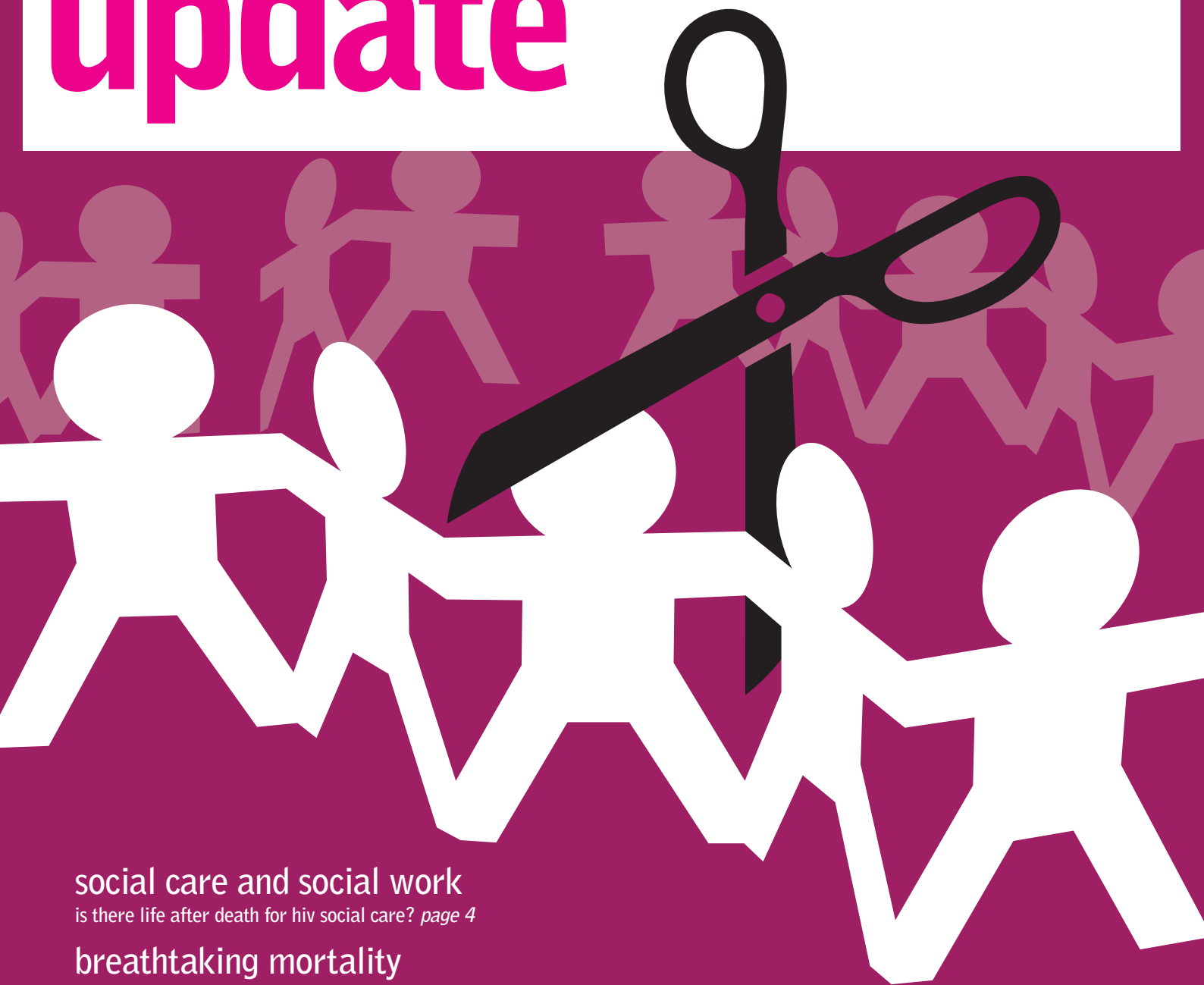


nam

www.aidsmap.com
issue 207 june 2011

hiv treatment update



social care and social work

is there life after death for hiv social care? *page 4*

brehtaking mortality

bacterial pneumonia and hiv *page 10*

upfront

treatment *is* prevention: now, how do we make it work? *page 3*

news in brief

treatment slashes hiv infection rate *page 14*

two new hepatitis c drugs approved *page 15*



Gus Cairns

in this issue

Changes afoot for HTU

In this issue we've got a mix that illustrates the varied experience of living with HIV. David McLay reminds us that people with HIV still have specific medical needs in his article on pneumonia (page 10); our exploration of the changes in HIV social care provision illustrates how difficult and confusing it can be to get non-medical needs met (page 4); and the latest news on prevention (opposite) provides us with yet more evidence that HIV drugs may be an essential component of prevention too.

NAM is committed to supporting people with HIV to understand their health and treatment options and, as NAM's flagship printed resource, *HIV Treatment Update* has a 20-year history of doing so (our first issue came out in 1992).

But after the next issue, it will be published quarterly rather than monthly. After July, the next issue will be in October, and from then on *HTU* will appear in January, April, July and October (or winter, spring, summer and autumn if you prefer).

Why are we making this change? Well, as you may guess, funding is a key reason. NAM has not been immune to the funding cuts that other HIV charities and service providers have faced, including the 20% cut to the London HIV prevention budget that recently featured on the BBC. The money we receive from paid *HTU*

subscriptions has also been in decline for a number of years.

It's important that we allocate our resources to best fit the way people use our materials. Surveys have shown consistently that you, our *HTU* readers, really appreciate having a well-designed, readable newsletter to receive through your door or pick up at your clinic, a printed resource that summarises the most important news and analyses the most important issues. That's why we are going to continue it.

We will expand each issue to 20 pages, instead of 16, so there will be more in-depth features in every issue. We would welcome your suggestions for the subjects you really want us to cover.

HTU surveys have also shown that most of our readers have access to the internet and use websites to research information. When it comes to the crunch, these days people turn to the net for quick information and comment. We hope you will find the news reporting, free resources and email bulletins on aidsmap.com useful to you.

We know you'll want to comment on these changes. We will be in touch with individual *HTU* subscribers but in the meantime, all comments, questions and suggestions are welcome at info@nam.org.uk.



hiv treatment update

editor Gus Cairns

sub-editing & proofreading

Greta Hughson

design Rowena Weedon

printing Cambrian Printers

ISSN 17567890

copyright ©NAM Publications

2011 All rights reserved

charity number 1011220

hiv treatment update

was founded by Peter Scott

contact details

Lincoln House, 1 Brixton Road,
London, SW9 6DE, UK

tel: 020 7840 0050

fax: 020 7735 5351

email: info@nam.org.uk

web: www.aidsmap.com

medical advisory panel

Dr Tristan Barber

Dr Fiona Boag

Dr Ray Brette

David A Castelnuovo

Professor Janet Darbyshire OBE

Heather Leake Date MRPharmS

Dr Martin Fisher

Professor Brian Gazzard

Professor Frances Gotch

Liz Hodges

Professor Margaret Johnson

Dr Graeme Moyle

Dr Adrian Palfreeman

Kholoud Porter PhD

Dr Steve Taylor

Professor Jonathan Weber

Dr Ian Williams

Dr Mike Youle

For more information about *HTU's* medical review panel, please visit www.aidsmap.com/page/1445504

about NAM

NAM is a charity that exists to support the fight against HIV and AIDS with independent, accurate, up-to-date and accessible information for affected communities, and those working to support them.

For more information, and details of our other publications and services, please contact us, or visit our website, www.aidsmap.com.

disclaimer

The publishers have taken all such care as they consider reasonable in preparing this newsletter. But they will not be held responsible for any inaccuracies or mis-statements of fact contained herein. Inclusion in this newsletter of information on any drug or clinical trial in no way represents an endorsement of that drug or trial. This newsletter should always be used in conjunction with professional medical advice.

supported by

**NHS Pan-London HIV
Prevention Programme**



Treatment *is* prevention: now, how do we make it work?

