

## Resistance spread 'compromising fight against malaria'

Scientists have found new evidence that resistance to the front-line treatments for malaria is increasing. They have confirmed that resistant strains of the malaria parasite on the border between Thailand and Burma, 500 miles away from previous sites.

Researchers say that the rise of resistance means the effort to eliminate malaria is 'seriously compromised'. Details have been published in the *Lancet* journal.

In 2009, researchers found that the most deadly species of malaria parasites were becoming more resistant to these drugs in parts of western Cambodia. This new data confirm that these *Plasmodium falciparum* parasites are growing steadily more resistant.

The researchers from the Shoklo Malaria Research Unit measured the time it took the artemisinin drugs to clear parasites from the bloodstreams of more than 3000 patients. Over the 9 years between 2001 and 2010, they found that drugs became less effective and the number of patients showing resistance rose to 20%.

Prof Francois Nosten, a member of the research team, says the development is very serious. 'It would certainly compromise the idea of eliminating malaria ... and will probably translate into a resurgence of malaria in many places,' he said.

Another scientist, Dr Standwell Nkhoma from the Texas Biomedical Research Institute., said 'the spread of drug-resistant malaria parasites within South East Asia and overspill into sub-Saharan Africa, where most malaria deaths occur, would be a public health disaster resulting in millions of deaths.'

The scientists cannot tell if the resistance has moved because mosquitoes

carrying the resistant parasites have moved or if it has arisen spontaneously among the population there. Either way the researchers involved say it raises the spectre of untreatable malaria.

'Either the resistance has moved and it will continue to move and will eventually reach Africa. Or if it has emerged, now that artemisinin is the standard therapy worldwide then it means it could emerge anywhere,' said Prof Nosten. 'If we were to lose artemisinin then we don't have any new drugs in the pipeline to replace them. We could be going back 15 years to where cases were very difficult to treat because of the lack of an efficacious drug.'

Artemisinin is rarely used on its own, usually being combined with older drugs to help fight the rise of resistance. These artemisinin-based combination therapies are now recommended by the World Health Organization as the first-line treatment and have contributed substantially to the recent decline in malaria cases in many regions.

Prof Nosten says the current spread of resistance could be similar to what happened in the 1970s with chloroquine, a drug that was once a front-line treatment against the disease.

In a separate paper published in the journal *Science* researchers have identified a region of the malaria parasite genome that is linked to resistance to artemisinin. Dr Tim Anderson, from Texas Biomed who led this study, says 'If we can identify the genetic determinants of artemisinin resistance we should be able to confirm potential cases of resistance more rapidly. This could be critically important for limiting the further spread of resistance.'

## Vaccinating 111 million children against polio

In March a UN-backed campaign sought to vaccinate more than 111 million children under the age of 5 against polio in 20 African countries in just 4 days.

The World Health Organization's (WHO) Regional Director for Africa, Luis Sambo said, 'This exercise should bring us closer to reaching our goal of inter-

rupting wild polio virus transmission in our region in 2012.'

The campaign is intended to serve as a massive boost in efforts to eradicate the disease, and will involve national health ministries and UN agencies, as well as tens of thousands of volunteers who went from door-to-door immunising children.

The organisers described the campaign as entering a 'decisive phase.'

## Malawi: nurses and midwives call for aid

The National Organisation for Nurses and Midwives (NONM) in Malawi has called on the donor community to speed up the process of sending aid to the country. Executive Director, Dorothy Ngoma, said a lot of people have died due to the aid drought that has hit the country since last year.

## G8 foreign ministers call on donors to support the Global Fund

G8 Foreign Ministers meeting in Washington on April 12 called on existing donors to meet their pledges of support to the Global Fund and appealed to implementing countries to show leadership in taking on health challenges.

## 'Aid helps more children reach five', says report

Four million more children a year are living beyond their fifth birthday than in 1990, a new report for Save the Children and Unicef has found.

Research by the Overseas Development Institute shows that aid is a key factor in improving children's well-being around the world. It says economic growth and good government policies also help improve their life-chances.

In sub-Saharan Africa, the countries which received the most aid saw children making the most progress.

## Aspirin taken daily 'cuts bowel cancer death risk

Bowel cancer patients who take daily aspirin could cut their chance of dying from the disease by about a third, experts believe.

