

HIV / AIDS AND ANTIRETROVIRAL TREATMENT



General disease



Tuberculosis



Flu



Diarrhoea



Malaria

DISEASE



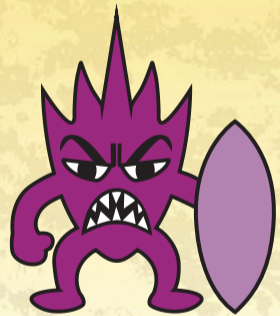
CD4



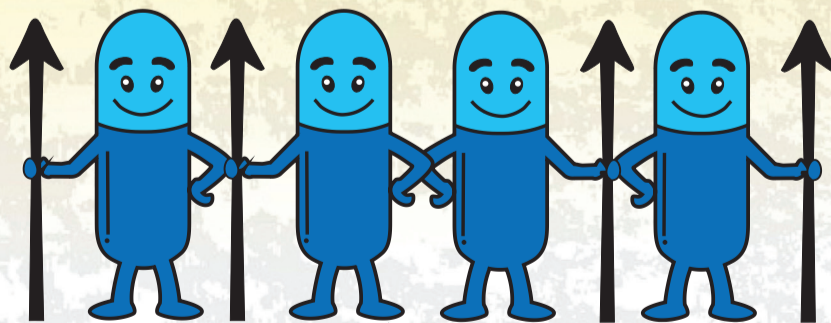
HIV



ARV



HIV_r



ARV₂



HIV_{r2}

Picture 1: The immune system, HIV and opportunistic infections

ROLE OF THE IMMUNE SYSTEM (CD4)

Health and diseases:

Diseases (in yellow) like TB, flu, malaria, HIV and others, are caused by germs, bacteria, and viruses. These diseases are your enemies and can make you sick.

CD4 and the Immune System:

The CD4 (in green) are cells that live inside the blood and protect the body against the diseases. They are like the “soldiers” of your body and they fight against your enemies, the diseases. All CD4 cells together are the “Army” of the body, what we call the immune system.

ACTION OF HIV ON THE IMMUNE SYSTEM

HIV (in red) is a virus that enters your body.

It makes more and more HIV when in our bodies and attacks our CD4 cells, destroying the Immune System (the soldiers of our body).

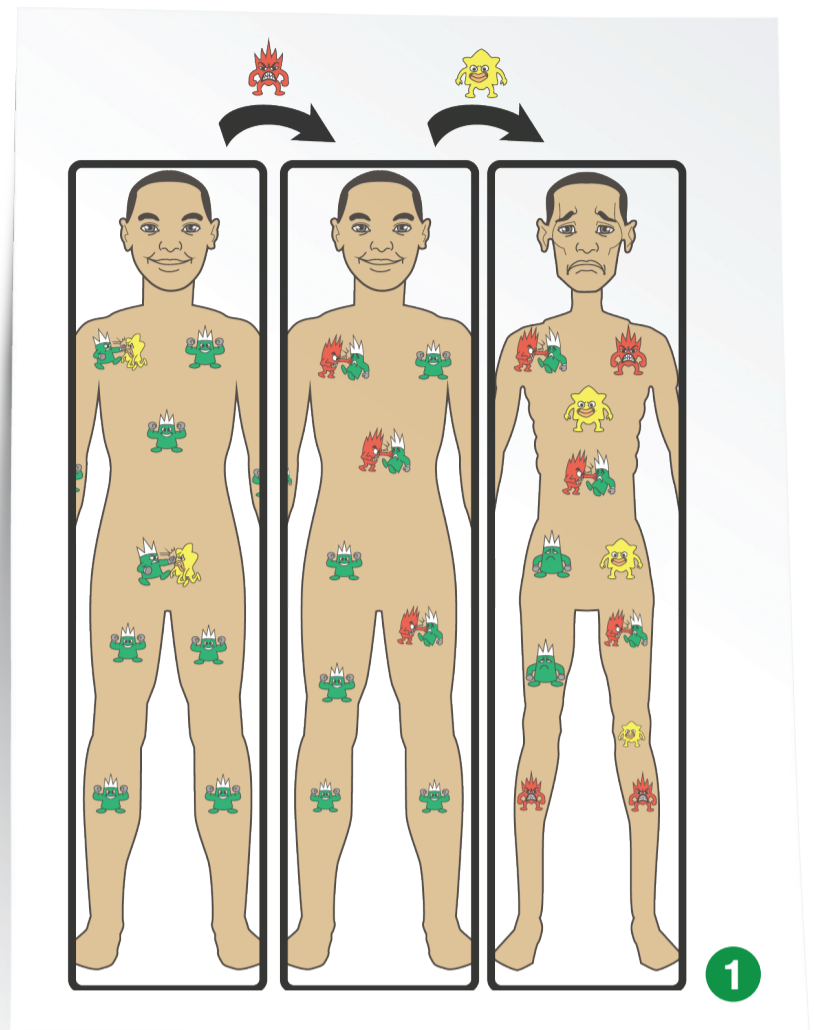
OPPORTUNISTIC INFECTIONS AND CD4 COUNT

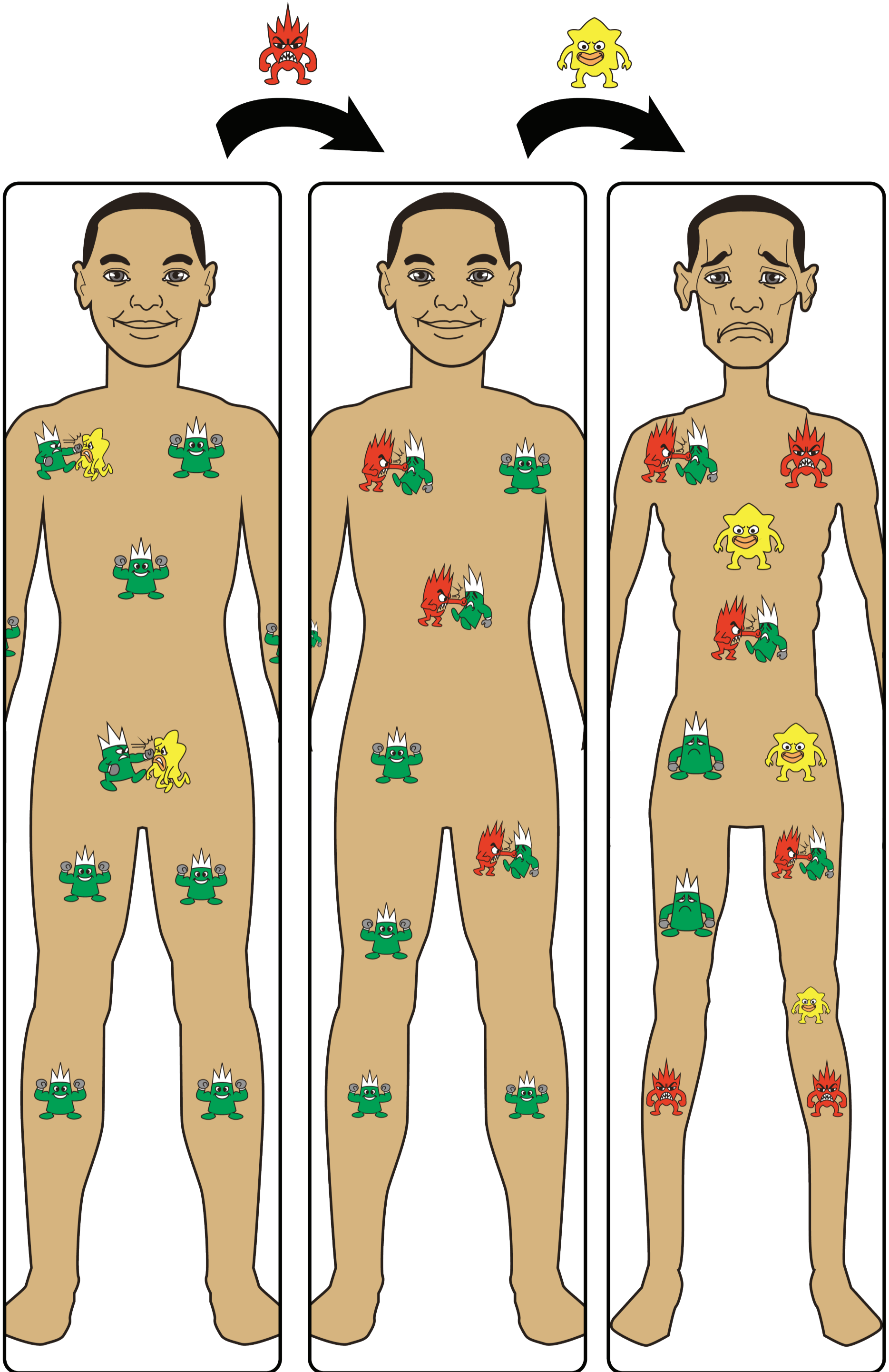
Opportunistic infections:

