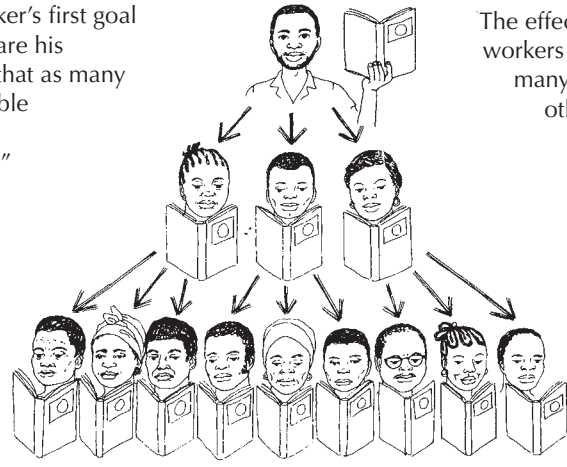
A health worker from Guatemala uses this book in pregaring a poster about oral rehydration. A group of curious school children look on. Together they learn about health problems, drawing, teaching, and sharing of ideas.

HELPING OTHERS LEARN TO USE THE BOOK

Where There Is No Doctor was not originally written for trained health workers, but for villagers who need information to care for the health of their families and neighbors. In areas the book has reached, it has served this purpose fairly well. Time and again, we have found that in villages where only a few persons know how to read, these persons have become important health resources for the village. Their neighbors ask them to look in the book for information about medicines, health problems, and other concerns.

Seeing how often *Where There Is No Doctor* was used as a manual for health workers, after several years we added the introductory section called "Words to the Village Health Worker." However, we still feel that **the book is a tool for anyone who can read and is interested in health.**

The health worker's first goal should be to share his knowledge, so that as many people as possible also become "health workers" among family and friends.



The effectiveness of health workers can be multiplied many times if they help others in neighboring communities to obtain and use appropriate "self-help" health books.

Giving brief instructions on how to use the book

Health workers can help others use *Where There Is No Doctor* more effectively if they explain certain features of the book to them. They can point out the different reference sections—the Contents, Index, and Green Pages—and help persons to practice looking up topics that interest them. Even 10 or 15 minutes of such practice can be a big help. Sometimes a health worker can bring small groups together to learn about using the book.

Here we give 12 suggestions for helping others learn how to use *Where There Is No Doctor.* Many of these will be developed more fully in the next 2 chapters.

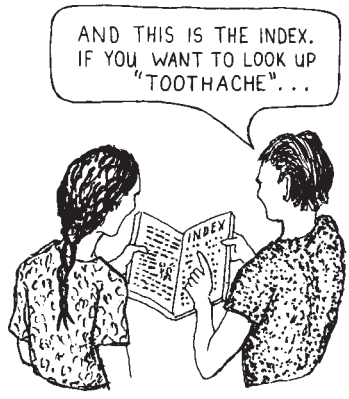
1. Show the person the inside of the front cover, and read the suggestions for "How to Use This Book."

2. Next, review the Contents briefly, so the person gets an idea of what is in each chapter. Explain that she can look in the contents for the chapter most likely to include the topic she wants. Then she can read the subheadings under the chapter title to see what page to turn to. Help her to practice doing this.

3. Now turn to the Index (yellow pages). Show how the subjects are listed in alphabetical order.

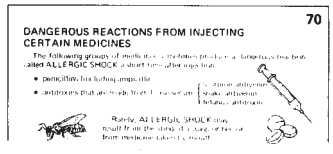
Practice: Ask the person to name a health problem that concerns her. Suppose she says "toothache." First have her flip through the book looking for pictures of teeth. (This is the way most people look for things first.) Next, show her how to find "Toothache" in the Contents, then in the Index.

Now have her pick another subject, such as snakebite. Let her try to find it herself, first by flipping through the book, then by using the Contents and the Index. Have her turn to the right page and read what it says.



4. Page references. Point out that throughout the book there are notes in parentheses ( ) saying "(p.____)." These give the numbers of pages that have related information. On the second page about snakebite, for example, there is a page reference for precautions to prevent allergic shock (p. 70).

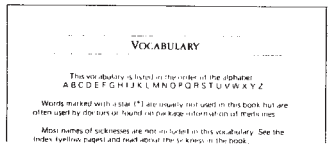
Practice: Have the person look up some page references and read the relevant parts.


70

DANGEROUS REACTIONS FROM INJECTING CERTAIN MEDICINES

5. Show the person the Vocabulary (***WTND,*** p. 421). Explain that this is an alphabetical list of words and their meanings. Then flip through the book until you spot some words in ***italics***— for example, ***bacteria*** on page 55, and ***resistant*** on page 57.

Practice: Have the person look up these words in the vocabulary.


VOCABULARY

6. Show the person how to look up specific medicines in the Green Pages, using the List of Medicines on page 341 and the Index of Medicines on page 344.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THE GREEN PAGES

THE USES, DOSAGE, AND PRECAUTIONS FOR THE MEDICINES REFERRED TO IN THIS BOOK

Practice: Have her look up a common medicine, such as aspirin, and read about it. Point out the importance of correct use, correct dosage, and always reading and following the precautions.

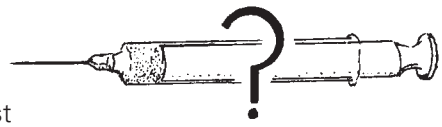
7. Finding out about a health problem when you are not sure just what it is. Have the person look in the book under the general kind of problem (skin problem, eye problem, old person's problem, etc.). Or look under the most important symptom or sign—for example, "cough" or "fever."

Point out that in many parts of the book there are guides to help you decide which illness a person probably has. For example:

- Guide to Identification of Skin Problems, p. 196
- Different Illnesses that Cause Fever, p. 26
- Different Kinds of Cough, p. 168

For a more complete list of these guides and a discussion of how to use them, see Chapter 21 of this book.

8. **Avoiding mistakes.** Point out the first 8 chapters of *Where There Is No Doctor,* being sure to show the person Chapter 2, "Sicknesses that are Often Confused," and Chapter 6, "Right and Wrong Uses of Modern Medicines." Look especially at the parts that deal with problems and beliefs common in your area. You may want to mark these pages in the book so the person can read them later. For example, if people in your area tend to overuse and misuse injections, mark the first 5 pages of Chapter 9 (pages 65 to 69) for special reading.



9. If the person will be providing care for sick or injured persons, encourage her to carefully study Chapter 3, "How to Examine a Sick Person," and Chapter 4, "How to Take Care of a Sick Person." If there is time, teach the person some of the basic aspects of history taking and physical examination.

10. **Prevention.** People's first interest in a book like *Where There Is No Doctor* usually has to do with curative medicine. But this interest can serve as a doorway to learning about prevention. Point out how, in discussing nearly any health problem, advice about prevention can be included. Look, for example, at scabies on p. 199. Stress the importance of preventive advice.

    Also encourage the person to read Chapters 11 and 12, on "Nutrition" and "Prevention." Consider putting markers at pages describing preventive action that is especially needed in your area. For example, if blindness due to lack of vitamin A is common in your community, mark page 226. Encourage the person to follow the advice on that page, and to help others to do the same.

