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in this issue

It's really very reassuring to know, as our main article this month suggests, that there are very few health-related reasons why HIV-positive people shouldn't be able to travel to anywhere they desire.

In reality, however, this isn't quite the case: some countries - notably the US, China and Russia - won't let us in unless we jump through some stressful and stigmatising hoops (or attempt to hide our status).

More to the point, travel is a luxury that only a minority of HIV-positive people in the UK can afford. At least half of all HIV-positive people are unemployed, and a 2006 report from Crusaid and the National AIDS Trust on HIV and poverty¹ suggests that one-in-four of us experience extreme financial hardship at some point in our lives.

These crises don't only happen to other people: the report suggests that it can affect any of us should we lose our jobs or our benefits due to issues beyond our control, such as sudden poor health or stigma and discrimination.

Even with improved treatments, and some legal protections, we should remember that life with HIV is never straightforward: even if things are going well for us today, the fight is far from over.

page 3 In this month's *Upfront*, we examine the latest evidence suggesting that people with HIV are at an increased risk of heart attacks, and that this risk may be even higher than previously thought. How worried should we be?

page 4 In *HIV and travellers' health*, we interview travel medicine expert, Dr David Laloo, and discover that there are many things within our control that we can do to help ensure that our trip abroad doesn't impact negatively on our health, and that our HIV doesn't impact negatively on our trip.

page 8 Since diarrhoea is the most frequently-experienced symptom of life with HIV, we all could do with some help *Managing HIV-related diarrhoea* at some point in our lives. As Derek Thaczuk explains, there are some very good reasons why we shouldn't have to suffer in silence.

page 12 Amongst the items in *News in Brief* are reports of new studies that suggest that women respond better to HIV treatment than men, and that missing HIV clinic visits is bad for your health.

page 14 In *Going places?* we look at two examples of how stigma and discrimination affect our ability to work and travel.



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hiv and heart attacks

by NAM's editorial team

More evidence has been published suggesting that people with HIV are at an increased risk of heart attacks, and that this risk may be higher than previously thought. How worried should we be?

A number of studies have already suggested that HIV-positive people receiving anti-HIV treatment have an increased risk of cardiovascular disease, including heart attacks and strokes. The largest of these studies – the DAD study – published their final findings on the risk of heart attacks at the end of April, although the headlines had previously been reported at conferences.

It found that people on anti-HIV therapy that included a protease inhibitor (PI) had a 16% increased risk of heart attack for each year they were taking a PI. After adjusting for the effect of blood fat (lipid) increases, the risk was found to be 10% per year. People on anti-HIV therapy that did not contain a PI did not appear to have an increased risk of heart attack.

However, the relative role of HIV itself (as opposed to the risk solely being a longer-term side-effect of protease inhibitor treatment) as well as the contribution of smoking and diabetes to the increased risk remains unclear. And an accompanying editorial points out that the increased risk associated with PI treatment is nowhere near as high as the risk created by smoking. It notes, "the incidence of [heart attacks] among patients exposed to protease inhibitors for more than six years was only 0.6% per year. This risk of

cardiovascular disease would be considered low or at most moderate, depending on a patient's risk factor burden. Thus there does not seem to be an epidemic on the horizon – simply a risk that needs to be managed. Given the much greater cardiovascular risks associated with...smoking (and the high prevalence of smoking among HIV-infected patients), perhaps more effort should be spent assisting our patients with smoking cessation."

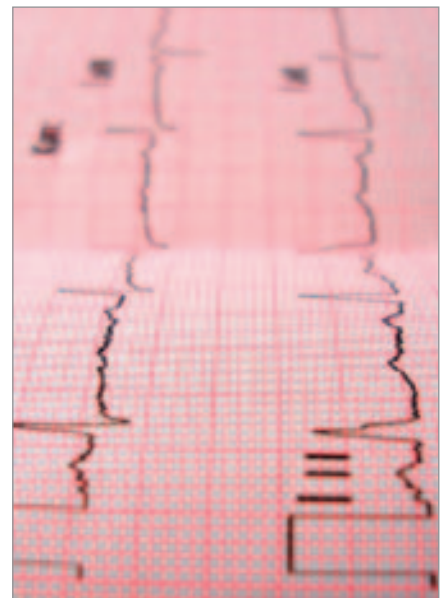
Confusing matters, however, is another study also published at the end of April, which found that HIV-positive people receiving treatment at two major US hospitals were 75% more likely to experience a heart attack than their HIV-negative counterparts. HIV-positive women were found to be especially vulnerable: they were almost three times as likely to experience a heart attack than HIV-negative women.

The findings could not be entirely explained by the presence of increased cholesterol levels, high blood pressure or diabetes. Nor could they be fully explained by the use of anti-HIV drugs: although the HIV-positive patients were more likely to have taken PI-based anti-HIV therapy, the researchers only had anti-HIV drug use data for half of the patients, preventing any analysis of heart attack risk according to anti-HIV drug class exposure.

