

## Ban Ki-moon gathers global health experts to improve care for world's poorest

United Nations Secretary-General Ban Ki-moon and global health leaders met at the Carter Center in the United States city of Atlanta recently. They agreed on measures to help make childbirth safer and tackled other challenges facing the world's poorest and most vulnerable people. 'We are here not only because global health is an enormous challenge, but also because we can do something about it,' Mr Ban said, following his meeting with leading global health experts from civil society, academia, philanthropy, and the private sector. Former US President Jimmy Carter was also in attendance.

The meeting attracted the participation of Margaret Chan, the Director-General



UN Secretary-General Ban Ki-moon and former US President Jimmy Carter

of the World Health Organization, and previous WHO chief Gro Brundtland, the former Prime Minister of Norway, and a member of the Elders – a group of world leaders whose goal is to contribute their wisdom, independent leadership, and integrity in tackling some of the world's toughest problems.

The Secretary-General said participants had a productive session. 'We have achieved consensus on the urgency of strengthening health systems to serve all, especially the poorest and most vulnerable,' he said.

Maternal health was a key focus of the discussions. 'We have outlined concrete options to make the process of giving birth safer for mothers, and debated concrete means to improve women's health,' the Secretary-General announced. A mother dies every minute from complications of pregnancy and childbirth. Maternal health is the slowest moving target of the Millennium Development Goals – the goals that all countries have agreed to reach by 2015 to lift people out of poverty.

'It is unacceptable that over half a million mothers die every year,' declared Mr Ban. 'We must put a stop to these senseless deaths.' Dr Chan said women's health is critical. 'The world in the last 20 years failed to take care of its women,' she said. The maternal mortality rate had not budged in those two decades. She decried the fact that half a million women die in childbirth

each year and another half a million suffer from neglected tropical diseases.

Dr Brundtland agreed that 'on the side of mothers, the world is really far away from any improvements and we need to now focus again so that we don't have a woman dying every minute because of childbirth.' She said the international community knows what works. 'The resources are not outrageous – \$10 billion is nothing in our world today to really make a serious impact on these kinds of issues,' she said.

The Secretary-General said participants also targeted neglected diseases like guinea worm and river blindness that 'can be eliminated if we only take the time to do so.'

More than 1 billion people – one-sixth of the world's population – suffer from one or more tropical diseases that are neglected in terms of the international response. Experts say eradication of some of these diseases is possible if treatment is scaled up in the poorest countries, but they caution that functioning and affordable health systems must be in place for progress to be achieved.

President Carter said this was 'one of the most important meetings' that he would attend this year. He stressed that to address global health problems, 'it is not only a matter of healthcare but of economic progress for the poorest people on earth.'

## Standing by the 15% Health Commitment

African governments have been called upon to make good their pledge to allocate 15% of their national budget to health issues in their respective countries.

The call was made by over 140 African and global organisations, led by the African Public Health Alliance (APHA) 15% Now Campaign, on the seventh anniversary of the African Union (AU) 15% Health Commitment, made in 2001 in Abuja, Nigeria.

The health coalition said African heads of state and government must not revise or further delay implementation of the commitment. In a campaign led by Nobel Prize Winner, Archbishop Desmond Tutu, who is APHA 15% Now Campaign Chairman, African leaders and Finance Ministers were urged to restate the commitment at the next AU Summit in Egypt.

The coalition, whose members met recently in a conference in Abuja, lamented the loss of over 8 million African lives annually to preventable, treatable, or manageable health conditions. Coordinator of the 15% Now Campaign, Rotimi Sankore, said, 'This is equal to 43 transatlantic jets with 500 passengers each crashing every single day.'

In its communiqué, the 15% Now

Campaign also made a 7-point call on African Heads of State and Ministers of Finance. In a statement to mark the anniversary of the 15% pledge, Archbishop Tutu stated, 'The AU Abuja 15% pledge is one of the most important commitments African leaders have made to health development and financing, and our Heads of State should strive to meet this pledge without further delay.'

