

IHME accuses WHO of publishing 'wrong' malaria mortality rates

The UK medical publication *The Lancet* has published a scathing attack on World Health Organization (WHO) malaria mortality figures ['New estimates of malaria deaths: concern and opportunity'] courtesy of outspoken figure Christopher Murray, head of the Institute for Health Metrics and Evaluation (IHME) based in Seattle, Washington, USA.

The report offered a smorgasbord of alleged errors in which WHO is accused of over inflating its successes in its fight against malaria, as well as levelling criticism at their new independent advisory body, the Malaria Policy Advisory Committee (MPAC), which, says Murray, with only 15 members would need to recruit a greater number of experts in order to be effective.

The IHME team raised serious concerns over the accuracy and reliability of the WHO data citing numbers collated between 2008 and 2010. In Murray's own words the estimates supplied by WHO were 'disturbing' in light of the fact that there had been 1.24 million deaths (95% uncertainty interval 0.93–1.69 million) from malaria worldwide in 2010, which is around twice the figure of 655 000 estimated by WHO for the same year. However, the key objection directed toward WHO, was that the proportion of malaria deaths in adults and children over 5 years old had been grossly underrepresented.

On the subject of who should take the lead on future initiatives, Murray suggested that the Global Fund, which was bolstered by an investment from the Bill and Melinda Gates Foundation,

should play a pivotal role, an opportunity he said that needed to be grasped with urgency and optimism.

In response to the *Lancet* salvo, WHO issued a strongly worded rebuttal urging the malaria global health community to exercise caution when interpreting the IHME malaria burden estimates. A WHO spokesperson said, 'the data published in the study have very high uncertainty intervals,' adding that news media coverage had led to misleading conclusions. WHO also expressed concern that Murray's findings would overturn decades of assumptions about malaria deaths. To further assuage doubts over the strength of the WHO data, it was disclosed that IMHE data-gathering methodology had been significantly unreliable, pointing out the use of verbal autopsy to ascertain causes of death in areas where there was in fact little or no malaria. In its statement, WHO said that at five of the six IMHE study sites the quality of microscopic diagnosis used to validate cause of deaths, had previously been challenged in other peer-reviewed articles.

The organisation did concede that there had been some overlap between IHME and WHO figures, and agreed that improvements were needed in terms of data gathering techniques in general, concluding that WHO and partners would need to increase efforts to support endemic countries in its undertaking to stay on course to fight malaria with existing tools and interventions.

risk and grants.

'My priorities at the Global Fund are to achieve maximum efficiency, accountability and concrete results that save lives,' Mr Jaramillo said. 'In essence, we will start with a reorganization that emphasises simplicity, discipline, and rigor, with grant-management as the core activity of the institution.'

The Fund's Executive Director Dr Michel Kazatchkine resigned on January 24.

Global Fund appoints Gabriel Jaramillo as General Manager

The Global Fund to Fight AIDS, Tuberculosis and Malaria has announced that it has appointed Columbian Gabriel Jaramillo as General Manager, a newly created position intended to oversee a process of transformation as it accelerates the fight against the three pandemics by focusing on its management of

New cancer treatment facilities in Nigeria

Nigeria is to appoint 10 teaching hospitals as dedicated centres for cancer treatment in response to the growing number of cases reported nationwide. The facilities which are to be supported by the International Atomic Energy Agency (IAEA) will function as facilities for the early detection, diagnosis, and treatment of cancer.

Nigerian Minister of Health, Prof. Onyebuchi Chukwu, said that the government's partnership with the IAEA was part of a commitment to improve cancer awareness and treatment. In addition to which, three screening centres in Abakaliki in Ebonyi State, Port Harcourt in Rivers State, and Gusau in Zamfara State are already fully operational.

Alleged causes for the current spike in cancer cases throughout Nigeria include tobacco use, infections, lack of physical activity, poor diet, obesity, and environmental pollutants.

Durban to host 2013 MIM

The UK's Medical Research Council will work closely with the Durban KwaZulu-Natal Convention Bureau and the Durban International Convention Centre as they prepare to host the 6th Multilateral Initiative on Malaria Pan African Conference (MIM).