In addition, the study found that HIV infection on its own doubled the heart attack risk, suggesting that HIV itself – regardless of other risks – makes a significant contribution to the

increased risk of heart attacks in HIV-positive people. Last year's SMART study of HIV treatment interruption found that individuals who interrupted treatment had a 60% higher risk of cardiovascular disease in the 16 months that followed, suggesting that anti-HIV drugs may actually reduce short-term cardiovascular risk.

The US study's senior author Dr Steven Grinspoon said that more studies were needed to understand exactly why heart attack rates are higher in HIV-positive people, and what is driving the increased risk. "We also need to analyse the relationship of antiretroviral medications to cardiovascular risk. HIV medications save lives, and patients should continue taking them as prescribed; but we want physicians to be aware of these increased heart attack rates, watch risk factors carefully and appropriately target their treatment."





hiv travellers' health

a little extra planning can go a long way, by Edwin J Bernard

Whether it's two weeks on a tropical beach, or going back home to visit friends and family, many of us are travelling more often to locations that were considered exotic just a decade ago. Since even 'healthy' HIV-negative individuals are at an increased risk of health problems when they travel abroad, those of us living with HIV should be aware that we may face a few extra challenges - such as adhering to our anti-HIV drugs or avoiding infections - when we head abroad.

However, with a little thought and some forward planning there are many things within our control that we can do to help ensure that our trip doesn't impact negatively on our health, and that our HIV doesn't impact negatively on our trip.

In April, Dr David Laloo, of the Liverpool School of Tropical Medicine, gave an extremely informative lecture at the British HIV Association (BHIVA) conference in Edinburgh entitled 'Optimising protection for the HIV-positive traveller'. He told the conference that although vaccinations are important - and getting them right are a particular issue for HIV-positive individuals - only 10% of illnesses can be prevented by vaccination, and that other general travel advice is very important.

This includes advice on:

- Accident prevention.
- Sexual health.
- Insect bite avoidance.
- Food and water safety.
- Deep vein thrombosis.

- Coping with existing symptoms and/or adherence to current medications.

Dr Laloo also cited two recent studies from the UK¹ and Canada² suggesting that many HIV-positive travellers take risks with their health when travelling. Some of these include:

- Having no, or inadequate, travel insurance.
- Taking treatment holidays or adhering poorly to ART.
- Taking more sexual health risks than at home.

ATU spoke with Dr Laloo following his presentation and asked him to provide some practical advice for HIV-positive individuals who are planning to travel beyond Europe.

ATU: The first thing we often think about when travelling to far-flung places is whether we need vaccinations, and how having HIV might affect us. Should we only mention our travel plans to our doctor if we're thinking of going somewhere 'exotic'?

DL: Actually, it wouldn't hurt to mention *any* travel plans to your doctor before you go, but clearly areas of the world that are tropical, or may otherwise have poor food and water hygiene should definitely be discussed with your doctor.

ATU: Does that include places that were considered exotic but actually are now within reach, like two weeks on a beach in the Caribbean or in southern Asia? And what if you or your family are from a country in the tropics and are just going back to visit friends or family?

DL: Actually, I would say 'yes' to discussing both of those examples with your doctor. Since it can sometimes be difficult - and stressful - to find a doctor in an emergency in some parts of the world, it might make sense for your HIV clinic doctor to try to find a contact for you before you go, particularly if he or she thinks it's likely to be an issue and you are planning on going somewhere a little bit 'off the beaten track'. Patients originally from the tropics should be aware that they may have lost some of their immunity to diseases like malaria and may need anti-malarial prophylaxis.

ATU: Who should be the first point of call for expert advice if you have travel-related health questions?

DL: You might want to do little bit of research yourself about what vaccinations you might need (see page 7, Further information) although ultimately your doctor should be doing most of the work. Your HIV clinic doctor, or your GP, should have some basic knowledge of the issues and then they can decide whether they can handle the issues for certain destinations or whether they need to refer you to a specialist travel clinic. Not all HIV-positive travellers need to see a travel medicine specialist, and

since not everyone is comfortable with disclosing their HIV status, it may be more appropriate in the first instance to use your HIV clinic doctor as your first source of information.

ATU: Where do you find travel medicine specialists, and are they generally HIV-aware?

DL: It's fair to say that the organisation of travel medicine in the UK is haphazard. There are, in fact, all sorts of people who are experts in this field: some GPs or practice nurses have taken a real interest in it; there are specialised travel clinics allied to hospitals; and there are a lot of private providers, such as Trailfinders. Since most travel medicine specialists actually see their role as advising the 'unusual' traveller, I don't think that HIV-positive people should be concerned about consulting them: their level of knowledge around HIV-related issues is likely to be pretty good.

ATU: Obviously, pre-travel vaccination is one thing that requires some advance planning. But being prepared is about more than just getting a jab, isn't it? You'd also need to make sure that you have HIV-specific travel insurance, and to be sure that you have enough anti-HIV drugs with you (including up to a weeks' extra supply), and to work out what the time zone change will mean in terms of taking your pills.

DL: Certainly, I would suggest that six to eight weeks before any trip you should at least be thinking to yourself, 'Do I need to do anything special?' It may well be helpful to discuss issues such as moving your pill timings with someone at your HIV clinic.

