

Reproductive health



This chapter will focus on the male and female reproductive systems, and the processes of menstruation and fertilisation. Each session is meant to be used during one group meeting.

1. Male and female reproductive systems



Session objectives

By the end of this discussion, participants will be able to:

- Identify the parts of the female reproductive system and describe how they work.
- Identify the parts of the male reproductive system and describe how they work.



Session guide

1. **Hold up** the illustration of the male reproductive system at the end of this session. Point to different parts of the male reproductive system and ask participants to name the part and what it does. Correct any incorrect information.
2. **Hold up** the illustration of the female reproductive system at the end of this session and repeat the steps above.
3. **Ask:** Why is it important to understand our own reproductive systems and that of the opposite sex?
4. **Ask:** Which parts of the male and female anatomy are the same? [Possible responses: Both males and females have a urethra and an anus; the female clitoris and the male penis are similar because they are very sensitive to sexual pleasure.]
5. **Ask:** In what ways are men and women's systems different? [Possible responses: Women have more parts internally. Their system is more complex and there is more potential for things to go wrong. It is important for both men and women to be familiar with their bodies, so that they know when something is wrong. Women have babies and men do not.]
6. **Ask:** Why do men generally feel more comfortable than women about their genitals? [Possible responses: The penis is more visible and young boys are taught to touch and handle their penis in order to urinate. Girls are often discouraged from touching themselves and cannot easily see their own genitals. In many societies there are cultural taboos relating to the female genitals and menstrual blood.
7. **Ask:** Why is it important to feel comfortable touching your own genitals? [Possible responses: It is important to know how your genitals look and feel when they are normal, so that you can recognize if something is wrong or if you develop an infection. Boys and men need to touch their testicles to feel for lumps that might be a sign of testicular cancer; girls and women may want to use tampons, or some forms of contraception, that are put inside the vagina; for both sexes, there are methods of contraception that require touching the genitals. Genitals are sources of sexual pleasure and touching the genitals for pleasure (masturbation) is a risk free way of exploring your own sexuality. There is no shame in touching yourself for sexual pleasure. It is a natural thing that many people do. In order to receive sexual pleasure from someone else, you need to know what kind of touching makes you feel good. Sexually touching your own genitals is a good way to get to know your body.]



Note to facilitators

If you have access to paper and pens, instead of holding up the pictures, ask participants to draw their own pictures by following the steps a to c below and then continue with step 3.

- Divide participants into pairs. Ask each pair to draw a picture of the male sexual organs (both inside and outside). Once they are finished drawing, ask them to turn their paper over and draw the female sexual organs (both inside and outside).
- Ask participants to display their pictures and encourage a discussion around these pictures, focusing on the most important parts. Correct any misunderstandings.
- Show participants the illustrations in this manual and ask them to talk about how they are similar to their drawings and how they are different. Explain the correct name of each part of the male and female reproductive systems and what they do. Be sure the group understands the information. Ask them to correct their drawings as needed.