The Alliance will also engage global stakeholders and actors including donors, the UN, EU and their institutions, World Bank, IMF, and international non-governmental institutions and organisations, especially those concerned with health, social, and economic development.

## Multi-drug-resistant strain of tuberculosis creating particular risks

The multi-drug-resistant form of tuberculosis is reaching its highest levels ever recorded and overwhelming the ability of healthcare systems around the world to treat sufferers, according to the United Nations envoy for efforts to fight the disease. Jorge Sampaio, the Secretary-General's Special Envoy to Stop Tuberculosis, said that the strain – known as MDR-TB – is becoming prevalent, with

about 400 000 cases reported in 2006, the most recent year for which global figures are available.

Detailing the latest reports on efforts to fight TB, Mr Sampaio said that only about 10% of all MDR-TB sufferers are likely to be treated this year because of a lack of treatment and laboratory capacity worldwide.

Overall, TB is still killing around 4500 people every day, with the epidemic fuelled by the fact that a sufferer is increasingly likely to be co-infected with HIV as well. The lethal combination of HIV and TB is emerging especially in sub-Saharan Africa, and in 2006 there were 700 000 cases of TB among people living with HIV worldwide.

The envoy, who spoke to journalists a day after the UN marked World TB Day, called on international leaders to redouble their efforts against TB and to ensure that the fight against HIV/AIDS is increasingly interlinked with the fight against TB so that there is a coordinated approach, from the use of prescription drugs to forms of treatment.

Mr Sampaio stressed the importance of the Global Leaders Forum on HIV/TB that was organised by the UN and other international organisations on 9 June in New York.



## Africa's health experts discuss new vaccines for meningitis

Ghana will later this year begin clinical trials in meningitis vaccines in infants with a view to eventually incorporating it into the routine immunisation of children.

Emeritus Professor Francis Nkrumah, of the Noguchi Memorial Institute of Medical Research (NMIMR), said the trials, which will take place at the Navrongo Health Research Institute, are aimed at developing new improved vaccines to eliminate meningitis. He was speaking after the opening of a 2-day meeting of the Meningitis Vaccine Project (MVP) Advisory Group in Accra.

The group's seventh meeting discussed the MVP established in 2001 by the World Health Organization (WHO) in partnership with the Programme for Appropriate Technology (PATH). This is also aimed at eliminating epidemic meningitis through the development, testing, introduction, and widespread use of conjugate meningococcal vaccines, the new vaccines on trial.

Prof. Nkrumah said Ghana had been very lucky for not experiencing epidemic meningitis this year though there were some sporadic reports in the northern parts of the country. 'To maintain this trend of low records of the epidemic, we need this new vaccine to eliminate it from the continent,' he said.

Dr Kader Konde, from WHOMVP focal point, said tests on the new vaccines had been successful in phases one and two of

the clinical trials in The Gambia, Mali, and India in children and adults and proven its efficacy and safety to use to eliminate the disease.

He said the new vaccine, an improvement on the old one, would last for 10 years whereas the old one would last for only 3 years.

● Meanwhile, in the UK, a possible vaccine against meningitis B has shown 'encouraging' results in preliminary clinical trials.

The MenB vaccine from pharmaceutical giant Novartis was tested on 150 babies in the UK. The company examined 85 strains of meningitis B while developing the potential vaccine.

The children were immunised at 2, 4, and 6 months of age, and received a fourth dose at 12 months. The vaccine's immune response was tested against three strains of meningitis B. The results showed that one month after the third dose the immune response against the three strains was 89%, 96% and 85%. A fourth dose given at 12 months of age resulted in the children receiving an immune response of 100%, 98% and 93%.