11. Point out the chapters and sections that are of special importance to the reader. For example, if she is a mother, show her the chapter on children's health problems. Ask if any of her children has an illness at the moment. See if she can find it in the book. Have her read about it. Then discuss it with her to make sure she understands the information

12. **Knowing when to seek help.** In making suggestions on how to use the book, emphasize that the person needs to recognize her limitations. Help her to realize that sometimes she will need to seek help from a health worker or doctor. Show her the following pages:
    - p. 42, Signs of Dangerous Illness
    - p. 159, When to Seek Medical Help in Cases of Diarrhea
    - p. 256, Signs of Special Risk that Make It Important that a Doctor or Skilled Midwife Attend the Birth—if Possible in a Hospital.

By focusing on the 12 points presented here, a person can gain some understanding of how to use the book in as little as 2 or 3 hours. However, these guidelines are only a beginning. There may be other parts of the book that are especially useful for your area. And a great deal of practice is needed to use the book really well. The next 2 chapters suggest ways of providing such practice in a training course.

ADAPTING *WHERE THERE IS NO DOCTOR* TO THE LOCAL SITUATION

The original Spanish edition of ***Where There Is No Doctor*** was written specifically for use in the mountain area of Western Mexico. In the English version, we tried to make the book so it could be used in many different countries. But clearly, a book that can be used in many areas will not be completely appropriate to any single place. Therefore, some of the information and ideas in the book will apply to your area. Others will not. And some local information will certainly be missing.

Health workers should recognize the limitations of the book and never use it as their "bible." (Unfortunately, this has happened in some health programs.)

Ideally, ***Where There Is No Doctor*** (or any reference book) should be adapted or rewritten for each area. This has already been done in some parts of the world.

MALI
(Bambara)

CAMBODIA
(Khmer)

MOZAMBIQUE
(Portuguese)

These editions have been adapted and the pictures redone to fit the local people and customs.

Unfortunately, not every area will have the time and money to write their own villager's health care handbook, or to adapt the whole of ***Where There Is No Doctor.*** Where complete adaptations are not possible, we suggest that training programs produce sheets or pamphlets to be used along with the book. These can cover additional information that relates to local needs, problems, and customs. Such information sheets might include:

- Local names of illnesses, and ways of looking at sickness and health.
- Examples of traditional forms of healing: beneficial and harmful.
- Names (including brand names and comparative prices) of medicines that are available locally. Or at least have students write this information into the Green Pages of their books.
- A list of commonly misused medicines and mistaken medical practices in your area, with explanations and warnings.
- Information about the diagnosis, treatment, and prevention of health problems that are important in your area but are not included in ***Where There Is No Doctor.***

Discuss with your students which parts of their books are appropriate to your area and which are not. Encourage them to question the truth or usefulness of anything they read.

Using the Contents, Index, Page References, and Vocabulary

CHAPTER **20**

Note: Some instructors may feel that certain things explained in this chapter are very obvious. They may think that to teach them would be a waste of time, or even an insult to the students. But skills in using an index and looking up page references should not be taken for granted. **If you allow time for explaining and helping students master these basic skills, it can make a big difference in their problem-solving abilities.**

LEARNING HOW TO LOOK THINGS UP

Persons who have not done much reading may find it difficult to use an information book effectively. In addition to reading slowly, they may also have difficulty finding what they are looking for. So they may miss important information.

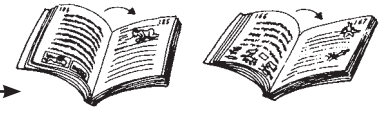
Early in the training course, **take time to show students how to use their books.** Instructors and more experienced students can guide others in practicing how to look things up.* The following are some points you may want to explain.

Page numbering

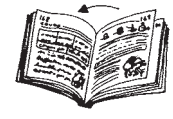
The pages are numbered in order: 1, 2, 3 ,4, 5, 6, 7, 8, 9, 10 ... 20 ....30 .....100 ..... 200, and so on. So if you want to find page 168 to read about "cough," do not start at the beginning of the book and go through it page by page. Instead . . .

Open the book somewhere in the middle—for instance to pages 198 and 199.

That is too far forward, so turn back some, say to page 184 and then to 166.



Now you are very close. Turn the page to 168.



*It is a good idea, in the first days of the course, to check each person's reading ability, knowledge of alphabetical order, and basic arithmetic skills. Provide support for those who need it. But be sure these students are not made to feel ashamed because they have had less schooling. Include them in all regular classes and help them feel free to participate.

Alphabetical lists

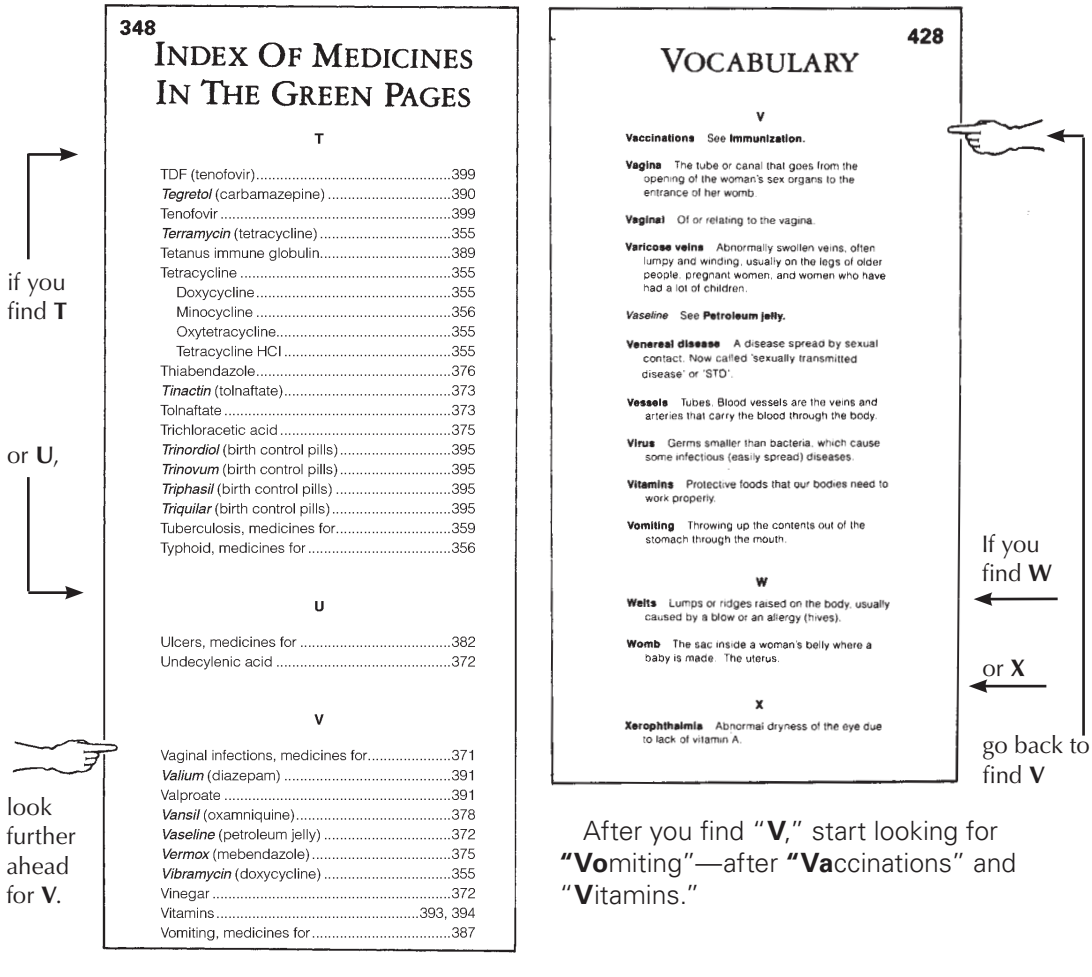
Where There Is No Doctor has several reference sections, or lists where you can look things up. Three of these are arranged in alphabetical order:

- The **Index** (the yellow pages at the end of the book)—where you can look up the page or pages with information about almost anything in the book.
- The **"Index of Medicines"** in the Green Pages—to help you find the page with the uses, dosage, and precautions for the medicine you want to know about.
- The **Vocabulary**—where you can look up the meanings of words written in *italics* in the main part of the book.

