

# News bites

## International

### WHO surgical safety checklist out

With major surgery now occurring at a rate of 234 million procedures per year – 1 for every 25 people – and studies indicating that a significant percentage result in preventable complications and deaths, the WHO last month launched a new safety checklist for surgical teams to use in operating theatres as part of a major drive to make surgery safer around the world.

‘Preventable surgical injuries and deaths are a growing concern,’ said Dr Margaret Chan, Director-General of the WHO. ‘Using the checklist is the best way to reduce surgical errors and improve patient safety.’

### Brain similarities in gay men and straight women

Gay men and straight women share some characteristics in the area of the brain responsible for emotion, mood and anxiety, researchers said last month in a study highlighting the potential biological underpinning of sexuality. Brain scans also showed the same symmetry among lesbians and straight men, the researchers wrote in the *Proceedings of the National Academy of Sciences*. ‘The observations cannot be easily attributed to perception or behaviour,’ the researchers from Sweden’s Karolinska Institute wrote. ‘Whether they may relate to processes laid down during the fetal or postnatal development is an open question.’

A number of studies have looked at the roles that genetic, biological and environmental factors play in sexual orientation but little evidence exists that any play an all-important role. Many scientists believe both nature and nurture play a part. Brain scans of 90 volunteers showed that the brains of heterosexual men and homosexual women were slightly asymmetric, with the right hemisphere slightly larger than the left, Ivanka Savic and Pers Lindstrom wrote. The brains of gay men and heterosexual women were not.

Then they measured blood flow to the amygdala – the area key for the ‘fight-or-flight’ response – and found it was wired in a similar fashion in gay men and heterosexual women as well as in lesbians and heterosexual men.

Meanwhile, the world’s largest study of twins claims to have finally settled the matter: homosexual behaviour is neither a result of nature, nor a result of nurture: it’s a result of a combination of factors. And there’s nothing your mother could do to change that. Writing in the scientific journal *Archives of Sexual Behaviour*, researchers from Queen Mary’s School of Biological and Chemical Sciences, and Karolinska Institute in Stockholm, report that both genetics and environmental factors (which are specific to an individual, and may include biological processes such as different hormone exposure in the womb) are important determinants of homosexual behaviour. Dr Qazi Rahman, study co-author and a leading scientist on human sexual orientation, explains: ‘This study puts cold water on any concerns that we are looking for a single “gay gene” or a single environmental variable which could be used to “select out” homosexuality – the factors which influence sexual orientation are complex. And we are not simply talking about homosexuality here – heterosexual behaviour is also influenced by a mixture of genetic and environmental factors.’

### Man survives 42 kg growth

Surgeons at Bangladesh’s biggest hospital last month removed a 42 kg tumour from a 40-year-old man’s abdomen. Dhaka Medical College hospital surgeon Omar Ali said the tumour, which was 81 cm long and 61 cm wide, was bigger than a football, and was the largest removed by medical staff in the country.

He said the man, a riksha puller, noticed his stomach growing larger, but believed the increase in size was caused by water retention. Two years later he went to hospital and surgery was performed. Tests are being done to check whether it is cancerous or not.

### Smoking bans save lives – it’s official

More than 400 000 people in England have given up smoking as a result of the ban on lighting up in public places introduced in July 2007, according to a recent study. Researchers say 40 000 deaths will be prevented over the next decade as a result of the ban. The Smoking Toolkit Study involved interviews with more than 32 000 smokers and ex-smokers over the 9 months before the ban and the 9 months afterwards. Smoking was made an offence in all enclosed public spaces in

England, including pubs and restaurants, on 1 July 2007, forcing smokers to take their cigarettes outside. In the 9 months preceding the ban, there was a 1.6% fall in the prevalence of smoking in England, but in the 9 months after its implementation, the fall was 5.5%, which researchers said equates to 400 000 people. Despite some opposition to the tough legislation, compliance has been almost total.

### One-night stands – women more negative

Almost half of women have negative feelings about one-night stands, a new study has found. The sexual and feminist revolutions were supposed to free women to enjoy casual sex just as men always had. Yet according to Professor Anne Campbell of Durham University in the UK, the negative feelings reported by women after one-night stands suggest that they are not well adapted to fleeting sexual encounters. Her findings are published in *Human Nature*.

Men are more likely to reproduce and therefore to benefit from numerous short-term partners. For women, however, quality seems to be more important than quantity. Also for women, finding partners of high genetic quality is a stronger motivator than sheer number, and it is commonly believed that women are more willing to have casual sex when there is a chance of forming a long-term relationship. Campbell looked at whether women have adapted to casual sex by examining their feelings after a one-night stand. If women have adapted, even though they may take part in casual sex less often than men because of their stricter criteria when selecting partners, they should rate the experience positively.

