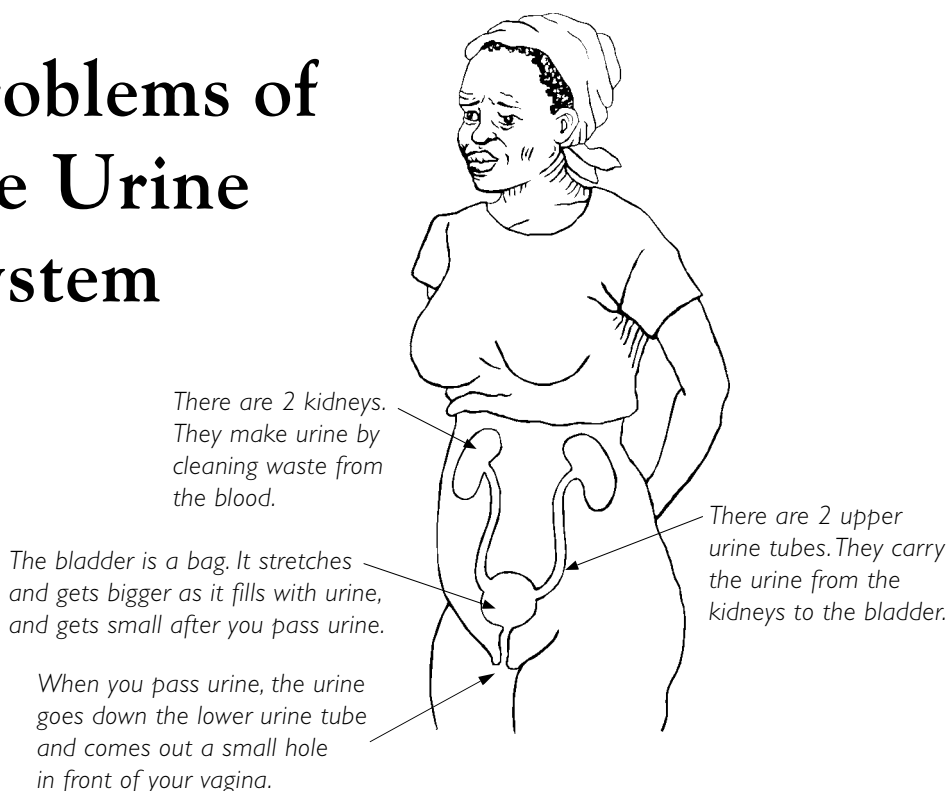


Chapter 23

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Problems of the Urine System



This chapter describes the most common problems that affect the urine system. Sometimes these problems are difficult to tell apart. So if your problem seems different from those described here, get medical help. You may need special tests to find out what the problem is.

If you can identify the problem, it may be possible to treat the problem at home—especially if treatment is started right away. But remember that some serious problems begin with signs that do not seem very bad. These problems can quickly become painful and dangerous. So if you do not feel better within 2 to 3 days, get medical help.

Female genital cutting

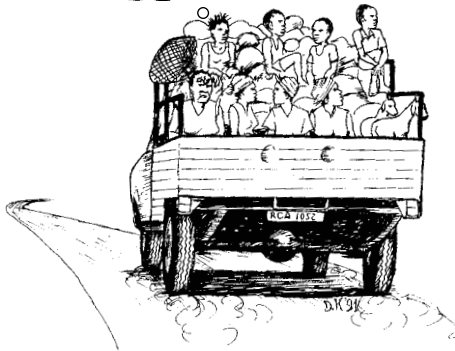
This can damage the urine system and cause serious health problems for a woman all her life. If you have been cut and have problems passing urine, or *infections* that return again and again, talk to a health worker. You may need surgery to correct the problem. For more information, see the chapter on “Female Genital Cutting,” page 459.

Infections of the Urine System



A girl or woman of any age—even a small baby—can get an infection of her urine system.

I hope the truck stops soon so I can pass urine.



► Teach little girls the correct way to wipe after passing stool.

There are 2 main kinds of urine system infections. A bladder infection is the most common and the easiest to treat. A kidney infection is very serious. It can lead to permanent damage to the kidney and even death.

WHAT CAUSES BLADDER AND KIDNEY INFECTIONS?