A large international study using antiretroviral drugs (ARVs) as a prevention method has closed four years early because it has found that giving ARVs to HIV-positive people reduced the chance of them infecting their partner by 96% (see page 14 for more details).¹

The result of the HPTN 052 study puts the results of other HIV prevention trials in the shade. In recent years we've seen three trials showing that men who get circumcised are about 65% less likely to acquire HIV;^{2,3} that prescribing daily *Truvada* (combined tenofovir and FTC) pills as pre-exposure prophylaxis (PrEP) to HIV-negative gay men reduced their risk of acquiring HIV by 42%;⁴ that giving women a microbicide gel containing tenofovir to use during sex reduced their risk by 39%;⁵ and even that, to everyone's surprise, an HIV vaccine few thought would work reduced infections by 31%.⁶

All promising results, but not ones you'd want to base an entire HIV prevention strategy on. A twentyfold reduction in risk, on the other hand, is the sort of epidemic-halting result we'd like to see in a vaccine. And of course the great thing about the HPTN 052 concept is, as activists pointed out, that it's almost "prevention for free": many people who could be taking ARVs as a prevention method should be taking them as treatment anyway, or would be pretty soon. The fact that there was an 82% reduction in TB cases in positive partners who took early treatment underlines this. Buy treatment, get prevention thrown in.

All very exciting, although not entirely unexpected. More than a year ago, in February 2010, the Partners in Prevention study, which was designed to find out if treating herpes might reduce HIV transmission, found that the minority of its participants who started taking ARVs were 92% less likely to transmit HIV to their partners once they started therapy.⁷

So does HPTN 052 imply that, given these huge reductions in transmission, we should regard ARV treatment as essentially *the* answer to the HIV epidemic? No, for a number of reasons.

Firstly, we are having a hard enough time getting ARVs to people who need them as vital treatment. Currently just over 50% of *diagnosed* people in the world with a CD4 count below the old World Health Organization threshold of 200 cells/mm³ are getting them, and roughly a third of people with CD4 counts below the new threshold of 350 cells/mm³.⁸ Some people think it may be unaffordable to put more HIV-positive people on ARVs in order to reduce the risk of them infecting others, when their health would be okay for several years without taking them. We need some good cost-effectiveness studies to find out if the prevention bonus of putting more people on ARVs would justify the cost in the long run.

Secondly, although people have got the impression HPTN 052 was a solely heterosexual study, they did manage to recruit 38 gay couples, or 3% of the total. But that is not nearly enough to establish whether the same reduction in risk applies to gay men and, while we suspect it does, we still need the studies to provide data to convince doubters. The same applies to injecting drug users.

Thirdly, there was the sneaky fact that there were another eleven HIV infections in the study that came from people other than the primary partner (that's 27% – an almost identical proportion to the 28% seen in Partners in Prevention). People 'play away', and, in many parts of the world, the main way HIV is transmitted is through casual sex, often from people who don't know they have HIV.

This reminds us that you can put every diagnosed person in the world on ARVs, but if you don't drive testing and diagnosis rates up to the point where the undiagnosed are a

small minority, HIV will continue to be passed on.

For 'treatment as prevention' to start really working worldwide, we need to: increase rates of testing; reduce the proportion of undiagnosed people to a minimum; link the diagnosed to care; provide them with ARVs; support them to take them; and monitor their health to ensure they remain virally suppressed.

If any one of these six links in the chain is weak, the proportion of people with HIV who are virtually non-infectious due to ARVs will be a minority. Even in San Francisco, a city which is starting to provide evidence in the form of reduced diagnoses that treatment as prevention might work, the proportion of HIV-positive people in the city who are on ARVs and have viral loads below 50 copies/ml is less than 50%.⁹

So, people will say, what about good old-fashioned safer sex, and getting people to use condoms? After all, the absolute lowest-possible price of combination therapy in low-income countries (which involves regimens including the toxic d4T) is about \$90 a year,¹⁰ whereas the price for one condom a day for 365 days, as supplied to donor programmes, would be about \$9.¹¹

This would be fine, if people used condoms consistently. But although determined programmes have increased the rate of condom use in casual sex in many countries to well over 50%, it seems pretty impossible to get long-established partners to use them.¹² Condoms remain part of the answer, but if they were the whole answer, the epidemic would have finished by now. We probably have no alternative but to start using ARV drugs as prevention much more systematically.

is there life after death for hiv social care?



HIV specialist social care is in danger of vanishing altogether as a facet of social work in England. Despite improvements in health, changes in the make-up and age of the HIV-positive population mean that their social care needs are greater than ever. Who will meet these in the future? *Gus Cairns* reports.

On 10 June last year, Eric Pickles, the Secretary of State for Communities and Local Government, announced that the AIDS Support Grant, a ring-fenced £25.5 million given to local authorities (councils) to look after the social care needs of people with HIV, was finally to end. 'Ring-fencing' means the money is not supposed to be spent on anything else. Though many had been predicting its demise for years, it was still a shock to providers of HIV social care in England. Would their services – and their jobs – survive?

Due in part to successful lobbying by HIV groups such as NAT (the National AIDS Trust), the government announced that it would still assign a proportion of the general pot of money allocated to local authorities to HIV, and that in fact the money was to be increased to £36.3 million by 2014. But in practice, that's just making transparent the formula whereby more is allocated to areas of highest prevalence (such as the London Borough of Lambeth, which got £1 million of the AIDS Support Grant last year): councils aren't bound to spend the money on HIV services.

The social care needs of people with HIV

And yet the social care needs of large numbers of people with HIV are more acute now than they ever were, largely due to shifts in the make-up of the population. A 2008 study in east London¹ found that many people were living in poverty, and a majority unemployed. Hardship was greatest among migrants, but significant numbers of UK-born patients also reported not having enough money to live on.

The survey, of 1687 patients in east London clinics, found that only half of the migrants in the study (largely from sub-Saharan Africa) had secure residency status in the UK and only 45% of black African men and 35% of African women had a job.

In UK-born gay men, there was evidence of poverty in the long-term diagnosed: 80% of gay men diagnosed for less than two years had a job but only 34% of those diagnosed before 1996, in the pre-treatment era.

Forty per cent of black African people reported not having enough money to live on, just under a quarter of ethnic minority gay men, and 10% of white gay men. Poverty was also widespread in the smaller numbers of white and Caribbean heterosexual people. Levels of home ownership were well below the UK average and, although under 2% were homeless, 10% of gay men from minority ethnic groups and 9% of black African heterosexual men and women were 'sofa surfing' – staying temporarily with relatives or friends.

"We found people with HIV in all groups faced social and economic hardship," said the investigators.

Dr Jane Anderson, chair of the British HIV Association, was one of this study's co-authors, and is an HIV consultant at the Homerton University Hospital in east London's Hackney.

"I've worked in Homerton for 20 years and I've seen things go from difficult to extremely difficult," she says. "In particular, we are seeing huge levels of deprivation amongst our African patients. Add the social damage HIV does to people who already have high levels of poverty and insecurity and it turns into a struggle for existence for some."

The links between social deprivation and poor treatment outcomes really need no explaining: how do you adhere to your antiretroviral regimen when you are staying with relatives who (you fear) would throw you out if they knew you had HIV, you have £36 a week from the National Asylum Support Service to survive on, and are suffering from nightmares and panic attacks because of the experiences you ran away from?

Such combinations of circumstances are by no means uncommon.

Who *should* support people who cannot support themselves? Traditionally, at least since the 1970s, that task has fallen to local authorities, and a profession invented to intervene on behalf of the state – that of social worker. Before that, people were supported by a network of voluntary agencies and, inevitably, the needs of the most vulnerable were often unmet.

Social care and social work

Social care was defined by the English Department of Health, in a paper issued during the last government, as "the wide range of services designed to support people in their daily lives and help them play a full part in society. It includes a range of practical services such as home care, day centres and residential and nursing homes. It can include practical assistance to help individuals overcome barriers to inclusion, such as supported entry into work for an individual with a mental health problem or a personal assistant to enable a disabled person to lead a full and active life. It can include support in managing complex relationships and emotional distress."

However the definition also ended on one key sentence: "Social care includes those services directly commissioned by the local authorities and those services which an individual or family organise and commission themselves."

This encapsulates a division that has never quite been settled within the social care professions and which has been thrown into more prominence with the Conservatives' emphasis on 'big society' volunteerism at the way forward. In their new *Vision for Social Care*² they lay increased emphasis on enabling people to employ their own carers and on social care being provided and developed by professionals and carers from a plurality of different disciplines.

Is social care simply to do with responding to people's needs and helping out the needy? Then maybe this could be provided by charities and the voluntary sector as they are. Or is it about the state's legally defined obligation to protect the most vulnerable in society – the very old; the sick and dying; children; those with severe mental illness or addictions? If so, it becomes a job involving legal issues, care plans, and all the power and responsibility of a profession representing an arm of the state, implying a very different role for voluntary agencies if they are charged with these tasks.