Dr Andrew Pollard, head of the Oxford Vaccine Group at the University of Oxford, who helped run the study, said these initial results were encouraging. 'These initial results from the UK show that the vaccine induces an immune response against strains containing the vaccine components. The next step is to find how broad these responses are against other strains that cause disease.'

## Single anti-bird flu drug 'not enough'

No single drug alone will be enough to treat all the victims of a global flu pandemic, research has shown.

Tests on the H5N1 strain of bird flu, which has spread in south-east Asia, have shown it is developing resistance to the leading anti-viral drug Tamiflu.

The *Nature* study, by the Medical Research Council, stresses the need to stockpile more than one type of drug.

The latest figures for human cases of the H5N1 bird flu virus show 382 people have been infected and 241 killed, mostly in south-east Asia. However the virus cannot easily pass from human to human at present. So far many of those who have been infected have been poultry workers who have come into intimate contact with infected birds. Experts warn that if the virus acquires the ability to pass from human to human, then it will pose a potential threat to millions across the globe.

Tamiflu and another drug, Relenza, work by inhibiting a key part of flu called neuraminidase (N1) which is responsible for the release of the virus from infected human cells and allows the disease to spread.

The team at the National Institute for Medical Research found that when they used a method called X-ray crystallography they were able to characterise a mutation in the structure of N1 that has been observed in human cases of H5N1. The scientists discovered that when this mutation occurred the virus became resistant to Tamiflu, while still remaining susceptible to Relenza. They also looked at samples from seasonal influenza, that affected people across Europe earlier this year, and found that samples showing this mutation were also resistant to Tamiflu.

Dr Steve Gamblin, who led the research team said it shows that stockpiling any one drug to prepare for a potential H5N1 pandemic is unlikely to provide adequate cover. He said, 'In order not to be outflanked by the virus, it will be necessary to have stocks of both existing drugs.'

Professor John Oxford, an expert in Virology at Queen Mary College School of Medicine London, said, 'I don't think it should worry people because these drug-resistant mutant strains of H5N1 don't spread very much and are not in the majority, they are still very much in the minority. The majority are still susceptible to anti-viral drugs.'

## Lack of political will biggest obstacle to improving sanitation



A lack of political will remains the greatest obstacle to efforts to drastically reduce the number of people without access to basic sanitation and clean, running water, Secretary-General Ban Ki-moon said recently, calling on the international community to take firmer and faster steps to tackle the problem.

'If we take up the challenge, the positive impact will reverberate far beyond better access to clean water,' Mr Ban said in a message to mark World Water Day; this year's Day also coincided with the International Year of Sanitation.

'Every dollar invested in water and sanitation yields an estimated seven dollars worth of productive activity. And that comes on top of the immeasurable gains in cutting poverty, improving health and raising living standards.'

The Secretary-General described it as unconscionable that a child dies on average every 20 seconds because of sub-standard sanitation conditions – a situation endured by an estimated 2.6 billion people worldwide, or more than a third of the global population – that are preventable.

'Poor sanitation combines with a lack of safe drinking water and inadequate hygiene to contribute to the terrible global death toll. Those who survive face diminished chances of living a healthy and productive existence. Children, especially girls, are forced to stay out of school, while hygiene-related diseases keep adults from engaging in productive work.'

Halving the proportion of people without access to basic sanitation is one of the eight Millennium Development Goals (MDGs) devised at a global leaders' summit in 2000, but the world is far behind the pace to achieve that by the target date of 2015, Mr Ban said. 'Experts predict that by 2015, 2.1 billion people will still lack basic sanitation. At the present rate, sub-Saharan Africa will not reach the target until 2076.' Population growth, widespread poverty and insufficient investment are among the key obstacles, but the Secretary-General noted that 'the biggest culprit' is the lack of political will.

Events were held around the world to highlight World Water Day.

## Assessing progress in maternal, newborn and child survival

'Tracking Progress in Maternal, Newborn and Child Survival, The 2008 Report' was released by the Partnership of Maternal, Newborn & Child Health at the Countdown 2015 Conference in Cape Town in April.