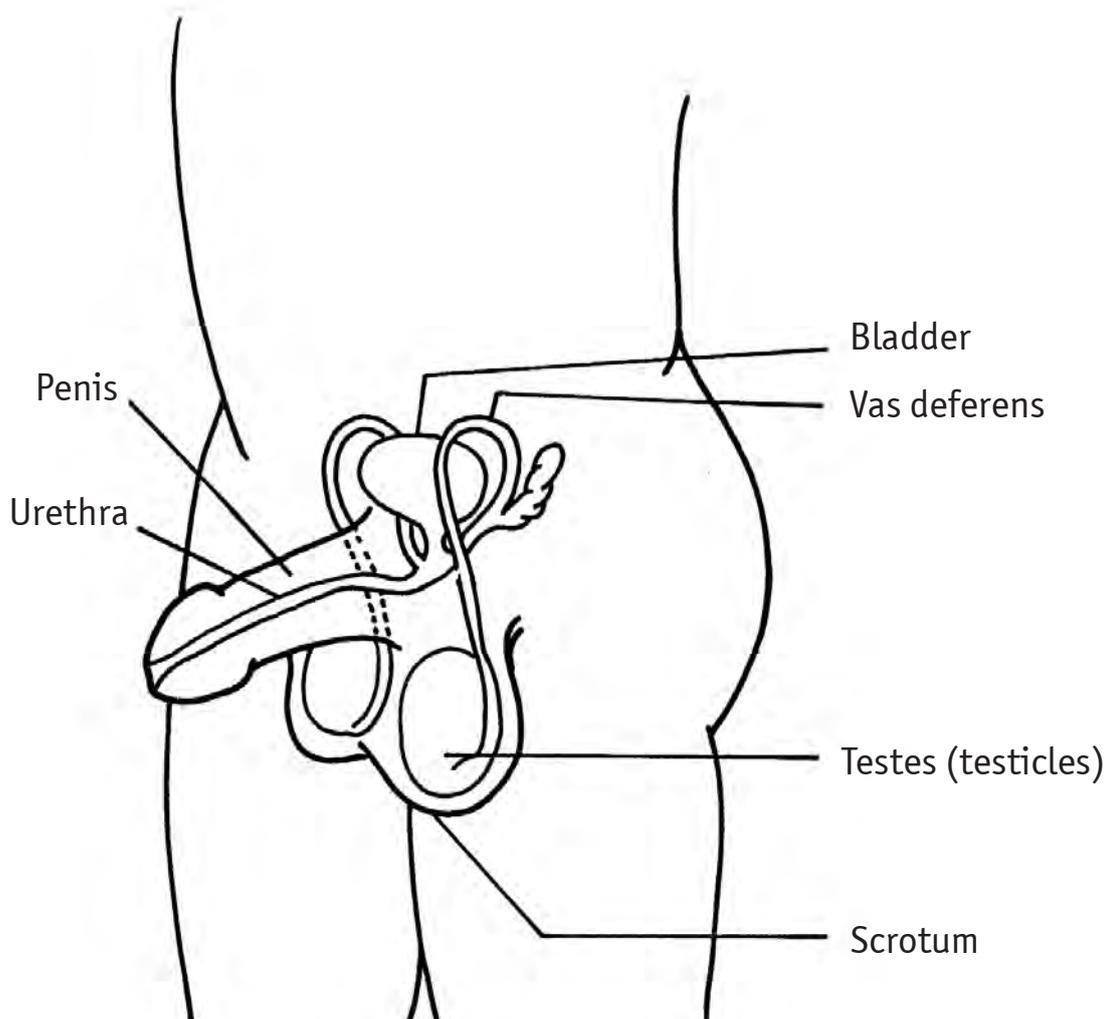
Female reproductive organs

Organ	Description
Vagina (uke)	The vagina is a channel between the womb and the outside of a woman's body. It can become bigger and smaller. The vagina is where the penis is inserted during sexual intercourse. It is where a baby comes out during childbirth. It is the way for menstrual blood (the period) to leave the body. The vagina also produces fluids; the amount of fluid, and their colour and texture, change at different times of the month.
Cervix (mlango wa nyumba ya uzazi)	The cervix connects the womb to the vagina, and normally has a very small opening. During pregnancy this opening stays small, so that the baby stays inside. During labor the cervix opens up so that the baby can be born.
Womb/uterus (kondo la mama, kidaka donge, mfuko wa kizazi)	The womb is where a fertilised egg attaches itself to create a pregnancy. During pregnancy, the womb holds the growing baby in a bag of fluid and the placenta (afterbirth) is connected to the baby for nourishment. The womb is normally the size of a mango, but becomes much bigger during pregnancy.
Fallopian tubes	A fallopian tube connects each ovary to the womb. When an egg is released from one of the ovaries every month, it is pulled into the fallopian tube and moves toward the womb. It is here that a man's sperm meets and fertilises the egg. The fertilised egg then goes to the uterus (womb). It takes about five days for the egg to move from the ovary to the womb.
Ovaries (kifuko cha mayai)	A woman has two ovaries, one on each side of the womb. Each one is the size of a small nut. The ovaries produce eggs which, if fertilised by sperm, will develop into a pregnancy.

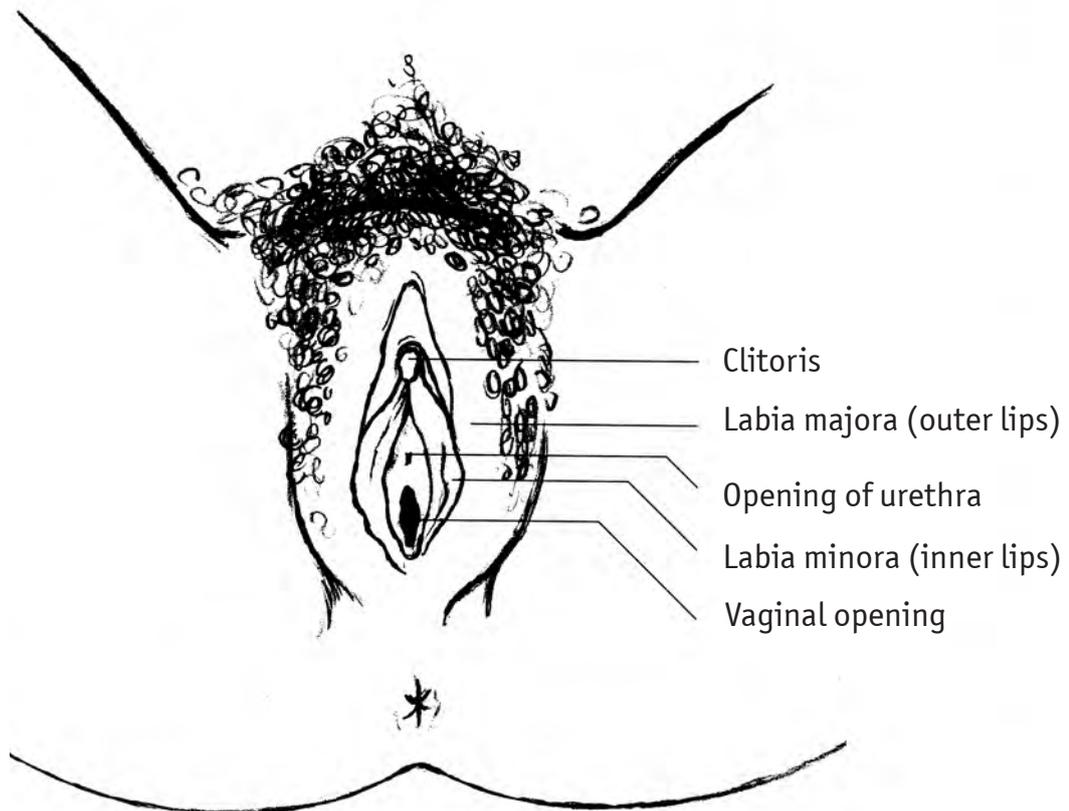
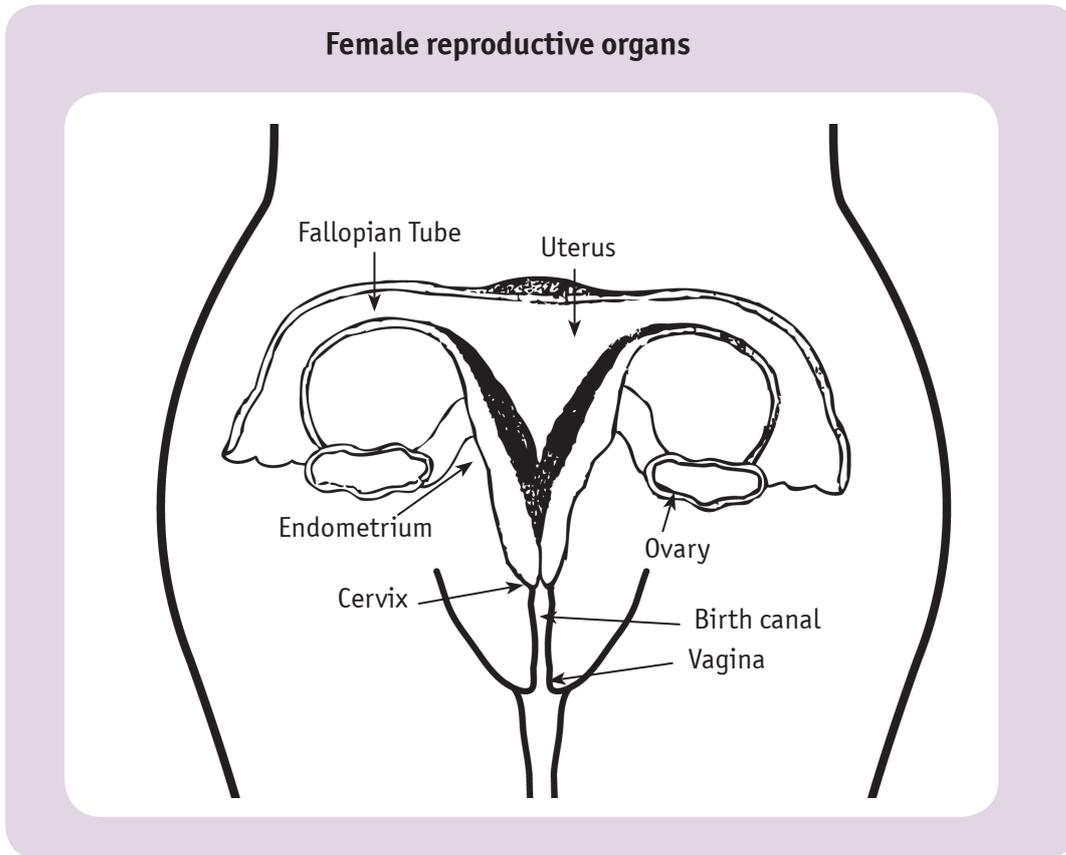
Male reproductive organs