HIV social care, says Andrew Pearmain, has historically occupied an uneasy hinterland somewhere between the two. Pearmain is a consultant social worker – the profession's top grade – who is contracted by Essex County Council to manage its specialist HIV social work service, and has done so for a decade.

He makes a distinction between the services offered by voluntary agencies and those that can be offered by properly trained and qualified social workers, perhaps not surprisingly speaking up for the latter.

"Few people outside the profession really understand what social workers do," he says. "Because we are connected to the state, we have the power to access things for clients that voluntary agencies can't, or have to do on an *ad hoc* basis." He says that voluntary agencies generally do not have legal power to be involved in the hard decisions at the sharp end of social work: child protection, sectioning under the *Mental Health Act*, end-of-life care and so on, though this is changing slowly. Pearmain says that in many places, because voluntary agencies are the sole providers of social care for the local HIV-positive population and have poor channels of communication with the local authority service, statutory social workers commented that people's situations were allowed to get worse than they need to before a 'last resort' call was made to the local authority team.

Qualified social workers are trained to conduct a sympathetic but rigorous assessment of a client's needs, and to devise a care plan that meets those needs. They are trained to be empathic

"I've seen things go from difficult to extremely difficult. In particular, we are seeing huge levels of deprivation amongst our African patients. Add the social damage HIV does to people who already have high levels of poverty and insecurity and it turns into a struggle for existence for some."

**Dr Jane Anderson,
Homerton University
Hospital**

to the person's whole circumstances in a way that healthcare workers, trained mainly to improve only medical outcomes, aren't always, but to do so in a way that enables the client rather than fostering dependency. The latter has been a charge made of some voluntary sector agencies which, funded by the number of people who come through the door, sometimes kept on providing services past the point they were needed, says Pearmain, such as "drop-ins that only see the same group of old regulars".

"We are trained to find whatever tiny bit of room for improvement we can find in the client's circumstances and then help them achieve that if we can," he says.

The other side of the coin, though, and an approach that increasingly typifies the hard-pressed generic social services some HIV programmes have merged with, is that the rigour and professionalism of assessment turns into a "computer says no" exercise, where clients are sieved through a process designed to deny service to all but the neediest – and even they, once provided with the immediate help they need, have their cases closed and are not given ongoing support.

A system designed to provide short-term respite care after an old lady's hip operation does not easily meet the complex, long-term, interlocking and fluctuating needs of a recently diagnosed HIV-positive person, who may be an asylum seeker with no residency status, no money to buy decent food, responsibility for a child, bouts of depression and anxiety, and a terror of her status being disclosed to anyone in her community – in addition to still-precarious health. And yet such a client would not meet the criteria for the more specialist and intensive social work support provided to people with severe mental illness, diagnosed addictions or severe disability, or to children in need of protection.

A triage process introduced in the late 1990s sorts the need of applicants applying for local authority support into 'mild, moderate, substantial and critical'. Pearmain estimates that one-in-ten people diagnosed with HIV in the UK is accessing some form of social care support from statutory and voluntary agencies, but that only one in 100 would be assessed as in 'substantial' or 'critical'

need, now the only criteria to be eligible for generic social work services in most local authorities. Since the public expenditure squeeze started, some authorities have “gone critical”, working only with people in imminent danger of death if denied services.

A patchwork of provision

The heyday of HIV social work was in the 1990s, Pearmain explains, where the combination of an assertive and very distinct client group, gay men with HIV, and workers who themselves were often people personally affected by the virus resulted in the development of a social care service offering high levels of commitment and care to individuals, ongoing case management, and a holistic approach to what people with HIV needed, other than health care, in order to lead what he calls the most “dignified, bearable and rewarding” life they could.

Since then, despite the AIDS Support Grant rising each year under New Labour, HIV specialist social work services run by local authorities have tended to shrink, be absorbed into generic social care, or disappear altogether, with local authorities funding voluntary agencies to do the social work.

Despite this, when in 2008 NAT conducted a review of the AIDS Support Grant (ASG),³ they concluded that the need for social care for people with HIV was greater than ever, and that the grant should continue to be ring-fenced. It praised the open-access nature of HIV social care and praised the innovative partnerships formed between statutory and voluntary agencies in some areas. But it also found that half of all local authorities conducted no needs assessments to decide how to allocate the grant and that there was no reporting of, or accountability for, how it actually had been spent.

Although tales of the ASG being entirely diverted into general social work, or even into council car parks, were fewer than in the early days of the grant, many local authorities had either subsumed HIV social care into the generic service or had used the money to support voluntary agencies without ensuring that they provided services with the professionalism, rigour and fairness that they should.

“Few people outside the profession really understand what social workers do. We are trained to find whatever tiny bit of room for improvement we can find in the client’s circumstances and then help them achieve that if we can.”

**Andrew Pearmain,
consultant social
worker**

Following the NAT review, Pearmain undertook an in-depth review of HIV social care provision in 16 local authorities in England, writing his own report, the findings of which were also presented to the last BHIVA (British HIV Association) Conference in April.^{4,5} He chose only those ones where *some* form of HIV specialist social care survived, and warns that the situation may be even bleaker in other parts of England.

The statutory service, he found, had dwindled to a core of around 86 HIV specialist social workers in England. However, these 86 workers are supporting around 3000 people with HIV and – if you include those in recent and imminent need, help up to 9000 people. Most HIV social workers have an ‘open’ caseload of around 30, including between five and ten ‘active’ cases at any one time, and around 70 more who have recently had or will soon need support.

Despite the original intention of the AIDS Support Grant, which was to standardise state social care for people with HIV, Pearmain found that services and structures varied hugely across the country. In some areas, such as his own Essex and Brighton, HIV specialist social work teams are maintained. He’s particularly impressed by Brighton, which offers, he says, a “professional, dedicated and consistent service, but quite hard-nosed because they’ve heard all the sob stories”.

In other areas, however, there is no provision, or it’s all done by generic social care teams, HIV voluntary agencies or in part by generic voluntary agencies like the Citizens Advice Bureau. This is the case in the inner London authorities, says Pearmain, which “got out of local authority HIV social work before anywhere else”.

Provision by generic and voluntary agencies does not necessarily imply poor service. Well-funded and professional voluntary organisations can provide valuable coverage, especially if they have good contacts with statutory services. The worst examples of provision Pearmain saw were in areas which continued to operate local authority HIV social care but where it was done poorly. He especially criticises the situation illustrated in one council, where “they

give a grudging amount of money to one voluntary agency but the HIV social workers are stuck up in an office [in a local hospital]". Now this hospital has a well-respected HIV clinic, but in this situation hospital social workers can become very limited and demoralised in the work they do, he says, because they are constantly subject to the demands of medical staff, who mainly see social workers as arrangers of 'beds and benefits' for inpatients who need to be moved on to free up space.

On the other hand, he lavishes his highest praise for one local authority where the HIV social worker was based at the local HIV clinic but was funded and managed by the local authority team, and had an explicit remit to care-plan for the non-medical support needs of all eligible clinic patients.

Faced with the demise of the AIDS Support Grant, Pearmain says, HIV specialist social care is likely to be squeezed out of the system even more, and voluntary agencies will face loss of funding in the areas where the AIDS Support Grant was largely spent on them, though it's more a question of the political will of the local authority to maintain HIV social services than of any inevitable decline. Essex got a 'Letter of Indication' from the Department of Health pointing out that £350,000 of the council's block grant was still allocated for HIV services "and our accountants said 'That's fine, that's all we need to continue to support the present service.'"

One promising development in this gloomy picture is 'direct payments'. The New Labour government expanded a scheme where people with disability and social care needs could be given budgets

“[People with HIV] are scared to approach non-HIV services like Citizens Advice Bureaux because they're frightened to disclose and don't trust workers will understand”

**Matt Wills,
Social Care
Co-ordinator,
Homerton University
Hospital**

to employ their own support workers. Although, as yet, it is not known whether the coalition government will take its axe to this scheme, it is thought likely to survive in at least a slimmed-down form. Direct payments allow people with conditions such as HIV to select services and carers appropriate to their needs rather than have to accept whatever the local authority allocates to them.

One clinic's solution

Faced with huge and increasing patient need, eating into medical time as doctors and nurses found themselves writing letters to immigration lawyers and benefit agencies, Homerton University Hospital devised a solution, by fundraising for and appointing its own Social Care Co-ordinator. Matt Wills has recently completed the first year of a five-year post, thanks to the private money of cosmetics and supermarkets, namely the MAC AIDS Fund and the Monument Trust (one of the charitable trusts of Sainsbury's).