Commenting on the report, Julian Lob-Levyt, Executive Secretary of GAVI Alliance (formerly The Global Alliance for Vaccines and Immunization), said the report provided a significant assessment of the progress in maternal, newborn and child survival. He was pleased to see the report's particular focus on the pivotal role of immunisation in efforts to reach the Millennium Development Goals (MDGs), especially MDG 4, which aims at reducing by two-thirds the mortality rate among children under five. Significant increases in immunisation rates serve as among the most promising trends for reducing childhood mortality and achieving MDG 4, he said.

The Countdown's use of the haemophilus influenzae type b (Hib) vaccine for the first time as an indicator of country responsiveness illustrates the power of new health interventions, continued Mr Lob-Levyt. Recent studies in Uganda and Kenya showed that the growing use of the Hib vaccine was responsible for eliminating deadly and extraordinarily painful Hib meningitis. As a result, thousands of lives were now being saved.

The Executive Secretary said GAVI would continue to strive to inspire new progress in the 52 countries that were not yet on track to meet MDG 4 by working with partners on the ground to reduce deaths among children through vaccination. With a dedicated country-driven approach and ongoing efforts he said the Alliance would find new ways to finance healthcare programmes for developing country governments.

## One in three malaria drugs failing

Some 35% of antimalarial drugs sold in six major African cities failed basic quality tests according to a study published in *PLoS ONE*, a peer-reviewed open-access journal.

The cities were in Ghana, Kenya, Nigeria, Rwanda, Tanzania, and Uganda. The study further found that artemisinin monotherapies, which the World Health Organization explicitly rejects as substandard, remain common in Africa. Substandard antimalarial drugs cause an estimated 200 000 avoidable deaths each year.

'Our study shows that efforts to increase access to quality antimalarial drugs in Africa are increasingly important,' said Dr Roger Bate, Resident Fellow at the American

Enterprise Institute and lead author on the study. 'Substandard drugs not only endanger lives today, but also jeopardise future malaria treatment strategies by accelerating parasite resistance.'

Artemisinin combination therapies, or ACTs, lower the chances of developing parasite resistance and reducing treatment efficacy. Yet a third of the drugs collected in the study were artemisinin monotherapies. 42% of them failed and 78% were manufactured after the World Health Organization proscribed them in January 2006.

'Malaria surged through Africa in the 1990s, fueled by resistance to chloroquine and other historically effective drugs,' said Richard Tren, Director of Africa Fighting Malaria, a non-profit advocacy group. 'Because regulation and post-market surveillance of drugs is so poor in most malarial countries, ACTs now risk the same fate.'

The World Health Assembly resolved in May 2007 to stop the production and marketing of artemisinin monotherapies. But according to the World Health Organization, only 40 of 74 global manufacturers have agreed in principle to stop production, and 42 countries – 18 of them in sub-Saharan Africa – still allow companies to market these drugs.

Africa Fighting Malaria also released a report on malaria treatment policy in Africa. The report examines the challenges of pharmaceutical regulation and production in Africa, and calls for stronger global leadership from donors on drug procurement standards.

'Under the Global Fund's "Option C", poor countries can use taxpayer funds to buy untested drugs of uncertain quality,' said Richard Tren. 'Option C was intended to increase incentives for nascent ACT producers to enter the market and foster competition. It has accomplished this, but it has not provided any incentives for these companies to go the extra step and submit to bioequivalence testing by a stringent regulatory authority.'

Post-market surveillance and pharmacovigilance are severely limited in Africa, yet crucial to detecting bad drugs and preventing the inevitable development of parasite resistance for an at-risk population of 700 million. As the *PLoS ONE* study argues, a fraction of the current global budget for malaria control could support a decentralised network for basic drug quality testing in Africa using Minilabs, portable chemistry sets, or equivalent technologies.

