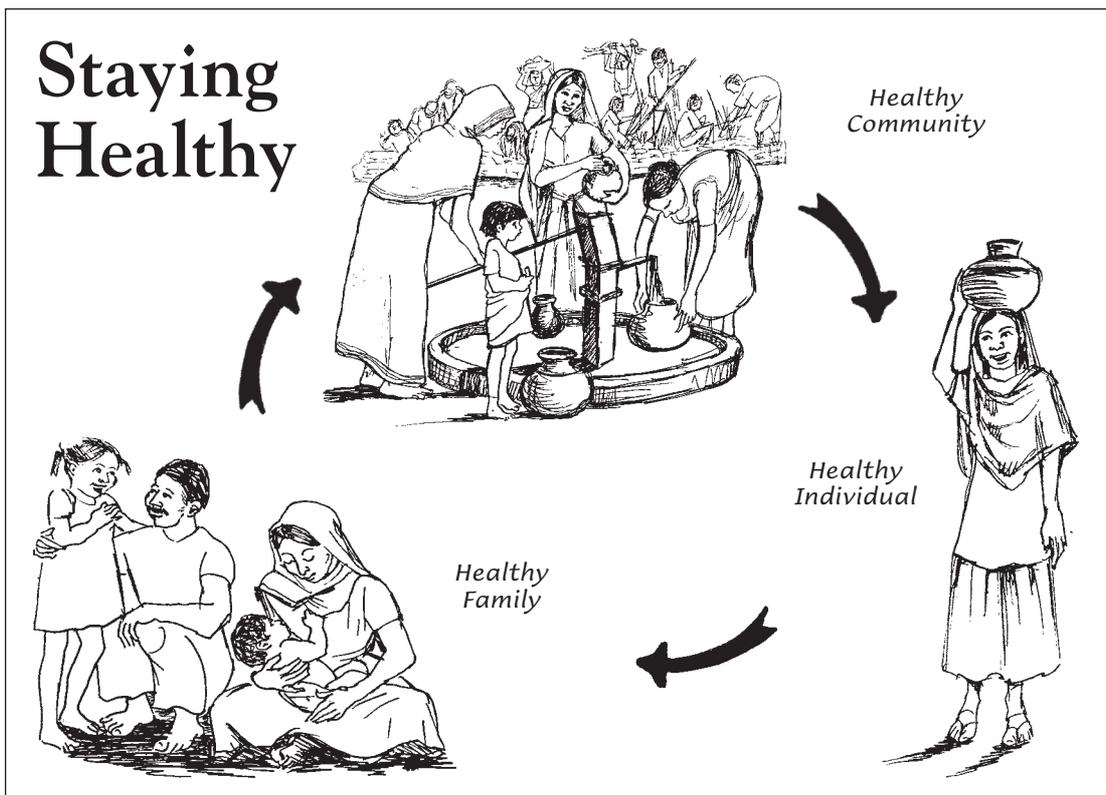


Chapter 10

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Most of this book describes health problems and what to do about them. But many of these problems can be prevented (stopped before they start) by better *nutrition*, cleanliness, rest, and by meeting women's basic health needs. So in this chapter we describe some of the things a woman, her family, and her community can do to prevent illness.

It is not always easy for women to prevent illness. Although they do a lot to keep their families and communities healthy, many women have difficulty finding the time, energy, and money to pay attention to their own health needs. Since women are often taught to put the needs of others first, they have little time left for themselves after caring for their families. And the family's limited resources are often spent on the children and men first.

Yet, in the long run, it saves a lot of pain and stress to prevent health problems before they start rather than treating them later. Some of these things do not take much time or money. Others take some extra time, effort, and money—at least in the beginning. But since prevention builds the health and strength of a woman, her family, and her community, life will be easier and better later on.

► *Healthy communities help women stay healthy. Healthy women can care for their families. Healthy families can contribute more to the community.*



eating for good health

Cleanliness

► Different health problems are spread in different ways. For example, tuberculosis (TB) germs are spread through the air. Lice and scabies are spread through clothes and bed covers.