ATU: You mentioned that travellers' diarrhoea is the most common health-related issue. Since HIV-positive people are already much more likely to experience diarrhoea, what do you recommend?

DL: I think you need to be prepared for diarrhoea. Certainly buying some over-the-counter *Imodium* (loperamide) before you go makes a lot of sense. You

shouldn't use it if you have a fever, or bloody diarrhoea, or if you are generally unwell, but long as you haven't got any of those warning signs, it's safe and effective.

ATU: You also suggest that it is possible to self-treat with a prescription antibiotic, such as ciprofloxacin (also called 'cipro') which is likely to be effective in killing the most common microbes associated with travellers' diarrhoea. Isn't there a concern that people are over-using antibiotics and might some doctors be reluctant to prescribe them 'just in case'?

DL: Absolutely. I think individual doctors may need to be persuaded. The great thing about travellers' diarrhoea is that all you probably need is two or three doses of cipro and if it's not settled after that, you should be seeking specialised medical help anyway - particularly if you have a lower CD4 count. But I think there is a very good case for HIV-positive people to say to their GP: "Look, I think I'm probably at a slightly increased risk and I certainly don't want to have diarrhoea which could mean I'm not going to absorb my anti-HIV drugs for four days, so will you do this?" And I think, on balance, most doctors will prescribe it: the evidence base is undoubtedly there and I think it's being increasingly recognised by travel health providers as a sensible thing to do.

ATU: What else can people do for themselves?

DL: Everyone thinks if you go and have your jabs then you're fine. But actually it's behaviour that matters. So you should learn about how to avoid mosquitoes - such as by using long lasting, DEET-containing repellent and sleeping under mosquito nets at night. Much of it is common sense, really: if you see a beach environment where there's refuse around or somebody's been using it as a kind of dumping ground or it's a local toilet, then walking barefoot or swimming is not a good idea. Swimming in a clean fresh flowing river is unlikely to be a

problem, but dipping in a smelly stagnant pool may lead to difficulties.

ATU: One of the things that really surprised me was your suggestion of an increased risk of deep vein thrombosis (DVT) in HIV-positive people. Can you tell me a bit more about that?

DL: Some data from smallish, not great quality, studies suggest that HIV-positive individuals may have a higher risk generally of venous thrombosis. However, it is well established that travellers are at an - albeit quite small - risk of DVT whatever their HIV status. What matters is immobility for long periods - whether it's on a long flight, or a long bus journey or a long car journey.

ATU: What is considered to be 'a long journey' for an increased DVT risk?

DL: It's been suggested that travel longer than four to six hours and certainly over eight hours increases the risk. There are several things you can do to reduce the risk. Although it might seem a bit silly, getting up and moving around and

making sure your legs aren't immobile for eight hours does make sense and will probably help you - although there is no proof that it will. Remaining well hydrated, particularly on aeroplanes may also help. There is, however, good evidence that flight socks or stockings do work and I think that it makes sense to use them. They cost around £12 and although they're not very pretty they may well prevent you from having something that can be very unpleasant.

ATU: You also showed some data suggesting that road accidents whilst abroad are far more likely to harm someone's health than a tropical disease. What can be done about that?

DL: Well, people seem to leave their common sense at home when they go on holiday and it's quite clear that they take both sexual risks and other risks that they would never dream of at home, such as hiring a motorbike, not using seatbelts or driving at night on dangerous roads. There's a lot of evidence that going on motorbikes is a really bad thing to do abroad if you're

not already a competent motorbike rider. And on holiday it's easy to forget about service standards, and other safety issues, such as making sure the brakes work! I would say to just be aware of putting yourself in situations that you wouldn't normally be in at home. It's as simple as that. The same goes for food and water safety: being careful about what you eat and drink should apply anywhere.

ATU: How do we find that balance where we're not being over-anxious, but rather being sensibly cautious?

DL: Certainly, I wouldn't want anyone reading this article to overly worry about things that perhaps they shouldn't worry about. It's simply about being sensible. As far as food and drink go, you need to think about the source of what you're putting into yourself. So if you can see that you've got a bottle of water that is new, there's a seal on it, well that's going to be absolutely safe. On the other hand, buying a bottle of water from the urchin on the street who's gone round

hiv travellers' checklist

Vaccinations: Check with your doctor well in advance of your trip to find out whether you need any vaccinations for the county you're visiting.

Medications: If any prescription medication is being taken abroad, bring documentation for the medication and sufficient supplies. Check that heat or humidity will not affect your medication. A copy of a clinic letter, summary of your history/CD4 count or your treatment passport may be helpful.

Adherence: Prepare for time zone changes well in advance, and if you need to eat with your pills, take your own travel snacks for the journey; buy a large bottle of water before boarding (after going through security).

Sex: Bring plenty of condoms, lube, gloves and/or dental dams with you if you plan to have sex. Protecting yourself and your partner(s) makes just as much sense when abroad as at home.