An ex-advice worker for Staffordshire Buddies, Matt moved to London specifically to take up his "dream job – the beauty of this post is that I have the freedom to design the role". Although on occasion he does directly intervene ("in simple but urgent cases it's sometimes easier to resolve things with one phone call"), he is primarily a referral agent, assessing patients' social care needs and sending them to any appropriate voluntary agencies. Chief amongst these are Positive East, Positively UK, Body & Soul, and the Food Chain for the high proportion of people with nutritional deficiencies due to trying to survive on low incomes, food vouchers (or nothing). These agencies, in turn, will refer to more specialised services such as immigration lawyers. He



also refers to the psychiatric liaison services; there is a high frequency of depression, anxiety and mental trauma amongst the Homerton patients, often due to a build-up of intolerable life circumstances rather than any pre-existing psychiatric problems.

He only occasionally finds himself referring to local authority social services, although he has done so in some cases of child protection and of patients needing convalescent care.

A questionnaire was sent out to healthcare staff at the hospital, to the voluntary agencies, and to the patients themselves, after the first year of the service and the findings presented at the BHIVA Conference in April.⁶

Most of the healthcare staff said that, since the Social Care Co-ordinator post had been in place, more time had been freed up for medical consultations, while over half of them said patients were more engaged in their medical care and that there had been improved clinical outcomes. The voluntary agencies said they had seen an increase in referrals to them, but alongside this an increase in the appropriateness of those referrals, so they weren't wasting time sending clients elsewhere. And patients expressed high levels of satisfaction and trust in the service.

The main issues presented by the patients were, in this order of frequency: housing; immigration; finances; benefits; and social isolation.

A 'before and after' questionnaire found that, before the start of the service, 10% of patients found difficulty in adhering to their medications, but after the first year of service that was down to 2.5%. The proportion of patients saying they had problems in other areas also decreased: attending appointments (12% before, 7.5% after); eating well (from 23 to 8%); paying bills (13 to 7%); poor mental health (30 to 13%); talking to others and socialising (20 to 5%); and work or study (17 to 9%).

NELNET, the network of HIV clinics in north-east London, has expressed an interest in adopting the Homerton model, and Matt has received queries from many areas of the UK by agencies which are also investigating this possible model.

Other models

The Homerton's approach is not the only model of provision of clinic-based social care. The neighbouring London boroughs of Camden and Islington stopped providing HIV social care within a specialist team earlier than almost any other local authority in England, offering social care through general teams, with some services contracted instead to the local Citizens Advice Bureau. Dr Mike Youle, HIV consultant at Camden's Royal Free hospital, comments that "We have the CAB come into our clinic and I have to say they are very good, and bring services to where the patient feels safer." Such services, however, depend crucially not only on adequate funding, but on there being a core of skilled HIV-experienced workers who can offer the service.

One innovative approach has been adopted in the community services based in Peterborough, a city still with a specialist HIV social work service.

Peterborough, an immigration dispersal area, has seen a big increase in its HIV-positive population in the last few years, including some cases among EU immigrant agricultural workers.

Peterborough's Community Services, part of NHS Peterborough, has a charitable fund. The money is raised through coffee mornings, at World AIDS Day activities and pledged monthly by members of the public. It is spent on supporting expenses HIV-positive people incur in retraining, volunteering, and going back to work.

Maureen Adams, the HIV social care team manager, said: "So far two people have taken law degrees, two social work degrees and we have supported three people to become nurses and one a teacher." People have also trained as bricklayers, computer operators and nursery nurses.

Another initiative allows HIV-positive people with significant social care needs to meet other people with HIV who they can employ as carers through the direct payments scheme.

The team run coffee mornings during which potential carers and employers can meet each other. In these relationships, whether formalised as an

employer and carer relationship or left as an informal relationship, the employer gets someone who understands HIV and the positive person gets employment as a carer, when an agency might question their health.

This is a practical way of getting round stigma; if it's a formal arrangement, the individual with a carer role can use it in their CV when approaching care agencies for work.

Conclusion

Trust is key for HIV patients accessing social care. Matt says: "They are scared to approach non-HIV services like the Citizens Advice Bureaux because they're frightened to disclose and don't trust workers will understand," while Jane Anderson comments that "HIV clinics are the one front door many patients are prepared to walk through."

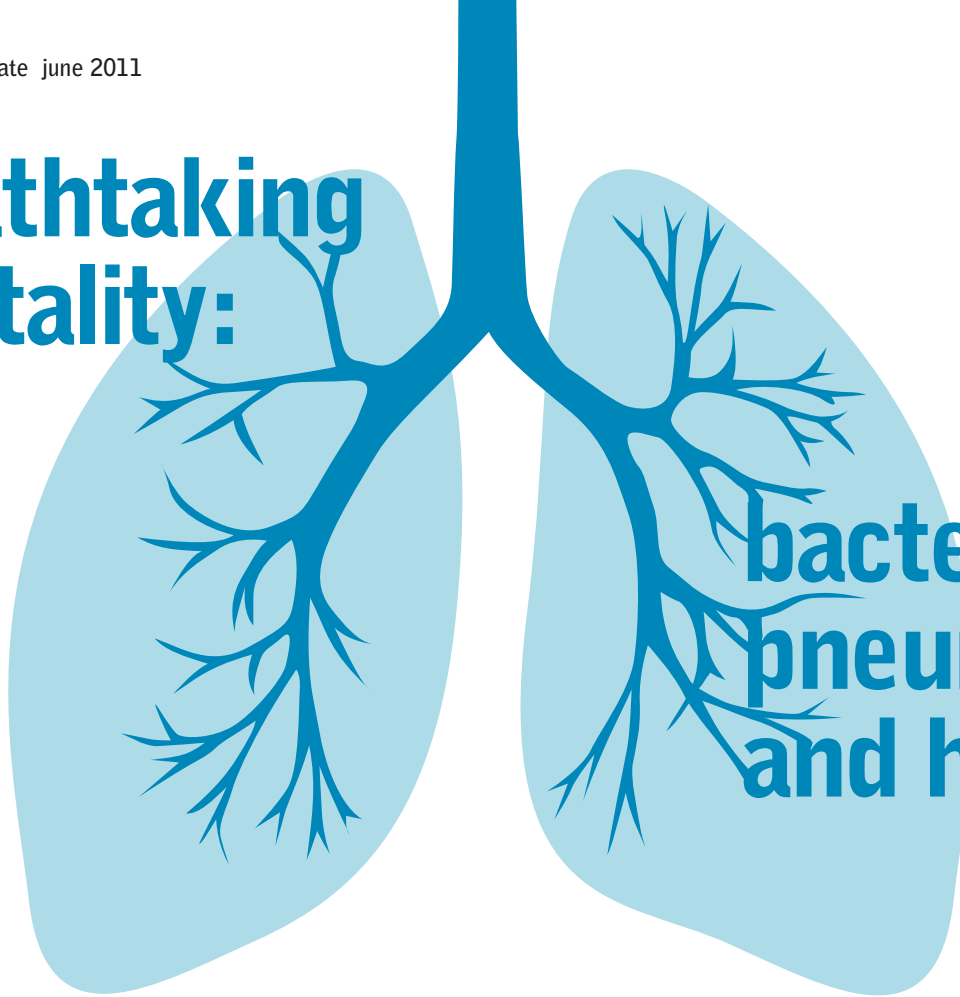
Andrew Pearmain concurs and says that, although basing social workers in clinics is not necessarily a guarantee of good care, "the front door of local authority generic social services is one [clients] will continue to be wary of, and they will access care via the back door of HIV specialist services wherever it's at all possible to do so". In his book he cites a voluntary worker who talks of the reward of supporting asylum seekers who arrive as destitute immigrants, afraid to disclose to anyone, as they become people who achieve residency status, go on courses and get good jobs.

Without their social care needs being taken care of, people with HIV with the greatest needs will at best struggle harder to get the help they need and at worst remain the invisible underclass of the HIV-positive population.

Help and advice

As this article has illustrated, social care is provided in very different ways in different parts of the country. To find out what's available in your area, start by phoning THT Direct on 0808 802 1221 (10am to 10pm weekdays, 12 to 6pm weekends) or search NAM's e-atlas (www.aidsmap.com/e-atlas). Your local authority or local NHS trust's website will also often list services for people with HIV. ■

breathhtaking mortality:



bacterial pneumonia and hiv

Ever stopped to think about the top reason people with HIV end up in intensive care? Heart attack? Liver problems? Accidents? No, pneumonia. *David McLay* investigates an illness that scores high on the morbidity and mortality charts but gets relatively little attention.