When the HIV kills your CD4 cells (your body soldiers) diseases can enter into the body and make you sick. We call these opportunistic infections. The most frequent are tuberculosis, diarrhea and skin diseases.

The CD4 count:

The blood test you had taken after your HIV test, is called a CD4 count which measures how strong the immune system is – how many of your body soldiers have been killed. The CD4 test is the most important test for deciding when you need to start treatment.





1

Picture 2: The antiretrovirals (ARV'S and HIV)

ARVs are drugs which stop the multiplication of HIV:

When HIV stops making more HIV in our bodies, our CD4 cells can increase again making our immune system strong and able to fight off diseases. ARV's do not kill all HIV in the body.

The importance of starting treatment early:

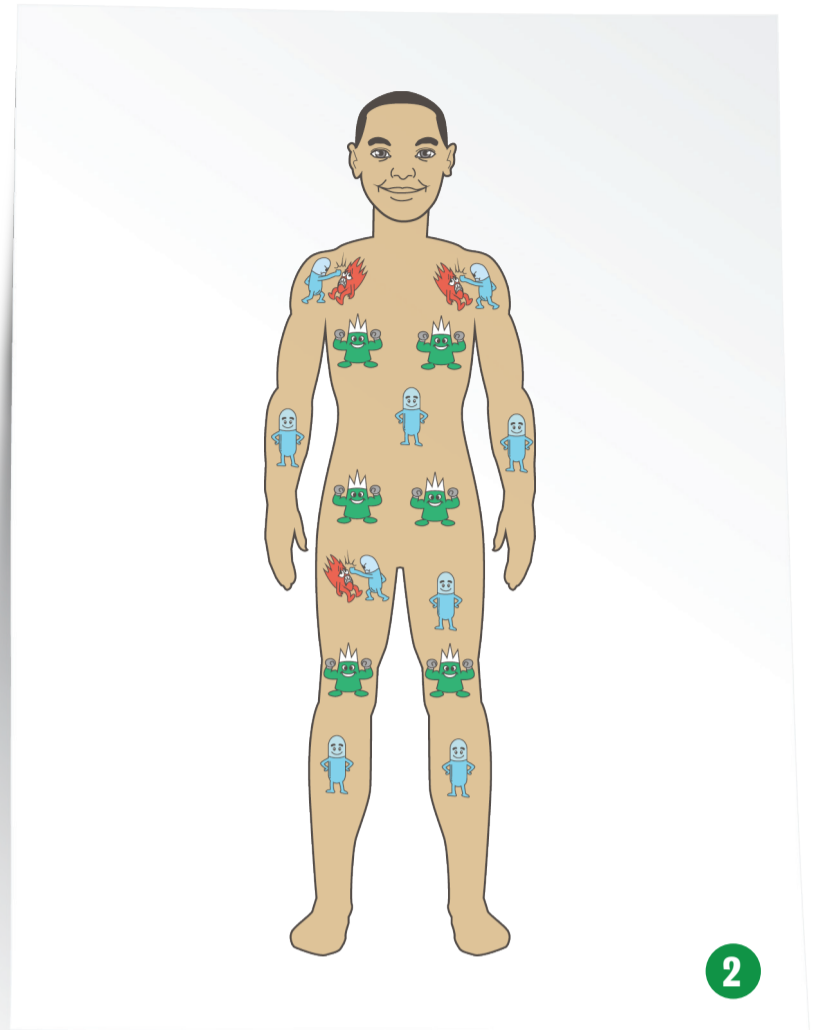
The best time to start taking ARV treatment is when your CD4 is just below 500. While your CD4 is above 500, you still have a good immune system and feel healthy. Below 500 you are at a higher risk of getting infections like TB and falling sick.

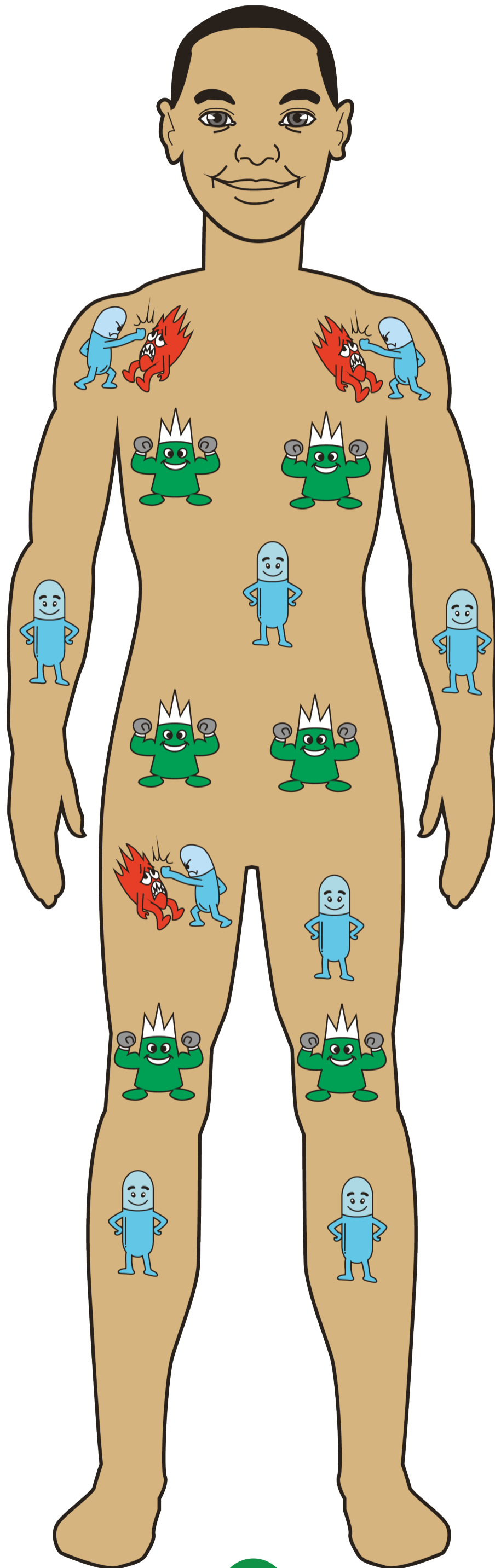
By starting ART early, while you still feel healthy, the smaller the chance you will get sick and your immune system will get permanently damaged. Starting ART early also decreases the chance of passing HIV to your partner or children.