Infections of the urine system are caused by *germs* (*bacteria*). They get into the body from the outside through the urinary opening near the *vagina*. Infection is more common in women than in men because a woman's lower urine tube is much shorter. This means germs can more easily climb up the short urine tube into the bladder.

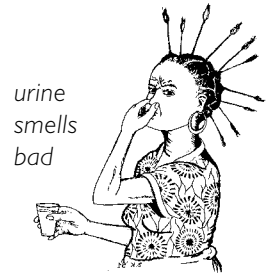
Germs often enter a woman's body or start to multiply when she:

- **has sex.** During sex, germs from the vagina and *anus* can be pushed up through the urinary opening into the lower urine tube. This is one of the most common causes of a bladder infection in women. To prevent infection, pass urine after having sex. This washes out the urine tube (but does not prevent pregnancy).
- **goes for a long time without drinking**, especially if she works outside in hot weather and sweats a lot. Germs will start to multiply in the empty bladder. Try to drink at least 8 glasses or cups of liquid a day. When working in the hot sun, drink even more.
- **goes for a long time without urinating** (for example, when traveling). Germs that stay in the urine system for a long time can cause an infection. Try to pass urine every 3 to 4 hours.
- **does not keep her genitals clean.** Germs from the *genitals*—and especially the *anus*—can get into the urinary opening and cause infection. Try to wash the genitals every day, and always wipe from front to back after passing *stool* (see page 154). Wiping forward can spread germs from the anus into the urinary opening. Also, try to wash your genitals before having sex. Keep the cloth and pads used for your monthly bleeding very clean.
- **has a disability**, especially those from back-bone (spinal cord) injuries, or with a loss of feeling in the lower body. For more information, see the books *Where There Is No Doctor* and *A Health Manual for Women with Disabilities*.



SIGNS AND TREATMENT**Bladder infection signs:**

- need to pass urine very often. (It may also feel as though some urine is still left inside.)
- pain or a burning feeling while passing urine
- pain in the lower belly just after passing urine
- urine smells bad, or looks cloudy, or has blood or pus in it. (Dark urine can be a sign of *hepatitis*. See page 277.)

**Kidney infection signs:**

- any bladder infection signs
- fever and chills
- lower back pain, often severe, that can go from the front, around the sides, and into the back
- nausea and vomiting
- feeling very ill and weak

If you have signs of both a bladder and a kidney infection, you probably have a kidney infection.

Don't worry Lihua. I will help you get to the health center.



When a woman has a kidney infection, she may be in great pain and feel very ill. This can be very frightening. If this happens to you, try to get a family member or a neighbor to help you get to a health worker or health post.

IMPORTANT If your signs are serious, start taking medicine right away. See the next page.

Treatment for a bladder infection:

Bladder infections can often be treated with home remedies. **Start treatment as soon as you notice the signs.** A bladder infection can sometimes travel quickly up the urine tubes into the kidneys.

- **Drink a lot of water.** Try to drink at least one cup of clean water every 30 minutes. This will make you pass urine often. Sometimes the germs will wash out of your urine system before the infection gets worse.
- **Stop having sex** for a few days, or until the signs have gone away.



- **Make a tea** from flowers, seeds, and leaves that are known to help cure urine infections. Ask the older women in the community which plants will help.

► STIs, especially *chlamydia*, can cause a burning feeling when a woman passes urine.

If you do not feel better in 1 to 2 days, stop taking the home remedies and start taking the medicines in the box below. If you do not feel better in 2 more days, see a health worker. You may have an STI rather than a urine system infection (see page 263).

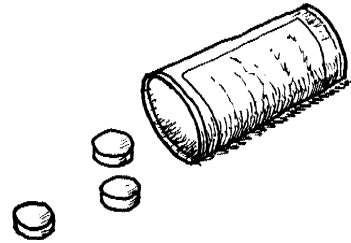
IMPORTANT Before taking any of these medicines, especially if you are pregnant or breastfeeding, first read about them in the “Green Pages” of this book.

Bladder Infection Medicines

| Medicine | How much to take | When to take |
|---|--------------------------|--|
| cotrimoxazole..... (160 mg trimethoprim and 800 mg sulfamethoxazole) | 2 tablets of 480 mg..... | 2 times a day, by mouth, for 3 days |
| or | | |
| nitrofurantoin | 100 mg | 2 times a day, by mouth, for 3 days |

Treatment for a kidney infection:

If you have signs of a kidney infection, home remedies are not enough. Start taking these medicines right away. But if you do not start to feel better after 2 days, see a health worker.



