

International

Working long hours? Watch your heart!

People who regularly work long hours may be significantly increasing their risk of developing heart disease, the world's biggest killer, British scientists reported recently.

Researchers said a long-term study showed that working more than 11 hours a day increased the risk of heart disease by 67%, compared with working a standard 7 - 8 hours a day. They said the findings suggest that information on working hours – used alongside other factors such as blood pressure, diabetes and smoking habits – could help doctors work out a patient's risk of heart disease. However, they also said it was not yet clear whether long working hours themselves contribute to heart disease risk, or whether they act as a 'marker' of other factors that can harm heart health, such as unhealthy eating habits, lack of exercise or depression. 'This study might make us think twice about the old adage "hard work won't kill you", said Stephen Holgate, chair of the population and systems medicine board at Britain's Medical Research Council, which part-funded the study. The study, published in the *Annals of Internal Medicine*, followed up nearly 7 100 British workers for 11 years. 'Working long days is associated with a remarkable increase in risk of heart disease,' said Mika Kivimaki of Britain's University College London, who led the research. He said it may be a 'wake-up call for people who overwork themselves.' 'Considering that including a measurement of working hours in a [doctor's] interview is so simple and useful, our research presents a strong case that it should become standard practice,' he said.

Cardiovascular diseases such as heart attacks and strokes are the world's largest killers, claiming around 17.1 million lives a year, according to the World Health Organization (WHO). Billions of dollars are spent every year on medical devices and drugs to treat them. The findings of this study support previous research showing a link between working hours and heart disease. However, the scientists said hard workers should not necessarily be alarmed about their heart health. 'Current evidence on [heart disease] prevention emphasises the importance of focusing on the total risk, rather than single risk factors,' Kivimaki said.

'People who work long hours should be particularly careful in following healthy diets, exercising sufficiently and keeping their blood pressure, cholesterol levels, and blood [sugar] within healthy limits.' The research used data from a study called Whitehall II, which has followed the health and wellbeing of more than 10 000 civil service workers in Britain since 1985. For this study, men and women who worked full time and

had no heart disease were selected, giving 7 095 participants. The researchers collected data on heart risk factors such as age, blood pressure, cholesterol, smoking and diabetes, and also asked participants how many hours they worked – including work during the day and work brought home – on an average weekday. During the 11-year study, 192 participants had heart attacks. Those who worked 11 hours or more a day were 67% more likely to have a heart attack than those who worked fewer hours.

The beam of energy that could save you from blindness

A hand-held device that fires sound waves into the eye could help prevent age-related macular degeneration (AMD), a leading cause of blindness. The gadget uses the waves to help drugs get into the eye without the need for painful injections. Early-stage animal studies show the treatment is effective, does not need a local anaesthetic as injections do, and reduces the risk of infections. Trials on people are due to start in the next few months, but because the device uses the same drugs as the injections it could be fast-tracked into widespread use within 2 - 3 years. AMD affects around 600 000 people in the UK. It usually develops after the age of 50 and is caused by the growth of new blood vessels over the macula – a small oval-shaped area at the back of the eye that helps us pick out visual details clearly. The condition makes it difficult to recognise faces, read or watch TV, as the central vision is blurred. As well as the ageing process, other factors that increase the risk of developing it are smoking, years of frequent exposure to sunlight and regularly drinking too much alcohol. There are two types of the condition – wet and dry.

Super breeds of germs defeating science

For decades, scientists developed new antibiotics to beat bacteria that mutated. But no longer. Welcome to a world where the drugs don't work. Methicillin-resistant *Staphylococcus aureus*, a bacterium that causes skin infections and is resistant to antibiotics, kills about 19 000 people a year in the USA and a similar number in Europe. Other drug-resistant superbugs are spreading. Cases of often-fatal 'extensively drug resistant' tuberculosis have mushroomed over the past few years. A new wave of 'super superbugs' with a mutation called NDM1, which first emerged in India, has now appeared all over the world. Scientists have no tools to fight them. 'You can't win against evolution,' said David Livermore, a scientist who tracks the emergence of superbugs at Britain's Health Protection Agency. 'All you can seek to do is to stay a jump ahead.' This is not happening now for a number of reasons. For a start, antibiotics are everywhere, giving bacteria countless opportunities to evolve escape routes. The drugs can be picked up, without