Many illnesses are spread by *germs* that pass from one person to another. Here are some of the most common ways that germs are spread:

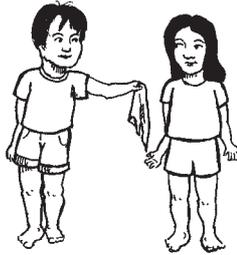
- by touching an infected person.



- through the air. For example, when someone coughs, germs in small drops of spit (saliva) can spread to other people or objects.



- through clothes, cloths, or bed covers.



- by eating contaminated food.



- through insect bites or animal bites.



Cleanliness in the community (sanitation), cleanliness in the home, and personal cleanliness are all important to prevent these sicknesses by stopping the spread of germs. For example:

1. A man infected with parasites has diarrhea outside.



2. A pig eats the man's stool.



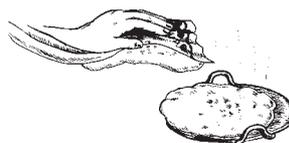
3. One of the man's children plays with the pig and gets stool on himself.



4. Later, the child starts to cry and his mother comforts him and cleans his fingers with her skirt. She also gets stool on her hands.



5. The busy mother prepares food for the family without washing her hands first. She uses her skirt to keep from burning her hands, forgetting that it was not clean.



6. The family eats the food. Soon everyone has diarrhea.



What could have prevented the family's illness?

If the family had used any of these precautions, the spread of illness could have been prevented:

- if the man had used a latrine or toilet.
- if the pig had not been allowed to run free.
- if the mother had not used her skirt to wipe the child's hands and then touch the food.
- if the mother had washed her hands after touching her child and before preparing food.

CLEANLINESS IN THE COMMUNITY (SANITATION)

Many common health problems are best solved in the community. When the community works together to improve sanitation, everybody benefits. For example:

Work together to develop a source of clean water for drinking and cooking. The source should be close enough to the community for people to get water easily.

To keep drinking and cooking water clean:

- do not let animals go near the water source. If necessary, build a fence to keep them out.
- do not bathe, or wash clothes, cooking pots, or eating utensils near the water source.
- do not pass stool or throw garbage (rubbish) near the water source.

Get rid of garbage in a safe way. If possible, bury, *compost*, or burn garbage. If you bury it, make sure the pit is deep enough to keep animals and bugs away. If the garbage is above ground, fence off the dump and cover the garbage with dirt to reduce flies. Also, find safe ways to get rid of dangerous and *toxic* materials. For example, do not burn plastic, because the *fumes* can be toxic, especially to children, old people, and sick people.

Drain standing water in washing areas, and in puddles, tires, and open containers. *Malaria* and *dengue fever* are spread by mosquitos, which breed in water that is not flowing. If possible, use mosquito nets when sleeping.

Organize your community to build latrines (see the next page for how to build a latrine).



Clean drinking water can help prevent diarrhea and parasites.

► *Use composted food waste to fertilize your crops.*

► For more information about building latrines, see Hesperian's book *A Community Guide to Environmental Health*.