Organ	Description
Testes/testicles (pumbu)	The testes are two egg-shaped organs, in front of and between the thighs, within a sac of skin called the scrotum. Testes produce sperm that fertilises the woman's egg to start a pregnancy. From puberty until old age, men's testes produce sperm all the time. A man releases 100-300 million sperm every time he ejaculates. During ejaculation, the sperm are carried in liquid called semen. One of the millions of sperm may reach an egg and fertilise it; the rest simply die in a few days and disappear.
Penis (uume, mboo)	The penis is the organ that carries the semen with sperm into the vagina. During sexual excitement, blood is pumped into the muscles of the penis. This makes the penis become hard so it can enter the vagina. After ejaculation, the blood quickly drains away into the body and the penis returns to its normal size.

Male reproductive organs



Female reproductive organs





Activity: Reproductive system quiz

Read aloud the following clues, and ask participants to guess the body part being described.

1. What is normally the size of a mango but has the ability to grow many times its size? It serves as a kind of house or nest and provides nourishment to its inhabitant.
Answer: uterus/womb
2. A woman has two of these, each the size of a small nut. Every month these “nuts” produce an egg.
Answer: ovaries
3. This organ also changes in size, depending on the situation. Semen can pass through this organ into the woman’s vagina.
Answer: penis
4. This part of the woman’s body is kind of like a factory. It has fat and tiny sacs that produce nourishment for babies.
Answer: breasts
5. This part serves as the opening to the vagina/birth canal. It consists of folds of skin and is covered with hair. The inner folds surround the most sensitive part of the women’s reproductive system – the part that gives pleasure during sexual intercourse.
Answer: vulva
6. What are about 10-12 centimetres long, and help move an egg from the ovary to the uterus? This is the place where the man’s sperm usually meets the egg.
Answer: fallopian tubes
7. This is factory in the man’s body that is located in a sac outside his body. This factory produces millions of tiny little “swimmers” that can pass out of the penis.
Answer: testes
8. This is a channel between the womb and outside. Through this channel flow different body fluids, as well as the baby when it is born. The walls of the channel are very elastic and can stretch when the baby is born.
Answer: vagina/birth canal
9. This is sometimes called the neck of the womb. It has a very small opening that opens up during labour so that the baby can come out of the womb.
Answer: cervix
10. These are little “messengers” in the body that tell it when to produce an egg, when to release it, when to start a menstrual period, and when to start nourishing a baby.
Answer: hormones

2. Menstruation and fertilisation



Session objectives

By the end of this discussion, participants will be able to:

- Describe the menstrual cycle.
- Explain how fertilisation and implantation occur.



Session guide

1. **Ask:** When is a girl first able to become pregnant? [Answer: When a girl begins ovulating she is able to become pregnant.]
2. **Ask:** What is a menstrual cycle (kuona mwezi) and when do women get it? What are some different names for what people call a menstrual cycle?
3. After participants discuss, correct any incorrect information and **summarize** what they have said using the following information:

When a girl is born, her ovaries contain hundreds of thousands of eggs. When a girl enters puberty, she begins to release eggs as part of a monthly period called the menstrual cycle. The menstrual cycle is not the same thing as a period. A period is the time when there is menstrual bleeding. The menstrual cycle starts the first day of the menstrual period and ends the day before the next period. The length of the menstrual cycle is different for each woman and can even be different for the same woman.

Once a month, an ovary sends a tiny egg into one of the fallopian tubes. Unless the egg is fertilised by the sperm while in the tube, the egg dries up and leaves the body about 2 weeks later through the uterus. Blood and tissues from the inner lining of the uterus combine to form the menstrual flow. In most girls this lasts 3-7 days.

