

# News bites

## International

### **Sterilised tsetse fly plan to control sleeping sickness**

In December 2009 the International Atomic Energy Agency (IAEA) announced an agreement to help African nations battle the tsetse fly, the main carrier of parasites that cause sleeping sickness with their bites.

The IAEA, which has been working on the problem with African countries for 30 years, can make available a sterile insect technique (SIT), a nuclear-based pest control technology that is often described as 'biological birth control for insects', according to the agency's website.

'In SIT-supported pest suppression and prevention campaigns, millions of sterilised male insects are released into targeted areas. They mate with wild females in the field, but no offspring are produced. Eventually, the pest population is suppressed and steadily reduced over time,' the IAEA explained.

The IAEA signed a memorandum of understanding with the African Union, extending co-operation in a range of domains. Work on sleeping sickness follows an effective trial in Zanzibar in the late 1990s.

Sleeping sickness, or trypanosomiasis, in animals is a deadly disease found in 35 African countries, where it kills 400 000 people a year, along with some 3 million head of cattle. Apart from the cost in lives, the disease is seen as a major obstacle to development, causing an estimated loss in earnings of about R29 billion a year. Medical co-operation is part of the brief of the IAEA, which is based in Vienna and is responsible for promoting peaceful uses of atomic energy.

### **Can a Bee Gees melody help you stay alive?**

Humming to upbeat songs like 'Nellie the elephant' while compressing the chest of a heart attack victim could improve a life-saving heart resuscitation technique, scientists said in December 2009.

A study of cardiopulmonary resuscitation (CPR) training found that listening to music with the right tempo helped people keep to a rate of 100 chest compressions per minute – the rate recommended in expert guidelines.

CPR is a potentially life-saving technique that can be taught to people with no other medical skills and can double heart attack survival rates if it is carried out on a patient before emergency services arrive.

Researchers from the universities of Birmingham, Coventry and Hertfordshire in Britain gave 130 untrained volunteers a brief demonstration on a resuscitation mannequin. The participants had 1 minute to practise while listening to a metronome and were then asked to perform 3 sequences of 1 minute of continuous chest compressions while listening on headphones to the songs 'Nellie the elephant', by Little Bear, and 'That's the way' (I like it), by KC and the Sunshine Band. The songs were chosen for their tempo, the researchers said in the *British Medical Journal*. 'Nellie the elephant' has 105 beats per minute and 'That's the way' has 106. 'Listening to "Nellie the elephant" significantly increased the proportion of participants delivering compression rates at close to 100 per minute,' the researchers wrote. Around 32% of volunteers got the rate right with 'Nellie', compared with 12% for no music and 9% for 'That's the way,' the researchers wrote.

But it also increased the number of compressions that were not hard enough, and since the rate and depth of chest compressions is important for CPR, 'Nellie' could not be recommended as an accompaniment until more research was done, they said.

An earlier pilot study used the Bee Gees song 'Staying alive', and other potential tunes include 'Another one bites the dust' by Queen, 'Quit playing games' (with my heart) by the Backstreet Boys, and 'Achy breaky heart' by Billy Ray Cyrus.

## Africa

### **Red Cross needs funds for Harare food drive**

The Red Cross says it needs R240 million to feed 220 000 Zimbabweans who cannot access hard currency in the collapsed economy. The Red Cross's Zimbabwe representative Stephen Omollo said in December 2009 that the International Federation of Red Cross and Red Crescent Societies was appealing for the money to help Zimbabweans living in rural areas without access to US dollars in an economy that has switched from the Zimbabwe dollar to hard currency.

Omollo says markets have food, but people can't afford to buy it. The Red Cross is distributing food vouchers that vendors can later exchange for cash. The United Nations also appealed this week for R2.83 billion in aid for Zimbabwe, but says the situation has improved 'somewhat' under a 10-month-old coalition government.

### **China-Africa: 3-year partnership plan**

China and 49 African countries have agreed on a 3-year action plan for establishing strategic partnerships in science and technology as well as higher education to promote knowledge-based sustainable development. The plan was announced in early December last year at the Fourth Ministerial Conference of the Forum on China-Africa Cooperation in Sharm El Sheikh in Egypt.

Under the plan, Chinese and African higher education institutions will establish a new type of one-to-one inter-institutional co-operation model between 20 universities or vocational colleges in China and the same number in Africa. To promote African human resources development, China will increase the number of scholarships to African students to 5 500 by 2012, boost scholarships for Chinese language teachers to help them to study in China, and double efforts to raise the capacity of local African teachers to teach the Chinese language, as well as offering training to 3 000 doctors, nurses and administrative personnel.

## South Africa

### **Speedy medicine vehicles on call**

Patients leaving Gauteng medical facilities without their much-needed drugs will, it is hoped, soon be a thing of the past – thanks to 2 new medicine response vehicles. Health and Social Development MEC Qedani Mahlangu in December last year handed over the vehicles to ensure that medicines are delivered speedily in emergency cases or where medication is urgently required outside the delivery schedule. Mahlangu said that when the Department launched Operation Kuyasheshwa-La, on 25 June 2009, shortage of medicines at hospitals and clinics was identified as one of the problems to be tackled.