Before we were waiting longer to propose to people to start ART, but because we now have better drugs with less side-effects, we are happier to start you on treatment earlier.

A treatment for life:

ART is for life and should not be stopped and started. The better you adhere to your treatment, the fitter you will be and the longer you will live.





2

Picture 3: The antiretroviral Therapy

Medication schedule:

ARV's are to be taken every day as close to the same time as possible. Most patients will need to take their treatment once a day, a few (mainly children) will still need to take their drugs morning and evening with a 12 hours interval.

Each one should choose the best time according to his habits: wake up time, work, school, etc. When you miss a dose, you should take the forgotten dose as soon as you remember and then get back to your usual medication schedule. In the individual session with the counsellor, you will make a plan on how to adhere to your treatment by using simple tricks to remind you of doses, where to store your medication, etc.

Support system:

It can be a big help to have disclosed your status to somebody.

This person could help to remind you to take your drugs, be a listening ear, accompany you to the hospital. However, you can start treatment even if you haven't told anyone your status.

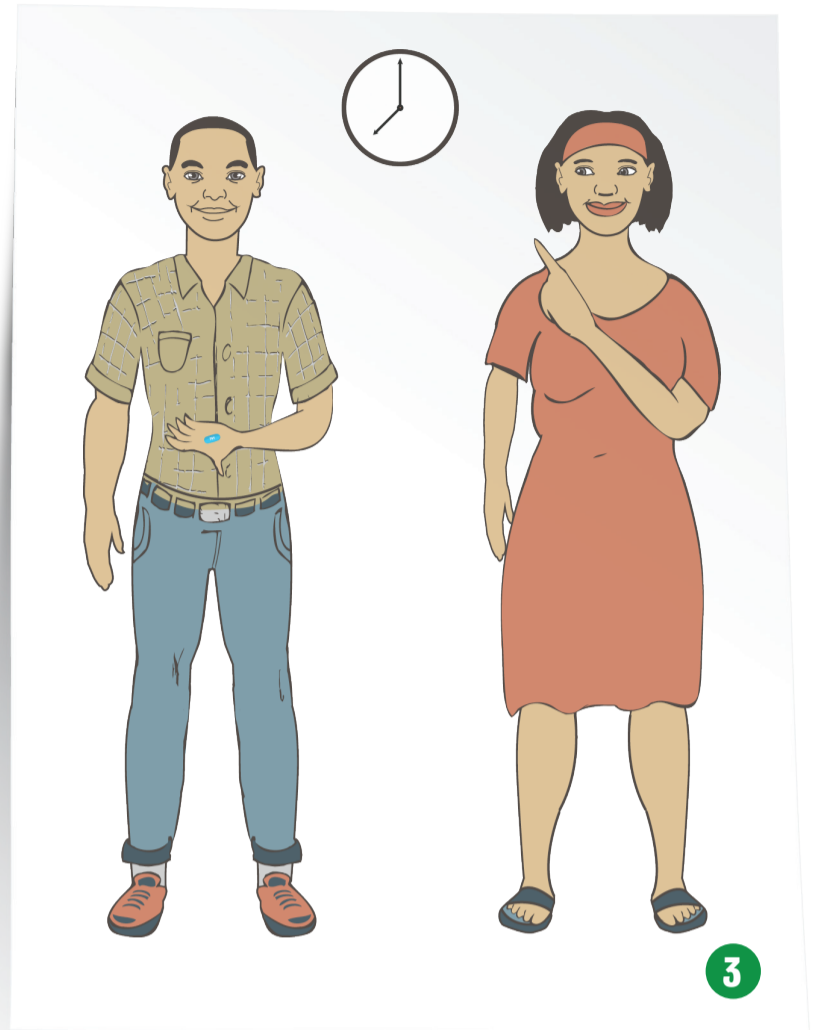
Learning a new habit:

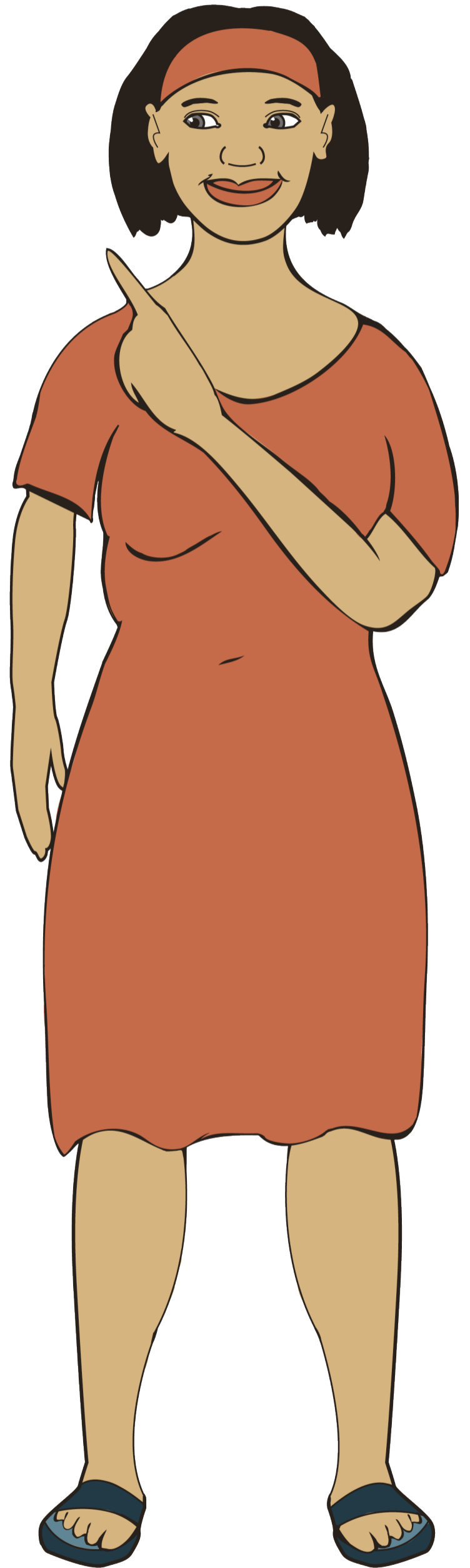
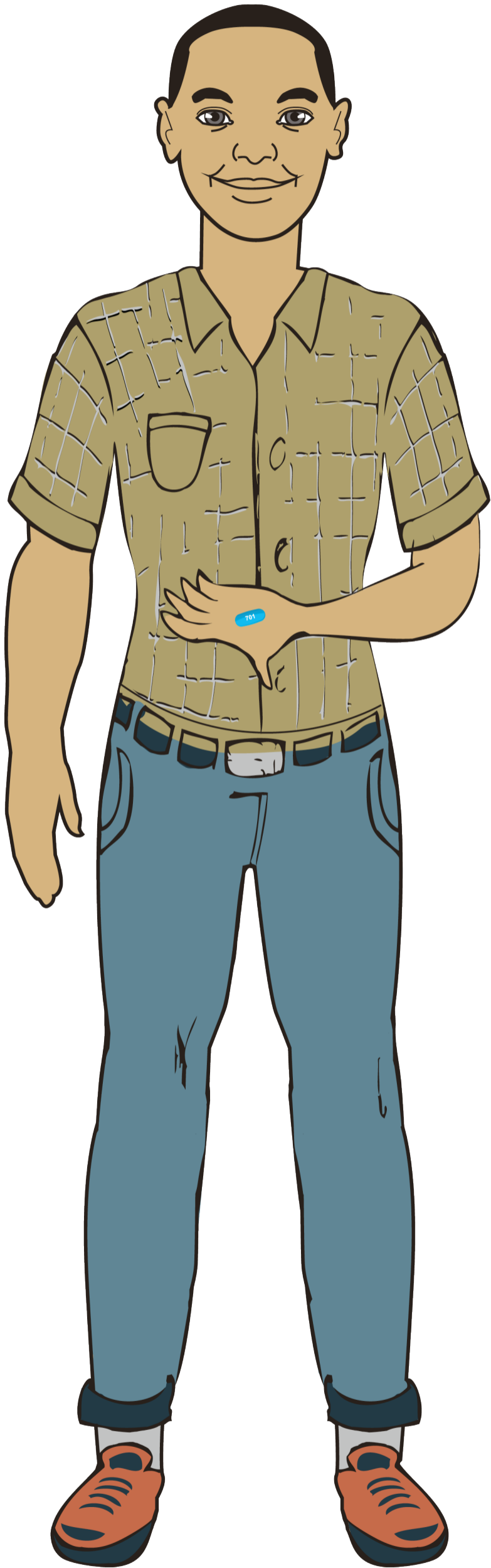
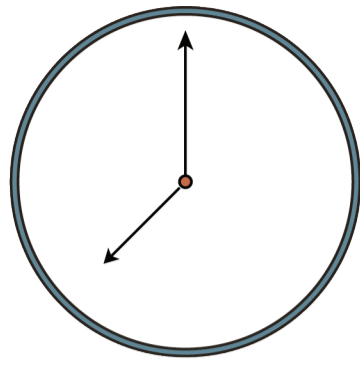
Learning a new habit like adhering to treatment takes time and practice. It is normal for you to forget a dose or to take a dose late, but we will work with you to help you become good at taking your medication at the same time every day. With time, taking your ARVs will become easier.

