Chapter 10

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This chapter is about things you can do to prevent health problems. You may also want to read Chapter 11, “Eating For Good Health,” and Chapter 28, “Alcohol and Other Drugs.”
Most of this book describes health problems and what to do about them. But many health problems can be prevented (stopped before they start) by eating healthy foods, getting more rest, stopping the spread of germs, and meeting basic needs. It is easier to say this than to do it.

While women do a lot to keep their families and communities healthy, they are often taught to put other people’s needs before their own. When a family has limited resources, these are often spent on the children and men. Women are often left with little time, energy, and money to care for their own health and prevent illness.

In the long run, it saves a lot of pain and stress to prevent health problems rather than trying to treat them later. You can do many things to stay strong and healthy that cost little money and do not take much time and effort. Everyone in your family and community will benefit when you stay healthy and help make it possible for others to stay healthy too.
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, the small drops of spit (saliva) can spread germs to other people.
- through clothes, cloths, or bed covers.
- through insect or animal bites.
- by eating contaminated food.

Personal, home, and community cleanliness (sanitation) prevent illnesses because they stop the spread of germs.

For example:

1. A man with a diarrhea caused by parasites passes stool 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’s mother cleans his fingers with her skirt. She also gets stool on her hands.
5. Because the community water pump is broken and it is the dry season, 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.

Different illnesses are spread in different ways. For example, tuberculosis (TB) spreads through the air. Scabies and human papillomavirus (HPV) spread through skin-to-skin contact with an infected person.
What could have prevented the family’s illness?
- If there was a latrine or a toilet the family could use.
- If animals were kept away from where the family lives and children play.
- If they did not have to use clothes to wipe, clean, or grab hot objects.
- If there was clean water for washing hands, especially before touching other people or preparing food.

Cleanliness in the Community (sanitation)
Many common health problems are best solved when the community works together to improve sanitation. This benefits everyone because it prevents the spread of illness. 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 and do not 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, and old and sick people. For more information, see A Community Guide to Environmental Health.

Drain standing water in washing areas, 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).
How to build a latrine

1. Dig a pit about ½ meter wide, 1½ 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.

➤ 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.
CLEANLINESS IN THE HOME
Since family members are in close contact with each other, it is very easy to spread illness to the whole family when someone gets sick. Here are some ways to help prevent illness in your home:

• 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 areas 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.

• 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 to go at least 20 meters from the house or from where people get drinking water.

➤ Sunlight kills many germs that cause illness.

➤ If children or animals pass stool near the house, clean it up at once.
**PERSONAL CLEANLINESS**

It is best to wash your body with soap and water every day if possible, especially your hands and genitals.

- 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.
- 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 you 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.

**Protect your teeth**

Taking good care of the teeth is important because:

- everyone needs strong, healthy teeth to chew food so it can digest well.
- good tooth care can prevent painful cavities (holes in the teeth caused by decay) and sore gums.
- decayed or rotten teeth caused by lack of good care 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.

Carefully clean your teeth 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.
**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 it, 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. Wash water containers with soap and clean water at least once a week. **Never store water in containers that have been used for chemicals, pesticides, or fuels.**

*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 1 liter (1 quart) of water and let it sit for 30 minutes. Store water in covered jars and keep your living space clean.

**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.
Food Safety

Many common diseases of the intestines are spread through food. People who harvest, handle, or prepare food can pass germs from their hands into the food. When food gets old or is not stored or cooked properly, germs and mold in the air can grow in the food and make it spoil (go bad).

To prevent the spread of germs in food:

• wash your hands with soap and water before preparing food, eating, and feeding your family.
• 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. If possible, keep animals out of the kitchen.
• throw food out when it spoils.

Some of the most common signs of spoiled foods are:

• 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)
• slime on the surface of meat or cooked foods

Cooked food

Cooking food kills germs. It is safest to eat all meats, fish, and poultry well cooked.

When the food begins to cool, the germs quickly start to grow again. If the food is not eaten within 2 hours after being cooked, reheat until liquids boil and solids (like rice) are steaming. Then eat the food right away.
Food selection.

Food can go 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 with no rust, bulges, or dents.
- jars with lids.
- bottles that are not chipped.
- packaging or containers that are whole, not torn or punctured.

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Food storage

It is safest to eat food right after cooking it, but this is not always possible. When you store food, keep it covered to protect it from insects and dust, and keep it cool to prevent bacteria and mold from growing. The methods described below cool food using evaporation (turning water into vapor). You can put food in shallow pans for more complete cooling.

**Pottery cooler.** For this method, you will need one big pot and one small pot. Use a large pot and lid that have not been glazed (coated with a baked-on covering). This will allow water to evaporate through this pot. Use a small pot that has been glazed on the inside. This will prevent water from seeping into the stored foods. Place food inside the small pot. Then put the small pot inside the big one, and fill the space between with water.

**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.
More Ways to Prevent Illness

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 a 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 to fulfill her tasks.

To 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 make a woman's burden lighter. Whether working for pay or not, she might need help caring for her children. Some families organize childcare cooperatives, where one person cares for young children so that others can work. Each family pays something to the person caring for the children or they each take a turn.