Travel insurance: Some specialist insurance companies will provide HIV-related cover. NAM cannot recommend any particular company but the most popular are:

Easy Travel Insurance

(0870 345 2222, www.hivtravelinsurance.com);

Freedom Travel Insurance

(0870 774 3760, www.freedominsure.co.uk); and

Rothwell and Towler

(01404 41234, www.travelfirst.co.uk).

EHIC card: If you're travelling in Europe (except Croatia, Turkey and northern Cyprus), the EHIC (European Health Insurance Card) provides you with some basic health cover. Check the full list on www.dh.gov.uk/en/Policyandguidance/Healthadvicefortravellers/index or call 0845 606 2030.

Visas/Entry restrictions: For the latest information about the country you're visiting, including safety and general visa requirements, check the Foreign & Commonwealth Office website www.fco.gov.uk. **aidsmap** aims to carry the most up to date information, but HIV entry restrictions do change, so it's best to double-check with the relevant embassy or local HIV NGO if you're unsure.

the back to fill it from a very dubious standpipe is not sensible. Clearly, poorly cooked food bought on the street in most places is likely to be really bad for you, whatever your HIV status. You need to look around your environment, and ask yourself, "What is the chance that this is safe?" Different people are comfortable with different levels of risk.

ATU: Once we've returned from our trip is there anything special that you suggest we do?

DL: If you become ill after you come back, you should make sure that whoever sees you knows that you've been away. If you look at why anyone dies from malaria in the UK, it is often because their doctor was not aware that they'd recently visited a country where malaria is endemic. So if you have been somewhere reasonably exotic and you become unwell with a fever, the possibility of malaria (which may persist for up to a year after return), needs to be flagged up early on.

ATU: Finally, what are your take home messages for someone who's thinking of taking a long trip this summer?

DL: Think about the fact that you are going somewhere slightly different well in advance. Try and find somebody who can give you good advice - whether that's your GP or your HIV clinic - or find a travel clinic. If you plan and you're sensible and you use your common sense, you're actually very unlikely to have any significant problems. But even if you've left it to the last minute it is still worth seeking health advice, as there are some vaccines that can be given at short notice, it is always worth taking malaria tablets for last minute travel, and you may still benefit from the preventative advice. ■

travel-related dvt

A deep vein thrombosis (DVT) is a blood clot that usually develops in the veins of the leg, usually the calf. It can occur days or even weeks after a long trip. Symptoms include intense pain in the affected calf and medical attention should be sought immediately since if the clot makes its way to the lungs it can be fatal. People who experience DVT usually have three or more of the following risk factors:

- Immobility for an extended period of time
- Dehydration
- Chronic illness, including HIV
- Cancer
- Recent surgery
- Existing clotting abnormality
- Obesity
- Taking hormones or the oral contraceptive pill
- Varicose veins
- Pregnant or had a baby within two months
- A history of heart problems
- A history of DVT



further information

The National Travel Health Network and Centre (NaTHNaC) has an excellent website (www.nathnac.org) providing thorough and impartial information on travelling abroad.

Factsheets are available on non-infectious health risks, such as food and water hygiene, insect bite avoidance, medicine transportation by travellers and travel-related DVT.

There is also comprehensive information on infectious health risks - such as cholera, hepatitis, malaria, traveller's diarrhoea, and yellow fever - and how to avoid them. Fit for travel (www.fitfortravel.scot.nhs.uk) provides similar information from the Scottish HPA.

Some travel clinics can be identified on the ISTM website (www.istm.org) both for pre-travel advice in the UK and for help whilst overseas.

The 'travel' chapter in NAM's book, *Living with HIV* includes information on:

- Entry restrictions that some countries impose on people with HIV.
- Travelling with your HIV medication.
- Your health and travel.
- Health insurance for people with HIV and how to obtain medical care abroad.
- Travel vaccinations.

The book is available free to all HIV-positive individuals. You can order a copy by emailing us at info@nam.org.uk or calling us on 020 7840 0050. It is also available to read online at www.aidsmap.com (in the 'Living with HIV' section).

It's not the most genteel of subjects: most people are understandably reluctant to discuss their bowel movements in detail - even with their doctor. But most HIV-positive people have to deal with diarrhoea - watery, frequent, copious bowel movements resulting from upsets to the digestive system - at some point in their lives and for some of us 'the trots' are an everyday part of life.

In fact, a study published last month found that HIV-positive individuals were almost seven times more likely than HIV-negative individuals to have experienced diarrhoea in the past week,

and that diarrhoea severely affected quality of life. Crucially, the researchers concluded: "It is important that healthcare providers specifically evaluate their HIV-infected patients for diarrhoea so that these symptoms may be optimally managed."¹

There are some very good reasons why we shouldn't suffer in silence, and why we should bring up our bowel problems at clinic appointments. Even at best, experiencing diarrhoea is a trouble and a nuisance, but the chronic 'runs' can really interfere with our quality of life, particularly when being 'caught short' leads to distress or humiliation. And

the possible adverse health results from severe diarrhoea - dehydration, malnutrition and even anti-HIV treatment failure due to chronic malabsorption - mean it requires urgent attention.