'The old man's friend', they call pneumonia, because it's often a relatively painless *coup de grâce* at the end of a long life. But this image of the lung disease belies the fact that it can strike people at any age, and kill quickly if not recognised and treated. The good news is that there are things you can do to reduce the risk and treat it.

Although HIV-negative people of all ages can get serious or even fatal pneumonia too, as seen most recently with pneumonia deaths caused by swine flu, it is disproportionately more common in people with HIV.

Lower respiratory tract infections are, in people with HIV, the most common cause of hospitalisation in an intensive care unit (ICU), according to a 2007 report from University College Hospital (UCH), London.¹ Nearly half of people with HIV admitted to ICUs (48%) had

a pulmonary (lung) infection, with *Pneumocystis pneumonia* (PCP) and bacterial pneumonia being the diagnosis in 80% of them. A 2009 US study reported about 40% of HIV-positive people in intensive care were admitted with respiratory failure, including pneumonia and other lung conditions such as emphysema.²

While PCP has a storied history in the world of HIV (see *Whatever happened to PCP?*, over), other pneumonias are not the health conditions people with HIV hear about regularly when talking to their doctors or perusing HIV news.

Dr Marc Lipman, consultant in HIV and respiratory medicine at the Royal Free hospital, London, says that people with HIV – including those on treatment – should still be aware of respiratory infections, particularly bacterial pneumonia.

With these facts in mind, let's look at what we know about HIV and bacterial pneumonia, and what you can do to avoid it.

Defining the condition

Pneumonia is one of those ailments that are so common we often don't bother to think much about them. Simply put, pneumonia is an infection of the lungs that causes inflammation. The infecting organism can be a bacterium, a virus, a fungus or a parasite. *Streptococcus pneumoniae* (pneumococcus) is the most talked-about culprit, but two other infections might be familiar to HIV-positive folk: PCP and histoplasmosis, two fungal infections common among people with severely weakened immune systems. PCP was almost unheard of until the start of the HIV epidemic in the 1980s. Fortunately, both are on the decline, thanks to effective therapies.

Because so many different microbes can cause pneumonia, the disease is usually characterised by where infection was acquired in the community, in hospital or in a nursing home. These groupings also dictate the treatment, because even if the microbe is not identified, doctors have found that cases from these different settings respond to different management.

Link to HIV

Over the course of the HIV epidemic, rates of community-acquired pneumonia have been five- to tenfold higher than in HIV-negative people of the same age, and bacterial pneumonia, 35 to 50 times higher.^{3,4,5,6} A Danish national cohort study of hospitalisation for pneumonia among people with HIV from 1995 to 2007 found that, while the overall rate of pneumonia decreased during that time, the rate in 2005-06 was still 6.3 times higher than among HIV-negative people.⁷

Bacterial pneumonia has been linked to several HIV-related factors, including CD4 counts, having an uncontrolled viral load, and not being on antiretroviral therapy. HIV-positive people with a weak immune system, particularly a CD4 count below 200 cells/mm³, are at greatest risk. At these low CD4 counts, the risk of complications, particularly bacteraemia – the presence of the bacteria in the blood – increases dramatically. Some experts suggest that a case of pneumococcal bacteraemia is a sign that someone should be tested for HIV.

Outcomes

Taking all cases of pneumonia together, including the AIDS-related PCP, the Danish national cohort study found that the risk of subsequent death amongst people with HIV was almost three times higher following hospitalisation for pneumonia, compared to not having pneumonia, and lasted for more than one year,⁸ while a study in 2000 found that 28% of all pneumonia deaths in British young adults were among people with HIV.⁹

Excluding PCP, while bacterial pneumonia is more common among people with HIV, and often fatal (an Italian team reported a death rate of 26% among people admitted to ICU from 1988 to 2002¹⁰), it is not clear whether HIV-positive people who acquire

pneumonia are more likely to die from it than their HIV-negative counterparts.

An early case-control study during the late 1990s involving 174 people with HIV in Alberta, Canada, measured the length of hospital stay and one-year mortality in people with HIV and found a three-to-ten-times-higher immediate risk of death compared with HIV-negative people.¹¹ However, more recent studies are suggesting that recovery is comparable with that experienced by HIV-negative people. In the UCH study, 77% of patients were eventually discharged from ICU fully recovered, compared with 74% for general medical patients.¹² Being on or off HIV treatment didn't seem to make a difference, with both groups having discharge rates near the overall rate. In a 2005 report on the international Community-Acquired Pneumonia Organization (CAPO) cohort study, the length of hospital stay and mortality rates due to pneumonia were similar in 58 HIV-positive and 174 HIV-negative people.¹³

Antiretroviral treatment

The introduction of effective HIV treatment has decreased rates of many infections, including pneumonia. The Danish cohort saw a significant drop in hospitalisation with the introduction of combination therapy in 1996, from 50.6 admissions per 1000 person-years in 1995-96 to 18.3 in 1999-2000.

The SMART study, which compared continuous therapy with CD4 count-guided treatment breaks, provided evidence that the effects of treatment may go beyond simple immune system strengthening. Intermittent rather than continuous therapy was associated with a 50% increase in risk of bacterial pneumonia, and continuous therapy reduced the risk of pneumonia even in those with CD4 counts above 500 cells/mm³.¹⁴

However, evidence suggests that even people with stronger immune systems may still be at risk. In the Danish cohort, the rate of hospitalisation for HIV-positive people with CD4 cell counts above 500 cells/mm³ was 5.9 times more than HIV-negative people.¹⁵

Dr Lipman explains that even in people on treatment with high CD4 counts, "There are still defects in the mucosal

Whatever happened to PCP?

One of the things that happened to PCP is that it changed its name and should now properly be called PJP. *Pneumocystis pneumonia* is caused by the fungus *Pneumocystis jirovecii*, with the *carinii* species now only infecting other animals. This ubiquitous fungus is probably transmitted through airborne routes early in life; two-thirds of healthy children have antibody to *P. jirovecii* by the age of four.

Colonisation of the respiratory tract of healthy people generally causes no ill effects. Infections appear with severe suppression of the immune system; about 90% of cases occur in people with CD4 counts below 200 cells/mm³.

PCP is seared into the collective memory of the HIV community in the resource-rich world because it was such a common and fatal condition early in the epidemic. According to the US Centers for Disease Control and Prevention, PCP occurred in 70 to 80% of people with AIDS, and even with treatment, the disease led to death in 20 to 40% of cases.²⁵ Rates of PCP dropped – to about 2 to 3 cases per 100 people a year among people with AIDS in Western Europe and the US – with the use of effective treatments, prophylaxis and with the advent of effective HIV treatment.

The antifungal agent cotrimoxazole (*Septtrin* or *Bactrim*) is the most commonly used agent for both prophylaxis and first-line treatment. Prophylaxis is started when CD4 counts fall below 200 or 250 cells/mm³.

People who have already had a case of PCP often continue taking prophylaxis after infection has cleared. For people who see sustained increases in their CD4 counts to more than 250 cells/mm³ after starting treatment, prophylaxis can be safely stopped.

Certain people are still more at risk of PCP. Dr Lipman says that PCP "generally occurs in people who present very late; in other words, who don't know their HIV status or aren't doing anything about it. Or they have low blood CD4 counts and have taken a regimen of prophylaxis that is ineffective or has become ineffective because they did not take it."

My brush with pneumonia

Brian West from the European AIDS Treatment Group, formerly of HIV Scotland, recalls a summer shiver that turned into Legionnaire's disease, one of the deadliest forms of pneumonia.

I've been living with HIV for over 26 years now, and thought I knew which illnesses to keep an eye out for. Pneumonia, however, was not on my list before last year.

The summer started well with a nice holiday in Spain, and four days later I got on a plane to go to the International AIDS Conference in Vienna. I started to feel a bit feverish waiting for the connecting flight at Zurich, but ignored it.

I went to bed that night and the next day things were worse. I struggled through a few meetings, but people looked at me strangely as I was shivering on a warm day. Two ex-nurse colleagues suggested going to see a doctor. I said that if I felt the same the next day I would.