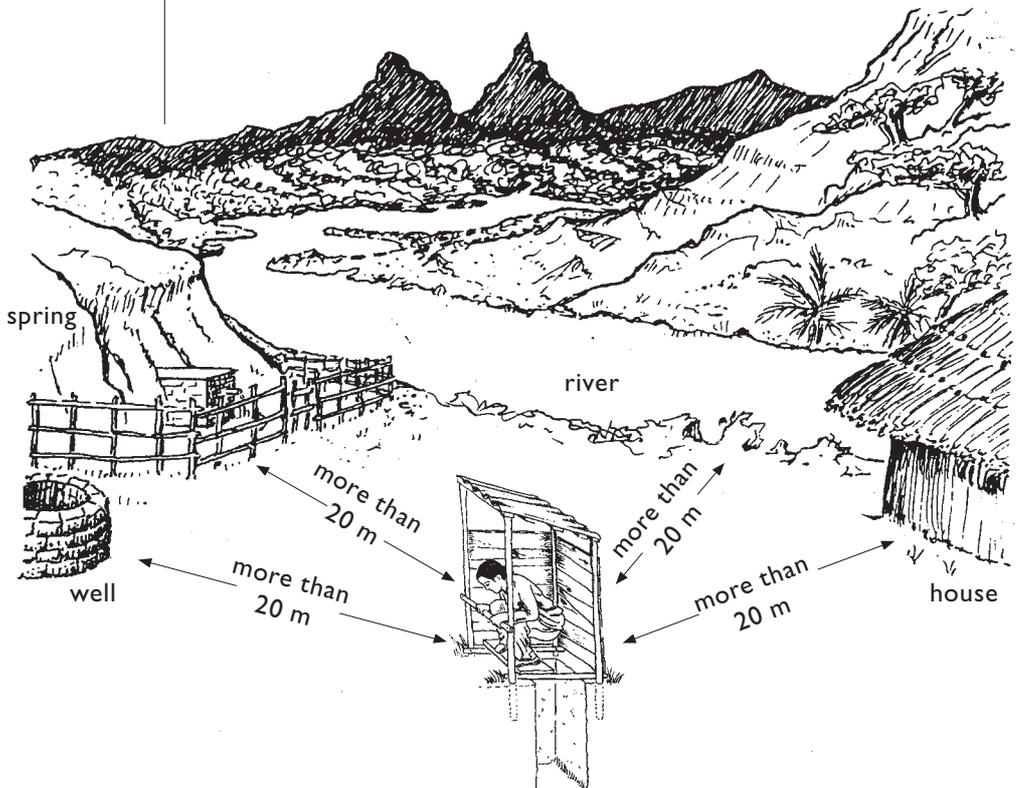
► After using the latrine, throw a little lime, dirt, or ash in the hole to reduce the smell and keep flies away.

How to build a latrine

1. Dig a pit about $\frac{1}{2}$ meter wide, $1\frac{1}{2}$ meters long, and 3 meters deep.
2. Cover the pit, leaving a hole about 20 by 30 centimeters.
3. Build a shelter and roof out of local building materials.



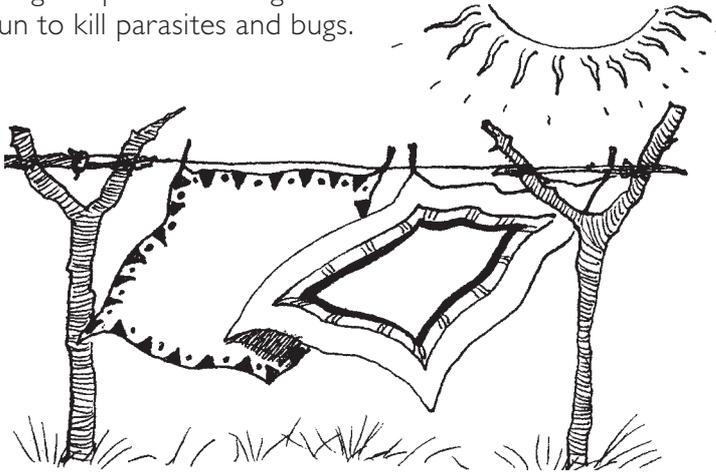
To be safe, a latrine should be at least 20 meters from all houses, wells, springs, rivers, or streams. If it must be anywhere near a place people go for water, be sure to put the latrine downstream.



CLEANLINESS IN THE HOME

Since family members are in close contact with each other, it is very easy to spread germs and illness to the whole family. A family will have less illness if they:

- wash cooking and eating pots and utensils with soap (or clean ash) and clean water after using them. If possible, let them dry in the sun.
- clean the living space often. Sweep and wash the floors, walls, and beneath furniture. Fill in cracks and holes in the floor or walls where roaches, bedbugs, and scorpions can hide.
- hang or spread bedding in the sun to kill parasites and bugs.



► Sunlight kills many germs that cause illness.