Remember, too, that diarrhoea (particularly when it contains blood) can have many other causes and could be a symptom of a chronic bowel disorder, such as Crohn's Disease or ulcerative colitis, or of the sexually transmitted infection, lymphogranuloma venereum (LGV): another good reason to bring it up with your doctor.



managing hiv-re

why we shouldn't suffer in silence, by Derek Thaczuk

It is HIV, or something else?

HIV-related diarrhoea stems from HIV's liking for the cells of the digestive tract - the stomach and intestines, or 'gut'. In fact, the bulk of the body's immune system cells live in the lining of the gut, not in the bloodstream as one might expect.

Given the virus' affinity for these cells, the gut tissues become a prime target for infection. Research has established that the gut is widely infected by HIV soon after initial infection, and continues to be a sizable pool of infection even with an 'undetectable' viral load in the blood. As Dr Peter Anton - director of the Center for HIV Prevention Research, UCLA AIDS Institute - describes, "if the virus had a choice between a CD4 cell in the blood and one in the gut, it would go to the gut, where there are more of the activated immune cells of the type that it prefers."

This ongoing infection can then trigger other overlapping problems. In an otherwise healthy, HIV-negative person, diarrhoea often has a single cause. Not so with HIV, where a wide range of factors can be at work, often simultaneously. This makes a careful, thorough diagnosis crucial. (The ability to talk straightforwardly with your doctor about your stools - quantity, consistency and even smell - becomes an invaluable asset here.) Between five and seven causes may be at work in an HIV-positive individual, notes Dr Anton, making it important for both doctor and patient to understand that several interventions may be needed

before seeing dramatic results. "If there are five causes and you treat one of them with 100% success," he says, "you may still see no immediate reduction in the problem, when in fact you've successfully moved one step toward treating it."

Intestinal infections

The first step is usually screening for any acute infection caused by bacteria, parasites or viruses - particularly with severe diarrhoea that has come on suddenly, or is accompanied by symptoms like abdominal pain or blood in the stool. *Giardia*, *amoebiasis*, *cryptosporidium*, *salmonella*, *shigella*, *campylobacter*, or other organisms can be picked up from contaminated food, water, or from other infected individuals (including via oral-anal sex, or 'rimming'). They can also take more aggressive hold in people with weakened immune systems. Severe illness from some organisms (*cryptosporidium*, for instance) are actually AIDS-defining conditions, and life-threatening illness is much less likely in people with higher CD4 counts. However, those with a history of previous illness, or whose CD4 counts have been low in the past, may be at greater risk. The diagnostic test, a culture taken from stool samples, will determine the appropriate anti-infective treatment.

Drug side-effects

Having ruled out or dealt with acute infections as a cause, medications are usually next. Diarrhoea is a possible

side-effect of a considerable array of antiretroviral drugs. Given that anti-HIV therapy, when it successfully suppresses viral load, is the main defence against the consequences of HIV disease, this may present a challenge. Doctors and patients alike may be disinclined to meddle with a successful combination. That said, treatment adjustments are often feasible. Dr Anita Rachlis, of the Division of Infectious Diseases, Sunnybrook Hospital and University of Toronto, says that "the question is, how much does it interfere with your life? If the problem is tolerable, you might want to stay with your current medications and manage the symptoms or live with them, if possible." And if not? "Then you have to look at whether it's feasible to switch to some other treatment. If you're [still] on lopinavir (*Kaletra*) capsules, for instance, you can try switching to the tablets." Although certain antiretrovirals, like *Kaletra* and nelfinavir (*Viracept*) are well-known suspects, reactions can be quite individual. "I've had people have diarrhoea from efavirenz (*Sustiva*), which you wouldn't necessarily expect," notes Dr Rachlis, "so you look for other reasons, and if the medications are an issue, then switch if you can. If you have another option that's medically appropriate, that you're not resistant to or that's not going to cause other problems like drug interactions, you can try moving to that. If your options are limited, you may have to stick with what you're on and try to manage the symptoms."

related diarrhoea

digestion and the GI tract

The digestive process takes the food we eat, breaks it down into its components, and extracts the nutrients our bodies need. This digestive process happens in the gastrointestinal or GI tract, which includes your stomach, small and large intestines. Digestion actually starts as food is chewed and swallowed; food is broken down further in the stomach by the addition of digestive enzymes.

The results - a thick paste of nutrients - then pass along into the intestines. Most of the body's needed nutrients are extracted in the small intestine; the remaining waste passes into the colon and large intestine, and out of the body. Normal digestive processes dump up to eleven litres of liquid into the colon per day. A healthy colon will reabsorb most of this water, preventing dehydration and resulting in those desirable well-formed stools. An irritated, inflamed colon will simply shunt the water through, resulting in diarrhoea.

Watching what you're eating

Dietary fat, in particular, frequently presents trouble. "We see fat digestion problems in a very large number of people with HIV," says Peter Anton. This may be due to having insufficient pancreatic enzymes to digest the fat. More often, the precise reason is not clearly understood, but the end result is the same: fat does not get absorbed properly in the digestive tract. "For every hundred grams of fat you eat, only about zero to seven grams should come out the other end," says Anton. Yet, in an HIV-positive person, it might be as much as 15 to 40 grams, causing greasy, frequent, explosive, foul-smelling bowel movements. "When fat doesn't get absorbed in the upper tract, it gets down to the colon, where it doesn't belong," Anton explains. "The bacteria there love it: they chew it up." The resultant foul gases and other waste products irritate the colon

even more, in a cascade effect that produces even more diarrhoea.