## Polio cases double in Nigeria

Polio cases have nearly doubled this year in Nigeria as officials struggle to fight various natural strains of the virus as well as an outbreak set off by the polio vaccine itself 3 years ago.

Outbreaks linked to the vaccine, as opposed to the naturally occurring virus,

are usually stamped out within months. But Nigeria has a very low immunisation rate, partly as a result of its weak health system and also owing to rumours about the safety of the vaccine.

Last year at this time, Nigeria had 54 reported cases caused by wild polio virus. This year, there were 106 new cases, according to figures released by the World Health Organization recently. The vaccine-sparked outbreak has struck more than 100 children so far, including 8 this year.

For every paralysed child, there are about 1000 others infected and spreading the highly infectious and sometimes fatal disease, experts say. 'This is a huge step backwards,' said Oyewale Tomori, a polio expert at Redeemer's University in Nigeria. He said the last time the country had every type of polio was in 1999 and described the current situation as 'hugely traumatic.'

Such outbreaks happen only when immunisation rates are low. Oral polio vaccine contains a weakened virus. In rare instances, as the virus passes through children who have not been immunised, it changes into a form dangerous enough to ignite new outbreaks. An injectable polio vaccine is used in the West that does not cause outbreaks, but it is more expensive and must be given by a doctor or nurse.

'There are just way too many kids in Nigeria who haven't been vaccinated and that's allowing the virus to spread,' said Dr Bruce Aylward, director of WHO's polio department.

## UNAIDS is out of touch with reality and should be closed down, says expert

A recent article in the *BMJ* says the exclusive focus on HIV promoted by UNAIDS is damaging health systems and distorting health financing.

'We are spending far too much on HIV relative to other health needs,' wrote Roger England, Chairman of the Health Systems Network. 'Some of the money would be better spent on strengthening general health services and funding more effective interventions in other diseases such as pneumonia and diabetes that kill more people,' he added. Globally HIV causes 3.7% of mortality, yet receives 25% of health aid and a big proportion of domestic expenditure. But HIV has not been the global catastrophe that was predicted, he says, in fact global HIV deaths are about the same as deaths of under fives in India.

A UN agency dedicated to a single disease is a liability, and UNAIDS needs to be closed down, concludes England, 'not because it has performed badly given its mandate – but because its mandate was wrong and harmful. Its technical functions should be re-fitted into WHO, to be balanced with those of other diseases.'

## Climate change: a threat to health?

Climate change is emerging as a major threat to health and adding pressure on public health systems, especially in Africa, a senior UN official has said.

'It causes a rise in sea levels, accelerates erosion of coastal zones, increases the intensity and frequency of natural disasters and accelerates the extinction of species,' Luis Gomes Sambo, World Health Organization (WHO) regional director for Africa, said. 'The impact on human health is even greater.'

Climate change, he added, is thought to directly contribute to changes in the geographic distribution of vector-borne diseases such as malaria and epidemics of meningococcal meningitis, Rift Valley fever, and cholera in previously unaffected areas. 'For example, the geographic distribution of meningococcal meningitis appears to be expanding from the usual meningitis belt to the southern African region,' Sambo said on 7 April during the commemoration of World Health Day in Brazzaville, capital of the Republic of Congo.

'Waterborne diseases and epidemics of acute diarrhoea are rampant in flood situations,' he added. The continent has seen extensive flooding across eastern, western, and southern regions. He said WHO would give priority support to African countries to develop the capacity to assess and manage the adverse health impact of climate change.

## Project to develop guidelines for health research in Africa launched

The 'Clinical Trials Roundtable' attracted more than 70 participants during the 'Science with Africa' conference organised by the UN Economic Commission for Africa and the African Union, an international organisation that promotes cooperation among the independent nations of Africa.

