

## International

### New ARV info 'a cause of anxiety in patients'

The Treatment Action Campaign (TAC) says the findings in a recent study on antiretrovirals (ARVs) and the role they play in premature ageing have caused anxiety in HIV/AIDS patients using ARVs. The TAC's comments come after a statement by scientists from Newcastle University in the UK which cited evidence from a recent study that some ARV drugs accelerated ageing in HIV/AIDS patients. Professor Patrick Chinnery from the Institute of Genetic Medicine at Newcastle University and Dr Brendan Payne from the Department of Infection and Tropical Medicine at the Royal Victoria Infirmary said the findings in the study might explain why HIV patients treated with ARVs at times showed advance signs of ageing. The TAC said it was concerned about the report which had caused 'unnecessary' anxiety in patients using ARVs or who will soon start ARV treatment. The term 'accelerated ageing' refers to evidence that people with HIV may have higher rates of non-AIDS-related illnesses such as heart disease, dementia, bone fractures and certain cancers than HIV-negative people of the same age, according to the TAC. The study found that ARVs damaged the mitochondrial DNA.



## Africa

### Chad – vaccination flaws increase polio spread

As polio strikes more and more people in Chad – 70 cases so far this year – tens of thousands of children are unprotected, largely owing to flaws in how vaccination campaigns are run.

Recent infections have made Chad the country with the highest number of cases worldwide, according to the World Health Organization (WHO). The government classified more regions as 'high risk' in

May than in February, despite regional and nationwide immunisation drives in February, March and May. Why are so many children in Chad missing out on the easily administered two drops of oral vaccine, which, given several times at a young age, can protect a child for life?

Weak co-ordination, supervision and monitoring, a defective cold-chain, and poor communications are some of the 'main problems' with polio immunisations, according to a new Chad government plan to improve coverage. Health experts are heartened by the plan but say it must be implemented immediately if a devastating spread of the disease is to be avoided. 'It's encouraging but we need this to be implemented very, very rapidly because we've got quite uncontrolled transmission, particularly of type 1 poliovirus,' said Oliver Rosenbauer, spokesperson for the WHO's polio eradication group in Geneva. Chad currently has outbreaks of both wild poliovirus type 1 (WPV1) and WPV3, with at least 70 and 3 cases respectively this year, according to the WHO. WPV3 – centred in Dar Sila District in the east – has been present since 2007, while the WPV1 outbreak (present in Chari Baguirmi, Logones east and west, Wadi Fira, Ouaddai, Salamat, Kanem and Batha, according to the government) began last September when the virus entered from northern Nigeria. The WHO says the presence of polio in Chad is of particular concern with the hajj (Muslim pilgrimage to Mecca) due in early November. 'Polio has struck close to the border with Sudan, and with Ramadan and the hajj coming up populations are probably already moving across the area,' Rosenbauer said. The four polio-endemic countries are Afghanistan, India, Nigeria and Pakistan. Rosenbauer said that Chad, which had once eradicated polio, is currently considered as having 're-established transmission'. The good news is Chad is not Nigeria in terms of population numbers and so this is an outbreak that can be very rapidly controlled, even over the next 6 months. But we've got challenges ahead, including the rainy season, and we've got the lack of ownership at the district level where we urgently need it,' he added.

### *E. coli* outbreak linked to Egyptian seed

The European Centre for Disease Prevention and Control has claimed that *E. coli* outbreaks in Germany and France could have come from seeds sourced in Egypt. Officials said that the seeds seemed to have entered Europe through a single German importer, which acted as a distributor to other companies. A report by the European Food Safety Authority said that sprouts grown from fenugreek seeds imported from Egypt in 2009 and 2010 'are implicated in both outbreaks'. But it added that 'there is still



much uncertainty about whether this is truly the common cause of the infections' because tests on the seeds have not yet found any of the deadly *E. coli*. According to the *New York Times*, food safety experts say, however, that the bacteria can contaminate one seed in thousands and that it is very difficult to isolate in seed samples. The devastating *E. coli* outbreak first surfaced in Germany in early May, eventually striking more than 4 000 people, nearly all of whom lived in Germany or had travelled there. The bacteria cause acute diarrhoea and, in severe cases, kidney failure. At least 48 people died, according to the European Centre for Disease Prevention and Control. As the German outbreak began to wane in mid-June, a fresh wave of illness involving the same *E. coli* strain was identified in the Bordeaux region of France. The French authorities said many of the people who fell ill had eaten sprouts from a mix of three varieties, including fenugreek. Public health experts in the USA said that the French outbreak, in which about 16 people fell ill, may have helped investigators looking into the German episode to focus on the three varieties of sprouts, looking for common threads.