Since fat is an essential part of the diet, however, Anton suggests what many nutritionists also recommend: small, more frequent meals. Five or six small meals a day, plus snacking on nuts or olives, "sort of sneaks fat into the system" without overwhelming the digestive system's ability to process it. Pancreatic enzymes themselves can be taken in supplement form: prescription brands include *Creon*, *Nutrizym*, and *Pancrex*.

Acidophilus

So-called 'friendly' bacteria normally found in the intestines may become diminished with chronic antibiotic use: 'probiotics' - dietary supplements containing potentially beneficial bacteria or yeast - including supplements of *Lactobacillus acidophilus* bacteria, can help to replenish the stock of healthy gut bacteria. However, be sure to look for product quality; bacteria, being living organisms, often don't make it through the processing and storage process. If experimenting with supplements, get a reputable seller to recommend a reliable brand.

Other interventions

Digestive problems may still persist even after the above factors are accounted for, most likely due to the digestive organs simply not functioning at peak efficiency. (This may be characterised as 'functional bowel disease' or 'irritable bowel syndrome'.) Several remedies have been shown to help HIV-related bowel function, including supplementation with soluble dietary fibre, calcium and an amino acid called L-glutamine.

Most experts suggest including ispaghula fibre as part of a diarrhoea-treating strategy. A type of seed husk, ispaghula is also known as psyllium. It is the main component of over-the-counter products like *Fybogel*, but is also available (at lower cost) from many health food and bulk food stores. However, it's important to watch the dose. At lower doses, it soaks

up water like a sponge, firming the stool and helping scour the digestive tract clean. (Ispaghula is mixed with juice or water and then drunk quickly - if left in the glass for even a minute or two, you'll see its 'instant jelly' effect in action.) At higher doses, however, it becomes a laxative, so experts recommend starting with a teaspoon or two per day and increasing slowly to see what works best. "Some people try too much at the beginning," says Anton, "get bloating and cramps and give it up. I'd say 80 to 90% of people respond quite well to just fibre alone at the proper dose."

Also worth experimenting with are calcium supplements. "It's not a bad thing to have extra calcium in your diet anyway," says Anita Rachlis, "because of the bone loss we're seeing more frequently with antiretroviral use." At Hal Huff's clinic, which uses a stepwise method of introducing different approaches, "we typically start with 1000mg of calcium carbonate twice a day, and may move up to as much as 5 grams a day." Several small studies have found calcium supplements to be beneficial, especially with drug-related diarrhoea from nelfinavir.²

L-glutamine, at fairly high doses (anywhere from 5 to 30g a day) may be even more beneficial. Despite studies



^{3,4} suggesting its success in reducing diarrhoea and improving absorption of anti-HIV drugs it is not available on the NHS. It is, however, available to purchase in powdered form from health food shops, particularly those frequented by body-builders.

Lastly, of course, drugs like over-the-counter loperamide (*Imodium*) and prescription-only *Lomotil* (diphenoxylate hydrochloride and atropine sulfate) can reduce symptoms. *Lomotil*, an opiate-based drug, is only suitable for short-term use, but loperamide can be used over the long-term as the body does not become used to it. As with other treatments, the strategy is to slowly adjust the dose until you find the most effective level. In truly intractable cases, it may be necessary to resort to morphine (as slow release morphine sulphate, or MST). As an opiate, morphine has strong constipating properties - but is, of course, also highly addictive and potentially dangerous.

A complex picture, certainly, but "people need to understand this may be a slow process," says Dr Anton. "The problem developed gradually, and it's going to have to be fixed gradually, but if we're thorough and patient we're usually able to deal with it."

diet tips and tricks

- With sudden onset (acute) diarrhoea, **do not eat, and stay in bed**. Drink only small amounts of fluids (ideally electrolyte-containing rehydration salts such as *Dioralyte* or *Electrolade* dissolved in water, although flat cola or lemonade will do) for 24 hours and then introduce bland food (e.g. dry biscuits). If it lasts longer than 24-48 hours then see a doctor.
- With chronic diarrhoea, **stay hydrated**. Reducing your water intake in an attempt to reduce what comes out won't succeed. If you're suffering from diarrhoea, make sure to replenish the fluids and salts that you're losing.
- **How you eat may be as important as what**. Try not to drink a lot of liquids near mealtimes - they dilute the digestive enzymes and make food harder to digest. Keep the bulk of your liquid intake between meals.
- **Chewing food thoroughly** gets the digestive process going early and lessens the workload on the intestines.
- Foods to try: **bananas, white rice, white bread, white pasta, apples** (preferably cooked and peeled), **oatmeal, mashed potatoes, or yoghurt**.
- Foods to avoid: **greasy, fatty, or fried food, spicy food, caffeine, and raw vegetables** - cooked are easier to digest.
- While milk and dairy products are often cited as something to avoid, a recent study⁵ in HIV-positive people has found that **small amounts of lactose did not actually make diarrhoea worse**. You may wish to experiment for yourself to see how well you tolerate milk and dairy products.
- Fibre comes in two types: soluble and insoluble. **The soluble kinds** - found in ispaghula and many of the foods suggested above - help to bulk the bowels. **Insoluble fibre** - found in whole wheat, corn, and most fruit and vegetable skins and seeds - tends to irritate the bowel and is better avoided.