The conference was held in Addis Ababa, and attended by more than 600 representatives, including representatives from health and science ministries, universities, non-governmental organisations, and international organizations from Africa, Europe and North America. Two representatives from industry were also in attendance – Dr Richard C Hubbard, from the drug company Pfizer, and a representative from the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA).

Much of the Clinical Trials Roundtable focused on identifying the needs of African countries for guidelines in clinical trials and other areas of health research. It also provided an opportunity for leading African and international partners to develop

a consensus position on the organisation of the project to develop guidelines for health research in Africa.

Francis Crawley, executive director of Brussels, Belgium-based Good Clinical Practice (GCP) Alliance, which he founded in 2005, was approached by organisers of 'Science with Africa' in October to participate. Crawley has extensive experience in creating GCP guidelines and model bioethics laws in Eastern European, Asian, and African countries.

More than 70 attended the Clinical Trials Roundtable. About 80% of participants were from Africa; the rest were from Europe, the US, and Canada. At a pre-meeting to the roundtable, African participants made it clear that, despite the existence of many international guidelines, Africa needed its own.

Crawley said, 'They need to feel a sense of ownership. They want a sense that these are guidelines that we did for ourselves and also that these are guidelines that are appropriate to the African situation.' But he stressed that the project to develop guidelines for health research in Africa cannot be counted as a success unless the guidelines are implemented. 'The real thing that we need to accomplish is to have these guidelines implemented into national policy so that we have regulatory agencies in Africa that have standards for health research and that these standards are also in line with healthcare and public objectives.'

Crawley alluded to the importance of getting big pharmaceutical companies to the table when it comes to the topic of guidelines for health research in Africa. 'We want the pharmaceutical industry to be at the table here, to be saying, "These are the kinds of considerations we have with our clinical trials. This is what is important and what we need."' 'These are the kinds of situations where we felt uncomfortable in the past with regard to human subject protections and these are the areas where we would like to see more developed. We need to have the pharmaceutical industry there in a really committed way because Africa really lacks an industry presence and it needs that.'

The project has two secretariats, the Cameroon Bioethics Society in Africa and the GCP Alliance in Europe, to support and develop management for it. A team of African and international collaborators is being built and from within that team a steering committee will be formed, followed by working parties for individual guidelines or model laws to be drafted. The plan is to develop and implement the following guidelines: good clinical practice guidelines; paediatric research guidelines; genetics, tissues, and data guidance; intellectual property and sharing health resources; and guidance on ethics in African health research.

## Treatable ailments kill nearly 10 million children each year

An estimated 9.7 million children worldwide under the age of 5 die each year from easily preventable or treatable health problems such as pneumonia and diarrhoea, says a report released by the US-based charity Save the Children. Most of the deaths occur in developing nations, and poor children are twice as likely to die as rich children.

## Monitoring AIDS treatment

A UK study indicates that when clinicians who monitor AIDS use simple physical signs of deteriorating health – such as weight loss or fever – they can provide therapies almost as effective as those relying on the most advanced laboratory analysis.

## Allergy risk 'may be set in womb'

First-born babies may be programmed in the womb to have a higher risk of asthma and allergy, research suggests. A University of South Carolina led team carried out tests on more than 1200 newborns from the Isle of Wight and found they were more likely to carry a gene variant that raised their risk of allergy.

## Asthma link to pregnancy stress

Women who are stressed in pregnancy may raise the risk of their child developing asthma or other allergies, a Harvard Medical School study suggests. Researchers found higher levels of a chemical linked to allergy in the blood of children of stressed mothers.

## Noncommunicable diseases now world's biggest killers

The global burden of disease is shifting from infectious diseases to noncommunicable diseases, with chronic conditions such as heart disease and stroke now being the chief causes of death globally, according to a new WHO report.

## Experts call for a new approach to fighting AIDS

AIDS experts at Harvard University's School of Public Health say that in the fight against the disease, current strategies like condom promotion and HIV testing haven't worked as well as they thought they would and a new approach is called for.