In each of these lists, the words are arranged so that their first letters are in the order of the alphabet: A,B,C,D,E, and so on until Z.

Suppose you want to look up "vomiting." Depending on whether you are interested in **medicines,** a **definition,** or a **full discussion** on vomiting, you can look it up in the Green Pages, the Vocabulary, or the Index.

First, **look for the large dark letters** in the center of each column. "**V"** will be near the end of the lists because it is near the end of the alphabet.



After you find "**V**," start looking for "**Vo**miting"—after **"Va**ccinations" and "**V**itamins."

Using the INDEX (yellow pages) of *Where There Is No Doctor*

When you find a word in the index followed by several page numbers, the **dark number** indicates the page that has the most information.
For example,

page **147** for "Vaccinations,"

pages **241-242** for "Vaginal discharge,"
and

page **175** under "Varicose veins."

What others do you find in this list?

If you find several words listed in lighter letters under the main word, these are subheadings related to the main topic or idea. For example, "with diarrhea" refers to **"Vomiting** with diarrhea."

If you do not find the subject you want in the Index, try looking for it under another name. For example, you might look first for "Upset stomach." If that is not listed, look up other words that mean the same thing: "Puking," "Throwing up," or "Vomiting." Usually the most widely known word is listed.

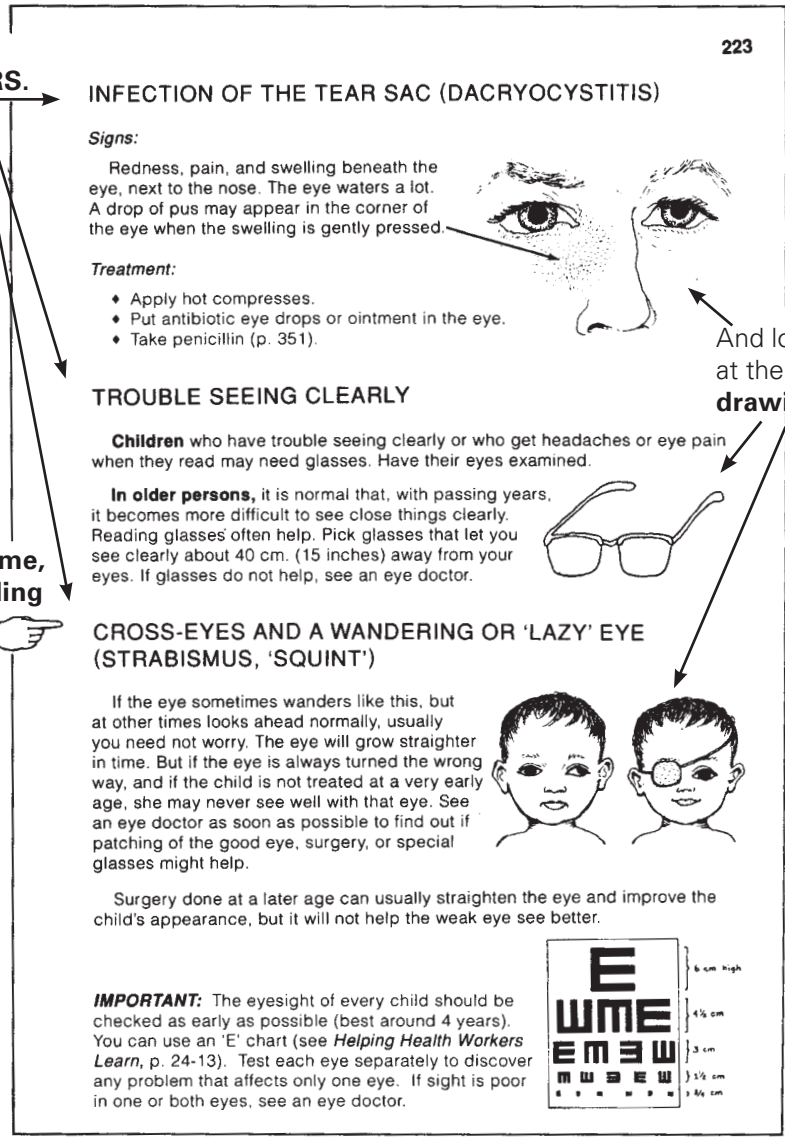
Practice at finding things in alphabetical lists will make it easier for health workers to use the Index and Vocabulary.

Finding what you are looking for on a page

After you have looked something up in the Index and have turned to the page with the topic you want, take a moment to **look over the whole page.** Do not just start reading from the top. First notice what part of the page has the information you are looking for.

For example: Suppose some neighbors have a baby who is cross-eyed, and you want to discuss with them what can be done to correct the problem. You look in the Index (or the Contents) and find that the main reference to cross-eyes is page 223. But **where on page 223 should you read?** Here are some clues:

Look at the words in **BIG, DARK LETTERS.**



223

INFECTION OF THE TEAR SAC (DACRYOCYSTITIS)

Signs:

Redness, pain, and swelling beneath the eye, next to the nose. The eye waters a lot. A drop of pus may appear in the corner of the eye when the swelling is gently pressed.

Treatment:

- Apply hot compresses.
- Put antibiotic eye drops or ointment in the eye.
- Take penicillin (p. 351).

TROUBLE SEEING CLEARLY

Children who have trouble seeing clearly or who get headaches or eye pain when they read may need glasses. Have their eyes examined.

In older persons, it is normal that, with passing years, it becomes more difficult to see close things clearly. Reading glasses often help. Pick glasses that let you see clearly about 40 cm. (15 inches) away from your eyes. If glasses do not help, see an eye doctor.

CROSS-EYES AND A WANDERING OR 'LAZY' EYE (STRABISMUS, 'SQUINT')

If the eye sometimes wanders like this, but at other times looks ahead normally, usually you need not worry. The eye will grow straighter in time. But if the eye is always turned the wrong way, and if the child is not treated at a very early age, she may never see well with that eye. See an eye doctor as soon as possible to find out if patching of the good eye, surgery, or special glasses might help.

Surgery done at a later age can usually straighten the eye and improve the child's appearance, but it will not help the weak eye see better.

IMPORTANT: The eyesight of every child should be checked as early as possible (best around 4 years). You can use an 'E' chart (see *Helping Health Workers Learn*, p. 24-13). Test each eye separately to discover any problem that affects only one eye. If sight is poor in one or both eyes, see an eye doctor.