4. **Ask:** How does a woman become pregnant?
5. After participants discuss, correct any incorrect information and **summarize** what they have said using the following information:

Each month, in preparation for a fertilised egg, the uterus builds up a thickened lining made up of blood and body tissue to nourish the egg. After sexual intercourse sperm cells travel to the fallopian tubes. If the egg cell is met by a sperm cell, the egg cell is fertilised. The fertilised egg then travels to the uterus and attaches itself to the lining of the womb. When this happens, it is called implantation and is when pregnancy begins. If the egg is not fertilised, this lining is not needed and is shed through the vagina during menstruation.

6. **Ask:** What is most fertile time of the month for women? Allow participants to discuss, but be sure the following information is mentioned:

In the menstrual cycle there are days when the woman is at greater risk of becoming pregnant (these days are called "fertile days") and other days when she is not at risk of becoming pregnant (these days are called "infertile days"). The woman is fertile when she produces an egg in each cycle (ovulation). Although the egg only lives 24 hours, there are several days during each cycle when a woman can become pregnant.

This is possible because she doesn't know exactly when ovulation will occur and sperm can live for several days inside the woman and fertilise the egg.

Many women think that their fertile period is right in the middle of their menstrual cycle, but this is only true for women with a 28-day cycle. For women with shorter or longer cycles, the fertile period will not be in the middle of the cycle. This is because ovulation (the release of the egg) occurs about 14 days before the next menstrual bleeding begins. This means that a woman who has a 21-day cycle probably ovulates around Day 7, whereas a woman with a 35-day cycle probably ovulates around Day 21.

7. **Ask:** Can awareness of their fertile period help women avoid pregnancy (or become pregnant), if desired? Why can it be difficult to depend on this as a reliable form of family planning?

Women and couples can avoid unplanned pregnancy by knowing on which days they should avoid unprotected sex because of a woman's fertility. Depending on their goals, couples may choose to time unprotected sexual intercourse so that it falls during the fertile phase (to become pregnant) or the infertile phase (to avoid pregnancy). To prevent pregnancy, couples should avoid unprotected sex on these days. On all other days, when pregnancy is very unlikely, couples can have unprotected sex. Women must be very familiar with their menstrual cycle and also have a regular menstrual cycle. Couples should talk with a health worker to decide if this could work well for them.

8. **Explain** that John and Margaret are trying to get pregnant. They have been trying for more than one year. John thinks it's Margaret's fault and Margaret thinks it's John's fault. Who do you think is to blame? Why?
9. After participants have discussed, **explain** that fertility is a problem involving two people. On average, the cause of the problem is with the man 40% of the time and with the woman 40% of the time. In the remaining 20% of cases, both the man and the woman contribute to the problem.



Activity: Fertilisation and implantation quiz

Read aloud the following statements and ask the participants to say true or false. Ask participants to discuss why it is true or false.

1. A woman's most fertile period is exactly half way between menstrual periods. **False**
2. The uterus remains unchanged unless a fertilised egg enters it. **False**
3. A sperm can live for up to 5 days after entering a woman's vagina. **True**
4. Generally, a sperm joins with an egg when the egg has reached the uterus. **False**
5. Unless a young woman's periods are regular, she cannot get pregnant. **False**
6. A woman's most fertile time is when the egg is passing through one of the fallopian tubes. **True**
7. Implantation is when the fertilised egg attaches itself to the lining of the uterus. **True**



Background notes

Men, women, boys and girls all have the right to understand how their bodies work. They should feel comfortable talking about their bodies so they can ask questions, learn correct information and take care of their health. It is important for men, women, boys, and girls to understand how their bodies work. With this information, people will be able to know when something is wrong with their reproductive system and take the steps they need in order to keep their bodies healthy and functioning.

Reproductive health means more than not having an illness or infection in the reproductive system. It is the complete physical, mental, and social well-being in all matters relating to the reproductive system. Reproductive health means that people are able to have a satisfying and safe sex life and that they are able to reproduce and have the freedom to decide if, when, and how often to do so.

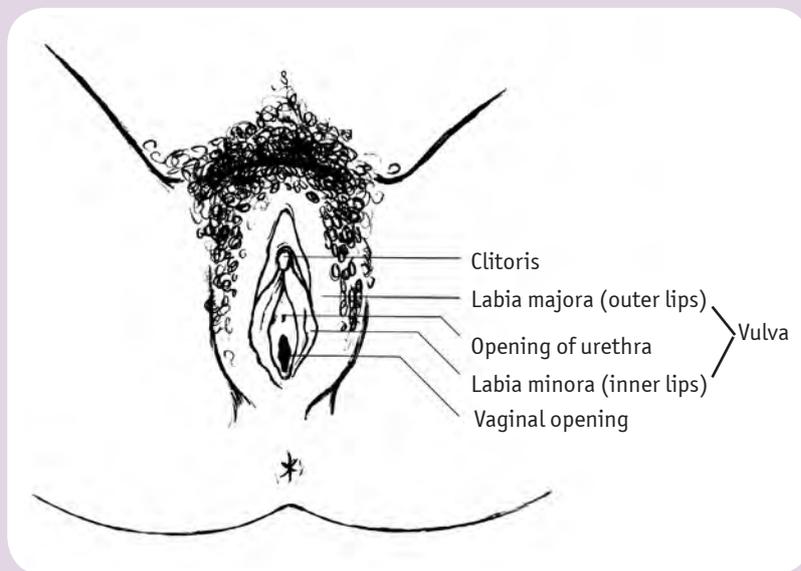
Most species have two sexes: male and female. Each sex has its own unique reproductive system. They are different in shape and structure, but both are designed to produce, nourish and transport either the egg or sperm.

Female reproductive system

The female reproductive system enables a woman to: produce eggs, have sexual intercourse, protect and nourish a fertilised egg until it is developed, and give birth. The parts of the female body that are involved in pregnancy and childbearing are called the reproductive organs. They include the vagina (uke), uterus (kondo la mama, kidaka donge, mfuko wa kizazi), two fallopian tubes, and two ovaries (kifuko cha mayai).