## South Africa

### Mediclinic rejects claims by health minister

Mediclinic Southern Africa has strongly rejected Health Minister Aaron Motsoaledi's claims that the private hospital sector is arbitrarily and unlawfully expensive. The health minister said that the pricing method of Mediclinic was 'incorrect' and that it

must apply a limit to its fees. Mediclinic said that it negotiates its prices annually with every medical scheme and was bound by these agreed rates. Private hospitals did not receive drugs at the substantially lower state tender prices that public hospitals did; they paid VAT and had to recoup the cost of debt and equity required to maintain high-quality infrastructure. Previous studies have accused private hospitals of charging high fees in order to make excessive profits which in turn allegedly drives up health care costs. The Hospital Association of South Africa (HASA)'s Chairman, Dr Nkaki Matlala, said that Motsoaledi's comments came as a 'surprise' as the private sector was holding discussions with the health department to improve the quality of health care.

### Limpopo health department dismisses 'fake' paramedics

The Limpopo Department of Health has dismissed 35 paramedics accused of presenting fraudulent qualifications. The affected paramedics allegedly failed to produce proof that their certificates were authentic. They were suspended 2 weeks ago and given time to produce the proof. Spokesperson for the department, Joe Maila, says the certificates looked genuine because they came from an institution which is known to do training for paramedics. However, 'as we looked closely into the matter, we realised that some of the certificate numbers are the same. Therefore we thought that there was a problem and we did our own investigation. When the whistleblower came through, we had already picked up that there could be problems,' said Maila.



Earlier this year the Limpopo Department of Health and Social Development promised to conduct a skills audit to root out fake medical practitioners. That followed the recent arrest of 6 Nigerian bogus doctors by the Hawks. One of the suspects worked at Ga-Matlala Hospital in Limpopo. MEC Dikeledi Magadzi said stringent measures would be put in place to prevent such discrepancies. Magadzi denied claims that they did not have the capacity to properly conduct the skills audit. The Health Professions Council of South Africa (HPCSA) has instituted its own investigations into the conduct of 2 registered doctors in Limpopo and Pretoria. It is believed that these unqualified doctors

were allowed to treat ill patients as well as administer medication and injections. Spokesperson for the HPCSA, Bertha Peters-Scheepers, said they are working closely with the Hawks to uncover the truth. Meanwhile the provincial administration was planning to clamp down on bogus doctors who use lampposts and perimeter walls to promote illegal abortions. Legislation on abortion and advertising standards prohibit abortion advertisements in which bogus doctors offer affordable, fast, safe and pain-free abortions.

### Gauteng health faces R235m in claims

The Gauteng health department is facing over 100 claims totalling R235m from state hospital patients, according to a report presented to the Public Accounts Committee of the Gauteng legislature. Chris Hani Baragwanath Hospital faces 26 claims, including a R5m claim for a patient who died after being treated for a toothache. Steve Biko Hospital faces the second-most claims (12), including that of a person who became blind after the wrong eye was operated on. This hospital also had a patient, now suing for R1.25m, who was allegedly raped and assaulted while under sedation. Several claims were related to negligence in treatment of newborn babies, including a baby who suffered brain damage after 'a patient gave birth to a baby without staff help ... as a result the baby fell to the floor and was left brain damaged'. Democratic Alliance health spokesperson Jack Bloom, who sent the report to the South African Press Association (Sapa), said there was an urgent need for better health care services. 'These claims reflect a horrific decline in treatment standards at our hospitals. Although some amounts claimed are clearly unrealistic they reflect the trauma of patients who feel they have been victims of bad treatment.'