And look at the **drawings.**

To save time, start reading here

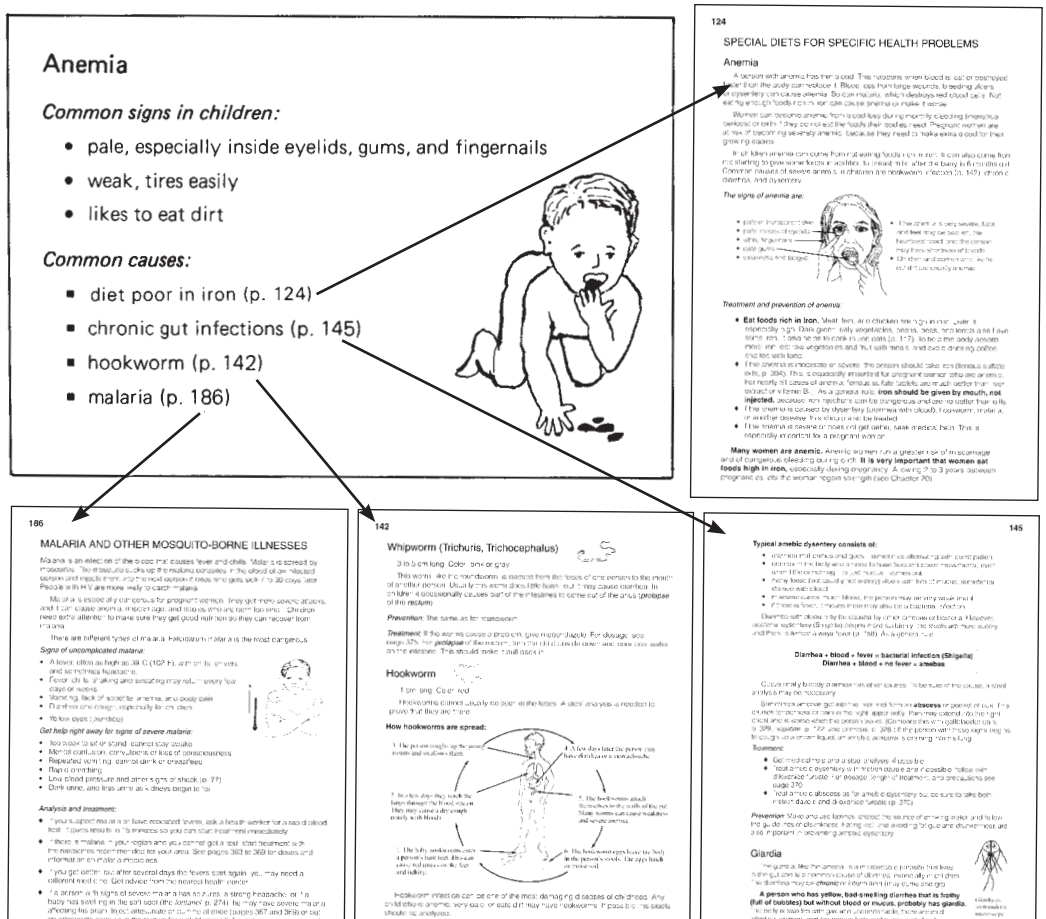
When you get to the bottom of the page, be sure to check the next page to see if the information continues.

Looking up page references

Once you have read about the topic you looked up, you may want to turn also to other pages mentioned in the text. These are often referred to in parentheses (inside curved lines like these)—for example, "(see p. 140)," or simply "(p. 125)." On these pages you will find additional information, such as:

- another disease that may be a cause of the problem you are interested in
- danger signs you should watch for
- how the same disease can affect another part of the body or another person
- medicines recommended for treatment, their dosage and precautions
- other recommended treatments
- how to prevent the problem you are reading about

Page 307 of *Where There Is No Doctor* refers you to various causes of anemia in children.



Also point out how arrows are used in the book to join writing with pictures (as on page 124 above) or to show which direction to read (page 142 above). Check students' ability to follow the arrows.

Page 159 of ***Where There Is No Doctor*** refers you to several pages with more information about...

special treatment if vomiting is a problem

the best medicine to use if the child is very sick

a sign of danger

Care of Babies with Diarrhea

Diarrhea is especially dangerous in babies and small children. Often no medicine is needed, but special care must be taken because a baby can die very quickly of dehydration.

GIVE HIM BREAST MILK

- **Continue breast feeding** and also give sips of **Rehydration Drink.**
- If vomiting is a problem, give breast milk often, but only a little at a time. Also give Rehydration Drink in small sips every 5 to 10 minutes (see Vomiting, p. 161).
- If there is no breast milk, try giving frequent small feedings of some other milk or milk substitute (like milk made from soybeans) **mixed to half normal strength with boiled water.** If milk seems to make the diarrhea worse, give some other protein (mashed chicken, eggs, lean meat, or skinned mashed beans, mixed with sugar or well-cooked rice or another carbohydrate, and boiled water).

AND ALSO REHYDRATION DRINK

- If the child is younger than 1 month, try to find a health worker before giving any medicine. If there is no health worker and the child is very sick, give him an 'infant syrup' that contains ampicillin: half a teaspoon 4 times daily (see p. 353). It is better not to use other antibiotics.

When to Seek Medical Help in Cases of Diarrhea

Diarrhea and dysentery can be very dangerous—especially in small children. **In the following situations you should get medical help:**

- if diarrhea lasts more than 4 days and is not getting better—or more than 1 day in a small child with severe diarrhea
- if the person shows signs of dehydration and is getting worse
- if the child vomits everything he drinks, or drinks nothing, or if frequent vomiting continues for more than 3 hours after beginning Rehydration Drink
- if the child begins to have fits, or if the feet and face swell
- if the person was very sick, weak, or malnourished before the diarrhea began (especially a little child or a very old person)
- if there is much blood in the stools. This can be dangerous even if there is only very little diarrhea (see gut obstruction, p. 94).

VOMITING

Many people, especially children, have an occasional stomach upset with vomiting. Often no cause can be found. There may be mild stomach or gut ache or fever. This kind of simple vomiting usually is not serious and clears up by itself.

Vomiting is one of the signs of many different problems, some minor and some quite serious, so it is important to examine the person carefully. Vomiting often comes from a problem in the stomach or guts, such as: an infection (see diarrhea, p. 153); poisoning from spoiled food (p. 135); or acute abdomen (for example, appendicitis or something blocking the gut, p. 94). Also, almost any sickness with high fever or severe pain may cause vomiting, especially malaria (p. 186), hepatitis (p. 172), tonsillitis (p. 309), earache (p. 309), meningitis (p. 185), urinary infection (p. 234), gallbladder pain (p. 329) or migraine headache (p. 162).

Danger signs with vomiting—seek medical help quickly!

- dehydration that increases and that you cannot control (p. 152)
- severe vomiting that lasts more than 24 hours
- violent vomiting, especially if vomit is dark green, brown, or smells like shit (signs of obstruction, p. 94)
- constant pain in the gut, especially if the person cannot defecate (shit) or if you cannot hear gurgles when you put your ear to the belly (see acute abdomen: obstruction; appendicitis, p. 94)
- vomiting of blood (ulcer, p. 128; cirrhosis, p. 328)

To help control simple vomiting:

- Eat nothing while vomiting is severe.
- Sip a cola drink or ginger ale. Some herbal teas, like camomile, may also help.
- For dehydration give small frequent sips of cola, tea, or Rehydration Drink (p. 152).
- If vomiting does not stop soon, use a vomit control medicine like promethazine (p. 387) or diphenhydramine (p. 388). But do not give these medicines to children under 2 years old.