To test the theory, a total of 1 743 men and women who had experienced a one-night stand were asked to rate both their positive and negative feelings the following morning, in an Internet survey. Overall, women’s feelings were more negative than those of the men. Eighty per cent of men had overall positive feelings about the experience compared with 54 per cent of women. Men were more likely than women to secretly want their friends to hear about it and to feel successful because the partner was desirable to others. Men also reported greater sexual satisfaction and contentment after the event, as well as a greater sense of well-being and confidence about themselves.

## Africa

The AIDS pandemic has eroded African societies in multiple ways, from threatening government institutions to decreasing agricultural production, according to a recent report, adding that more challenges were expected in coming years.

The report by the African Development Forum, presented at a conference on HIV/AIDS at the United Nations headquarters in New York, provided a gloomy analysis of the situation in sub-Saharan Africa, which has been hardest hit by AIDS worldwide.

'Our overall conclusion is that the pandemic poses a great threat to governance in Africa,' said the forum. In many parts of the continent, the impact of AIDS already has significant consequences for all forms of social, economic and political activity and thus for governance in the years to come.' The disease has killed more than 14 million Africans since 2000, when the continent established the African Development Forum to raise awareness of the impacts of HIV/AIDS.

Millions had died before that year, but the forum was considered a watershed in the fight against the pandemic. An estimated 17 million Africans have been infected with HIV since 2000 and the number of AIDS-related orphans increased from 8.5 million in 2000 to 14 million in 2006. The UN estimated a total of 32.2 million people living with HIV around the world in 2007. The forum said AIDS deaths in Africa had created a brain drain, reducing the ranks of educated and professional people, and preventing the education of younger cadres.

## South Africa

### HIV/mental illness link poorly recognised

The links between HIV and mental illness are so multi-layered, and little understood, that doctors often struggle to determine which came first. Mental health care professionals sometimes battle to understand the causes of a patient's

psychosis or dementia, without knowing that the patient has a late-stage HIV infection, while their colleagues in the HIV/AIDS sector have little or no training on how to deal with patients with mental illnesses.

'There are no specific mental health services for people living with HIV,' said Professor Melvyn Freeman, co-author of a study by the Human Sciences Research Council (HSRC), which found that 44% of a sample of 900 HIV-positive individuals were suffering from a mental disorder.

Mental illnesses can be risk factors for HIV. Some mental disorders lead to greater promiscuity; others can make sufferers more vulnerable to sexual abuse and exploitation. Even depression can increase an individual's HIV risk. 'If you don't feel there's much point in your own survival, you don't see the point in taking precautions to protect yourself,' noted Freeman, who has advised the UN World Health Organization on how better to integrate mental health into its HIV/AIDS initiatives. Conversely, people with HIV are more likely to develop mental illness than the general population.

'One of our biggest challenges in psychiatry is this epidemic,' said Dr Greg Johnsson, a psychiatrist at Chris Hani Baragwanath Hospital where his team of a nurse, occupational therapist and a psychologist run a special clinic in the psychiatric section for HIV-positive patients who also suffer from mental illness. 'The goal is to treat the HIV and also treat the mental illness, because at the ARV clinics they're so overwhelmed that they don't pick up on the depressions, dementia and psychosis,' Johnsson added.

### Unsafe water a killer in Third World

Unsafe water leads to 1 in 10 diseases and 6% of deaths worldwide, according to estimates in a report published by the WHO last month. While the UN agency estimates that problems relating to water cause 9.1% of diseases recorded yearly, the report highlights that this affects the world's

poorest countries disproportionately. 'In the 35 most affected countries, over 15% of diseases could easily be prevented by improved water, sanitation and hygiene,' reported author Annette Pruss-Ustun. In developed countries, water causes less than 1% of deaths. In developing countries, the toll leaps to an average 8% - with the extreme case being Angola, at 24%.

Illnesses like malaria, dengue fever, or diarrhoea can be transmitted through the water supply. The problem particularly threatens children. An unsafe water supply is to blame for 22% of illnesses in those under 14 years of age, and one-quarter of young deaths.

### New vaccines for baby death district

Two new vaccines will be launched in Ukhahlamba in the Eastern Cape after a recent outbreak of diarrhoea that contributed to the deaths of 78 babies in the area. Health Minister Manto Tshabalala-Msimang said last month that there were problems in obtaining clean water and sanitation in Ukhahlamba and attributed the deaths to severe malnutrition, kwashiorkor, pneumonia, poor sanitation and marasmus. A vaccine to prevent viral pneumonia in children, and another to prevent viral diarrhoea, would be launched, Tshabalala-Msimang told a donor consultation meeting near Johannesburg. These additions to the department's immunisation programme would be launched 'as soon as the vaccines could be sourced'.

Tshabalala-Msimang said a recent investigation into the high number of baby deaths in the area pointed to several problems. The area was very poor and hence food was in short supply and there were a number of health system issues that needed strengthening. She said the WHO had been asked to step in and help. 'I wish to request other development partners to assist as well,' she said, emphasising that this should be co-ordinated under the leadership of the health department.

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