life expectancy

Missing HIV clinic visits is bad for your health

HIV-positive patients who don't keep their HIV clinic appointments are significantly more likely to die than those who maintain good contact with their HIV clinic, according to a US study. It found that, compared to patients who attended all of their scheduled visits in the year after commencing anti-HIV therapy, those who missed one quarterly visit had an increased risk of death of 42%, and those who missed three quarterly visits were 95% more likely to die.

This is the first study to show an association between clinic attendance and survival for either HIV or any other chronic illness. It suggests that if you have difficulties keeping your clinic appointments you may have difficulties managing other health-related issues in your life, including adhering to anti-HIV drugs.

This is an issue that hits close to home. The recent BHIVA conference heard that a third of all HIV outpatients at a major London hospital did not attend clinic for more than a year even though one in three were on ART and one in four had a CD4 count below 200 cells/mm³. Although a quarter reported immigration issues at their last visit (and may have left the country) this does account for the majority of people missing appointments. Surprisingly, the study found that almost 10% of people who had missed their appointments were thought to be 'in denial' of their HIV status.

An editorial accompanying the US study notes "multiple studies have shown that patients who access case management, transportation, mental health support, drug treatment and other supportive services are more likely to be retained in care than those who do not." It concluded by noting that there is also a need to "assist patients to develop a positive relationship with health care providers and to improve their knowledge of HIV infection and dispel negative health beliefs."

statistics

Fewer than one in three starting treatment according to UK guidelines

Recommendations by the British HIV Association (BHIVA) regarding when to start HIV therapy are being ignored by the majority of doctors and patients in the UK. BHIVA's 2006 treatment guidelines say that you should start treatment once your CD4 cell count has fallen below 350, but before it reaches 200 cells/mm³. If you are ill due to HIV, have or hepatitis coinfection, or are pregnant you might want to start at even higher CD4 counts.

However, the recent BHIVA conference heard that only 30% started treatment according to the guidelines last year and that most (40%) people started anti-HIV drugs when their CD4 counts were 51-200 cells/mm³. Worryingly, one in five did not start until their CD4 counts were below 50 cells/mm³. Although a lot of people starting treatment late were diagnosed with advanced HIV infection or with an AIDS-defining illness, late diagnosis was not a factor for one in three of people starting treatment late.

It's not clear why this is happening. It could be that some HIV doctors are not following BHIVA's guidelines. Alternatively, some people could be declining HIV treatment, despite their doctors' recommendation, because of fears about the side-effects of HIV treatment, or because they are in denial about their HIV infection or of the very real health risks that a low CD4 cell count indicates. It is also possible that some people were not returning to their HIV clinic after their diagnosis because they feared that their uncertain immigration status could lead to financial charges.



treatment news

Do women respond better to HIV treatment than men?



It has been known for some time that HIV-positive women tend to have higher CD4 cell counts and lower viral loads than HIV-positive men. Despite this, women and men experience the same rate of HIV disease progression if they don't receive anti-HIV drugs. However, a Spanish study has now found that women have a much better response to HIV treatment than men. Investigators measured CD4 cell counts and viral load changes in more than 2,600 men and women a year after they started, or changed, HIV treatment. They found that women who were starting HIV treatment for the first time had a much higher CD4 cell count after a year of anti-HIV drugs than men. Women also tended to have a lower viral load after

twelve months than men. The researchers then looked at the twelve-month response to treatment in men and women who had taken anti-HIV drugs before and were starting a new treatment combination. They found that women tended to have a higher CD4 cell count, and were much more likely than men to have an undetectable viral load. None of these differences could be explained by women being more adherent to HIV treatment than men.

Previous studies into the differences between men and women on anti-HIV drugs have produced varying conclusions. Some have found higher CD4 counts in men and others in women while others have found no difference.

treatment access

Are you worried about NHS charges?



Some people, including recent migrants to the UK, individuals of uncertain immigration status, failed asylum seekers and British passport holders who are not normally resident in the UK, can be charged for using NHS HIV services and anti-HIV drugs. This could mean that some people are putting their own health, or, if they are pregnant, that of their unborn child, at risk.