Most of these come in pills, syrups, injections, and suppositories (soft pills you push up the **anus**). Tablets or syrup can also be put up the anus. Crush up the tablet in a little water. Put it in with an enema set or syringe without a needle.

When taken by mouth, the medicine should be swallowed with very little water and nothing else should be swallowed for 5 minutes. Never give more than the recommended dose. Do not give a second dose until dehydration has been corrected and the person has begun to urinate. If severe vomiting and diarrhea make medication by mouth or anus impossible, give an injection of one of the vomit-control medicines. Promethazine may work best. Take care not to give too much!

Benzylpenicillin (crystalline penicillin, penicillin G, etc.)
(a short-acting penicillin)

Name:_____ price:_____ for _____

Often comes in: vials of 1 million U (600 mg) or 5 million U (3 g)

Dosage of benzylpenicillin or any short-acting penicillin—for severe infections:

Give an injection every 4 hours for 10 to 14 days.

In each injection give:
adults and children over age 8: 1 million U
children age 3 to 8: 500,000 U
children under 3: 250,000 U

Procaine penicillin (procaine benzylpenicillin, procaine penicillin G)
(an intermediate-acting penicillin)

Name:_____ price:_____ for _____

Often comes in: vials of 1 million U (1 g) or 3 million U (3 g), and more

Dosage of procaine penicillin—for moderately severe infections:

Give 1 injection a day for 10 to 15 days.

With each injection give:
adults: 600,000 to 1,200,000 U
children age 8 to 12: 600,000 U
children age 3 to 7: 300,000 U
children under 3: 150,000 U
newborn babies: DO NOT USE unless no other penicillin or ampicillin is available. If this is your only choice, inject 50,000 U, 1 time a day for 10 to 15 days.

Sometimes procaine penicillin comes premixed with a short-acting penicillin such as benzyl penicillin or penicillin G. The ***dosage*** for these procaine penicillin combinations are the same as for procaine penicillin alone.

Benzathine benzylpenicillin (benzathine penicillin G)
(a long-acting penicillin)

Name:_____ price:_____ for _____

Often comes in: vials of 1,200,000 or 2,400,000 U

Dosage of benzathine benzylpenicillin—for mild to moderately severe infections:

Give 1 injection every 4 days. For mild infections, 1 injection may be enough.
adults and children 30 kg or more: 1,200,000 U
children up to 30 kg: 600,000 U

For rheumatic fever, give one injection of the above dose.

To prevent repeat infection in persons who have had rheumatic fever, give the above dose every 4 weeks (p. 310).

For treatment of syphilis, benzathine benzylpenicillin is best. For dosage, see page 238.

For treatment of tetanus in newborn babies, inject 100,000 U one time only along with antitetanus immunoglobulin and tetanus vaccine (p. 184).

AMPICILLIN AND AMOXICILLIN: BROAD-SPECTRUM PENICILLINS

Ampicillin

Often comes in:
solutions, 125 or 250 mg/5 ml
price:_____ for _____
capsules, 250 mg
price:_____ for _____
injections, vials of 500 mg or 1 g
price:_____ for _____

Amoxicillin

Often comes in:
capsules or tablets: 250 or 500 mg
price:_____ for _____
mixture: 125 mg in 5 ml
price:_____ for _____
or 250 mg in 5 ml
price:_____ for _____

These ***broad-spectrum*** penicillins kill many more kinds of bacteria than other penicillins. They are safer than other broad-spectrum antibiotics and are especially useful for babies and small children.

Ampicillin and amoxicillin are often interchangeable. When you see a recommendation for ampicillin in this book, you will often be able to use amoxicillin in its place, in the correct dose (see below). But **do not take amoxicillin by mouth when injected ampicillin is recommended** (amoxicillin does not come in injectable form).

Obstructed Gut

An acute abdomen may be caused by something that blocks or obstructs a part of the gut, so that food and stools cannot pass. More common causes are:

- a ball or knot of roundworms (Ascaris, p. 140)
- a loop of gut that is pinched in a hernia (p. 177)
- a part of the gut that slips inside the part below it (intussusception)

Almost any kind of acute abdomen may show some signs of obstruction. Because it hurts the damaged gut to move, it stops moving.

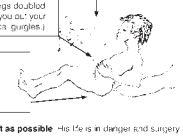
Signs of an obstructed gut:

Steady, severe pain in the belly.

This child's belly is swollen, hard, and very tender. It hurts more when you touch it. He tries to protect his belly and keeps his legs doubled up. His belly is often silent. (When you put your ear to it, you hear no sound of typical gurgles.)

Sudden vomiting with great force! The vomit may shoot out a meter or more. It may have green bile in it or smell and look like feces.

He is usually constipated (little or no bowel movements). If there is diarrhea, it is only a little bit. Sometimes all that comes out is some bloody mucus.



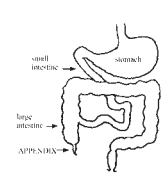
Get this person to a hospital **as fast as possible**. His life is in danger and surgery may be needed.

Appendicitis, Peritonitis

These dangerous conditions often require surgery. Seek medical help fast.

Appendicitis is an infection of the ***appendix***, a finger shaped sac attached to the large intestine in the lower right hand part of the belly. An infected appendix sometimes bursts open, causing ***peritonitis***.

Peritonitis is an acute, serious infection of the lining of the cavity or bag that holds the gut. It results when the appendix or another part of the gut bursts or is torn.



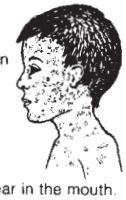
Looking up related information—
even when page references are not given

Usually a book gives only the most important page references, to save you time in looking things up. But sometimes you will want to look up related information, or something you are unsure about—even though no page reference is given.

Read this information about measles from pages 311 and 312 of ***Where There Is No Doctor***:

Measles

This severe virus infection is **especially dangerous in children** who are **poorly nourished** or have **tuberculosis.** Ten days after being near a person with measles, it begins with signs of a cold—fever, runny nose, red sore eyes, and cough.



The child becomes increasingly ill. The mouth may become very sore and he may develop diarrhea.

After 2 or 3 days a few tiny white spots like salt grains appear in the mouth. A day or 2 later the rash appears—first behind the ears and on the neck, then on the face and body, and last on the arms and legs. After the rash appears, the child usually begins to get better. The rash lasts about 5 days. Sometimes there are scattered black spots caused by bleeding into the skin ('black measles'). This means the attack is very severe. Get medical help.

Treatment:

- The child should stay in bed, drink lots of liquids, and be given nutritious food. If she cannot swallow solid food, give her liquids like soup. If a baby cannot breast feed, give breast milk in a spoon (see p. 120).
- If possible, give vitamin A to prevent eye damage (p. 392).
- For fever and discomfort, give acetaminophen (or aspirin).
- If earache develops, give an antibiotic (p. 351).
- If signs of pneumonia, meningitis, or severe pain in the ear or stomach develop, get medical help.
- If the child has diarrhea, give Rehydration Drink (p. 152).