Side effects of ART:

All patients will probably have some light side effects at the start of their treatment. It is normal to experience some nausea, headache, dizziness, difficulty sleeping and diarrhea (explain the specific side-effects of the patient's treatment). They normally disappear within a few weeks after starting treatment. If you do vomit in the hour following the time you have taken your medication, then you must take another dose (or all of them).

It is important to continue to take your treatment even if you experience these side effects but you must tell your clinician about these symptoms. Only a few patients will experience serious symptoms. If this happens to you, you should not stop taking your treatment, but come to the health facility as soon as possible for the nurse/doctor to identify what the problem is. The problem could be due to side effects, but could also be related to HIV itself or something else.





Picture 4: The viral load test

What is the goal of your ARV treatment?

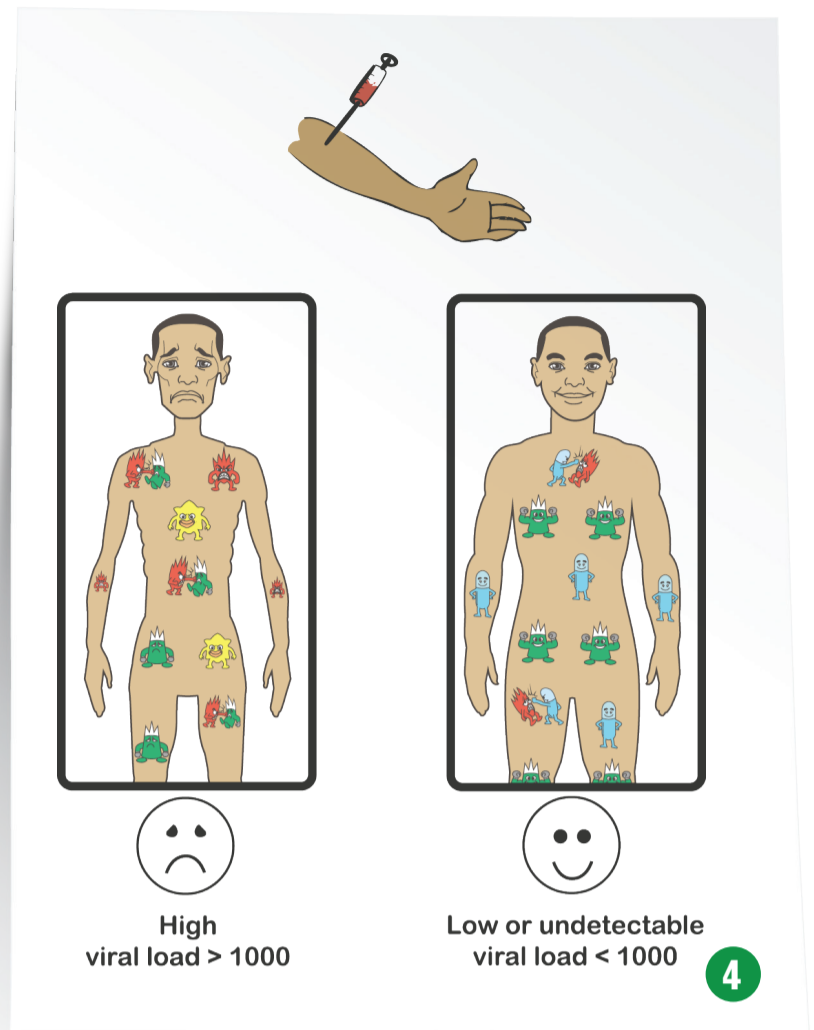
When you take your ARVs every day, they stop your HIV multiplying (making more HIV in your body) and prevent HIV from killing your CD4 cells (the soldiers of your body). Therefore, when taking ARV's, the quantity of HIV in your body will decrease.

How to know if your ART treatment is working?

By doing a viral load test. A viral load test measures the amount of HIV in your blood and is done by drawing blood.

When to have a viral load test?

The first viral load will be taken at 6 months and then again after 1 year on treatment, and after that yearly (adapt locally), as part of the routine follow up of HIV+ patients on ART. If there is a problem with your viral load, it is taken again 3 months later. It is your right to know your viral load result! Ask your health care worker for the test and for your results.