- do not spit on the floor. When you cough or sneeze, cover your mouth with your arm, or with a cloth or handkerchief. Then, if possible, wash your hands.
- get rid of body wastes in a safe way. Teach children to use a latrine or to bury their stools, or at least to go far away from the house or from where people get drinking water.

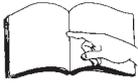


► If children or animals pass stool near the house, clean it up at once.

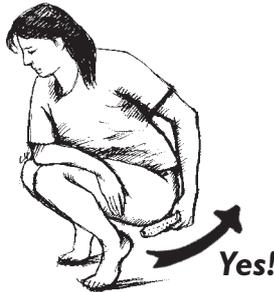
PERSONAL CLEANLINESS

It is best to wash with soap and clean water every day, if possible. Also:

- wash your hands before eating or preparing food, after passing *urine* or stool, and before and after caring for a baby or someone who is sick.
- wash the *genitals* every day with mild soap and water. **But do not *douche*.** The vagina cleans and protects itself by making a small amount of wetness or discharge. Douching washes away this protection and makes a woman more likely to get a vaginal infection.
- pass urine after having sex. This helps prevent infections of the urine system (but will not prevent pregnancy).
- wipe carefully after passing stool. Always wipe from front to back. Wiping forward can spread germs and worms into the urinary opening and vagina.



caring for yourself during monthly bleeding, 55
infections of the urine system, 365

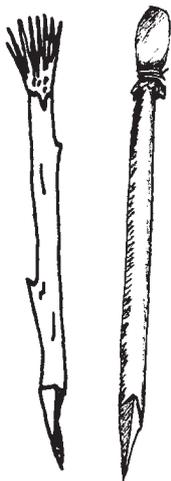


Protect your teeth

Taking good care of the teeth is important because:

- strong, healthy teeth are needed to chew and digest food well.
- painful cavities (holes in the teeth caused by decay) and sore gums can be prevented by good tooth care.
- decayed or rotten teeth caused by lack of cleanliness can lead to serious infections that may affect other parts of the body.
- people who do not care for their teeth are more likely to lose them when they get old.

Teeth should be cleaned carefully twice a day. This removes the germs that cause decay and tooth loss. Clean the surface of all front and back teeth, then clean between the teeth and under the gums. Use a soft brush, tooth stick, or finger wrapped with a piece of rough cloth. Toothpaste is good but not necessary. Salt, baking soda, or even plain, clean water will also work.



You can make a toothbrush to keep your teeth clean.



CLEAN WATER

Drinking water should be taken from the cleanest possible source. If the water is cloudy, let it settle and pour off the clear water. Then, before drinking, kill the harmful germs as described below. This is called purification.

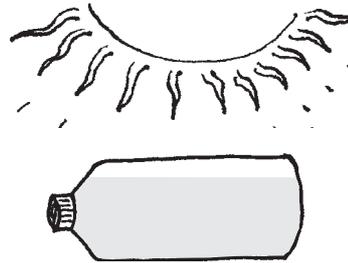
Store the purified water in clean, covered containers. If the container has been used for storing cooking oil, wash it well with soap and hot water before storing clean water in it. **Never store water in containers that have been used for chemicals, pesticides, or fuels.** Wash water containers with soap and clean water at least once a week.



Store water in covered jars and keep your living space clean.

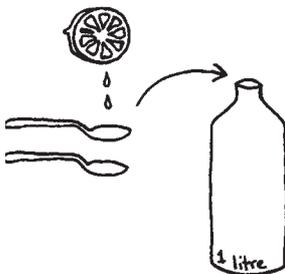
Here are some simple and inexpensive ways to purify your water:

Sunlight. Sunlight kills many harmful germs. To purify water using sunlight, fill clean, clear glass or plastic containers with water, and leave them outside from morning to late afternoon. Be sure to place the containers in an open space where they will be in the sun all day. (If drinking water is needed right away, putting the containers in the sun for 2 hours in the middle of the day should be enough for purification.)