'MIM is the world's largest gathering of the malaria community, and occurs every 3 to 4 years,' said James Seymour, chief executive of the Durban KwaZulu-Natal Convention Bureau. It is expected that the conference and exhibition will have an economic impact well in excess of R18-million on the Durban and KwaZulu-Natal economy.

MDG target on drinking water met

The world has met the Millennium Development Goal (MDG) target of halving the proportion of people without access to safe drinking water, well ahead of the MDG 2015 deadline.

A report issued by UNICEF and the World Health Organization (WHO), 'Progress on Drinking Water and Sanitation, 2012 Update' reveals that, at the end of 2010, 89% of the world's population used improved drinking water sources, meeting the target.

Crackdown on fake drugs to cut malaria mortality rates in Benin, Nigeria



©Alex Duval Smith for UNICEF

Following an announcement by local government in Benin in 2011, to provide free treatment for malaria, action has now been taken to reduce the impact of counterfeit medications being sold on the streets of the state via a newly appointed health work taskforce.

The sale of anti-malaria medication is widespread in Benin and it is believed that this has contributed significantly to the state's disproportionately high death toll from the disease. State officials report that traders are not only unaware of the provenance and efficacy of the medication that they are selling but are also advising sufferers on how to self medicate with directions

such as 'take six tablets a day for a week, pause for a week, take paracetamol then start again.'

Boxes of drugs, mainly Chloroquine Phosphate, are usually unlabelled and sold in batches of 100 tablets per box and contain no accompanying literature on side-effects or instruction to seek medical advice if needed.

Police raids on street sellers are reportedly proving effective although official figures are yet to be released. The government says that it will stand by its commitment to reduce deaths from malaria and heralds the provision of free medication in public clinics and hospitals as a positive first step.

South Africa partners with Swiss pharma company in bid for cheaper HIV drugs

South African government officials have launched a joint venture with pharmaceutical company Lonza, based in Switzerland, to produce HIV medication at competitively low rates. The project which has been dubbed Ketlapheta will focus on the production and manufacture of APIs (active pharmaceutical ingredients) for use in anti-retroviral medicines.

The South African Minister for Science and Technology, Naledi Pandor,

said, 'Ketlapheta will reduce the country's dependence on imported drugs and will provide security of supply of priority drugs, stable pricing, with less sensitivity to exchange fluctuations.'

Ketlapheta, which means 'I will live or survive' in Sesotho, is expected to attract a financial investment of 1.6 billion rands (US\$210 million). Of this 1.1 billion rands (US\$140 million) will come directly from the South African government, with the rest being invested via Lonza. Of 22.9 million HIV-positive people in sub-Saharan Africa, 5.6 million are South African, according to a recent UNAIDS report.

Uganda: mosquito nets turned into wedding dresses and fishing nets

Uganda's Ministry of health has reported that their plans to eradicate malaria by distributing free bednets to all has backfired, as widespread use of nets for fishing and wedding gowns, grows in popularity.

Ken Mugisha a government official said that government would not tolerate the waste and that before more nets are supplied an education review would need to be carried out.

Uganda has one of the highest rates of malaria infection with most patients living in remote villages without access to hospital treatment.

South African Health Department admits to staffing crisis

The Gauteng Health Department has acknowledged that staff shortages may pose a significant risk to patient health. Using the Chris Hani Baragwanath Academic Hospital as an example, the provincial Health Minister said that insufficient trained theatre nurses were placing a considerable strain on the level of services delivered to the most vulnerable.

Gauteng Health Minister, Ntombi Mekingwe, has described the situation as critical and said that urgent action was needed in order to rectify the situation.

Government officials have responded with claims that the issue is being addressed, with talks already underway.

Uganda to narrow international pay gap for scientists

Uganda's president, Yoweri Museveni, has promised to bring scientists' salaries in line with their international counterparts. Museveni stated that science and technology were essential to raise Africa from poverty and urged Ugandan scientists not to be enticed by posts abroad in places such as Europe and North America. 'Scientists in Uganda should be remunerated to near international standards. And this will be done,' he said.