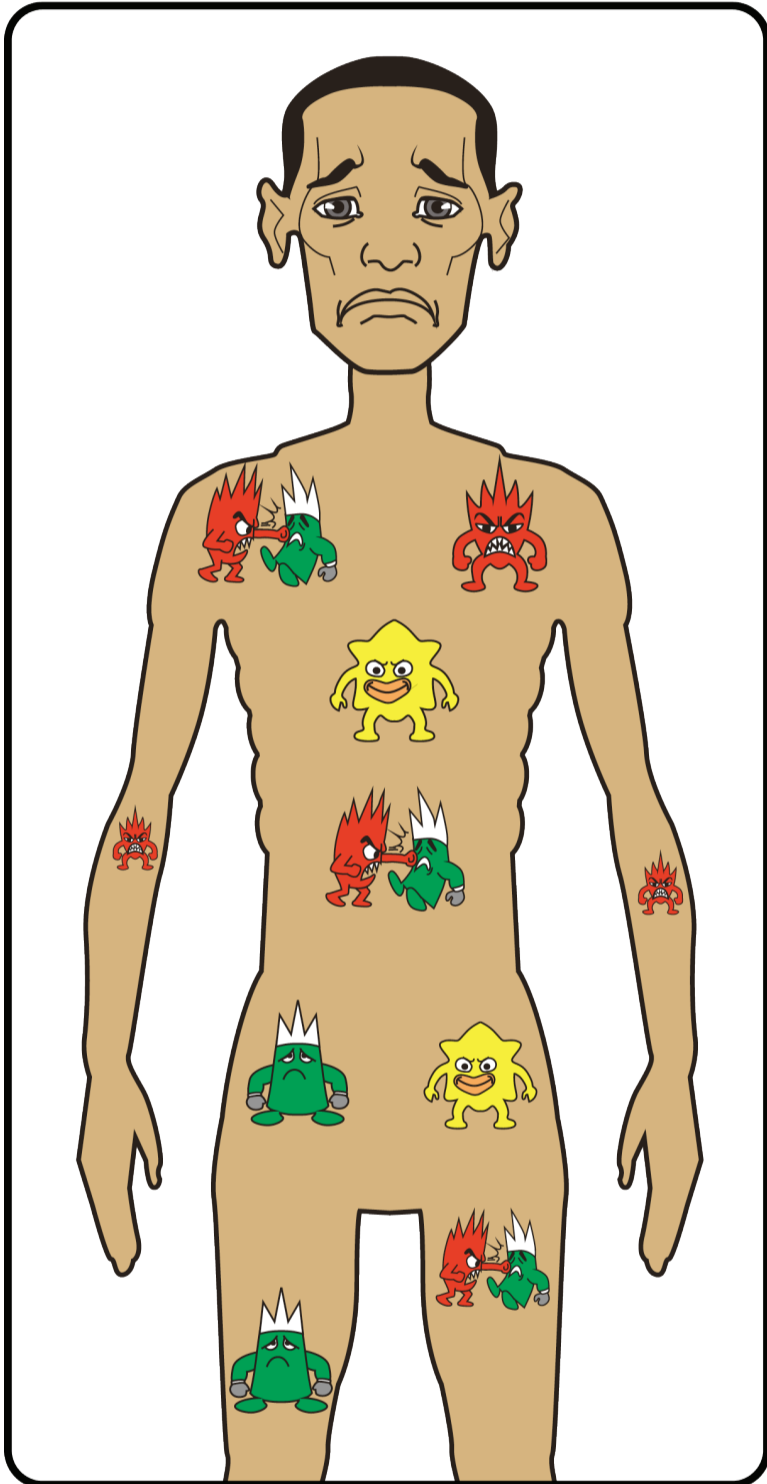
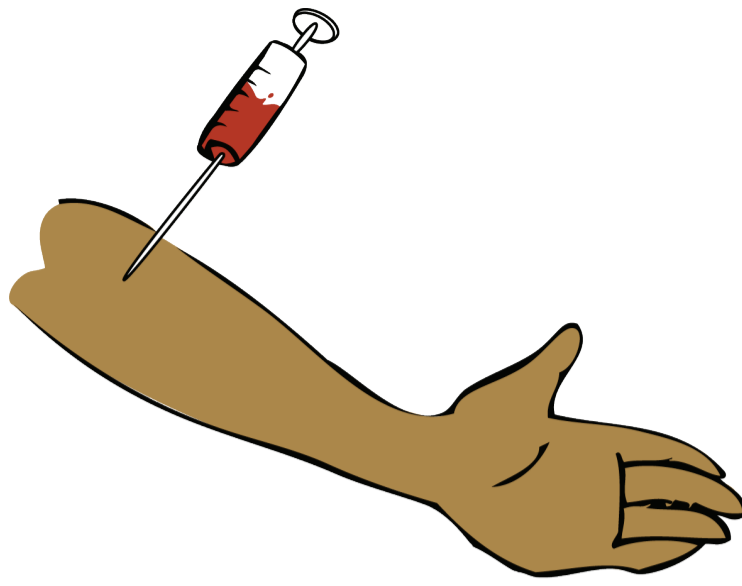


What does a low or undetectable viral load result mean?

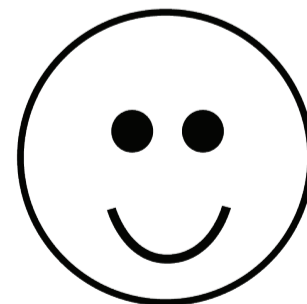
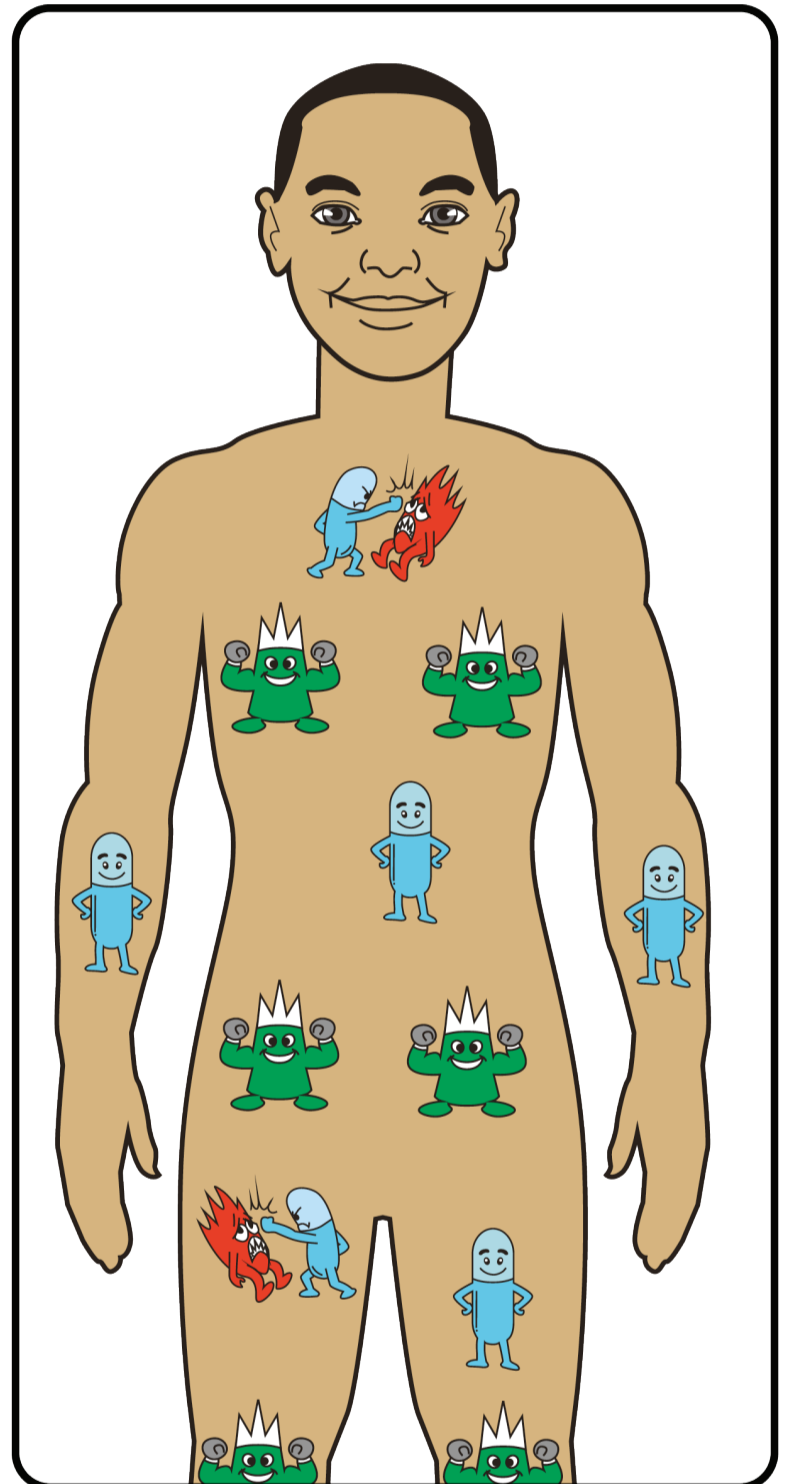
- A low or undetectable viral load is a viral load of less than 1000 copies (adapt locally). It means that you have so little HIV in your blood, it can't be measured. This is because the multiplication of the virus has been stopped by the ARV treatment. An undetectable viral load in the blood does not mean you no longer have HIV it just means it can't be seen with the tests we have.
- You can compare taking ART to weeding the garden: when you weed the garden regularly (or adhere well to ART), there is hardly no weed to be seen (or no HIV to be seen – your viral load is low or undetectable). But from the moment you stop weeding the garden (or stop taking ART), the weed will pop up again (or HIV will multiply again). In the same way your viral load is undetectable when you adhere well to your treatment.
- A low or undetectable viral load is very good as it means you have your HIV under control. You should continue with your good adherence. You will now be seen less often by the clinician and will be offered easier ways to pick up your drugs.