These organs lie inside the lower part of the abdomen, called the pelvis. They are surrounded by bones and muscles. The breasts are also affected by pregnancy and are essential for breastfeeding a baby.

External female reproductive organs



Vulva

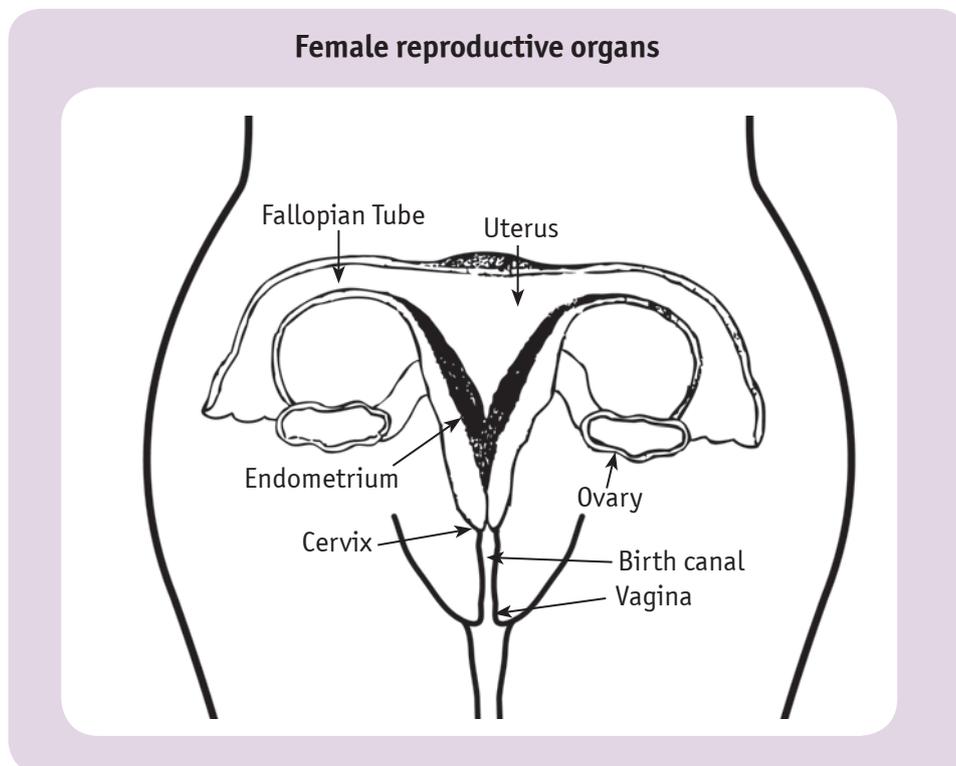
The vulva is the area around the opening of the vagina that can be seen from the outside. The outer folds of the skin, called the labia majora, are thick and covered with hair. The two inner folds, called the labia minora, are much thinner. These inner folds form a hood around the clitoris, a small, sensitive organ above the vagina that responds to stimulation and makes sexual intercourse pleasurable for women. Inside the vaginal opening is a pair of glands that produce a thin fluid that moistens the vagina, especially during sexual excitement.

Vagina (uke)

The vagina is a muscular hollow channel between the womb and the outside. Because it has muscular walls, it can expand and contract. This ability to become wide or narrow allows the vagina to hold something as slim as a tampon, but also something as wide as a baby. The vagina has three purposes:

1. It's where the penis is inserted during sexual intercourse. When a man ejaculates, sperm from the penis enters the vagina. It then passes through the womb and into the fallopian tube, where it may fertilise the egg.
2. It's the path a baby takes out of a woman's body during childbirth. This is why it is sometimes called the "birth canal." The walls of the vagina are elastic and can stretch to allow the passage of the baby's head and body.
3. It provides a way for menstrual blood (the period) to leave the body from the uterus.

The vagina also produces fluids; the amount of fluids, and their colour and texture, varies at different times of the month. The hymen is a thin sheet of tissue that partially covers the opening of the vagina. Hymens are different for each woman. Hymens are usually stretched or torn after a woman's first sexual experience and the hymen may bleed a little, though some women may not have any bleeding after their first sexual experience.



Cervix (mlango wa nyumba ya uzazi)

The cervix is sometimes called the neck of the womb. It connects the womb to the vagina, and normally has a very small opening. During pregnancy this opening stays small, so that the baby stays inside the womb. During labor the cervix opens up (dilates) so that the baby can be born.

Uterus (kondo la mama, kidaka donge, mfuko wa kizazi)

Before pregnancy, the womb is the size of a small mango. The lower end of the womb is called the cervix, and it connects with the upper part of the vagina. A fertilised egg attaches itself to the lining on the inside of the womb, and the womb gives protection and nourishment until the baby is born. Fetus is the medical word for a baby before it is born. During pregnancy, the womb holds the growing fetus in a bag of fluid, and the placenta (afterbirth) connects to the fetus by a cord and provides oxygen and nourishment. By the time the baby is born, the womb alone weighs nearly a kilo and holds an average of five kilos (the fetus, placenta, and fluid).

Fallopian tubes

Two fallopian tubes connect the ovaries to the womb on each side. The tubes are 10-12 centimetres long. When an egg is released from one of the ovaries every month, it is pulled into the fallopian tube and moves along the tube toward the womb. It is here that a man's sperm meets and fertilises the egg. The fertilised egg then begins a slow journey to the uterus (womb). It takes about five days for the egg to move from the ovary to the womb.

Ovaries (kifuko cha mayai)

A woman has two ovaries, one on each side of the womb. Each one is the size of a small nut. The ovaries produce eggs which, if fertilised by sperm from a man, will develop into a baby. The ovaries produce important female hormones. These hormones help with the growth, development and function of the female body, especially the reproductive organs, throughout a woman's life. Hormones cause the breasts to grow and cause menstruation every month.