Even more rest is needed during pregnancy. Everyone needs extra help from family members and friends to lighten their workload during pregnancy.

Exercise
Most people get plenty of exercise doing their daily tasks. But if someone does not move much while they work—for example, if they sit or stand all day in a factory or office—they should try to walk and stretch every day. This will help keep their heart, lungs, and bones strong. Regular exercise also supports mental health and helps prevent depression.

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

**Regular health exams**

You should see a trained health worker to check your reproductive system every 3 to 5 years, even if you feel fine. This exam should include a pelvic exam (explained below), a breast exam, a test for anemia, and an exam for sexually transmitted infections (STIs, see page 263). It may also include a test for cancer of the cervix (the opening of the womb). This is especially important for people who are 35 and older, as risk of cervical cancer increases with age.

➤ 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.

What to expect during a pelvic exam:

This exam is more comfortable if your bladder is empty and you relax your muscles.

1. A health worker will look at your outer genitals for any swelling, bumps, sores, or changes in color.

2. Then the health worker will use a small metal or plastic tool called a speculum to hold your vagina open. You may feel some pressure or discomfort with the speculum inside, but it should not hurt. The health worker will examine the walls of the vagina and the cervix for swelling, bumps, sores, or discharge.

3. If the clinic has laboratory services, the health worker may test for STIs. The health worker may also test for changes on the opening of the womb (cervix) that could become cancer. They may do a Pap test, visual inspection of the cervix, or a test to look for the virus that causes cervical cancer. These tests are done with the speculum in place. If cervical cancer is found and treated early, it can almost always be cured.

4. The health worker will remove the speculum and will put on a clean plastic glove and put two fingers of one hand into your vagina. They will press their other hand on your lower belly to feel the size, shape, and location of your womb, tubes, and ovaries. This part of the exam should not be painful. If it is, let them know. 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, womb, tubes, and ovaries.
**SAFER SEX**
You can protect yourself from STIs and unwanted pregnancies while enjoying a healthy sex life. The main way to do this is by using a condom every time you have sex. Condoms are affordable, easy to use, and widely available.

**FAMILY PLANNING**
People are healthier when they can decide for themselves if and when to have children. Access to family planning enables you to make those decisions. If you want to have children, it is safest to delay your first pregnancy until your body is fully grown. Then, waiting 2 or more years between pregnancies lets your body regain strength and gives your baby time to finish breastfeeding. When you have the number of children you want, family planning lets you choose not to have more.

*It is healthier not to have:*

- babies too young,
- babies too old,
- many babies,
- babies very close together.

**GOOD CARE DURING PREGNANCY AND BIRTH**
Everyone should get care during pregnancy and birth to make sure that they and their babies are healthy. If you are pregnant, get regular check-ups from a midwife or a trained health worker. They can check for problems during pregnancy or birth that do not show signs you can see or feel yourself, such as high blood pressure or the baby in the wrong position. Good prenatal care can prevent problems from becoming dangerous.
More Ways to Prevent Illness

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

Fallen womb (prolapse). If someone has been pregnant often, had long labors, or pushed too early during labor, the muscles and ligaments that hold up the 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 injured. 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.

### Vaccinations against tetanus

*Tetanus* is a serious infection caused by a germ that can enter a person’s body through a wound. Birth is an especially risky time, both for the person who is delivering and the baby. Tetanus can infect either one if an instrument that is not sterilized is put into the womb or used to cut the baby’s cord.

Everyone should be vaccinated against tetanus. If you are pregnant and have not been vaccinated, you should have an injection at your first prenatal check-up, and a second injection at 4 weeks or more later, but at least 2 weeks before giving birth. Then, if possible, follow the rest of the schedule.

**This is one example of a 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.
Staying Healthy

Regular Breast Exams

It is common to have some small lumps in your breasts. These lumps often change in size and shape during your menstrual cycle. They can become very tender just before your menstrual period. Although it is rare, a breast lump that does not go away can be a sign of breast cancer.

You can learn how to examine your breasts for lumps yourself. If you do this once a month, you will become familiar with how your breasts feel, and will be more likely to know when something is wrong.

➤ Examine your breasts every month, even after your menstrual bleeding has stopped forever.

➤ If you have a disability that makes examining your breasts difficult, you can ask someone you trust to do it for you.

How to Examine Your Breasts

Stand or sit in front of a mirror and look at your breasts. 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 with your left arm behind your head. Keeping your fingers flat, use your right hand to press your left breast and feel for any lumps.

Be sure to touch every part of your breast. It helps to use the same pattern every month. When you finish with your left breast, check your right breast the same way but using your left hand.

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 menstrual period. This may be a sign of cancer (see page 382). You should also get medical help if there is a discharge coming out of either nipple.
WORKING TOWARD A BALANCE BETWEEN TREATMENT AND PREVENTION

Health workers and anyone else working to improve the health of the community can play an important role in stopping illnesses before they start. But often a person’s main need is not preventing illness but getting relief from an illness they already have. 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 someone about prevention is when they come to see you for help with a health problem. 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 people you see. This balance will depend a lot on how people 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 are more able to think about prevention. Then much suffering can be avoided, and you can help women and others in the community work toward more effective self-care.