What does a high viral load result mean?

- You may be facing a lot of problems to adhere to your treatment. This is the most common cause for a detectable viral load.
- By solving your adherence problems early, you can get your viral load to low or undetectable.
- In a few cases, you could be adherent but you have already become resistant to your treatment.



**High
viral load > 1000**



**Low or undetectable
viral load < 1000**

Picture 5: Poor adherence

What is poor adherence to ART?

ARV's should be taken every day as close to the same time as possible.

Poor adherence occurs when we often take our pills too late, when we forget to take a dose, when we do not take all of our pills or when we stop the treatment because we are feeling better, etc.

CONSEQUENCES OF POOR ADHERENCE

1. Getting sick:

If you do not take your ARVs every day at a chosen time, you will not have enough ARVs in your blood to fight the HIV.

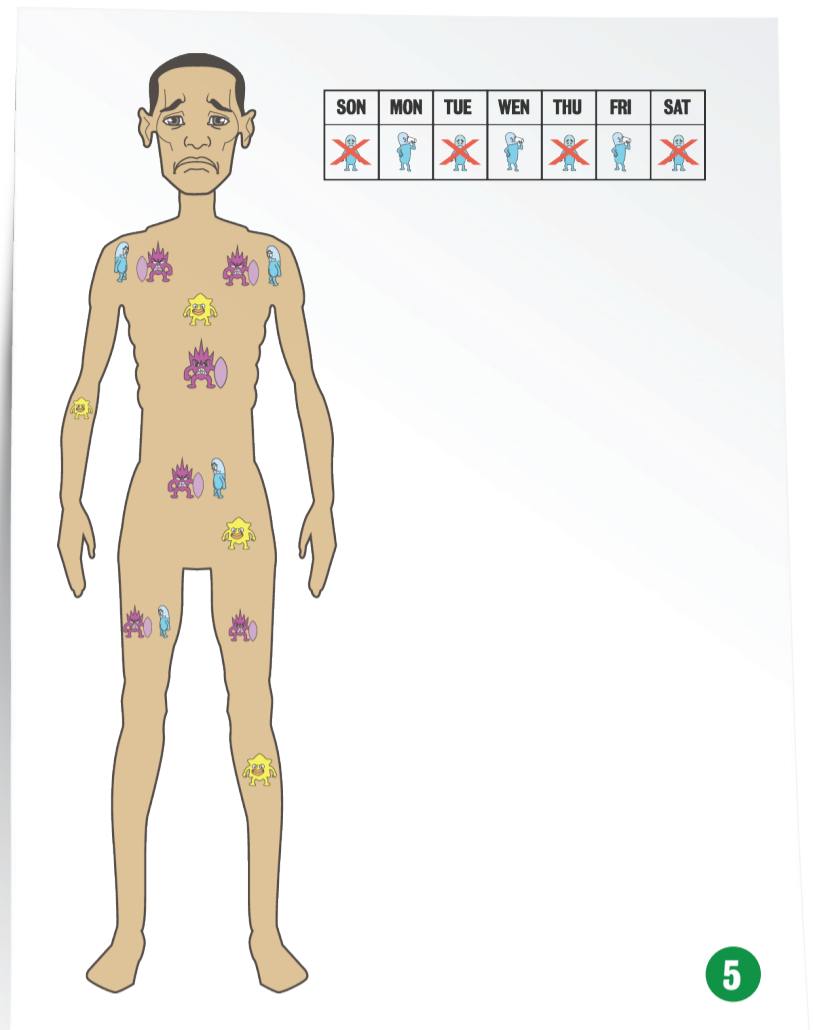
Your viral load will be high meaning HIV is multiplying again and will be destroying the CD4. This means you cannot fight off illness and will get sick.

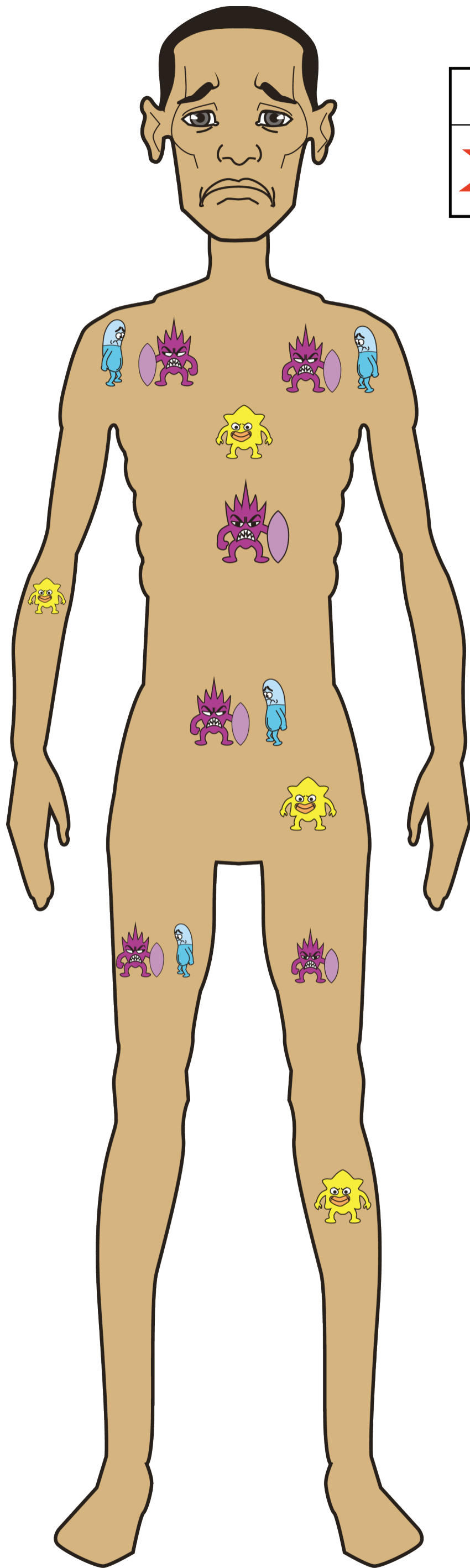
2. Developing resistance:

If the level of the ARVs in the blood is too low, the virus is able to transform itself and will start to multiply again. This means the HIV virus has become resistant and that the ARVs are no longer able to work to attack your HIV.