'We are here today to offer our patients a comprehensive supply of medicine at hospitals and clinics as prescribed by the

national policy, which is to ensure an adequate and reliable supply of safe, cost-effective drugs of acceptable quality to all citizens of South Africa and the rational use of drugs by prescribers, dispensers and consumers,' Mahlangu said.

As the festive season and 2010 FIFA World Cup approaches, she said, it was crucial that the Department was not short of medical supplies during emergencies. Mahlangu also handed over blood warmers that will warm the blood prior to being transfused. The blood warmers will be placed at Sizwe, Heidelberg, South Rand, Kopanong, Tshepong TB and Far East Rand hospitals, which have been identified as lacking this essential equipment. 'It is of the utmost importance that blood should not be heated in a microwave oven or similar device or any other method. No more shall patients be required to sleep on blood in order to warm it prior to transfusion,' said Mahlangu.

### Brutal attack on ophthalmologist

An ophthalmologist who for 21 years was president of the International Intraocular Society might never be able to see normally again after a brutal attack.

Marius Pretorius (70) and his wife Lien (68) were overpowered in their Vereeniging flat in December 2009 by 3 men armed with guns and knives. They tied up both victims with rope and ties before trying to strangle Mrs Pretorius. The couple's daughter, Hannelie Warren, said they also tried to gouge out her dad's eyes. The robbers apparently said they didn't want him to see again and identify them to the police. 'One attacker sat on my dad's back and smoked a cigarette while he was tied down. My dad has horrific injuries – he may never have normal vision again.' Warren said Pretorius was still in hospital. The muscles behind his eyes were damaged and specialists aren't sure whether the muscles will recover sufficiently for him to have normal vision again. Warren said her parents were severely traumatised and receiving counselling.

No arrests have been made and Warren accused the police of dragging their feet.

Pretorius, speaking from the Emfuleni Medi-Clinic in Vanderbijlpark, said that since the attack 6 days before, police had not interviewed him about what had happened. 'They only spoke to my wife. No one has been to ask me any questions,' he said. Warren said people in the building where the attack had taken place and who saw the attackers before and after the incident had also not been approached by police in a bid to gather any evidence. 'This is appalling,' she added. Captain Shado Mashobane of the Vereeniging police station confirmed that no arrests had been made, but said the investigation was 'underway.' Warren said they had been flooded with e-mails and phone calls of support from ophthalmologists in the UK, USA, Australia, China, Canada, Hungary and Hawaii.

### All Ekurhuleni clinics to dispense ARVs

All 94 clinics in the Ekurhuleni region will be dispensing antiretroviral (ARV) treatment from 1 April 2010. The Ekurhuleni Metropolitan Municipality has made this commitment to expand its response to HIV and AIDS to ensure that the rate of new HIV infections is reduced by 50% and the impact of the pandemic on individuals, families and the society is maintained.

'In order to meet the need for testing and treatment, we will work to ensure that all the health facilities in Ekurhuleni are ready to receive and assist patients and not just a few accredited ARV centres. Any citizen should be able to move into any health facility and ask for counselling, testing and even treatment if needed,' said the member of the Mayoral Committee responsible for Health, Makhosazana Maluleke. This comes after President Jacob Zuma announced changes in the country's HIV and AIDS policy on World AIDS Day (1 December). 'The President said on World AIDS Day that HIV-positive people will get their ARV treatment when their CD4 count level is at 350 and no longer 200 as before. The President also announced that all pregnant HIV-positive women with a CD4 count of 350 or with symptoms

regardless of CD4 count must have access to treatment. All other pregnant women not falling into this category, but who are HIV positive, will be put on treatment at 14 weeks of pregnancy to protect the baby,' said Maluleke. She urged parents not to 'hide their HIV-positive children in bedrooms' as treatment becomes more available.

### Hopes dashed Pro 2000 gel might block HIV

Hopes that the microbicide Pro 2000 might block transmission of HIV have been dashed, after results from a large study sponsored by the UK's Medical Research Council had shown it offered women no protection against the virus.

Microbicides are gels, creams or foams that are inserted into the vagina or rectum. So far, every product tested has either done nothing or increased the risk of infection. 'It's disappointing. But the hunt for a microbicide is not something we will give up on,' said the study's principal investigator for the Durban site, Gita Ramjee. However, the latest setback means researchers will close the door on what are known as second-generation products such as Pro 2000 and turn to more promising products. These include tried and tested antiretroviral drugs already on the market for HIV/AIDS patients.

Researchers hope a safe and effective microbicide will give women more options for protecting themselves from infection from HIV, particularly when men are loath to use condoms. A microbicide could also be useful for women who are trying to fall pregnant, as the products tested so far do not affect conception.

In February, another Pro 2000 trial suggested it might reduce the risk of getting HIV by 30%, but the small size of the trial meant the findings were not statistically significant. Scientists could not be sure whether slightly fewer gel users than non-users getting HIV meant the product really did prevent HIV transmission or that it was due to chance.

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