

News bites

International

Depression more disabling than other non-fatal chronic diseases

The first worldwide comparison of depression with four other non-fatal chronic diseases shows that feeling seriously blue is the most disabling of all, according to a study released in September.

Combing through self-reported health data on 245 404 adults from 60 countries collected by the World Health Organization (WHO), researchers found that an average of 3.2% of those surveyed had experienced depression over a 1-year period. This percentage was slightly lower than that for asthma (3.3%), arthritis (4.1%), and angina (4.5%), and higher than that for diabetes (2.0%).

However, the results of a quality-of-life index called the 'global mean health score' showed that depression was, by a significant margin, the most difficult to bear. Individuals burdened with diabetes returned an overall satisfaction score of 78.9, and a score of nearly 80 for the 3 other chronic ailments. Respondents with no chronic diseases scored 90.6 on a 1 - 100 scale. For those suffering from depression, however, the score was only 72.9.

'Our findings are consistent with earlier studies that have shown a high degree of association between depression and disability,' commented lead author Saba Moussavi and colleagues of the WHO. The study, published in the *Lancet*, says that depression accounts for the greatest share of non-fatal disease burden, accounting for almost 12% of total years lived with disability worldwide.

The researchers called on doctors around the world to be more alert in the diagnosis and treatment of the condition, noting that it is fairly easy to recognise and treat.

Climate change impacting human disease

Thousands of physicians and scientists met in Chicago in September to tackle the growing resistance of bacteria to antibiotics and the effects of global warming on them, at the world's biggest conference on disease-causing microbes.

For the first time at the annual event 'the keynote session is going to be on climate change and the impact on human disease,' said Jim Sliwa, spokesperson for the American Society for Microbiology that

organised the event. 'We know that climate change is going to change the pattern of infectious diseases,' he said. 'There are so many variables that we don't know what's going to happen. As global average temperature increases, we know ... for example, the malaria line in mountainous regions will continue to rise. This is fairly certain because above a certain altitude mosquitoes can't live,' he said. 'We know also in the tropics influenza is year-round. There is no influenza season, so as the temperature rises the tropical areas expand and we'll get more year-round influenza.'

Presentations at the conference addressed the problem of drug-resistant microbes such as tuberculosis, which kills 2 million people each year. Pharmaceutical labs presented research on growing challenges such as the resistance of certain *Staphylococcus* bacteria, known as SARM, to antibiotics - a source of many in-hospital infections, the association said.

They also discussed the risks of a possible epidemic of a form of bird flu that is dangerous to humans and that could be passed from person to person. Also on the agenda were the results of clinical trials on the effectiveness of anti-retroviral therapies on cancers in people carrying HIV, the virus that causes AIDS. British researchers made a presentation on the antibiotic effects of statin drugs, which reduce cholesterol. Research seems to have revealed the mechanism by which chemical action of the liver gives the anti-cholesterol drugs anti-microbe properties.

Gestational diabetes ups obesity-risk babies

Children born to mothers who developed diabetes during pregnancy are more likely to be overweight or obese than their peers, according to a new study. However, treatment of so-called gestational diabetes reduces the risk. Dr Teresa A Hillier and her colleagues studied nearly 10 000 mother-child pairs enrolled in Kaiser Permanente plans in Hawaii and in the Pacific Northwest during the period 1995 - 2000. Women with pre-existing diabetes were excluded. Follow-up of the children 5 - 7 years later revealed a significant association between their weight and their mothers' blood glucose levels when tested during pregnancy, the researchers report in the medical journal *Diabetes Care*. Specifically, a child was 28% more likely to be overweight or obese when the glucose level of the mother during pregnancy was

in the top range rather than the lowest. According to Hillier's team, the trend remained significant after factoring in maternal weight gain, maternal age, number of pregnancies, ethnicity, and birth weight. However, further analysis showed that the risk of obesity was not significantly increased among children born to mothers with treated gestational diabetes.