Prevention of measles:

Children with measles should keep far away from other children, even from brothers and sisters. Especially try to protect children who are poorly nourished or who have tuberculosis or other chronic illnesses. Children from other families should not go into a house where there is measles. If children in a family where there is measles have not yet had measles themselves, they should not go to school or into stores or other public places for 10 days.

To prevent measles from killing children, make sure all children are well nourished. Have your children vaccinated against measles when they are 8 to 14 months of age.

Do you know what a ***virus*** is? If not, look it up in the Vocabulary.

What foods are ***nutritious***? Look in the Index, the Vocabulary, or Chapter 11 on "Nutrition."

This is an exact page reference. Turn to page 120.

What are the dosages, risks, and precautions for these medicines? Look them up in the Green Pages.

What is an antibiotic? You can turn to p. 351, as suggested. But for more information, look in the Index.

What are the signs of ***pneumonia and meningitis?*** How can you check for severe pain in the ear or stomach? If you are uncertain, look these up in the Index or the Contents.

What are vaccinations? You can look in the Vocabulary. Where can you find out more about them? Look in the Index or the Contents.

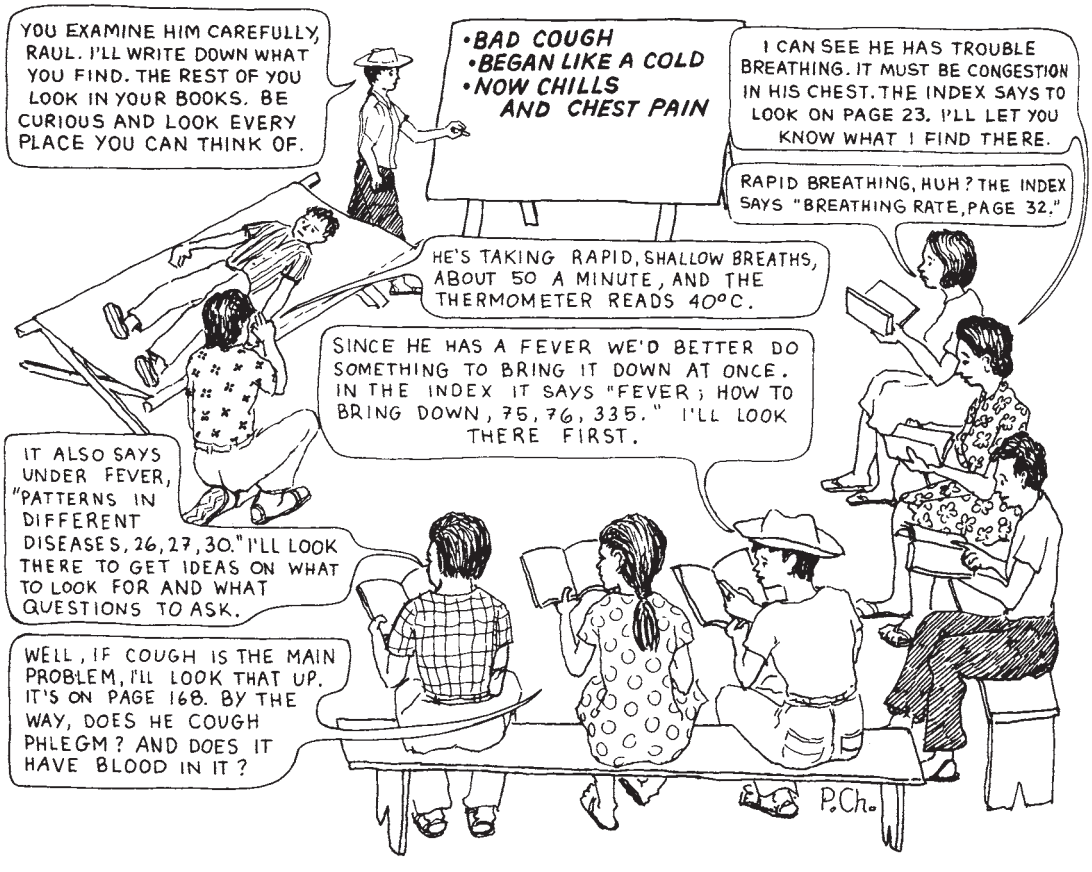
Be sure students practice looking up page references and reading the related information. They should keep practicing this until they can do it easily. The group can play a game by following references from page to page. They will find that almost everything in health care is related!

PRACTICE IN READING AND USING THE BOOK

Role-playing exercises can give students a good chance to develop skill in using *Where There Is No Doctor*—especially the Contents, the Index, and the page references.

For example, one person can pretend he is sick with a very bad cough, in this case pneumonia. (But do not tell the students what the illness is. Let them find out through their own investigation and use of their books.) The person says his sickness began a few days ago like a cold or the flu—with a headache and sore throat. But now he feels much worse.

The students must ask questions to get more information. The "sick person" can complain of chills or chest pain. To make it more realistic, he breathes with rapid, shallow breaths (as described in this book on p. **14**-11). A pretend thermometer can be used to show that he has a fever (see p. **14**-4).



Encourage the students to look in any part of the book where they think they might find useful information—and to share what they find with each other. Especially help those who have trouble reading or looking things up.

If the group decides that the person in the role play probably has pneumonia, be sure that everyone looks up the references mentioned in the treatment section on page 171.

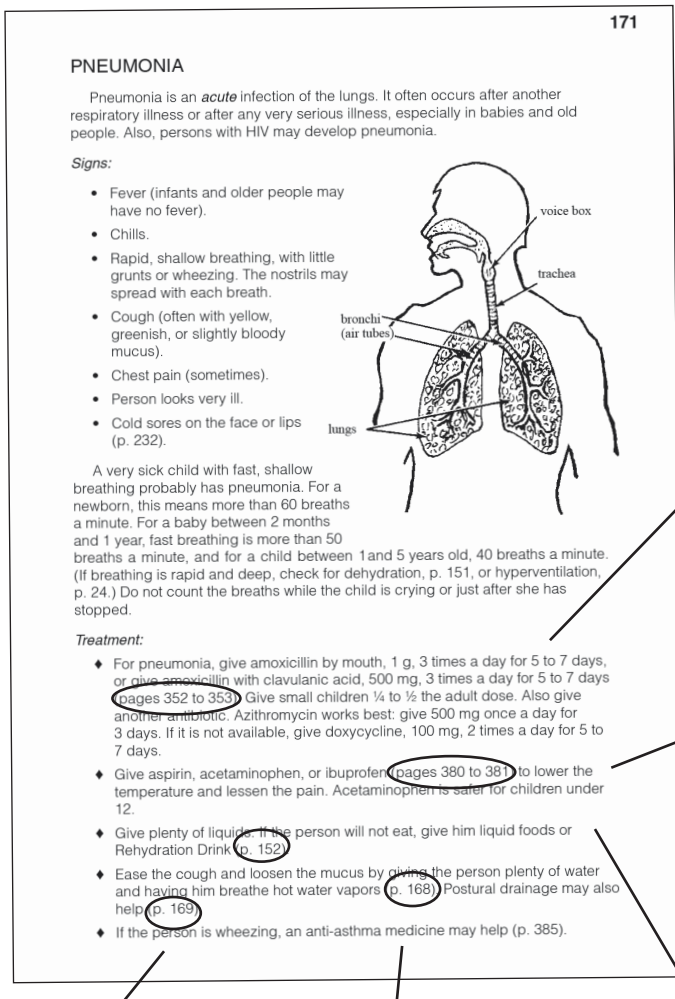
the correct medicines to fight the infection

correct medicines to lower the fever

to ease the cough

and loosen the mucus

Rehydration Drink if he will not eat



171

PNEUMONIA

Pneumonia is an ***acute*** infection of the lungs. It often occurs after another respiratory illness or after any very serious illness, especially in babies and old people. Also, persons with HIV may develop pneumonia.