Kidney Infection Medicines

| Medicine | How much to take | When to take |
|---|--------------------------|---|
| ciprofloxacin | 500 mg | 2 times a day, by mouth, for 10 days |
| (Do not use if you are breastfeeding) | | |
| or | | |
| cefixime | 500 mg | 2 times a day, by mouth, for 10 days |
| or | | |
| cotrimoxazole..... (160 mg trimethoprim and 800 mg sulfamethoxazole) | 2 tablets of 480 mg..... | 2 times a day, by mouth, for 10 days |

If you cannot swallow medicines because you are vomiting, take:

| | | |
|-------------------|----------------------------|-----------------------------|
| ceftriaxone | one gram | IV, once a day |
| or | | |
| gentamicin | 80 mg the first time | IV, or inject into a muscle |
| | only, then 60 mg each | 3 times a day. |
| | other time | |

When you can swallow medicine again without vomiting, stop injections and continue with the medicine by mouth for kidney infection, for 7 more days.

BLOOD IN THE URINE

If your urine has blood in it, and if there are no other signs of a bladder or kidney infection, you may have bladder or kidney stones (see below). Or you may have one of these diseases, if they are common in your community:

- **Bilharzia (blood flukes, schistosomiasis)** can cause permanent damage to the urine system if it is not treated early enough. See a health worker trained in problems of the urine system for treatment, and to learn how to prevent bilharzia from happening again. For more information about bilharzia, see *Where There Is No Doctor* or another general medical book.
- **Tuberculosis (TB)** can damage the bladder and kidneys. For more information, see page 387.

KIDNEY OR BLADDER STONES

These are small hard stones that start to grow in the kidney, and then move through the urine system.

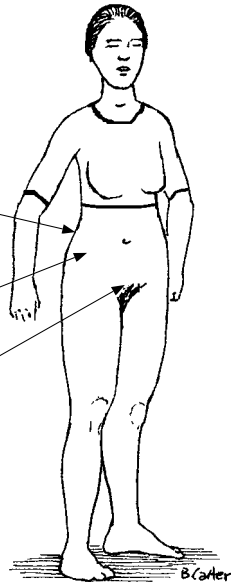
Signs:

- Sudden, very bad pain:

in the back where the kidneys are,

or in the side near the kidneys,

or lower down in the urine tubes or bladder.



Other signs are:

- Blood in the urine. This can happen if the stones scratch the inside of the urine system.
- Difficulty passing urine. This can happen if a stone blocks the tubes.

Treatment:

- Drink large amounts of liquid (at least 1 or 2 cups every 30 minutes). This will help wash the stone out of the kidney and down the urine tube.
- Take a pain medicine. If the pain is very bad, get medical help.

Sometimes the blocked urine tubes become infected. Treat this problem the same way you would treat a kidney infection.

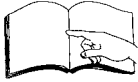
Other Problems of the Urine System



tuberculosis



medicines for pain



growths, 380
diabetes, 174

NEED TO PASS URINE OFTEN

This may happen because:

- the muscles around your bladder and *womb* have become weak. The 'squeezing exercise' (page 371) may help strengthen these muscles.
- a growth (like a fibroid) in your abdomen is pushing against the bladder so it cannot hold much urine.
- you have a bladder infection.
- you have *diabetes*.

LEAKING URINE

Poor control of urine (incontinence)

This can be caused by weak or damaged muscles around the bladder. It happens mainly to older women or to women after childbirth. The urine leaks out when a woman puts pressure on the weak muscles in her lower belly during sex, or by laughing, coughing, sneezing, or lifting. The 'squeezing exercise' (page 371) may help.

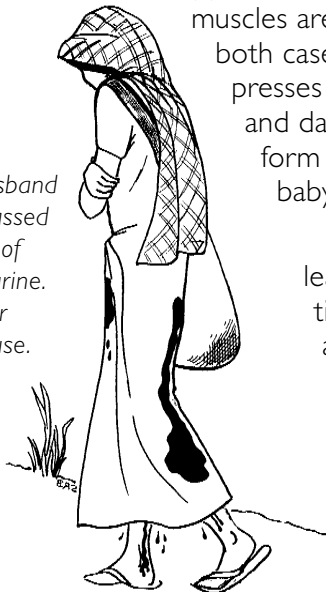
Urine leaking from the vagina (vesico-vaginal fistula, VVF)

When a woman leaks urine all the time, she may have a hole between her vagina and bladder. (Sometimes the hole is between the rectum and the vagina, and stool leaks out.)