Next day I woke up with a raging temperature, a headache and shortness of breath. I phoned up one of my colleagues who said she knew where to get the best treatment. Within an hour I was in a taxi going to the main hospital in Vienna. I was incredibly lucky, because having good HIV contacts meant I was taken straight to the infectious diseases unit. The senior HIV physician sent me for an X-ray and immediately diagnosed pneumonia. He then asked for sputum samples to send to the central laboratory, to see if they could isolate the type.

They told me it was legionella, or Legionnaires' disease. I was told that it takes four to twelve days to incubate and so I would have probably caught it in Spain (later confirmed – beware of infected shower heads!). I was very lucky to have been given a precise diagnosis only five hours after I walked into the hospital – highly unusual, I believe.

The treatment was bucket loads of intravenous antibiotics over a six-day period in hospital – after 26 years of living with HIV, the longest hospital stay I have ever had. It did not end there. I had a further eight weeks of oral antibiotics (crap dosing schedules,

four times a day, six hours apart – hasn't HIV moved on?).

The recovery period was a shock. When the doctor said it would be two to three months, I thought, well maybe other people, but not me, I am fit! He was right, of course. For the first few weeks I struggled to go up a flight of stairs. I could not walk along the road and talk at the same time. This is, I discovered, multi-tasking for weakened lungs. It took me three months to feel better. Prior to this illness I had been going to the gym three times a week. I had to restart my gym regime slowly, and I can honestly say it was six months before I felt fully recovered.

This illness floored me completely, and I know I was very lucky, because I had a really quick diagnosis and the best possible care. Legionella pneumonia kills a lot of people, and I was lucky not to be one of them. I didn't realise it was something I had to be aware of. Now I am. It's funny how people tell you to run the shower for five minutes when you are lying attached to a drip in a hospital bed... A bit late really!

immunity that stop people from getting infections when they breathe in a bug."

Risk factors unrelated to HIV

Beyond HIV infection, studies have revealed a number of risk factors for pneumonia, including:

- Smoking (cigarettes and cannabis¹⁶)
- Excessive alcohol drinking
- Injecting drug use
- Having another health condition, such as cardiovascular, pulmonary or renal disease, diabetes or cirrhosis of the liver
- Malnutrition
- Low socioeconomic status.

Smoking features high on this list of risks. It's a tough road to quitting smoking (see *Off the hook* in issue 193 of *HTU*), but there are many good reasons to travel it. The pulmonary risks associated with smoking among people with HIV also include lung cancer,

bronchitis and chronic obstructive pulmonary disease.

Vaccines

Two vaccines exist against common strains of pneumococcus, the main cause of bacterial pneumonia. They are commonly administered to children, but are sometimes recommended for adults at risk of pneumococcal disease. Both UK and US guidelines recommend vaccination with the older 23-valent polysaccharide vaccine for all people with HIV. However, there is conflicting evidence whether the vaccine provides any additional protection against pneumonia, particularly in people with low CD4 counts, who should be most likely to benefit from vaccines, but who are also least likely to produce an adequate immune response.

Results from the only randomised, double-blind, placebo-controlled trial of the 23-valent vaccine, conducted in

Uganda during the early 1990s before the advent of ART, showed no protective effect. In fact, vaccination was associated with an increased risk of pneumonia, but a decreased risk of death.^{17,18}

However, more recent studies have shown a protective effect. In a Spanish study, HIV-positive people on HIV treatment with a CD4 count above 200 cells/mm³ and people not on treatment with a count over 350 cells/mm³ had an immune response to the vaccine similar to HIV-negative people.¹⁹ In a retrospective case-control study by the same Spanish team, vaccination with the 23-valent vaccine decreased the risk of pneumococcal disease by 56%, though being on treatment reduced the risk even more, by 77%.²⁰

While vaccination may be recommended, is it widespread? Not according to Dr Lipman, at least in his experience. Given the conflicting study results and the

unproven benefit, doctors may be hesitant to vaccinate because it might give a false sense of security. Moreover, the vaccine is expensive and not covered by most public health systems.

However, a related vaccine that is routine for many people with HIV – the annual flu vaccine (which in 2010-11 included protection against swine flu) – may actually provide some indirect protection from bacterial pneumonia (pneumonia can be a complication of flu). In one Japanese study, vaccinating people with HIV for seasonal flu reduced the number of people who caught flu by 71%.²¹

Diagnosis and treatment

Pneumonia is diagnosed through signs and symptoms and, sometimes, a chest X-ray. In HIV-positive people with a strong immune system, signs and symptoms are similar to those seen in HIV-negative people: fever, trouble breathing, cough that produces green or yellow sputum, and possibly chest pain. These appear over the course of three to five days and persist. Any chest cold that seems to linger should be checked out by a doctor.

HIV-positive people with low CD4 counts may present with more subtle symptoms, that can be easier to miss. These include a low-grade fever, dry cough, rapid breathing and even weight loss or confusion. Diagnosis in HIV-positive people with liver disease may require special care; a recent Italian study found HIV-positive people with liver cirrhosis presented with milder symptoms, but a higher risk of death.²²

Sputum and blood can be cultured in an attempt to identify the bacterium causing the infection, though successful identification is made in only about one-third of cases. As with HIV-negative people, the most common bacteria are *Streptococcus pneumoniae* and Gram-negative bacteria such as *Haemophilus influenzae*, *Pseudomonas sp* and *Legionella sp*.²³

The good news is that, according to Dr Lipman, “Most bacterial pneumonias will respond as they would do in a non-HIV infected population.” Treatment involves using an antibiotic from the penicillin or related, second-generation cephalosporin family, or one from the

macrolide family such as erythromycin. The antibiotic is usually prescribed without trying to identify the infecting microbe; the antibiotic can often clear the infection before test results are ready.

More important is whether people should be admitted to hospital for treatment. Doctors can use an algorithm such as the PSI (pneumonia severity index) or CURB-65 – which include basic demographic and vital signs and a short mental test – to evaluate the severity of a case. Severe cases are treated in hospital while low-risk cases can be treated at home. Neither the algorithms nor pneumonia treatment guidelines, however, have been validated for HIV-positive people. A recent review by Italian researchers suggested that PSI could be used in people with CD4 counts above 200 cells/mm³, while people with lower CD4 counts should be admitted to hospital.²⁴

Treatment can be more complicated for people with lower CD4 counts, particularly below 100 cells/mm³, says Dr Lipman, because they are more likely to get more exotic bugs that don’t respond to standard treatment. Also, he adds, in the early days of the HIV epidemic it was common for people to have infections with more than one organism.

It’s easy to see how bacterial pneumonia could become the forgotten sibling – plain and unassuming. Dr Lipman reminds us: “Bacterial pneumonia and other respiratory tract infections were always there. They just didn’t necessarily get the headlines that TB [tuberculosis] and *Pneumocystis* did.”

Effective treatments and generally good prognosis are all the more reason to pay a bit of attention to this forgotten sibling: a little prevention and early treatment can prevent an unwanted visit to ICU.

The most important thing to be aware of is that pneumonia is a common condition that can be more common in people with HIV, even in people on treatment. It is yet another good reason to give up smoking, and to disclose your HIV status to your GP, so that they know you may need antibiotics or a chest X-ray sooner than someone without HIV. ■

references to all articles [cont. on page fifteen]

Treatment is prevention: now how do we make it work? [page three]

- UNAIDS *Groundbreaking trial results confirm HIV treatment prevents transmission of HIV*. Press Release, 12 May 2011.
- Bailey RC et al. *The protective effect of male circumcision is sustained for at least 42 months: results from the Kisumu, Kenya trial*. XVII International AIDS Conference, Mexico City, abstract THAC0501, 2008.
- Kong XR et al. *Longer-term effects of male circumcision on HIV incidence and risk behaviors during post-trial surveillance in Rakai, Uganda*. 18th Conference on Retroviruses and Opportunistic Infections, Boston, abstract 36, 2011.
- Grant RM et al. *Preexposure chemoprophylaxis for HIV prevention in men who have sex with men*. *New Engl Jour Med* 363(27):2587-2599, 2010.
- Abdool Karim Q et al. *Effectiveness and safety of tenofovir gel, an antiretroviral microbicide, for the prevention of HIV infection in women*. *Science* 329(5996):1168-1174, 2010.
- Reks-Ngarm S et al. *Vaccination with ALVAC and AIDSVAX to Prevent HIV-1 Infection in Thailand*. *New England Journal of Medicine* 361(23):2209-2220. 2009.
- Donnell D et al. *ART and risk of heterosexual HIV-1 transmission in HIV-1 serodiscordant African couples: a multinational prospective study*. 17th Conference on Retroviruses and Opportunistic Infections, San Francisco, abstract 136, 2010.
- World Health Organization *Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector*. See www.who.int/hiv/pub/2010progressreport/en/. 2010.
- Das-Douglas M et al. *Decreases in community viral load are associated with a reduction in new HIV diagnoses in San Francisco*. 17th Conference on Retroviruses and Opportunistic Infections, San Francisco, abstract 33, 2010.
- Clinton Foundation Antiretroviral (ARV) price list. See www.clintonfoundation.org/files/chairvpricelistaugust2009english.pdf.
- PATH *The female condom: significant potential for STI and pregnancy prevention*. *Outlook* 22(2):May 2006. See www.path.org/publications/detail.php?i=1266
- International Family Health *Are people using condoms? Current evidence from Sub-Saharan Africa and Asia and the implications for microbicides*. Policy paper, 2003. See www.global-campaign.org/clientfiles/LSHTM-Condom.pdf