Menstrual cycle

When a baby girl is born, her ovaries contain hundreds of thousands of eggs. When a girl is becoming an adolescent, she begins to release eggs as part of a monthly period called the menstrual cycle. Once a month, an ovary sends a tiny egg into 1 of the fallopian tubes. Unless the egg is fertilised by the sperm while in the tube, the egg dries up and leaves the body about 2 weeks later through the uterus. Blood and tissues from the inner lining of the uterus combine to form the menstrual flow. In most girls this lasts 3-7 days.

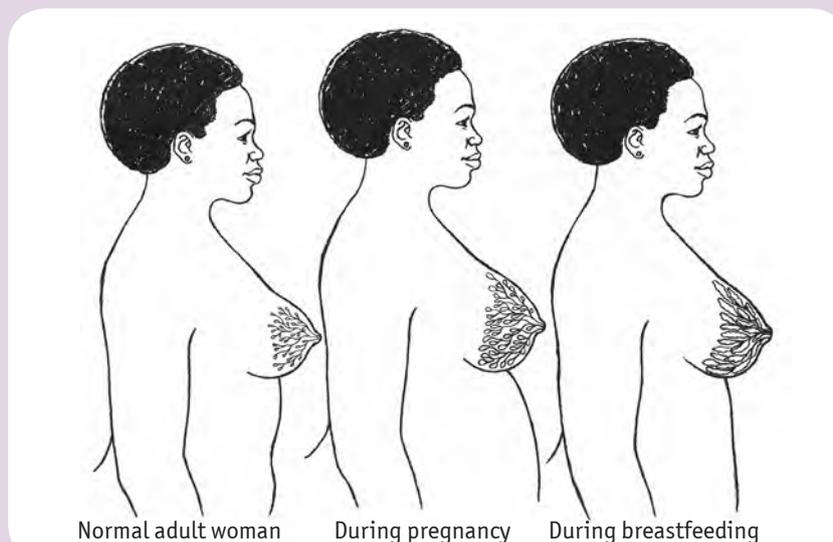
It's common for women and girls to experience some discomfort in the days leading to their periods. Physical and emotional symptoms could include abdominal cramps, acne, bloating, fatigue, backaches, sore breasts, headaches, constipation, diarrhea, food cravings, depression or difficulty concentrating or handling stress. It can take up to 2 years for a girl's body to develop a regular menstrual cycle.

As a woman grows past her reproductive age, the number of eggs available become less and soon her menstrual cycle will stop altogether. When this happens, she can no longer have a baby.

Breasts (matiti)

The main external feature of the breast is the nipple and the dark skin around it, called the areola. Inside, the breasts consist of fat and sacs called "glands" that produce milk. In many women, one breast is larger than the other. Often, both breasts swell slightly during the menstrual period. During pregnancy, the glands grow in size as they produce milk; often some liquid comes out of the nipple even before the baby is born.

Breasts during adulthood



Hormones

The body constantly produces hormones, which are like special chemical messengers that tell your body how and when to change and to grow. For example, a growth spurt during adolescence is caused by a growth hormone, which is released by the brain in increasing amounts. In addition to the growth hormone, sex hormones also start to be released during puberty. For girls, the sex hormones are produced in the ovaries, and for boys, they are produced in the testicles. These sex hormones cause the difference between the shape of men's and women's bodies. Other hormones control the menstrual cycle or ensure a pregnancy is maintained and nourished.

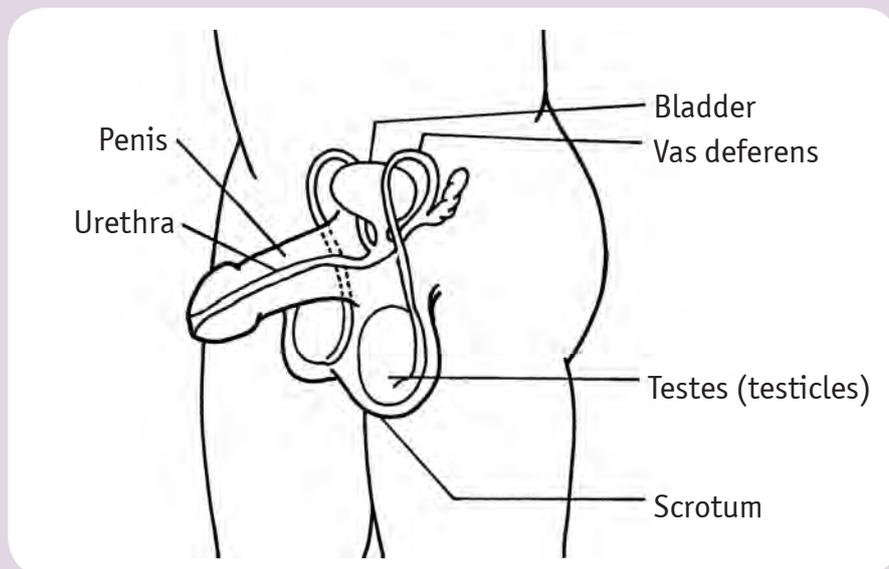
Male reproductive system

The man produces sperm that fertilises the egg to create a pregnancy. A man's major reproductive organs are outside his body.

Testes/testicles (pumbu)

The two testes produce sperm that fertilises the woman's egg to start making a baby. The testes are two egg-shaped organs, in front of and between the thighs, within a sac of skin called the scrotum. From puberty until old age, men's testes produce sperm all the time. While a woman releases one egg every month, a man releases 100-300 million sperm every time he ejaculates. During ejaculation, the sperm are carried in liquid called semen that is produced by the man's reproductive organs. The semen passes through a tube called the vas deferens and out of the penis. One of the millions of sperm may reach an egg and fertilise it; the rest simply die in a few days and disappear.

Male reproductive organs



Penis (uume, mboo)

The penis is the organ that carries the semen with sperm into the vagina. During sexual excitement, blood is pumped into the muscles of the penis. This makes the penis stiffen or become erect so it can enter the vagina. Although both semen and urine pass through the tube called the urethra in the penis, at the time of ejaculation the opening from the bladder is closed so that only semen comes out of the penis. After ejaculation, the blood quickly drains away into the body and the penis returns to its normal size.