Signs:

- Fever (infants and older people may have no fever).
- Chills.
- Rapid, shallow breathing, with little grunts or wheezing. The nostrils may spread with each breath.
- Cough (often with yellow, greenish, or slightly bloody mucus).
- Chest pain (sometimes).
- Person looks very ill.
- Cold sores on the face or lips (p. 232).

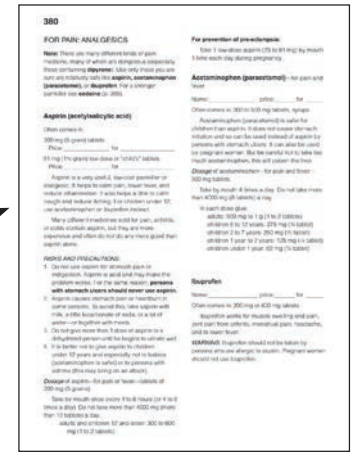
A very sick child with fast, shallow breathing probably has pneumonia. For a newborn, this means more than 60 breaths a minute. For a baby between 2 months and 1 year, fast breathing is more than 50 breaths a minute, and for a child between 1and 5 years old, 40 breaths a minute. (If breathing is rapid and deep, check for dehydration, p. 151, or hyperventilation, p. 24.) Do not count the breaths while the child is crying or just after she has stopped.

Treatment:

- For pneumonia, give amoxicillin by mouth, 1 g, 3 times a day for 5 to 7 days, or give amoxicillin with clavulanic acid, 500 mg, 3 times a day for 5 to 7 days (pages 352 to 353). Give small children ¼ to ½ the adult dose. Also give another antibiotic. Azithromycin works best: give 500 mg once a day for 3 days. If it is not available, give doxycycline, 100 mg, 2 times a day for 5 to 7 days.
- Give aspirin, acetaminophen, or ibuprofen (pages 380 to 381) to lower the temperature and lessen the pain. Acetaminophen is safer for children under 12.
- Give plenty of liquids. If the person will not eat, give him liquid foods or Rehydration Drink (p. 152).
- Ease the cough and loosen the mucus by giving the person plenty of water and having him breathe hot water vapors (p. 168). Postural drainage may also help (p. 169).
- If the person is wheezing, an anti-asthma medicine may help (p. 385).

353

Amoxicillin with clavulanic acid (Amoxicillin-clavulanate potassium, Augmentin)



380

FOR PAIN: ANALGESICS

Acetaminophen (paracetamol)—for pain and fever

Aspirin (acetylsalicylic acid)

Ibuprofen

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2. **For all kinds of cough,** especially a dry cough, the following cough syrup can be given:

Take a teaspoonful every 2 or 3 hours.

WARNING: Do not give honey to babies under 1 year. Make the syrup with sugar instead of honey.

3. **For a severe dry cough that does not let you sleep,** you can take a syrup with codeine (p. 393). Tablets of aspirin with codeine (or even aspirin alone) also help. If there is a lot of phlegm or wheezing, do not use codeine.

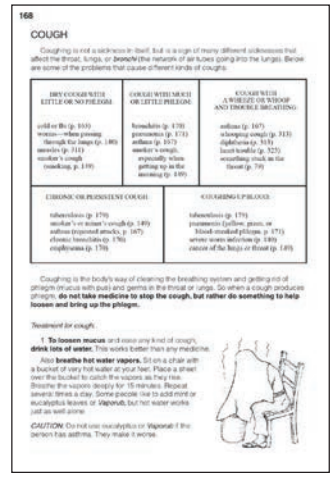
4. **For a cough with wheezing** (difficult, noisy breathing), see Asthma (p. 167), Chronic Bronchitis (p. 170), and Heart Trouble (p. 325).

5. **Try to find out what sickness is causing the cough and treat that.** If the cough lasts a long time, if there is blood, pus, or smelly phlegm in it, or if the person is losing weight or has continual difficulty breathing, see a health worker.

6. **If you have any kind of a cough, do not smoke.** Smoking damages the lungs.

To prevent a cough, do not smoke.
To cure a cough, treat the illness that causes it—and do not smoke.
To calm a cough, and loosen phlegm, drink lots of water—and do not smoke.

HOW TO DRAIN MUCUS FROM THE LUNGS (POSTURAL DRAINAGE)



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COUGH

DRY COUGH WITH LITTLE OR NO PHLEGM	COUGH WITH MUCH OR LITTLE PHLEGM	COUGH WITH A WHISTLE OR WHOOP AND TROUBLE BREATHING
cold or flu (p. 163) worms—when passing through the lungs (p. 180) measles (p. 311) smoker's cough (smoking, p. 149)	bronchitis (p. 170) pneumonia (p. 171) asthma (p. 167) smoker's cough, especially when getting up in the morning (p. 149)	asthma (p. 167) whooping cough (p. 313) diphtheria (p. 313) laryngitis (p. 325) something stuck in the throat (p. 79)
CHRONIC OR PERSISTENT COUGH		**COUGHING UP BLOOD**
tuberculosis (p. 179) smoker's or asthma's cough (p. 149) asthma (repeated attacks, p. 167) chronic bronchitis (p. 170) emphysema (p. 170)		tuberculosis (p. 179) pneumonia (yellow, green, or blood-streaked phlegm, p. 171) severe sores and sores in the throat (p. 149) cancer of the lungs or throat (p. 149)

Coughing is the body's way of cleaning the breathing system and getting rid of phlegm (mucus with pus) and germs in the throat or lungs. So when a cough produces phlegm, **do not take medicine to stop the cough, but rather do something to help loosen and bring up the phlegm.**

Treatment for cough:

1. **To loosen mucus** and ease any kind of cough, **drink lots of water.** This works better than any medicine.

Also **breathe hot water vapors.** Sit on a chair with a bucket of very hot water at your feet. Place a sheet over the bucket to catch the vapors as they rise. Breathe the vapors deeply for 15 minutes. Repeat several times a day. Some people like to add mint or eucalyptus leaves or **Vaporub,** but hot water works just as well alone.

CAUTION: Do not use eucalyptus or Vaporub if the person has asthma. They make it worse.

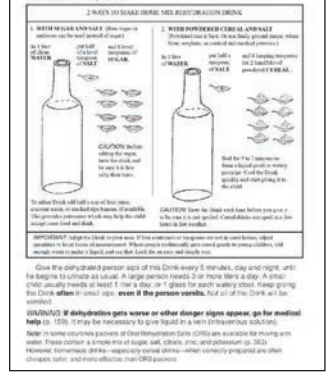
152

To prevent or treat dehydration: When a person has watery diarrhea, **act quickly:**

- **Give lots of liquids to drink:** Rehydration Drink is best. Or give a thin cereal porridge or gruel, tea, soup, or even plain water.
- **Keep giving food.** As soon as the sick child (or adult) will accept food, give frequent feedings of foods he likes and accepts.
- To babies, **keep giving breast milk** often—and before other drinks.