Is there life after death for HIV social care? [page four]

- Ibrahim F et al. *Social and economic hardship among people living with HIV in London*. *HIV Medicine*, 9(8):616-624, 2008.
- Department of Health *A vision for adult social care: Capable communities and active citizens*. Issued 16 November 2010. See <http://bit.ly/m7yX1G>.
- National AIDS Trust *The AIDS Support Grant: making a difference?* July 2009. Can be downloaded at <http://bit.ly/isXw5u>
- Pearmain A *Feast to famine? HIV social care and the AIDS Support Grant*. 17th Annual BHIVA Conference, Bournemouth, abstract P25A. 2011. Read abstract at <http://www.bhiva.org/documents/Conferences/Bournemouth2011/HIVMedicine12.pdf>.
- Pearmain’s report *Feast to famine? HIV social care and the AIDS Support Grant* can be downloaded at <http://bit.ly/lq6Yat> and the executive summary at <http://bit.ly/mAIzZd>.
- Wills M et al. *Social care co-ordination in an HIV clinic – an innovative and popular service*. 17th Annual BHIVA Conference, Bournemouth, abstract P19. 2011. Read abstract at www.bhiva.org/documents/Conferences/Bournemouth2011/HIVMedicine12.pdf.

Breathtaking mortality: bacterial pneumonia and HIV [page ten]

- Dickson SJ et al. *Survival of HIV-infected patients in the intensive care unit in the era of highly active antiretroviral therapy*. *Thorax* 62:964-968, 2007.
- Powell K et al. *Survival for patients with HIV admitted to the ICU continues to improve in the current era of combination antiretroviral therapy*. *Chest* 135:11-17, 2009.
- Nuorti JP et al. *Epidemiologic relation between HIV and invasive pneumococcal disease in San Francisco County, California*. *Ann Intern Med* 132:182-190, 2000.
- Feikin DR et al. *Global strategies to prevent bacterial pneumonia in adults with HIV disease*. *Lancet Infect Dis* 4:445-455, 2004.

news in brief



Treatment as prevention

Treatment slashes HIV infection rate

A trial designed to see if giving antiretroviral drugs (ARVs) to HIV-positive people would stop them infecting partners has been stopped nearly four years earlier than planned, because the answer was a convincing 'yes'.

The HPTN 052 study found that HIV-positive people on ARVs were more than 20 times less likely to transmit HIV to their sexual partners than untreated people.

The study, conducted in eight countries, began enrolling participants in 2005, recruiting 1736 couples in which one partner had HIV and the other did not.

Half the HIV-positive participants, who had to have a CD4 count between 350 and 550 cells/mm³, started taking ARV drugs immediately and half waited either until their CD4 count fell below 250 cells/mm³ or they developed an AIDS-defining illness.

The investigators stopped the trial when they realised that out of 28 HIV infections seen in the HIV-negative partners where the HIV-positive partner was clearly the source, only one occurred where the positive partner was taking ARVs – a 96% risk reduction.

Starting early was better for the HIV-positive partner too: there were only three cases of TB in people who started ARVs immediately and 17 in those who delayed them.

Michel Sidibé, Executive Director of UNAIDS, said: "This breakthrough is a serious game changer and will drive the prevention revolution forward. It makes HIV treatment a new priority prevention option."¹

The trial result has led to calls for a more evidence-based approach to global funding for HIV programmes. In *The Lancet*, a team of experts from many international HIV groups has called for the "discontinuation of the inefficient application of programmes to the wrong populations or without regard to their outcomes" and support solely for programmes with a "direct effect on reduction of transmission, morbidity, and mortality."²

Vitamin D

Vitamin D deficiency does matter

Vitamin D deficiency, very common in people with HIV, does seem to be associated with faster immune decline, two studies have found.

In a survey of 1985 HIV-positive people from Europe, Israel and Argentina, 24% of patients had vitamin D blood levels below 24 nanograms per millilitre, which is the threshold for deficiency.¹

The investigators found that the one-third of patients with the lowest levels of vitamin D at the start of the study were nearly twice as likely to have progressed to AIDS ten years later and about 1.7 times more likely to die, even of non-AIDS-related causes. This risk was independent of their initial CD4 count.

Another study from the US² compared 149 people with HIV and 34 HIV-negative people. Vitamin D levels were significantly higher in the HIV-negative controls. In the patients with HIV, low vitamin D levels were associated with increased inflammation, lower CD4 counts, and poorer responses to therapy.

Low levels of the vitamin were also strongly associated with hardening of the arteries; people with the worst thickening in the wall of the carotid (neck) artery were ten times more likely to have vitamin D deficiency.

The investigators say: "Our results show that vitamin D may play a role in both HIV-related cardiovascular disease and immune restoration."

Neither of the studies above, however, definitively pin down vitamin D deficiency as the cause because they cannot rule out the possibility that other issues such as lifestyle might cause both the deficiency and the poorer health. The US investigators therefore urge a randomised controlled trial of vitamin D supplements for people with HIV to find out if correcting deficiency can improve health.

HIV treatment

Commissioners explain London changes

The London HIV Consortium, which negotiates HIV drug purchasing in the capital, has explained the background to changes in HIV drug prescribing, which aim to save £8 million.¹ London's NHS spent over £170m on ARVs in 2009/10, 19% of the entire drug spend.

As outlined in the last issue of *HTU*,² contracts have been signed with drug companies agreeing price reductions if certain volumes of drugs are sold. To meet these targets, the number of patients on abacavir (usually as the abacavir/3TC pill *Kivexa*) and atazanavir (*Reyataz*) need to be increased.

With abacavir, most of the increase will come from putting new patients on *Kivexa* rather than on tenofovir/FTC (*Truvada*) or the triple-drug pill *Atripla*, unless abacavir is contra-indicated. With atazanavir, however, a number of patients already taking other protease inhibitors (PIs) will have to be switched.

The LHC's money-saving plan is part of a national drive to improve quality, innovation, productivity and prevention (QIPP) in NHS services. NHS trusts achieving efficiency and service targets will get funding bonuses or will fail to

For daily news reports and breaking stories from the major HIV conferences visit aidsmap.com

get some of their expected funding if they don't.

The LHC says: "The ARV tender process this year means that considerable savings will be made to the bill for antiretrovirals...With the clinical outcomes of a number of [ARVs] now similar, HIV doctors and patients can ensure cost-effectiveness of treatment without compromising the quality of care... and, where it is clinically appropriate to do so, will use the least expensive treatment option available."

An audit to monitor the outcomes for patients has been started and will report every three months for two years.

The National AIDS Trust (NAT) has expressed concerns over the targets and has written to the London Specialised Commissioning Group (LSCG),³ the purchaser side of the LHC. NAT asks LSCG for guarantees that outcomes in patients will be audited properly by gender, age and risk group, that no-one will be switched to atazanavir without

properly informed mutual agreement, and that it commits to wider discussions with people with HIV and HIV organisations when considering similar measures in future.

LSCG is also asked to confirm that clinics "will not be rewarded or sanctioned for success or failure in switching a certain number or proportion of patients to atazanavir". This would seem to be a difficult promise to make given that the most novel aspect of this new agreement, which over 50% of London's lead HIV consultants have already signed, is that explicit financial rewards and sanctions are part of it.

The HIV treatment advocates' network UKCAB (www.ukcab.net) is asking Londoners who experience their HIV drugs being changed without warning or explanation to contact them or the i-Base Treatment Phoneline on 0808 800 6013. (See <http://bit.ly/jgl8ir>)

Hepatitis C

Two new hepatitis C drugs approved

The first two protease inhibitor drugs for hepatitis C, as examined in *HTU* 205, have now been approved in the US. Boceprevir (*Victrelis*) has already been approved by the European Medicines Agency, and telaprevir (*Incivek*) is likely to follow soon. Both are approved only for treatment of the most common and hard-to-treat strain, genotype 1.