Menstruation and fertilisation

An important event in the life of a female is the beginning of her menstrual period. This shows her body is physically able to become pregnant and bear a child. Sometimes, it can represent a change in the role she plays in her family, her community, and with her male peers. Many young women do not have the information they need to understand what is happening inside their bodies. Without the facts, women may not know when something is wrong, fail to seek health care when they should, and take unnecessary risks without knowing they are doing so. For example, without completely understanding fertility and implantation, many women might get pregnant when they thought they were protected by their “safe period.” This session is designed to clarify participants’ understanding of menstruation and fertilisation.

Menstruation (kuona mwezi)

As a girl moves into adolescence, hormones cause the ovaries to grow and to start releasing an egg (or ovum) each month. Every female is born with thousands of eggs in her ovaries – and these eggs are so small you cannot see them.

As the ovaries grow, the uterus also grows and a soft lining begins to form in the uterus each month. This means the uterus is preparing itself to receive a fertilised egg. If there is no fertilised egg, the lining of the uterus will break down and will pass through the cervix and out of the vagina. This is called menstruation or a menstrual period. The lining of the uterus is made of blood, so it is called menstrual blood.

Girls who have started menstruating have “monthly cycles.” For the first few years, most girls’ menstrual cycles are very irregular. They do not know when they will get their periods. There is no pattern and they sometimes will go several months without getting their periods at all. This is normal. After a few years the menstrual cycle will become more regular. Some women never have a regular cycle, and this is ok.

Even when it is regular, the length of the menstrual cycle varies for different women and girls. For some, the cycle is as short as 21 or (even fewer) days. For others, it is as long as 35 days.

The average 28-day menstrual cycle

On Day 1 a woman starts to bleed. For the next 5 to 7 days her body will be shedding the lining from the walls of her uterus. Her body has understood that there is not going to be a pregnancy that month, and it knows that it needs to start to prepare another egg. One egg starts ripening in one of her ovaries. Soon afterwards, the uterus starts to build up another lining.

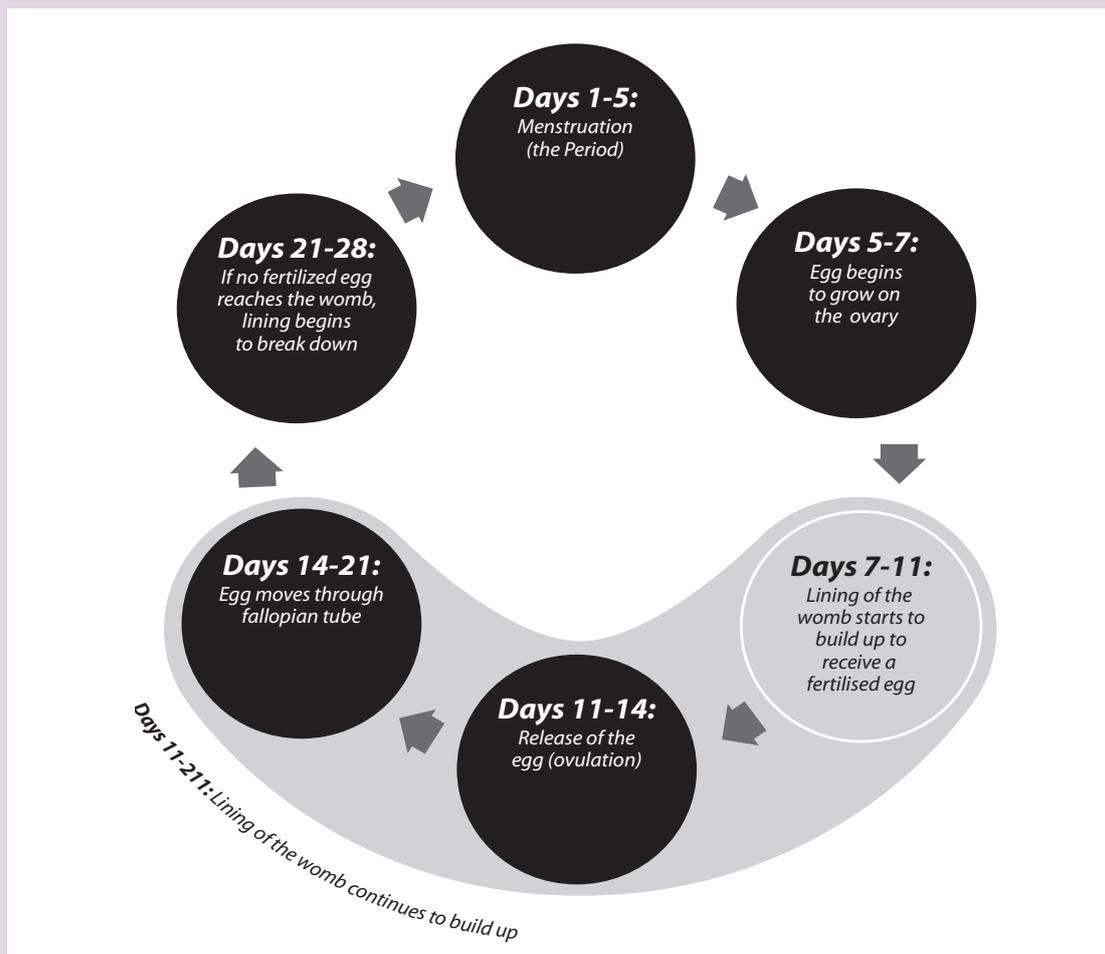
Halfway through the cycle – sometime around Day 14 or 2 weeks after she started bleeding – the egg is released from the ovary, and it starts to float down the fallopian tube. This is the fertile period, when the woman’s chances of becoming pregnant are the highest. The egg spends a few days inside the fallopian tube, and if it meets a male’s sperm there, it can become fertilised.