To avoid getting germs in the water, choose a spot away from children, dust, and animals. If you want the water to cool before using, bring the containers inside overnight. Water can be stored for a day or two in the same container. Sunlight purification works best in warm climates.

Lemon juice sometimes kills cholera (and some other germs). Add 2 tablespoons lemon juice to a liter (1 quart) of water and let it sit for 30 minutes.



Boiling water for 1 minute makes it safe from germs. Let it boil for 1 full minute before taking the pot off to cool. Because boiling water uses so much fuel, use this method only if there is no other way to purify your water.





► *Washing your hands prevents the spread of disease. Keep a special clean rag for drying your hands. Wash it often and dry it in the sun.*



Or dry your hands in the air by shaking the water off.

► *Some communities have traditional ways to prepare raw meat or fish that make them safe to eat.*

FOOD SAFETY

Many common diseases of the intestines are spread through food. Sometimes people who harvest, handle, or prepare food pass germs from their hands into the food. Sometimes germs and molds in the air begin to grow in the food and it goes bad (spoils). This happens when food is not stored or cooked properly, or when it gets old.

To prevent the spread of germs in food:

- wash your hands with soap and water before preparing food, before eating, and before feeding your children.
- wash or peel all fruits and vegetables that are eaten raw.
- do not let raw meat, poultry, or fish touch other food that is eaten raw. Always wash your hands, knife, and cutting board after cutting these meats.
- avoid coughing, spitting, and chewing things like gum or betel near food so your saliva does not get in the food.
- do not allow animals to lick dishes or utensils clean. If possible, keep animals out of the kitchen.
- throw food out when it spoils.

Here are some of the most common signs of spoiled foods:

- bad smell
- bad taste or a change in taste
- changed color (for example, if raw meat changes from red to brown)
- many bubbles on the top (for example, on the top of old stew or soup) along with a bad smell
- slime on the surface of meat or cooked foods

Cooked food

Cooking food kills germs. All meats, fish, and poultry should be well cooked. Nothing should look raw or have a raw color.

If the food begins to cool, the germs quickly start to grow again. If the food is not eaten within 2 hours, reheat it until it is very hot. Liquids should be bubbling, and solids (like rice) should be steaming.



Food selection. Sometimes food is bad even before it is cooked or stored. Here are some things to look for when selecting food.

Fresh (raw) foods should be:

- fresh and in season.
- whole—not bruised, damaged, or eaten by insects.
- clean (not dirty).
- fresh smelling (especially fish, shellfish, and meat, which should not have a strong smell).



Processed (cooked or packaged) foods should be stored in:

- tins that look new (no rust, bulges, or dents).
- jars that have clean tops.
- bottles that are not chipped.
- packages that are whole, not torn.



Strong-smelling fish and bulging cans are signs that the food has spoiled.

Food storage

Whenever possible, eat freshly prepared food. If you store food, keep it covered to protect it from flies and other insects, and dust.

Food keeps best if it stays cool. The methods described below cool food using evaporation (the way that water disappears into the air). Put the food in shallow pans for more complete cooling.

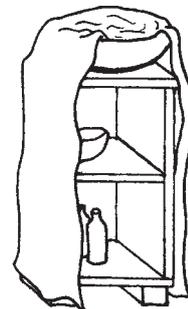
Pottery cooler. This double-pot cooler is made of a small pot inside a large pot. The space between the pots is filled with water. Use a large pot and lid that have not been glazed (coated with a hard, smooth, baked-on covering) so that the water will evaporate through the pot.



The small pot should be glazed on the inside to make it easier to keep clean and to stop water from seeping into the stored foods.

Cupboard cooler. Put a wooden crate or box on its side, and then set it on bricks or stones to raise it off the floor. Put a container of water on top of the crate and drape sackcloth or other coarse cloth over the bowl and around the crate. The cloth should not quite reach the floor. Dip the cloth in the water, so that the wetness spreads throughout the cloth. Place the food inside the crate. As the water in the cloth evaporates, it will cool the food. This method works best if you can keep the cloth wet all the time.