Treatment of South Sudan's mentally ill raises concerns

Amnesty International has claimed that mental health awareness is urgently needed in South Sudan if there is to be any improvement in the treatment of those afflicted. Cultural beliefs such as those in witchcraft mean that those most desperately in need of care are neglected. Families are said to ostracise members who exhibit mental health issues for fear of reprisal within their communities.

Most of the country's mentally ill are homeless and are regarded as a danger to society, with some having taken refuge in woodland.

More significantly, sufferers find themselves falling foul of the local authorities who place them in crowded prison cells for the protection of society. Police officers currently receive no formal training on how to handle the mentally ill with the most severe conditions often resulting in the harshest treatment. Martin Goleg, a prisoners' rights advocate based in South Sudan said that

'the mentally ill inmates in Juba central prison are treated like wild animals. Their cells are very dirty and they are poorly fed.'

Goleg has received support from the Deputy Director of Juba central prison, Felix Kayidiri who agreed that an improvement in conditions was urgently needed. However, Kayidiri is not backed by his own officers who feel that as the main priority is controlling the mentally ill rather than providing for them.

Drug abuse and stress related to unemployment are cited as the major causes for mental ill health in South Sudan, and a shortage of psychotropic drugs nationwide as well as inadequate training in psychiatric medicine are said to exacerbate the problem.

At present there are no plans to address these issues, although Amnesty will continue in its efforts to raise awareness within South Sudan and engineer support from the global community.

Climate change contest winners to help farmers with clever new phone apps



Three winning entries to the 'Apps4Africa: Climate Challenge' held in Nairobi, Kenya will now be put to the test as designs are adapted for use in the real world. The competition which carried a US\$15 000 first prize and focused on challenges posed by climate change was won overall by Rainy Bunch who designed a national supply chain management system that will monitor the purchase, storage, distribution, and consumption of grain across Tanzania.

Second place went to the Mkulima Calculator team from Kenya, who won US\$7000 for their innovative application designed to help farmers know when to plant crops and how to select the most suitable crops on the basis of location by incorporating climate and weather data. Agro Universe, a mobile and web-based application from Uganda, took the third prize of US\$3000 for their project which, aimed to educate farmers on chemical use.

The use of mobile phone apps is on the increase, which, says Jonathan Gosier, co-founder of metaLayer Inc based in the USA, is due in part to Africa's growing middle class. 'Local apps developers are building solutions for the local mass market, who in turn are purchasing these apps and services. This is creating an ecosystem. This would be significant for Africa, as it creates jobs and local content,' he said.

William Nguru who took part of the completion added that while the news was indeed exciting, the projects were still very much at the development stage and were unlikely to reach farmers soon unless much needed funding was provided.

Nigeria: former Military Head receives NMA accolade

The Nigeria Medical Association (NMA) has paid tribute to the former military Head of State, General Abdulsalami Abubakar for his services to healthcare delivery in the state of Niger. Abubakar was honoured during the NMA's General Meeting held in February and highlighted in particular his financial donations, which have to date been spent on sponsoring physicians as well as renovating hospitals.

International conference on health technology slated for London

The Institute of Engineering and Technology in London will this year host the 7th Appropriate Health Technologies for Developing Countries from September 18–19th.

The meeting will bring together healthcare technologists, clinicians, researchers, and public bodies from around the world to explore effective engineering solutions to meet the healthcare problems of developing countries.

The call for papers is still open. More information at: <http://conferences.theiet.org/aht/index.cfm>

New specimen collection centre launches in Kenya

A leading global medical technology company, and the US President's Emergency Plan for AIDS Relief (PEPFAR), through the US Department of Health and Human Services' Centres for Disease Control and Prevention (CDC), has announced the launch of the Centre for Excellence in Phlebotomy and Specimen Collection at the Kenya Medical Training College (KMTC) the first facility of its kind in sub-Saharan Africa. The KMTC programme will provide both pre-service and in-service training for healthcare workers, including laboratory technologists, nurses and clinical officers, who will be trained in the safe collection of blood and other specimens required for the diagnosis and monitoring of diseases.