The nose knows

When it comes to a man's body odour, the fragrance - or stench - is in the nose of the beholder, according to USA researchers who suggest a single gene may determine how people perceive body odour.

The study, published online in *Nature*, helps explain why the same sweaty man can smell like vanilla to some, like urine to others and for about a third of adults, have no smell at all. 'This is the first time that any human odourant receptor is associated with how we experience odours,' said Hiroaki Matsunami of Duke University in North Carolina. Matsunami and colleagues at Duke and Rockefeller University in New York focused on the chemical androstenone, which is created when the body breaks down the male sex hormone testosterone. Androstenone is in the sweat of men and women, but it is more highly concentrated in men. How one perceives its smell appears to have a lot to do with variations in one odour receptor gene called OR7D4. 'It is well known that people have different perceptions to androstenone. But people didn't know what was the basis of it,' Matsunami said.

Africa

Kenya nearly halves child malaria deaths

Kenya recently announced it almost halved malaria deaths among small children by using insecticidal nets, spurring the World Health Organization (WHO) to advocate free nets for all as it tackles Africa's deadliest disease.

Health Minister Charity Ngilu said distribution of 13.4 million nets over the past 5 years among children and pregnant women had helped curtail infections, a key success against a disease threatening 40% of the world's population. 'Childhood deaths have been reduced by 44% in high-risk districts; in-patient malaria cases and deaths are falling [and] there are reduced cases at the community

level,' she said in a statement. 'For every 1 000 treated nets used, 7 children who might have died of malaria are saved.'

Malaria kills 34 000 children under the age of 5 each year in Kenya, and threatens the lives of more than 25 million of its population of 34 million people, the ministry said. Children sleeping under the nets in malaria-risk areas are 44% less likely to die than those who do not sleep under the nets, according to a survey carried out in 4 districts representing the country's epidemiological pattern. The government has distributed 12 million doses of artemisinin-based therapy (ACT), the latest surefire anti-malaria drug cocktail to replace the monotherapies that had developed resistance. In addition, about 824 600 houses in 16 epidemic-prone districts underwent indoor spraying this year.

Recycled rubbish improves health

In Africa's largest impoverished area, uncollected waste has long posed an insurmountable health hazard but an ingenious new energy-generating incineration programme could help contain pollution.

The UN-sponsored project in Kibera – a sprawling shantytown in Nairobi – recycles waste to fuel a giant cooker in this poor neighbourhood where many never have a hot meal or warm water to bath in. 'It's true that the idea is funny but we saw something that we did not expect,' said Debrah Wanjiku, a 23-year-old mother of 2 as she explained how the 'community cooker' works. Much like other poor areas around the Kenyan capital and in other African cities, Kibera has no waste-collecting services, leaving its estimated 1 million residents to wade ankle-deep in a thick sludge of rubbish and mud.

A recent study by the UN Environment Programme (UNEP) on a waste dump in another Nairobi slum, Korogocho – reportedly the largest in sub-Saharan Africa – documented the alarming impact the uncontained waste can have on human health and the environment. It notably recorded levels of toxic cadmium and mercury up to 10 times higher than emergency thresholds in developed countries.

South Africa

Scientists strive to stop pending clampdown on stem cell research

The Health Department is under fire again – this time over pending legislation that experts warn will kill the local stem cell therapy industry before it even has

the chance to get off the ground. At the Blo2Biz SA conference at the Cape Town International Convention Centre they warned that the country will lose the future potential to cure illnesses, including diabetes and heart disease, as a result. Controversy over stem cell therapy which is already used routinely here and globally with regard to bone marrow transplants is not unique to South Africa, but the publishing of new draft regulations this year has pushed the issue back into the spotlight. Speakers told the conference the regulations dictated that all stem cell establishments operate as non-profit entities, which would effectively shut down the biotech sector. In addition, the regulations suggest intellectual property be cancelled in terms of stem cells, and a further concern is that they set no time limit on the administrators with regard to researchers waiting for approval for their work. Professors Michael Pepper, managing director of the Ncare Institute of Cellular and Molecular Medicine, said an analysis last year had shown that more than 50 companies globally involved in cell-based therapies operated with private and government funding. If the current regulations were passed, it would inhibit implementation of many new cell therapies in South Africa, and curb all activities in the biotech sector.