3. Transmitting HIV to your child or your partner :

If your viral load is high meaning there is a lot of HIV in your blood, there is a much higher chance of passing HIV to your baby during pregnancy, delivery or breastfeeding. The chance of infecting your partner with HIV through unprotected sex is also a lot higher.





SON	MON	TUE	WEN	THU	FRI	SAT

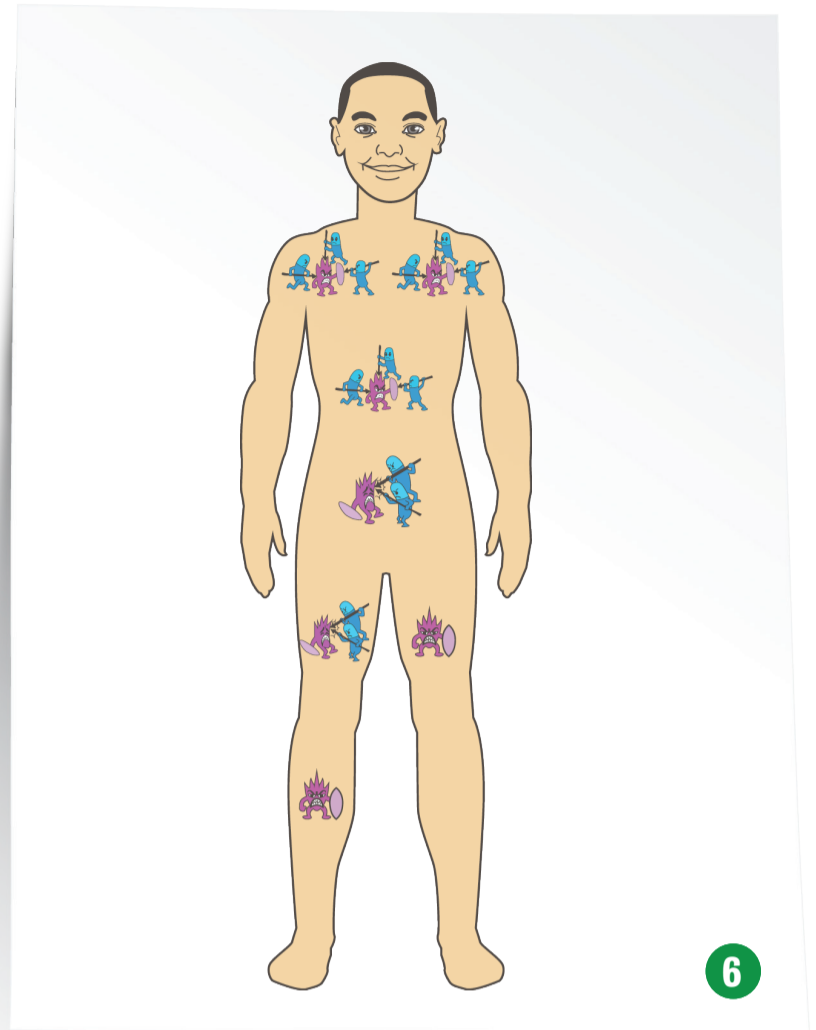
Picture 6: Second line Treatment

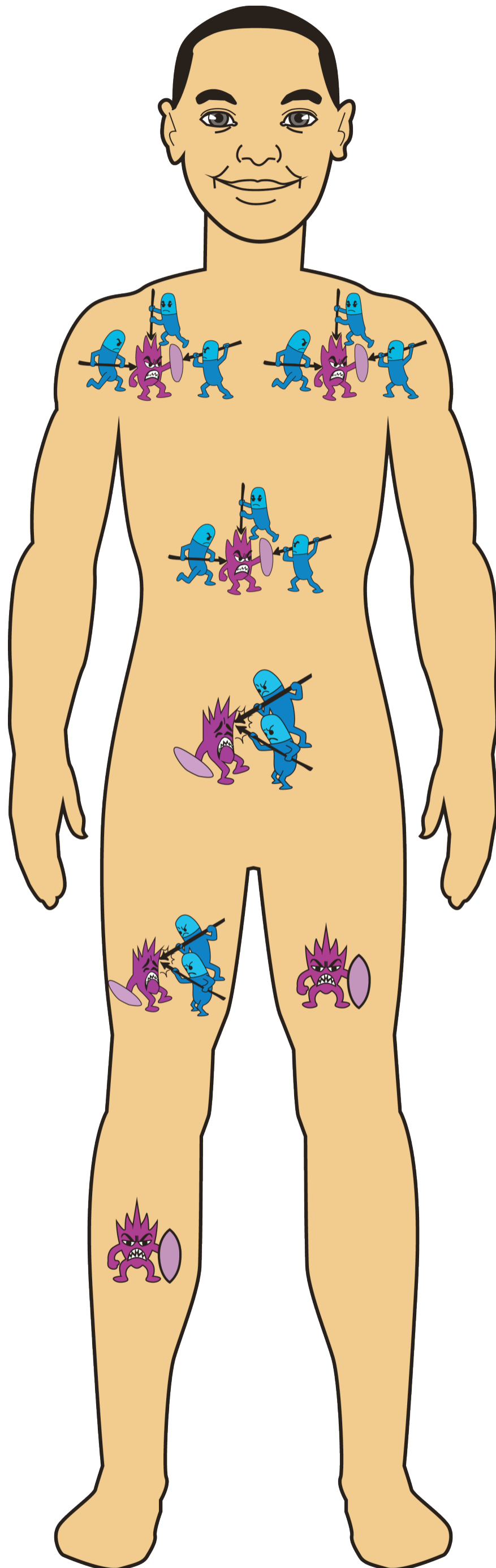
What is 2nd line treatment?

If your viral load stays high (meaning there is still a lot of HIV in your blood) despite good adherence, it means the HIV became resistant to the drugs you are usually taking. The doctor or nurse may decide to put you on another treatment that can fight the resistant virus. This is called 2nd line treatment.

Adherence to 2nd line treatment:

You should adhere well to second line treatment to avoid HIV becoming resistant to the new treatment. Your counsellor will help you to make a plan to adhere to your new treatment.





Picture 7: Travelling

Once you are feeling well you may want to travel again. Always tell your nurse / counsellor about your travel plans so they are able to ensure you can continue to take your medication for the period you are away.