This serious problem happens as a result of a blocked birth. It happens to girls who have babies when they are very young, before their bones are fully grown. The problem can also happen to older women who have had many babies, if their muscles are no longer strong enough to push a baby out. In both cases, it is difficult for the baby to get out. Its head presses on the skin between the bladder and the vagina, and damages the skin. This causes an opening (fistula) to form between the bladder and the vagina. Often the baby is born dead.

After the birth, the fistula does not heal and urine leaks from the bladder out through the vagina all the time. The girl or woman has to wear a cloth or pad all day and night to catch the urine.

If she cannot get help (see the next page), fistulas can cause serious problems for a girl or woman in her daily life. Her husband, family, and friends may avoid her because she smells of urine all the time.



This girl's husband was embarrassed by the smell of her leaking urine. He made her leave his house.

Treatment:

After the birth, if you are leaking urine or stool, talk with a health worker as soon as possible to find out if she or he knows of a hospital where the fistula can be repaired. You should **go to the hospital as soon as possible**. If you cannot get to the hospital quickly, the health worker may know how to put in a plastic or rubber tube (catheter) through the urine hole into the bladder (see page 373). This tube will drain the urine and may help the fistula heal. But you must still go to the hospital. When you get there, the doctor will examine you to see if the fistula has healed or if you need an operation to repair the fistula.

Do not despair. The problem can often be made better.

IMPORTANT *To help prevent infection while the tube is in, drink a lot of fluid (at least 10 to 12 cups a day). This will make you pass urine often and flush out germs.*

Prevention:

- Avoid marriage and pregnancy until a girl is fully grown.
- If a girl under 17 is pregnant, she should try to see a trained midwife or health worker as soon as possible to find out how to have the safest birth.
- Do not have babies too close together, so that your muscles can get strong again in between births (see page 197).

► *If you have leaking urine after giving birth, seek medical help right away.*



pregnancy

The squeezing exercise

This exercise can help strengthen weak muscles that cause you to pass urine often or to leak urine. First practice while you are passing urine. As the urine comes out, stop it by tightly squeezing the muscles in your vagina. Count to 10, then relax the muscles to let the urine come out. Repeat this several times whenever you urinate. Once you know how, practice the squeezing exercise at other times during the day. No one will know. Try to practice at least 4 times a day, squeezing your muscles 5 to 10 times each time.

Some women may need surgery to help control leaking urine. If your urine leaks a lot and this exercise does not help, get advice from a health worker trained in women's health. The squeezing exercise is good for all women to do every day. It helps keep muscles strong and can prevent problems later in life.



When You Have Problems Passing Stool or Urine

Many women (and men) do not have normal control over when they pass stool or urine (especially persons who are near death, or who have a spinal cord injury, or a disability that affects the muscles of the lower body). This can be inconvenient and embarrassing. It can also cause skin problems and dangerous infections, so it is important to stay clean, dry, and healthy.

Bowel control

This information will help those persons who have hard stools (constipation) or who have difficulty passing stool. You can learn to help the stool come out when it is easiest for you. The *bowels* work best when you are sitting rather than lying, so try to remove the stool when you are sitting on a toilet or pot. If you cannot sit, try to do it lying on your left side.

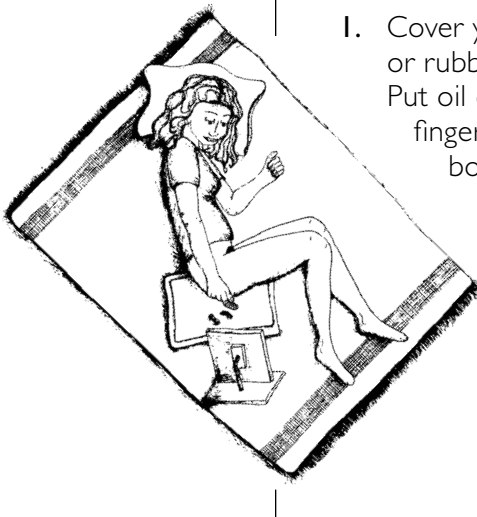
How to remove stool:

1. Cover your hand with a plastic or rubber glove, or a plastic bag. Put oil on your pointing (index) finger (vegetable or mineral oil both work well).