A special **rehydration drink** helps to prevent or treat dehydration, especially in cases of severe watery diarrhea:

2 WAYS TO MAKE HOME MIX REHYDRATION DRINK



Give the dehydrated person sips of this Drink every 5 minutes, day and night, until he begins to urinate as usual. A large person needs 3 or more liters a day. A small child usually needs at least 1 liter a day, or 1 glass for each watery stool. Keep giving this Drink **often** in small sips, **even if the person vomits,** but sip all the Drink as it is vomited.

WARNING: **If dehydration gets worse or other danger signs appear, go for medical help** (p. 159). It may be necessary to give liquid in a vein (intravenous solution).

Note: In some countries packets of Oral Rehydration Salts (ORS) are available for mixing with water. These contain a simple mix of sugar, salt, citrate, zinc, and potassium (p. 393). However, homemade drinks—especially cereal drinks—when correctly prepared are often cheaper, safer, and more effective than ORS packets.

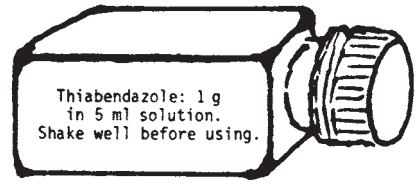
Using the Green Pages to find information about medicines

Here, too, role playing can be a realistic and fun way to practice using ***WTND.***

For example, one person pretends to be the mother of a 6-year-old boy who has tapeworm. She says she has seen little flat, white worms in his shit.

Another student plays the role of the local store owner. He sells the mother a medicine called ***Mintezol,*** saying that it is "good for all kinds of worms."

But before giving it to her son, the mother visits the local health worker to ask if the medicine will work and how much she should give. The student playing the role of the health worker first reads the fine print on the side of the bottle:



Then he and the rest of the class help each other to look up "thiabendazole" in either of the lists at the beginning of the Green Pages.

LIST OF MEDICINES

INDEX OF MEDICINES

T

Both lists say to turn to page 376. Together, the "health worker" and the "mother" (and the rest of the class) read what the medicine can be used for. They notice that the description says nothing about tapeworm.

So the "health worker" tells the "mother" that ***Mintezol*** would probably not be useful for her "son."

If the class looks at the next page (377) of ***WTND,*** they will find 3 medicines that do work for tapeworm: niclosamide (***Yomesan***), praziquantel (***Biltricide***, ***Droncit***), and quinacrine (mepacrine, ***Atabrine***). They can read about the risks and precautions, and compare the prices and availability of the different medications. The students will need to have already written in the prices of products in their area. Or the instructor can provide this information during the role play. Be sure all students write it into their books.

Niclosamide (*Yomesan*)—for tapeworm infection
Name: Yomesan price: $.92 for 4
500 mg. tablets

Praziquantel (*Biltricide, Droncit*)—for tapeworm
Name: Droncit price: $1.57 for 16
500 mg. tablets

Quinacrine (mepacrine)
(familiar brand name: *Atabrine*)
Name: Fedal-Lamb Compuesto price: $.67 for 12
100 mg. tablets

The students can now decide with the "mother" which medicine may work best at a price she can afford. The health worker then reads or figures out the exact dosage for the child, writes it down, and explains it to the mother. If she cannot read, the health worker can use a dosage blank with pictures (see p. 64 of *Where There Is No Doctor).* **Practice in finding and explaining the right dosage is extremely important.** (See p. **18**-10.)

It is also important that health workers read all they can about a problem before recommending medicines. So during the role play, be sure students look up "Tapeworm" in the Index or Contents of *Where There Is No Doctor,* and turn to page 143. →

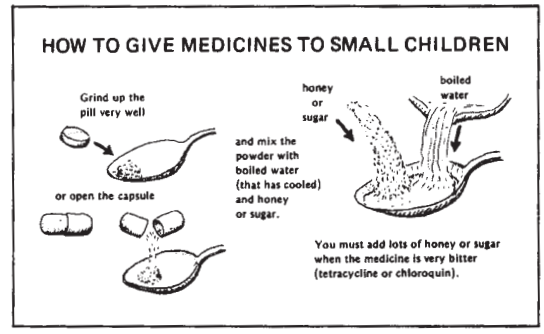
Prevention: **Be careful that all meat is well cooked, especially pork.** Make sure no parts in the center of roasted meat are still raw.

Effect on health: Tapeworms in the intestines sometimes cause mild stomachaches, but few other problems.

The greatest danger exists when the ***cysts*** (small sacs containing baby worms) get into a person's brain. This happens when the eggs pass from his stools to his mouth. For this reason, **anyone with tapeworms must follow the guidelines of cleanliness carefully—and get treatment as soon as possible.**

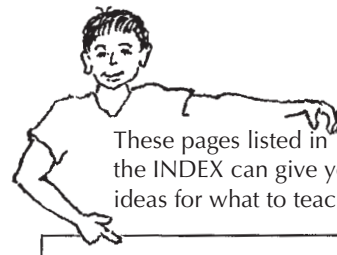
The students can use the pictures in the book to help explain to the "mother" and her "son" about tapeworms and how to avoid them. They may also want to look up the "guidelines of cleanliness" referred to in the discussion of tapeworm prevention. (See especially p. 133 of *WTND.)*

Depending on your local situation, the role play can be developed in various ways. For example, the "mother" might complain that her "son" will not swallow pills. What should she do? The "health worker" and "mother" can look in the Index or Contents, and will be guided to page 62. →



Or the "health worker" might go with the "mother" to return the unused medicine and buy one that is effective against tapeworm. To interest the "store owner" in learning more about the medicines he buys and sells, the health worker might show him the "Words to the Village Storekeeper (or Pharmacist)" on page 338 of *Where There Is No Doctor.*

Using the Index or Contents to plan classes or for independent study



The Index (yellow pages) is a good source of ideas for independent or group study because it lists all the pages that have information about a specific subject. For example:

If health workers want to refresh their knowledge about how to ***examine*** someone:

Examining
a pregnant woman, 250–253
a sick person, 29–38
breasts, 279
eyes, 33, 217
eyesight, 223
for appendicitis, 36, 95
for hernia, 94, 317
for knee reflexes, 183

If mothers have already learned the importance of giving ***Rehydration Drink*** to children with diarrhea. and want to learn about other uses for it:

Rehydration Drink, 152, 311, 382–383, 400, 426
and vomiting, 161
as an enema, 15
for acute abdomen, 95
for dehydration, 9, 46, 158, 306
for newborns, 273
for very sick persons, 40, 53

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The list of Contents at the beginning of the book can also be useful for planning classes or study. For example, if a group of concerned persons in the community wants to learn about the special problems of old people, the list of Contents may help them plan what to study.

In several health programs we know, village health workers meet every month or so to review a chapter of ***WTND,*** or part of a chapter, in order to continue learning. In other programs, health workers and teachers meet regularly with parents, school children, or mothers' clubs to read and discuss the book, chapter by chapter.

There are many ways people can use a book like ***Where There Is No Doctor.*** But to use it fully and well takes a lot of practice. Practice guided by friendly persons who have experience in using reference books is especially helpful.