► Women in the community can teach others about which local foods keep well and good ways to store them.



Cover the entire crate when you make a cupboard cooler. The front is open here just so you can see inside.

Special Needs of Women



work

► Work with your community to lower women's workload. Stoves that use less fuel (page 395) and village water sources improve everyone's lives.

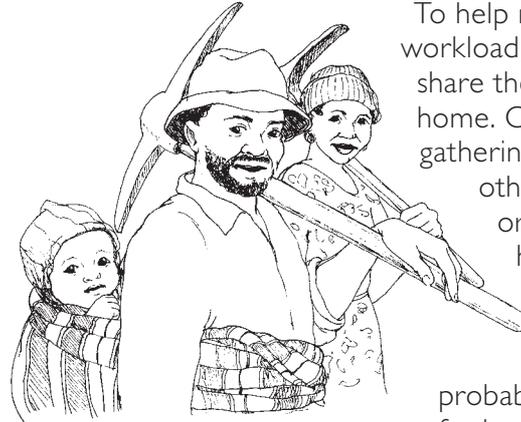


sitting or standing for a long time

REST AND EXERCISE

Rest

Most women work very hard cooking, carrying water, and collecting fuel to help their families survive. If a woman also works outside her home, she has a double burden. She may work all day at a factory, in an office, or in the fields, and then return home to her second job—caring for her family. All this hard work can lead to *exhaustion*, *malnutrition*, and sickness, because she does not have enough time to rest or enough food to give her energy for her tasks.



To help reduce a woman's workload, family members can share the burden of work at home. Cooking, cleaning, and gathering fuel and water with other women (together or in turns) can also help make a woman's burden lighter. Whether she works for pay or not, she probably needs help caring for her children. Some

women organize child care cooperatives, where one woman cares for young children so that others can work. Each woman pays something to the woman caring for the children or they each take a turn.

If a woman is pregnant, she needs even more rest. She can explain to her family why she needs rest, and ask them for extra help with her workload.

*I am so tired of sitting!
I need to get more exercise. Maybe I should walk home...*

Exercise

Most women get plenty of exercise doing their daily tasks. But if a woman does not move much while she works—for example, if she sits or stands all day in a factory or office—she should try to walk and stretch every day. This will help keep her heart, lungs, and bones strong.



REGULAR HEALTH EXAMS

If possible, a woman should see a trained health worker to check her *reproductive system* (see page 44) every 3 to 5 years, even if she feels fine. This exam should include a pelvic exam, a breast exam, a test for weak blood (*anemia*), and an exam for *sexually transmitted infections* (STIs) if she is at risk (see page 263). It may also include a *Pap test* (explained below) or other test for cervical cancer. This is especially important for women over 35, because women are more likely to get *cancer of the cervix* (the opening of the womb) as they get older.



► Many STIs and cancers do not show signs until the illness is very serious. By then it may be too late to treat the problem.

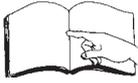


women who are at risk for STIs

These are the steps in the pelvic exam:

1. The health worker will look at your outer genitals for any swelling, bumps, sores, or changes in color.
2. Usually, the health worker will put a speculum into your vagina. A speculum is a small metal or plastic tool that holds the inside of the vagina open. He or she can then examine the walls of the vagina and the cervix for swelling, bumps, sores, or discharge. You may feel slight pressure or discomfort with the speculum inside, but it should not hurt. The exam is more comfortable if your muscles are relaxed and your *bladder* is empty.
3. If the clinic has *laboratory* services, the health worker will do tests for STIs, if necessary. The health worker may also do a test to look for early changes on the opening of the womb (cervix) that could become cancer. This could be a Pap test, visual inspection of the cervix, or a new test to look for HPV, the virus that causes cervical cancer. These tests are not painful and are done with the speculum in place. If cancer is found and treated early, it can almost always be cured (see page 377).
4. After the health worker removes the speculum, she will put on a clean plastic glove and put two fingers of one hand into your vagina. She will press her other hand on your lower belly. In this way she can feel the size, shape, and location of your womb, *tubes*, and *ovaries*. This part of the exam should not be painful. If it is, tell her. It may mean something is wrong.
5. For some problems, the health worker may need to do a rectal exam. One finger is put into your *rectum* and one finger into your vagina. This can give the health worker more information about possible problems of the vagina, and of the womb, tubes, and ovaries.