A significant challenge to adopting the new drugs is their expense. US activist group, the Fair Pricing Coalition has expressed "disappointment" in the wholesale prices of the two drugs, which are \$48,000 and \$49,200 for a course of boceprevir or telaprevir respectively, especially as this will set the likely price of future hepatitis C drugs. In Europe a price of €28,000 has been suggested for boceprevir, though in practice a variety of discounts may be negotiated.

references to all articles [from page thirteen]

- Heffernan RT et al. *Declining incidence of invasive Streptococcus pneumoniae infections among persons with AIDS in an era of highly active antiretroviral therapy*. J Infect Dis 191:2038-2045, 2005.
- Hirschtick RE et al. *Bacterial pneumonia in persons infected with the human immunodeficiency virus. Pulmonary Complications of HIV Infection Study Group*. N Engl J Med 333:845-851, 1995.
- Sogaard OS et al. *Hospitalization for pneumonia among individuals with and without HIV infection, 1995-2007: a Danish population-based, nationwide cohort study*. Clin Infect Dis 47:1345-1353, 2008.
- Sogaard OS et al. *Mortality after hospitalization for pneumonia among individuals with HIV, 1995-2008: a Danish cohort study*. PLoS ONE 4: e7022, 2009 doi:10.1371/journal.pone.0007022.
- Simpson JC et al. *A national confidential enquiry into community acquired pneumonia deaths in young adults in England and Wales*. Thorax 55:1040-1045, 2000.
- Franzetti F et al. *Nosocomial bacterial pneumonia in HIV-infected patients: risk factors for adverse outcome and implications for rational empiric antibiotic therapy*. Infection 34:9-16, 2006.
- Johnson DH et al. *Hospitalization for community-acquired pneumonia in Alberta patients with human immunodeficiency virus infection: A case control study*. Canadian Respiratory Journal 10(5):265-270, 2003.
- Dickson, *op. cit.*
- Christensen D et al. *HIV infection does not influence clinical outcomes in hospitalized patients with bacterial community-acquired pneumonia: results from the CAPO international cohort study*. Clin Infect Dis 41:554-556, 2005.
- Gordin RM et al. *Pneumonia in HIV-infected persons: increased risk with cigarette smoking and treatment interruption*. Am J Respir Crit Care Med 178:630636, 2008.
- Sogaard, 2008 *op. cit.*
- Caiifa WT et al. *Drug smoking, Pneumocystis carinii pneumonia, and immunosuppression increase risk of bacterial pneumonia in human immunodeficiency virus-seropositive drug users*. Am J Respir Crit Care Med 150:1493-1498, 1994.
- French N et al. *23-valent pneumococcal polysaccharide vaccine in HIV-1-infected Ugandan adults: double-blind, randomised and placebo controlled trial*. The Lancet 355:2106-2111, 2000.
- Watera C et al. *23-valent pneumococcal polysaccharide vaccine in HIV-infected Ugandan adults: 6-year follow-up of a clinical trial cohort*. AIDS18:1210-1213, 2004.
- Falco V et al. *Serological response to pneumococcal vaccination in HAART-treated HIV infected patients: one year follow-up study*. Vaccine 24:2567-2574, 2006.
- Penaranda M et al. *Effectiveness of polysaccharide pneumococcal vaccine in HIV-infected patients: a case-control study*. Clin Infect Dis 45:e82-e87, 2007.
- Yamanaka H et al. *Efficacy and immunologic response to influenza vaccine in HIV-1-infected patients*. J Acquir Immune Defic Syndr 39: 167 - 173, 2005.
- Manno D et al. *Risk factors and clinical characteristics associated with hospitalization for community-acquired bacterial pneumonia in HIV-positive patients according to the presence of liver cirrhosis*. Infection 37:334-339, 2009.
- Madeddu G et al. *Bacterial community-acquired pneumonia in HIV-infected patients*. Curr Opin Pulm Med 16:201-207, 2010.
- Ibid.*
- Centers for Disease Control and Prevention. *Guidelines for prevention and treatment of opportunistic infections in HIV-infected adults and adolescents*. MMWR 58:6-9, 2009.

News in brief [page fourteen]

Treatment slashes HIV infection rate

- UNAIDS. *Groundbreaking trial results confirm HIV treatment prevents transmission of HIV*. Press release, 12 May 2011.
- Schwartländer B et al. *Towards an improved investment approach for an effective response to HIV/AIDS*. The Lancet, early online publication, DOI:10.1016/S0140-6736(11)60702-2, 3 June 2011.

Vitamin D deficiency does matter

- Viard J-P et al. *Vitamin D and clinical disease progression in HIV infection: results from the EuroSIDA study*. AIDS 25, online edition: doi: 10.1097/QAD.0b013e328347f6f7, 2011
- Ross AC et al. *Vitamin D is linked to carotid intima-media thickness and immune reconstitution in HIV-positive individuals*. Antiviral Therapy, online edition: doi: 10.3851/IMP1784, 2011.

Commissioners explain London changes

- See www.londonspecialisedcommissioning.nhs.uk/?assetId=16#contentBox368
- See www.aidsmap.com/prescribing-in-london
- See <http://bit.ly/likRcW>

HIV & UK African communities



NAM has developed a new online tool that highlights and signposts the range of services available to African people living with HIV in the UK.

It includes information and research specific to UK African communities and insightful personal stories, making it a vital resource for anyone working with African people living with HIV.

Key issues: Overview of the main issues and challenges for African people living with HIV.

Access to health care and Immigration and asylum: Summary of the key legislation, guidelines and entitlements.

Directory of services: A searchable database of HIV services and related social care and support services working with African people in the UK.

Personal stories: Three people share their experiences of living with HIV.



www.aidsmap.com/UK-African-communities



If you work in a community-based organisation in the UK that offers tailored services for African people, you can order a free copy of this resource. Phone **020 7840 0050** or email **info@nam.org.uk**

This resource has been developed as part of NAM's African communities engagement project. We are grateful to the following funders for supporting this project:

**Big Lottery Fund
Bristol-Myers Squibb
The Henry Smith Charity
Janssen**



LOTTERY FUNDED

thanks to our funders

NAM's treatments information for people living with HIV is provided free thanks to the generosity of:

Abbott;
Big Lottery Fund;
Boehringer Ingelheim;
Bristol-Myers Squibb;
Derek Butler Trust;
Government of the United Kingdom, Department of Health;
Gilead Sciences;
Henry Smith Charity;
Janssen;
M*A*C AIDS Fund
Manchester City Council;
Merck Sharp & Dohme;
Miss Agnes Hunter's Charitable Trust;
NHS Ashton, Leigh & Wigan;
NHS Birmingham East and North;
NHS Bolton;
NHS Brighton & Hove;
NHS Manchester;
NHS Norfolk;
NHS Pan-London HIV Prevention Programme;
NHS Salford;
NHS South East Essex;
NHS South West Essex;
NHS West Sussex;
Sanofi Pasteur MSD;
ViiV Healthcare

NAM would also like to acknowledge the generous support of its individual donors.

donate to nam

Every year NAM provides information resources, like *HIV Treatment Update*, to thousands of people living with HIV around the world, completely free of charge. To do this we really do rely on the generosity of people like you to help us continue our vital work. No matter how big or small, your donation can make a huge difference to the work we are able to achieve. Make a difference today, please donate whatever you can by visiting www.aidsmap.com/donate or by calling us on 020 7840 0050. Thank you.

where to find out more about hiv

- **Find out more about HIV treatment:**
NAM's factsheets, booklets, directories and website keep you up to date about key topics, and are designed to help you make your healthcare and HIV treatment decisions. Contact NAM to find out more and order your copies.
- **www.aidsmap.com**
Visit our website for the latest news about HIV & AIDS, a fully searchable treatments database and a complete list of sexual health clinics in the UK.
- **THT Direct**
Offers information and advice to anyone infected, affected or concerned about issues relating to HIV and sexual health.
0845 1221 200
Mon-Fri, 10am-10pm Sat-Sun, 12pm-6pm
- **i-Base Treatment Phoneline**
An HIV treatment phoneline, where you can discuss your issues with a treatment advocate.
0808 8006 013
Mon-Wed, 12pm-4pm