Courts have lately been granting higher payouts for medical negligence, so the department will be paying many millions from a very tight budget. 'It would be far better to dramatically improve health care so that claims do not have to be made in the first place,' observed Bloom.

### Ban on killer fats imminent

The fight against heart disease is set for a boost when a government ban on artery-clogging trans fats takes effect from mid-August. Trans fat is vegetable oil that has been chemically altered – or partially



hydrogenated – to harden it so it becomes stable, remains solid at room temperature and gives food products a longer shelf life. It may be found in anything from margarines to biscuits, cake and fried foods. It is also linked to an increased risk of heart attack because it raises the level of ‘bad’ (LDL) cholesterol and lowers the level of ‘good’ (HDL) cholesterol, leading to plaque deposits on the arteries and potential blood clots. It has also been linked to diabetes and breast and prostate cancer. Final regulations to ban trans fats were published in the *Government Gazette* and will take effect from 17 August, health minister Aaron Motsoaledi said in a written reply to a question from DA MP Sandy Kalyan. This follows similar bans in Canada, Denmark and the USA. All manufactured and pre-packaged food, as well as food prepared by restaurants and fast-food outlets, where partially hydrogenated oil is used for deep-frying, will be affected by the ban, which limits trans fat content to 2%. However, the ban excludes trans fats occurring naturally in animal products, as these have been shown



to be beneficial in small quantities. Critics have raised concerns about the practicality of the ban and the country’s ability to enforce it, given the limited number of laboratories and the high volume of food imports. But Kalyan said it was a step in the right direction and tied in with Motsoaledi’s attempts to promote a healthy lifestyle.

**Invention aims to bring relief to respiratory sufferers**

Concerned parents, especially those with children with respiratory problems, can breathe a tentative sigh of relief. Pollution risk information could be just a click away. KwaZulu-Natal scientists are developing a web-based risk map that will be able to accurately predict health hazards in a specific area. Professor Rajen Naidoo from the University of KwaZulu-Natal explains: ‘If you have a child and your child has asthma and you are living in an area where you know pollution levels can be elevated at any time. You want to know three to four days before what is the likelihood that pollution levels will increase and with that knowledge one can decide on action to take for their child. Maybe not send them to play in the sports field, keep him at home and make sure his meds are up to date.’ Industries can also make use of such a tool. ‘Stakeholders



like industry can say well look, given the meteorological patterns we received showing that three or four days down the line our processes will cause an elevated pollution, maybe we should look at controlling and adjusting the particular process which is causing the elevation,’ Naidoo added. The map uses satellite data and its pollution level readings are said to be more reliable than those from monitoring systems on the ground. The study is part of a multi-national collaboration funded by the European Union. A pilot website should be available by the end of the year.

**CHRIS BATEMAN**

## SINGLE SUTURE

### *Mouse virus not to blame for chronic fatigue syndrome*

A retrovirus found in the blood of people with chronic fatigue syndrome probably came from contamination, not infection.

Two years ago, Vincent Lombardi at the Whittemore Peterson Institute in Reno, Nevada, thought he had found the cause of the tiredness and muscle pain of CFS after discovering a mouse virus called xenotropic murine leukaemia virus-related virus (XMRV) in blood samples of 68 of 101 people with CFS compared with just eight of 218 samples from healthy volunteers.

Now, Jay Levy at the University of California, San Francisco, has drawn a blank when screening for XMRV in 61 people with CFS, 43 of whom had tested positive in Lombardi’s study.

In another study, Vinay Pathak at the National Cancer Institute in Frederick, Maryland, suggests that XMRV originated in lab mice between 1993 and 1996 – after many of the people in Lombardi’s study were diagnosed with CFS – and so cannot be the cause.

Pathak says that researchers grew cancers in mice without immune systems in order to make prostate tumour tissue for study. The tumour cells picked up two leukaemia viruses which combined to form XMRV. The strains in Lombardi’s samples are so similar to the ‘recombinant’ virus that it is unlikely to have another source, says Pathak.

XMRV has been identified as a contaminant in some lab reagents, which might explain Lombardi’s results.

New Scientist, 11 June 2011, p. 17.