safer sex, 189
pelvic infection, 274

► AIDS has become a major cause of death among women.



family planning

SAFER SEX

Having unprotected sex, or sex with many partners, makes a woman more at risk for getting an STI, including HIV infection. HIV infection can lead to death from AIDS. Untreated STIs can cause *infertility*, *pregnancies in the tube*, and *miscarriage*. Having many partners also makes a woman more at risk for developing *pelvic inflammatory disease (PID)* and cancer. Women and men can help prevent all these problems by practicing safer sex.

FAMILY PLANNING

A young woman should use family planning to delay her first pregnancy until her body is fully grown. Then, after her first baby is born, she should wait 2 or more years between each pregnancy. This method, called child spacing, lets her body get strong again between pregnancies, and her baby can finish breastfeeding. When she has the number of children she wants, she can choose not to have any more.

For healthy mothers and babies, it is better not to have:



babies too early,



babies too late,



too many babies,



babies too close together.

GOOD CARE DURING PREGNANCY AND BIRTH

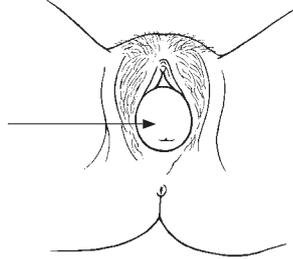
Many women do not seek care during their pregnancy because they do not feel sick. But feeling well does not mean there are no problems. Many of the problems of pregnancy and birth, such as high blood pressure or the baby lying the wrong way, usually do not have any signs. A woman should try to get regular prenatal (before birth) checkups, so that a midwife or health worker trained in giving care during pregnancy can examine her body and see if her pregnancy is going well. Good prenatal care can prevent problems from becoming dangerous.

Family planning and good care during pregnancy and birth can prevent:

Fallen womb (prolapse). If a woman has been pregnant often, had long labors, or pushed too early during labor, the muscles and *ligaments* that hold up her womb may have become weak. When this happens the womb can fall part or all of the way into the vagina. This is called a prolapse.

Signs:

- leaking urine
- in severe cases, the cervix can be seen at the opening of the vagina



Prevention:

- Space children at least 2 years apart.
- During labor, push only when the cervix is fully open and there is a strong need to push. Never let anyone push down on your womb to get the baby out quickly.

Urine leaking from the vagina (fistula). If a baby's head presses too long against the wall of the vagina during labor, the vaginal *tissue* may be damaged. Urine or stool may leak out of the vagina. For more information, see page 370.

Prevention:

- Wait to get pregnant until your body is fully grown.
- Get medical help if labor goes on too long.
- Space babies at least 2 years apart so that your muscles can get strong again in between pregnancies.



treatment for fallen womb



leaking urine



giving birth



squeezing exercise

VACCINATIONS AGAINST TETANUS

Tetanus is an infection that kills. A woman can get tetanus when a germ that lives in the stools of people or animals enters her body through a wound. Although anyone can get tetanus, women and babies are especially at risk during childbirth. Tetanus can enter the body if an instrument that is not properly disinfected is put into the womb or used to cut the baby's cord.

All girls and pregnant women should be *vaccinated* against tetanus. If a woman is pregnant and has not been vaccinated, she should have an *injection* at her first prenatal checkup, and a second injection at least a month later. Then, if possible, she should follow the rest of the schedule.

Tetanus immunization schedule:

No. 1: at first visit

No. 2: at least 1 month after first injection

No. 3: at least 6 months after 2nd injection

No. 4: at least 1 year after 3rd injection

No. 5: at least 1 year after 4th injection

Then get an injection once every 10 years.

