



Adherence

Ensuring that you take the drugs you are prescribed at the right times, in the right way and in the right amounts is the main key to success of anti-HIV drugs and opportunistic infection treatments and prophylaxis. This is because missing doses, taking the wrong doses, or taking a drug in such a way that you absorb too little, leads to more rapid development of resistance to the drug and you may stop getting any benefit from it.

Studies have found that when people who were responding well start to lose the benefits, the most common explanation was that they were missing or reducing doses, or stopping one or more of the drugs. Using recreational drugs, alcohol, shift working, travelling with time zone changes, changes in your routine, e.g. having a baby, staying with friends and holidays are things that challenge adherence.

Side effects

Side effects are one of the most common reasons for poor adherence. If you experience side effects you may feel like reducing the dose of a drug, but you should always talk to your doctor or nurse first. Most side effects occur during the first few weeks after you start a new drug. Your doctor may be able to give other medicines to reduce side effects such as nausea, diarrhoea and headaches. If you find the side effects intolerable, it is imperative that you inform your treatment centre so that alternative regimens can be considered. It may be best not to start treatment in the first place until you are confident that you will be willing to keep taking the drugs.

Missing more than one dose per month can lead to the development of resistance. When HIV multiplies, it can mutate and become resistant to your combination - then your future treatments could be restricted. You should aim to have a constant level of the drug in your body, by ensuring that you take your combination at regular intervals.

Resistance

A micro organism is most likely to develop resistance to a drug if the blood level of the drug is too low to stop it from reproducing, but high enough to affect how it evolves in your body. Once it develops resistance to one drug it may also be resistant to other similar drugs. However, the risk of such 'cross-resistance' varies from drug to drug – it is not inevitable.

When a drug is prescribed, you will be told exactly how to take it – this includes how many times per day and any food restrictions the regimen might have, e.g. with food or on an empty stomach (however such restrictions are becoming more unusual). These instructions have been worked out to ensure that you have an adequate level of the drug in your body all the time, thus reducing the risk of resistance. Once you have decided on the best time to take your medication, it is imperative that you stick as closely as possible to these times, taking your medication no more than one hour earlier or later than your designated time.

It is also important for you to be aware of possible drug interactions that may affect plasma drug levels. This is because one drug can influence the ways in which another drug is processed by your body. Sometimes this will cause an increase in blood levels of one drug which could be dangerous, but in other cases it might cause the blood levels of the drug to fall, reducing its effectiveness and increasing the chances of resistance.

It is essential that you inform your pharmacist if you are taking any over-the-counter medication such as antacids; any alternative medications or medications prescribed by an alternative practitioner; or any medications prescribed by your GP or other doctors.

It can be difficult for everyone to remember to take tablets at regular intervals; here are some tips that may help you to remember to take them on time. Always check with your doctor, nurse or pharmacist to make sure you are taking the right dose and at the right time.

Tips to help you with taking your pills:

- **Find out what you should do if you miss a dose.** As a rule, take it as soon as you remember, but check with your doctor, nurse or pharmacist about your particular tablets and combination.
- **Think about when and why you miss them.** Identify doses you may miss regularly.
- **Take your tablets with something you do every day.** Remembering your tablet time can be difficult. Taking the pills with an everyday task may make it easier - *brush teeth, take pills - eat dinner, take pills* (you can think of some regular activity in your own life).
- **Use a pill box.** Carry your tablets in a pill box if you are out and about. Ask your pharmacist, they may be able to provide one for you. They are divided into sections for different times of the day to help you remember your doses.
- **Keep a record of when you need a new prescription.** Mark a day in your diary or calendar when it is time to get a new prescription filled out, so that you don't run out. Make sure you order your medication at least one week before you do run out and plan ahead for holidays.
- **Place your tablets near something you see every day.** Next to your 'phone or 'fridge. If you see them you are more likely to remember them.
- **Use mobile phone alarm, computer reminders, post it notes, watches or anything that will help you to remember.** This may be a good way to set up a routine and later you may be able to remember without them. Forgetting is the most common reason for missing tablets.
- **Stick a magnet on your 'fridge to remind you.**
- **Find out what to do if you miss a meal at tablet time.** For those drugs that need fat to be absorbed, a rich chocolate bar or a glass of milk and biscuits may be enough.
- **Talk with friends about your tablets.** It makes it easier to take them when people around you know how important they are for your long-term health.
- **'Phone or speak to an HIV Treatment advice/helpline.** There are people available to talk to you if you have difficulties. Some centres may have a specialist pharmacist or nurse available to give advice on how to remember to take your combination
- **Watch out for!** Alcohol, recreational drugs, lie-ins and any change in your general routine including holidays. These are all factors which can lead to doses being taken late or missed completely.
- **Travel.** Changes in time zones can be problematical and how you handle this will depend on the duration of your trip. Generally it is safer to keep to the time you would take the medication if you were in the UK unless you are away for extended periods. Ask for advice from your doctor, nurse or pharmacist, or one of the helplines.

In summary, drug adherence means:

- taking the correct dose of each drug
- taking each drug at the correct time
- following instructions about whether to take it with food or on an empty stomach
- avoiding potential interactions between different drugs.
- always consult your doctor before starting any alternative remedies as certain supplements, e.g. St John's Wort, can interact with medication

Useful resources:

info@I-base.org.uk – Information and advice

www.aidsmap.org

National AIDS Helpline: 0800 567 123

National African AIDS Helpline 0800 0967 500

Specialist Nurse Chelsea and Westminster NHS Foundation Trust – 0208 746 5602