Sleeping bug: scientists identify drug resistance mechanism



Researchers in the UK have identified several ways in which the parasite responsible for sleeping sickness is able to resist the drugs used to treat the condition, which has significant implications for the development of more effective non-resistant versions.

Sleeping sickness (human African trypanosomiasis) is caused by *Trypanosoma brucei* parasites and is transmitted by the tsetse fly in sub-Saharan Africa.

Although the World Health Organization (WHO) reports a large drop in

the number of reported cases since figures were first released in 1998, it now appears that the treatments currently available are becoming increasingly ineffective because of parasitic resistance.

David Horn, a researcher at the London School of Hygiene and Tropical Medicine said, 'The older drugs were introduced over 60 years ago. They were known to kill the parasites but nothing was known about their molecular mechanism,' adding that this knowledge gap had now been filled.

Horn's team used genetic screening to pinpoint exactly how the drugs enter and kill the parasite, on a cellular level, a move which may help tackle growing resistance and lead to the design of better drugs. The team reports that knowing what these pumps look like at the molecular level has assisted them in identifying those which are indispensable for the parasite's survival,

It is believed that this new research will enable his team to develop new, durable drugs that get into the parasite cell via the indispensable pumps greatly enhancing their efficacy.

Research gives better understanding of role of genes in TB immunity

Research carried out by the University of Sussex and funded by the British Lung Foundation (BLF) has identified genetic variants that are associated with the immune response to the TB vaccination, BCG. It has led to the identification of genes that warrant further investigation. Future research of these genes could identify targets for new treatments for the often fatal disease, tuberculosis (TB).

The research looked at the genetic reasons why some people show a natural resistance when exposed to the bacteria that causes TB. With thousands of genes in human DNA, finding the ones relevant to fighting the bacterium is complex but the study has identified genes that may be involved in defending against the disease.

Melanie Newport, Professor in Infectious Diseases and Global Health, Brighton and Sussex Medical School (BSMS) said, 'This project has exploited the growing understanding of human genome sequence to contribute towards the identification of key pathways involved in protecting people against tuberculosis, using BCG vaccination of newborn infants as a model. We are now undertaking experiments to investigate the functional effects of these variants in the laboratory.'

Ian Jarrold, Research Manager at the British Lung Foundation, said, 'Other studies have focused on the development of new antibiotics but the TB causing bacterium can build resistance to these drugs. Using this research as a starting point, genetic information could be used to identify components of the immune system which may lead to more effective treatments.'

Uganda pledges more funding for sleeping sickness research

The Ugandan government has announced that it will earmark funds for continuing research into sleeping sickness.

The initial investment of 100 million shillings has proven insufficient according to members within the Ministry of Health, who also criticise the government for being slow to act when cases of the disease were first reported. 7 billion shillings will now be made available borrowing from within the Ministry of Health as well as expected external funding. To date 2000 Ugandans are reported to have died from the disease.

Kenyan scientist receives posthumous honour



The legacy of Kenyan scientist Thomas Odhiambo, founder of the African Academy of Sciences and TWAS (The

Academy of Sciences for the Developing World), is to continue in the form of an award for outstanding achievement by African scientists.

Odhiambo, who died in 2003, is best remembered for his commitment to what he described as home-grown scientific solutions and his activities at the International Centre of Insect Physiology and Ecology (ICIPE) in Kenya.

The award created by ICIPE will recognise scientists who excel and make outstanding pan-African contributions in the field of Entomology.

Ahmed Hassanali, a senior scientist at Kenya's Kenyatta University who was involved in several of Odhiambo's projects, said that his former colleague was keen to develop local methods to help people; particularly small-scale farmers in Africa increase their productivity.

'He helped in developing the patent policy in ICIPE, which is important as it safeguards intellectual property. This shows just how much he was dedicated to the development of research in Africa,' Hassanali said.