► A woman should examine her breasts every month, even after her monthly bleeding has stopped forever.

► If a woman has a disability that makes examining her breasts difficult, she can ask someone she trusts to do it for her.

REGULAR BREAST EXAMS

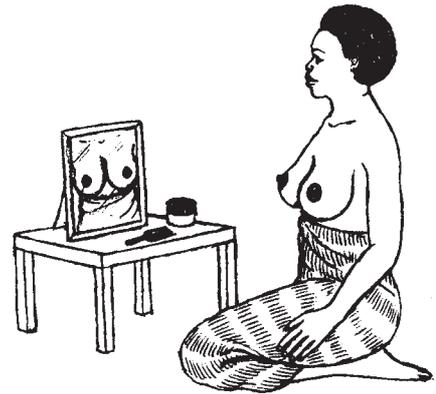
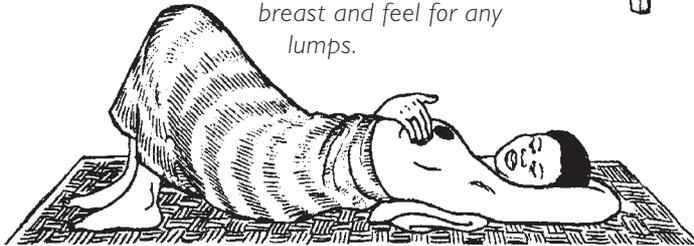
Most women have some small lumps in their breasts. These lumps often change in size and shape during her monthly cycle. They can become very tender just before a woman's monthly bleeding. Sometimes—but not very often—a breast lump that does not go away can be a sign of breast cancer.

A woman can usually find breast lumps herself if she learns how to examine her breasts. If she does this once a month, she will become familiar with how her breasts feel, and will be more likely to know when something is wrong.

How to examine your breasts

Look at your breasts in a mirror, if you have one. Raise your arms over your head. Look for any change in the shape of your breasts, or any swelling or changes in the skin or nipple. Then put your arms at your sides and check your breasts again.

Lie down. Keeping your fingers flat, press your breast and feel for any lumps.



Be sure to touch every part of your breast. It helps to use the same pattern every month.



What to do if you find a lump

If the lump is smooth or rubbery, and moves under the skin when you push it with your fingers, do not worry about it. But if it is hard, has an uneven shape, and is painless, keep watching it—especially if the lump is in only one breast and does not move even when you push it. See a health worker if the lump is still there after your next monthly bleeding. This may be a sign of cancer (see page 382). You should also get medical help if there is a discharge that looks like blood or pus.

Things to Avoid to Stay Healthy

Tobacco, alcohol, and other drugs can all be bad for a woman's health. For more information, see page 435.

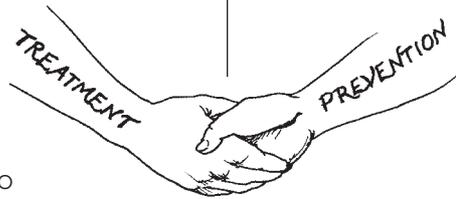
WORKING TOWARD A BALANCE BETWEEN TREATMENT AND PREVENTION

Health workers, or anyone working to improve the health of women in the community, can play an important role in stopping illnesses before they start. But often a woman's main need is not preventing illness but getting relief from an illness she already has. One of the first concerns of a health worker, then, must be to help with healing.

But treatment can be used as a doorway to prevention. One of the best times to talk to a woman about prevention is when she comes to see you for help. For example, if a woman comes to you with an infection of the urine system, treat the problem first. Then take time to explain how she can prevent these infections in the future.

Work toward a balance between prevention and treatment that is acceptable to the women you see. This balance will depend a lot on how the women already feel about sickness, healing, and health. As daily survival becomes less of a challenge, as their ideas about health change, and more diseases are controlled, you may find that they become more interested in prevention. Then much needless suffering can be avoided, and you can help women work toward more effective self-care.

Working for Change



► Health workers can play an important role in helping women work together to prevent women's health problems in the community.