prescription, for pennies in countries like Thailand, India and parts of Latin America. Even though their use is controlled in the West, the system encourages doctors to shoot the bugs first and ask questions later. Most worryingly, the world's top drug companies, faced with decreasing returns and ever more expensive and difficult science, have not only slowed efforts to develop new antibiotics, but have been quitting the field in droves. Currently, only two large companies – GlaxoSmithKline and AstraZeneca – still have strong and active antibiotic research and development programmes, says the Infectious Diseases Society of America. In 1990, there were nearly 20.

Africa

African medicine makers pledge to work together

A hopeful new era for medicines in South Africa dawned with the recent launch of the Southern African Generic Medicines Association (SAGMA). Generic drugs – medicines produced to pharmacologically identical formulae as the original drugs, but after the patent period has expired – are widely seen to be one of the pillars of the provision of affordable, first-class health care to the broadest possible number of patients. South Africa imports up to 70% of its generics from India and China. Driven by the pandemics of HIV/AIDS, TB and malaria, there has for some years been discussion about the benefits of local production of drugs. The launch of SAGMA is the co-ordinated response. SAGMA's self-defined mandate is to wrestle with and find solutions for the challenges that inhibit local manufacture of generics. Among these are:

- Unlevel playing fields as a result of high taxes on ingredients coming into the country for use in local manufacture, compared with low or no taxes on the import of certain complete drugs.
- A shortage of skills and the capital necessary to upgrade existing manufacturing facilities to meet internationally defined manufacturing standards.
- The relatively small size of the local market, which means local manufacturers carry the cost burden of being unable to leverage economies of scale.

The challenges are considerable. Still, says Skhumbuzo Ngozwana, chair of SAGMA, they're not overwhelming. 'The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself.' Therefore, he quipped at the launch, finishing the quote from George Bernard Shaw, 'all progress depends on the unreasonable man'. The vision for SAGMA is 'to create a vibrant and self-sustaining generic pharmaceutical

manufacturing industry in the Southern African Development Community (SADC). Is this unreasonable? No, said speaker after speaker: it's difficult, but it's no pipe dream. On the contrary, it's not only desirable but necessary, said keynote speaker Joy Phumaphi, former Minister of Health of Botswana, and now representing the African Leaders Malaria Alliance. A key message from the conference was that, alongside food security, African leaders should work towards establishing medicines security for Africa's people – access to affordable, reliable, safe, and effective medicines.

South Africa

DA welcomes ruling against Gauteng health MEC

The DA recently welcomed the ruling that it was wrong for Gauteng health MEC Ntombi Mekgwe to have worn an ANC T-shirt at an official visit to the Chris Hani Baragwanath Hospital. The ruling came after DA provincial caucus leader Jack Bloom laid the complaint with the Gauteng Legislature's Integrity Commissioner Jules Browde after the visit on 6 March. In the report on the issue Browde said: 'When an MEC is on his/her official duties he/she is the representative of all the members of the legislature and consequently all the parties they represent. It is, therefore, in my opinion, improper for an MEC in those circumstances to indicate publicly that he/she represents a particular party in carrying out his/her duties.' Mekgwe wore her ANC T-shirt on a visit to inspect two CAT scanners recently installed at the hospital in Soweto. The scanners were ordered last year from Japan as part of the R157 million project to equip Bara. They were delivered to the hospital in March. Browde's report said Mekgwe had said that she was aware of the previous ruling on this issue and had packed a change of clothes to replace the ANC T-shirt which she used to attend voter registration in Carletonville. She discovered after she left Carletonville that she had inadvertently failed to put the clothing in her car, so had no option but to wear the T-shirt. 'In the circumstances, and particularly because the MEC was and is aware of her duty in terms of my ruling, that she agrees with and accepts it, I recommend that no further steps need to be taken,' Browde said. Jack Bloom said it was important that the principle of separating party and state was reaffirmed in the ruling.