Manuel backs hospital cuts

Finance Minister Trevor Manuel has expressed his support for the the Western Cape health authorities who will be moving beds away from Groote Schuur and Tygerberg hospitals to other hospitals closer to the people. Manuel was speaking before he addressed, for the first time, the Western Cape legislature on issues of delivery and oversight which he said provincial legislatures should become more closely involved with. Health authorities have proposed moving 60 hospital beds away from Groote Schuur, traditionally a significant teaching hospital, as well as a further 30 beds from Tygerberg, to secondary and primary health care facilities in an attempt to reduce an envisaged overspending of R200m. Manuel said the move to contain budgets was in trying to find a balance to manage contradictory objectives extending health services to more people and to maintain the efficiency of tertiary or training hospitals to develop a cadre of medically competent people.

Medical aid registrar's wings clipped

The Pretoria High Court has ruled that the registrar of medical schemes, Patrick Masobe, may not appeal against a decision by the Council for Medical Schemes, the regulatory body of which he is the executive

officer. Masobe has gained a reputation for challenging decisions by the council when it has approved schemes he has rejected, so the case has been keenly watched by medical aid schemes. Last year he refused to register 90 of 220 changes to proposed schemes. Genesis Medical Scheme applied to the Pretoria High Court early this year to force Masobe to register the scheme's 2006 rules and benefits. Judge Ferdi Preller, in a judgement delivered recently, said the Medical Schemes Act did not give Masobe the right to appeal against his own tribunal. He said: 'It would simply make no sense if he was entitled to override decisions of the council, whose members have been appointed by the Minister for their expertise in various fields.' The judge said the registrar did not have power that could be exercised independently from and contrary to the wishes of the council.

Hospital, doctor make mercy dash

Lawyers acting for a Durban hospital and paediatric surgeon made a mercy dash to the High Court recently, securing a court order allowing them to give a critically ill 2-year-old girl a blood transfusion in the face of staunch opposition from her Jehovah's Witness parents. In granting the order giving Parklands Hospital and surgeon Abdool Shaik authority to do whatever is necessary over the next 7 days to save the little girl's life, Durban High Court Judge Herbert Msimang said the court, as the upper guardian of all children, had to act in their best interests. The parents, Thabani and Shnangele Mabanga, who were supported in court by members of their church, had argued earlier that God was the ultimate guardian, and that according to their religious beliefs they would not give consent for a transfusion. Their daughter was admitted to hospital at the end of August suffering



It's the **shell** that makes **Ecotrin** safer.

Safety-Coated
Ecotrin[®]
81mg

The miracle of Aspirin made safer.

Each tablet contains Aspirin 81mg. Reg. No.: 29/2.7/0767
PharmAfrica (Pty) Ltd, 33 Hulbert Road, New Centre, Johannesburg 2001
Under licence from Goldshield Pharmaceuticals Ltd, U.K.

News bites

from pneumonia. She was diagnosed with a massive sub-hepatic abscess in her abdominal cavity and was referred to Shaik for surgery. In his affidavit before the judge, Shaik said she was critically ill in the early stages of cardiac arrest and in urgent need of abdominal surgery and a blood transfusion to enable the surgery to be performed.

Poor hospital control blamed for HIV infections

Violet¹ was forced to turn off her 5-month-old son's life support system just a week after being told he was HIV positive, but no one has been able to tell the HIV-negative mother how he contracted the virus. Now, after research showing that at least 42 babies and children are suspected to have been accidentally infected with HIV in State hospitals, doctors are pointing a finger at the continued largely inadequate infection control that they believe is behind these unexplained infections and the 4 deaths that came after them. In addition, at least 6 families from Cape Town (where 70% of the unexplained HIV cases have been found), Gauteng and Port Elizabeth are taking or considering legal action against the state for what they describe as the total violation of the duty of care government hospitals owed towards their children. At the same time, ground-breaking research conducted by a group of scientists and doctors and subsequent investigations by the Human Sciences Research Council and Treatment Action Campaign have painted a disturbing picture of HIV-infected expressed breastmilk being given to premature babies, the re-use of dirty syringes and poor sterilisation of medical equipment in State hospitals. ('Pseudonym.)