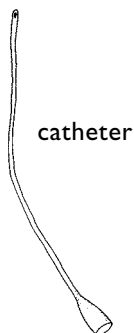
To keep your finger clean, use a thin rubber glove or 'finger cot'.

2. Put your oiled finger into the anus about 2 cm (1 inch). Gently move the finger in circles for about 1 minute, until the muscle relaxes and the stool pushes out.
3. If the stool does not come out by itself, remove as much as you can with your finger.
4. Clean the anus and the skin around it well, and wash your hands.



To prevent hard stools:

- drink lots of water every day.
- eat foods that are high in *fiber*.
- keep a regular bowel program.
- exercise or move your body every day.



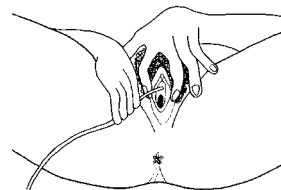
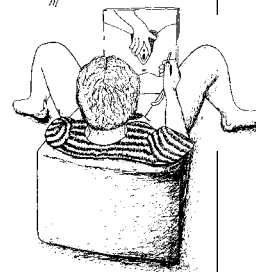
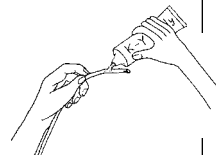
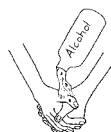
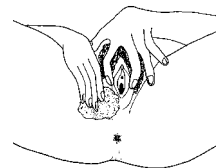
Bladder control

Sometimes it is necessary to remove urine from the bladder by using a rubber or plastic tube called a catheter. **Never use a catheter unless it is absolutely necessary.** Even careful use of a catheter can cause infection of the bladder and kidneys. So it should only be used if someone has a:

- very full, painful bladder and cannot pass urine.
- vesico-vaginal fistula (VVF). See page 370.
- disability or injury, and cannot feel the muscles that control passing urine.

How to put in a catheter

1. Boil the catheter (and any syringe or tool you may be using) for 15 minutes.
2. Wash well with mild soap and clean water the skin around the genitals. Take care to clean the area where urine (pee) comes out and the folds of skin around it (the vulva). If you do not have mild soap, use only clean water. Strong soap can harm your skin.
3. Wash your hands. After washing, only touch things that are *sterile* or very clean.
4. Sit where your genitals are not touching anything, like on the front of a chair or on a clean toilet seat. If you sit on the ground or another solid surface, put clean cloths under and around the genitals.
5. Wash your hands again with alcohol or with mild soap and clean water, or put on sterile gloves.
6. Cover the catheter with a sterile lubricant (slippery cream) that dissolves in water (not oil or petroleum gel). It helps to protect the soft skin of the genitals and urine tube (urethra). If you do not have any lubricant, make sure the catheter is still wet from the boiled water, and be extra gentle when you put it in.
7. If you put the catheter in by yourself, use a mirror to help you see where the urinary opening is, and use your pointing (index) finger and third finger to hold the skin around the vagina open. The urinary opening is below the clitoris almost at the opening to the vagina. After you have done this a few times, you will be able to feel where the opening is and you will not need to use a mirror.
8. Then, with your middle finger, touch below your clitoris. You will feel a sort of small dent or dimple, and right below that is the urinary opening. Keep your middle finger on that spot, and with your other hand, hold the clean catheter 4 to 5 inches from the end, touch the tip to the end of your middle finger, and gently guide the catheter into the opening until urine starts to come out.



Make sure the catheter is in a downward position so that the urine can come out.

You will know if the catheter goes into the vagina instead of the urinary opening because it will go in easily, but no urine will come out. Also, when you remove it, the catheter will have discharge (mucus from the vagina) in it. Rinse the catheter in very clean water, and try again.

IMPORTANT To avoid infection when using a catheter, it is important for you to be very clean, and to use only a catheter that is sterile, boiled, or very clean (see page 525). If you do get a bladder or kidney infection, talk with a health worker. You may have an infection in your vagina.