'Doctors' using legitimate names

A criminal investigation is under way in the Western Cape into bogus doctors operating

as registered professionals, in some cases using the names of legitimate doctors. The matter of bogus doctors using the names of registered ones cropped up during a probe into the death of 8-year-old Britney Rashied of Grassy Park. About 2 years ago she was taken to the Grassy Park day hospital suffering from appendicitis. A doctor there allegedly gave her paracetamol and sent her home. The child died on 4 January 2009, when her appendix burst. It since emerged that the man who had seen to her at the day hospital had apparently been using another registered doctor's name and might not have been a doctor. He had been working as a locum, meaning a doctor employed temporarily, and had been supplied by an agency. Provincial health department spokeswoman Faiza Steyn said a pathologist who performed an autopsy on Britney had concluded she died of natural causes and therefore no inquest docket had been opened. But Steyn said the doctor who treated Britney and the agency that supplied him were being probed. She said the Special Investigating Unit and the police were looking into Britney's case and other related incidents on behalf of the health department. Steyn said the Hawks, on a national level, were also involved in investigations. 'A private team of forensic investigators was contracted to investigate the proprietors of the locum agency which sent the bogus doctor to the community health centre where [Britney] was seen. 'To date, our department has not been informed of their findings,' Steyn said. She said to root out bogus doctors, the department had standard operating procedures that doctors supplied by agencies had to produce proof that they were registered with the Health Professions Council of South Africa (HPCSA) when reporting for duty. HPCSA spokeswoman Bertha Peters-Scheepers said the HPCSA was probing a doctor whose name was linked to Britney's case.

State is 'turning tide' on TB

A disease that kills tens of thousands of South Africans every year is being smashed with the help of expensive gadgets, home visits by health officials and specially designed hospital wards. The government's war on TB was recently spelt out by the Minister of Health, Aaron Motsoaledi, in an address to Harvard University experts in Boston in the USA. Instead of merely treating patients who have the drug-resistant illness, community health care workers now travel to the homes of all known TB sufferers. The patient's relatives are all tested to find out whether they are infected as well – and so far more

than 60 000 people have been checked since the programme began nearly 3 months ago. The government has also received the world's largest order of TB diagnostic machines. Thanks to the roll-out of 24 GeneXpert machines, South African authorities can now diagnose patients in 2 hours instead of the minimum 6 weeks it usually takes. In the past, thousands of patients died of TB while waiting to find out if they were infected. Nine prototype TB hospital wards – one for each province – have been designed by the Council for Scientific and Industrial Research (CSIR) with help from Harvard. A 40-bed wing of the new type of ward was opened in Klerksdorp in North West last month, and the Catherine Booth Hospital in Empangeni also opened its facility. Designers have concentrated on providing natural ventilation, so the TB bacillus is dispersed – rather than infecting or re-infecting other patients.

Durban hospital improves service delivery

KwaZulu-Natal Health MEC Sibongiseni Dhlomo says he is impressed with the progress of the turn-around strategy at Prince Mshiyeni Memorial Hospital at Umlazi south of Durban. Dhlomo recently visited the hospital. The hospital is one of the busiest in Durban and it delivers more than 1 000 babies per month. The turn-around strategy was introduced about 2 years ago after various problems, including high infant mortality. Dhlomo says part of the improvement is the elimination of long queues at the administration and pharmacy sections. 'To highlight those areas that have since impressed me extremely is the new system that has been introduced in the pharmacy department, in terms of their managing patients it has changed with adding staff. By just changing the system and changing the attitude – we now see that patients actually get treatment on the same day. The waiting time at the pharmacy has now been reduced to 38 minutes. We needed a re-arrangement of the system,' says Dhlomo. Recently the hospital was in the news for the wrong reasons, among them is that a decomposed body was discovered in one of the halls last year, mothers apparently delivered babies while waiting to be attended to and nurses were said to have told visitors to change linen. The Department of Health will also start campaigns to encourage communities to use clinics to reduce the burden on the province's hospitals.

CHRIS BATEMAN