A new leaflet, produced by the Terrence Higgins Trust and National AIDS Trust, explains who can get free NHS care and what happens if a person needs treatment but can't afford to pay for it. It also provides information on the confidentiality of medical records and offers some information on where to go if you need help and support. The leaflet can be downloaded from www.tht.org.uk or www.nat.org.uk. Individuals with concerns about their entitlement to NHS treatment and care can also contact THT Direct on 0845 12 21 200.

new drugs

Maraviroc passes US approval hurdle

The first CCR5 inhibitor has moved closer to formal approval in the US although it is unclear when maraviroc - which now has the brand name, *Celsentri* - will be approved in the UK and the rest of the Europe. However, the drug is available here on an expanded access programme for highly treatment-experienced individuals who need it in order to put together an effective anti-HIV combination.

going places?

how stigma and discrimination affect our ability to work and travel, by Edwin J Bernard

Our main article this month suggests that there are now fewer *health-related* reasons why HIV-positive people shouldn't be able to travel anywhere they desire. However, this doesn't mean that we are *able* to travel anywhere: the most obvious and worrying reasons are lack of affordability and entry restrictions.

Half of all HIV-positive people are unemployed

Since HIV has become, for many, a chronic, manageable condition, there are fewer health-related reasons why HIV-positive people should not be able to stay in work following diagnosis, or return to work following illness. After all, work can have many advantages, including stimulation, enjoyment, a sense of accomplishment, company and friendship - and, of course, it provides a regular financial income.

There can, however, be some very real difficulties in returning to work after a prolonged period of time off work due to illness. There's also the possibility that you might encounter some difficulties in the workplace due to HIV-related stigma or discrimination, despite the protection of the law.

There are few hard data on HIV and employment. However a survey on employment, education and training undertaken by researchers at City University in over 1,680 HIV-positive people attending six HIV clinics in north east London between June 2004 and June 2005, and presented at last month's British HIV Association (BHIVA) conference in Edinburgh¹ has found that more than half of respondents (51.7%) were unemployed. Not surprisingly, unemployed people were found to be significantly less likely to have enough money to meet their basic needs - never mind travel - compared to those who were working.

The survey focused on the two largest groups disproportionately affected by HIV in the UK: people of black African ethnicity, and gay men of any ethnicity. White gay men were most likely to have full- or part-time paid work (58%); followed by ethnic minority gay men (54%); black African heterosexual men (45%) and black African heterosexual women (35%).

The study took into account the fact that many HIV-positive black African migrants are unable to work legally, and found that even after limiting the responses to black Africans who were entitled to work, a higher percentage of gay men of any ethnicity were employed compared to black African heterosexuals. Racism, it appears, plays a major role here.

Although the strongest - and least surprising - association with unemployment was lower educational attainment, the most surprising finding was that having "body signs of living with HIV" had the second strongest association: people who felt that they literally carried the stigma of HIV on their faces or bodies were twice as likely to be unemployed.

Stigma or discrimination?

These findings confirm that disclosure (or fear of disclosure) of HIV status at work is a major issue for many of us. Although there is no legal obligation for anyone living with HIV to inform their employer of their HIV status, given the protections afforded to us following the inclusion of HIV in the



further information

Want to know how the DDA protects HIV-positive people from the point of diagnosis? Visit www.pointofdiagnosis.org

Want to know more about HIV in the workplace? Ensuring Positive Futures has all kinds of information for employers and employees. Visit www.e-pf.org.uk or call 020 7564 2180.

Want to know more about the pros and cons of disclosing your HIV status to your employer? Visit the National AIDS Trust for a leaflet on recruitment advice for HIV-positive job applicants (www.nat.org.uk/document/233).

In addition, the 'Work' chapter of the 'Living with HIV' section on aidsmap.com contains a summary of the issues people face when seeking, or returning to, work.

Disability Discrimination Act (DDA) 2005, disclosure may be beneficial to allow for 'reasonable adjustments'. These include:

- Flexible working hours;
- Flexible break times for taking medication;
- Time off for hospital appointments.

In addition, according to the Department for Work and Pensions "if you don't mention a disability while you are at work, but you are later dismissed for a reason relating to your disability, you may have difficulty succeeding in any legal complaint under the DDA. An employer does not have to make reasonable adjustments for a disabled applicant or employee if the employer does not know (and could not reasonably be expected to know) that the applicant or employee is disabled and is likely to need a reasonable adjustment."²

The study, however, reminds us that HIV-related stigma is sometimes a separate issue from discrimination: if someone feels that they appear to be HIV-positive and yet doesn't want to disclose to their employer or fellow

employees, the protections of the DDA could be almost meaningless to them.

US travel ban still in place

In the January/February 2007 issue (ATU 163) we reported that the White House had announced they would soon be easing long-standing restrictions on HIV-positive short-term visitors. The United States is one of the few countries (along with China, Iraq, Russia, and Saudi Arabia) that forbids entry to people with HIV for even short stays, and this policy is the one most likely to affect HIV-positive travellers.

Last month, the Center for Strategic and International Studies (CSIS), published a report on the US restrictions³, which called for an end of this outmoded, discriminatory policy for tourists and migrants alike. At a meeting to discuss the report, there was still some uncertainty about when the tourist ban - seen as the first step to an end of a total HIV immigration ban - would end, and whether it would require HIV-positive individuals to disclose their status to US officials in order to benefit. Tom Walsh of the US Global AIDS Coordinator Office, told the meeting: "The process is under way, it is complex, and I wish there was more that I could say."

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- **Information events in London**
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