Quanta company linked to drugs claimed to cure HIV

Alternative medication produced by a company whose directors include

Christine Quanta, the lawyer tipped to become the next chairperson of the SABC board, is being sold to the public as a cure for HIV/AIDS despite the product still undergoing scientific tests. Quanta, who is not involved in the day-to-day affairs of the company, said recently that such claims were not company policy and until the tests were completed the product should be described as a nutritional supplement. Meanwhile the CSIR warned it had not tested the plant product in terms of human use and potential toxicity. But Quanta's co-director, Uitenhage healer Freddie Isaacs, recently claimed his product could work miracles – including curing HIV/AIDS.

Whistle gets blown on Frere Hospital's Ntshona

A disciplinary committee has found Frere Hospital whistleblower Dr Nokuzola Ntshona guilty of speaking to the media. She was found guilty on 17 September on 3 of 4 charges of speaking out against the government's reaction to a newspaper probe of Frere Hospital's maternity section. Three months ago the newspaper reported on high numbers of babies said to be dying from avoidable causes at the institution. Health Minister Manto Tshabalala-Msimang and President Thabo Mbeki dismissed the reports. Ntshona was suspended in August after she wrote 2 letters, one of which was addressed to the director-general in the Presidency, Frank Chikane, highlighting problems at the hospital.

Health movement aims to hold the state accountable

The government is neglecting the health care of the poor, a senior Cosatu official has charged. Speaking at the launch of the People's Right to Health campaign in late September, Cosatu's Western Cape secretary, Tony Ehrenreich, said: 'There is clearly a huge problem with health care delivery. The government is neglecting

health care while it is putting funds into the World Cup. So there is no prioritisation of health.' About 300 representatives from various organisations marched through Khayelitsha near Cape Town to raise awareness about the right to adequate health care and services. It marked the launch of the South African chapter of the People's Health Movement, a global network of civil society groups, activists and trade unions concerned about the state of health care.

ARVs destroyed in clinic fire in Cape

Millions of rands worth of antiretrovirals and other chronic medication were lost in a fire, which broke out at a clinic in Tafelsig in the Western Cape in early September. The community of Tafelsig believes the fire was a result of arson at the clinic, which treated about 300 patients daily. Community leader Benjamin Peterson said residents suspected those who had started the fire had wanted to steal chemicals to manufacture the drug Tik.

Chris Hani Baragwanath R400m revamp to be completed next year

Chris Hani Baragwanath Hospital is undergoing a R400m facelift, the health department announced. Units under construction at the hospital will deal with accidents, emergency and trauma, radiology and pharmacy. Gavin Cooper of Asch-Gosiame Construction Project Management, that is overseeing the construction, said that the company had already used 40% (R160m) of the money allocated to revamp the hospital. Due to service delays, the project would be finished in May.

CHRIS BATEMAN

single suture

Kidneys through keyholes

Surgeons in Texas are using a technique of laparoscopic surgery that allows them to remove a kidney through a 2.5 centimetre incision in the belly button – they put it into a ziploc bag and pull. So far the surgeon, Jeffrey Cadeddu, has performed the surgery on 3 people, 2 with kidney infections and 1 with cancer of the kidney. The procedure takes 3 hours under general anaesthetic, but he is hoping to reduce this with practice. If the technique becomes more widely used it could make it less stressful to donate a kidney – as long as the organ is not damaged during removal. In previous surgery, Cadeddu has pulled the gall bladder, the appendix, the spleen and the uterus through the umbilicus.

New Scientist 2007; 1 September: 6.