If the egg doesn’t become fertilised, it goes into the uterus, down through the cervix and vagina, and passes out of her body. This will be around Day 20.

About a week later, when her body realizes that there has been no fertilised egg, the lining of the uterus will again come out as menstrual bleeding, and the cycle begins all over again.

Many women think that their fertile period is right in the middle of their cycle, but this is only true for women with a 28-day cycle. For women with shorter or longer cycles, the fertile period will not be in the middle of the cycle. This is because ovulation (the release of the egg) occurs about 14 days before the next menstrual bleeding begins. This means that a woman who has a 21-day cycle probably ovulates around Day 7, whereas a woman with a 35-day cycle probably ovulates around Day 21.

The average 28-day menstrual cycle



The menstrual cycle can be very irregular during adolescence. It can be affected by stress, sorrow, travel, and other changes. Many girls become pregnant by mistake because they have unprotected sex during what they think should be their “safe days” – the days when they think their risks of pregnancy are low.

In addition, there are no “safe days” against HIV and other STIs. You can get those infections every day of the month.

Fertilisation

A sperm fertilises an egg while it is in one of the female’s fallopian tubes. The egg and the sperm then travel together to the uterus (womb) where they are implanted. It is at this point that a pregnancy begins.

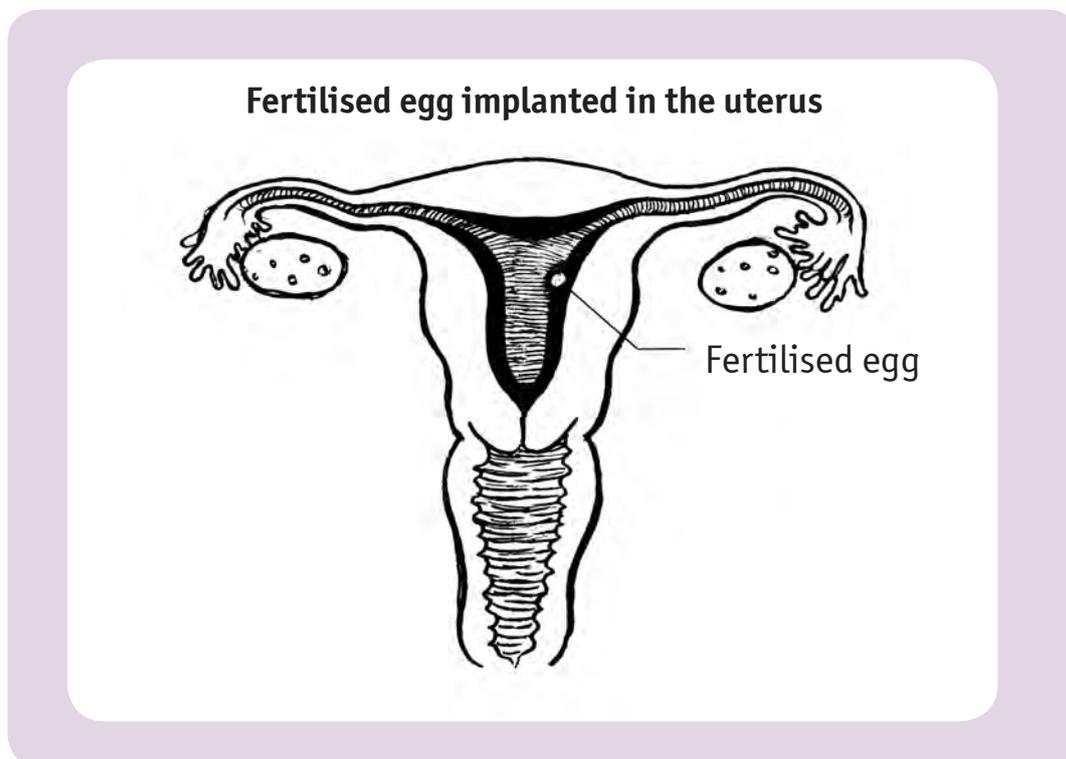
Each month, in preparation for a fertilised egg, the uterus builds up a thickened lining made up of blood and body tissue to nourish the egg. If the egg cell is met by a sperm cell, after sexual intercourse, the egg cell is said to be fertilised. It travels to the uterus and attaches itself to the uterine lining. This is called implantation and is when pregnancy begins. If the egg is not fertilised, this lining is not needed and is shed through the vagina during menstruation.

Infertility

A couple is described as infertile if the woman has not become pregnant after having normal sexual intercourse two or three times a week without using any contraception for at least one year. Normally, 85 out of 100 young couples who want to have a child can do so within a year of trying. The chances are slightly lower if the woman is over the age of 30, and significantly lower if she is over the age of 40.

Sexually transmitted infections (STI) and other infections of the reproductive organs can cause permanent damage to the reproductive organs of both men and women. As a result of these diseases, as many as one in four couples in Africa may experience some difficulty getting pregnant.

Fertility is a problem involving two people. On average, the cause of the problem lies with the man 40% of the time and with the woman 40% of the time. In the remaining 20% of cases, both the man and the woman contribute to the problem.



Secondary infertility refers to couples who have previously conceived but are unable to conceive again. Secondary infertility is usually a result of illness, disease or age. Except for sterilization, family planning methods do not contribute to secondary infertility.



Gender and reproductive health

Gender is a very important factor in reproductive health. Reproduction is often viewed as a woman's concern. But girls are not provided the information they need about their reproductive system and the male reproductive system. There are a lot of myths about menstruation and girls and women are often denied control over decisions regarding their own body. Early marriage places young girls, who are not physically or emotionally ready for marriage, at high risk for reproductive health problems. Wives do not control decisions regarding if and when to have children, or the use of birth control. Many of the reproductive health concerns women experience are a result of myths, misunderstandings or lack of information regarding reproductive health. Men also need to understand and to become a partner with women in promoting and protecting their reproductive health.