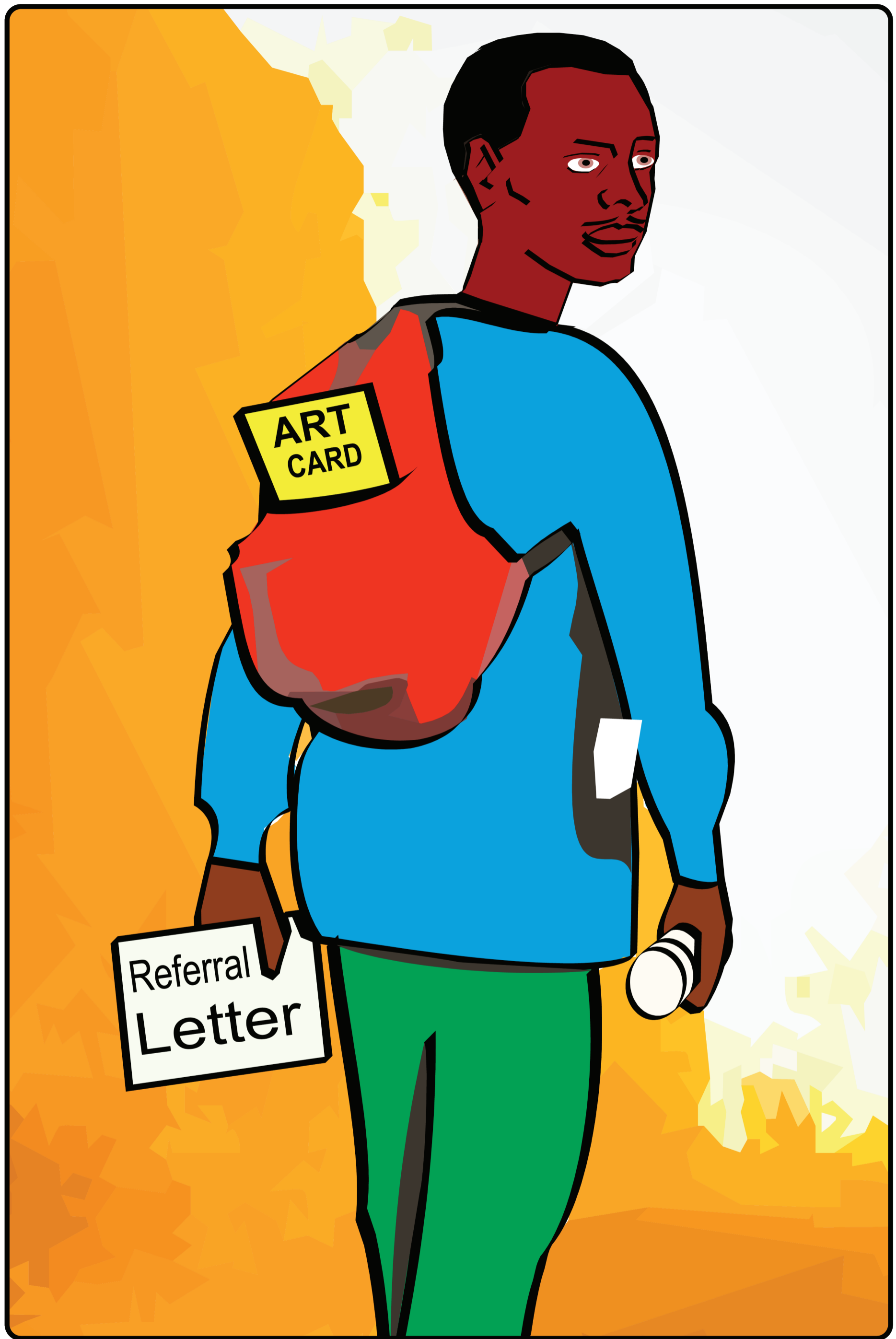
When you plan to go away for a short time:

- Tell the doctor/nurse and they will ensure you have enough drugs to cover the time you will be away. They may give you a longer drug refill than usual if needed.
- Always take your drugs and your health passport / patient card with you on your travels

When you plan to go away for a longer time or are not sure you will be coming back:

- The doctor/nurse/counsellor will supply you with a refill of ARVs for at least 3 months and also help you identify a health facility at your destination where you can go for treatment.
- They will also prepare a referral/transfer letter stating what treatment you are on. When you arrive at the health facility at your destination, you should give them your referral letter so the nurse/doctor knows how to best help you.
- In other clinics or in other countries the pills for the regimen you are currently taking may be another color or have more or less tablets than you are used to. The most important thing is that you stay on the same regimen and that you understand how you should take your treatment. If your regimen is not available at the new clinic discuss the issue with the health care provider





Picture 8: Your treatment journey

Starting ART:

When you have just started ART, you will be asked to come to the clinic regularly to see your nurse/doctor. This is so we can check you are well and you are not having any problems with your treatment.

ART refill options once your viral load is low / CD4 is above X:

Adapt the following locally according to whether VL or CD4 monitoring is available.

Once you are well and your viral load is low, you will only need to see a clinician once a year. Or once you are feeling well and your CD4 is above X you will only need to see a clinician every 6 months.



8

You will be offered some options for how you would like to receive your drugs:

- One option is to come yourself every X months to the clinic to collect your drugs straight from the pharmacy. You can also ask somebody you trust to pick up your drugs for you at the pharmacy, if you give them your patient book.
- Another option is to collect your drugs as a group: At the clinic or at a community venue, where a peer educator will distribute drugs x monthly or by forming a group of people on ART from your area and rotate to pick up drugs at the clinic for all group members every X months.

When to report back to the clinic:

Whatever option you choose, there are a few important things to keep in mind:

- You must continue to see your clinician and have a CD4 / viral load done at least twice/once a year (adapt locally)
- When you have a health problem, you must always report to your clinic
- In following cases you must report to the clinic as soon as possible:
 - If you have a high viral load
 - If you are pregnant
 - If you have symptoms of TB like a chronic cough, tiredness, night sweats and weight loss
 - If you have a severe headache that is not relieved with paracetamol
 - If you have diarrhea that persists for more than one week
 - If you are vomiting for more than 3 days
 - If you develop a new rash
 - If you develop any swelling of your feet/face or are unable to pass urine (if on TDF)
 - If you have severe sleep disturbance or change in behaviour (if on EFV)
 - If you have breathlessness or dizziness (if on AZT)



Picture 9: Your rights and duties

People living with HIV/AIDS have certain rights and duties when it comes to health care.

A right is something that should be provided by health care workers to you without you having to give anything in return.

- Your HIV status should be kept confidential by health care workers.
- You should receive ART medicines free of charge.
- You should get at least one month of ARVs refill at every visit, without interruption.
- You should get information from the health care worker on the treatment they prescribe for you, such as information about what the medicines are for, how and when to take them and what are its side-effects .
- You should get the results of your CD4 and Viral Load tests.



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When your rights are not respected, you can complain to the health care workers, report to other authorities, PLHIV networks or civil society organisation dealing with HIV and health rights issues.

People living with HIV/AIDS also have certain duties. Duties are what you would have to do to ensure that the health worker can provide you good quality care.

- You should provide health care workers with information on your HIV status, your treatment and other conditions you have.
- You should look after your personal medical records.
- You should comply to your prescribed treatment .