A study in the *British Journal of Cancer* looked at 4500 bowel cancer patients living in The Netherlands. All of the patients on aspirin were taking a low dose – 80mg or less a day – something already recommended for people with heart disease. But experts say it is too soon to start routinely offering it for bowel cancer.

A wealth of evidence already suggests aspirin might prevent certain cancers from developing in the first place. Recent work suggests it might also work as a cancer therapy – slowing down or preventing a cancer's spread.

## New UN partnership seeks to advance HIV/AIDS response



Ibrahim Assane Mayaki of NEPAD (left) and UNAIDS Executive Director Michel Sidibé sign agreement in Addis Ababa

The United Nations has teamed up with the New Partnership for Africa's Development (NEPAD) Agency to advance sustainable responses to HIV/AIDS, health, and development across the continent.

Under a new agreement, the Joint UN Programme on HIV/AIDS (UNAIDS) and the Agency will work with partners to support the development of common African positions for the AIDS response, with an emphasis on sustainable financing.

'This new partnership will bring us one step closer to our goal of zero new HIV infections, zero discrimination, and zero AIDS-related deaths,' UNAIDS' Executive Director, Michel Sidibé, told reporters in Addis Ababa, after the signing in March. UNAIDS is charged with coordinating efforts to unite the world against AIDS; globally, it sets policy and is the source of HIV-related data.

UNAIDS and NEPAD will work to-

gether to address constraints in access to HIV medicines, facilitate policies and partnerships to eliminate new HIV infections in children and improve the health of mothers, enhance country ownership and accountability, and encourage South-South cooperation.

In his remarks, Mr Sidibé added that 'getting to zero' would demand effective and inclusive partnerships, shared responsibility, greater transparency and a focus on results – areas in which NEPAD is known to excel.

The Chief Executive Officer of NEPAD Agency, Ibrahim Mayaki, said that country ownership would be critical to advancing AIDS and development responses in the coming decade.

'Partnerships for development can only succeed if they are led by developing countries,' he said. 'AIDS programmes must be financially sustainable over the long term and tailored to specific national settings.'

Sub-Saharan Africa carries the highest HIV burden of any region in the world. In 2010, about 68% of all people living with HIV resided in sub-Saharan Africa, a region with only 12% of the global population.

Currently, about two-thirds of all AIDS investments in Africa come from external sources. The continent will require between \$11 billion – \$12 billion for its regional AIDS response by 2015 – \$3 billion to \$4 billion more than the current expenditure.

### Cheap device reduces premature births

A cheap medical device can dramatically reduce the number of premature births in some at-risk women, according to a team of doctors in Spain.

Being born before 34 weeks of pregnancy is linked to a host of health problems.

The study, published in the *Lancet*, showed that using a 'cervical pessary' reduced the rate in the at-risk group. Doctors said more studies were needed before the technique was used routinely.

The authors said 13 million babies were born prematurely every year.

In the trial, doctors were looking at women who had a cervix shorter than

25 mm. These pregnant women are thought to be at a higher risk of an early delivery.

The cervix was measured between 18 and 22 weeks into the pregnancy by an ultrasound scan. Of the 11 875 women who took part in the trial, 726 had a cervical length less than 25 mm. Half of these women had a pessary, a small ring of silicone, inserted into their cervix. In the group of women without the pessary, 27% of babies were born prematurely; the rate was 6% among those fitted with a pessary.

The study concluded the pessary was a 'reliable alternative for prevention of preterm birth' in a group of at-risk women.

### New prostate cancer treatment may reduce side-effects

A new technique to treat early prostate cancer may have far fewer side-effects than existing therapies, say experts.

A 41-patient study in the journal *Lancet Oncology* suggests targeted ultrasound treatment could reduce the risk of impotence and incontinence.

Researchers say it could transform future treatment if the findings are repeated in larger studies.

### World's biggest study into Parkinson's disease

Parkinson's UK is launching a £1.6 m in-depth study, which it says is the biggest of its kind in the world, to track people with the neurological condition.

The work, led by the University of Glasgow, aims to follow 3000 volunteers – people recently diagnosed with Parkinson's, people diagnosed aged under 50, and their brothers and sisters. Its aim is to identify markers in the blood which could be used to create a diagnostic test for the disease, something which doesn't yet exist.

### Initiative slashes cost of anti-malaria medicines in many African countries

An innovative initiative led by the Global Fund to Fight AIDS, Tuberculosis and Malaria to put affordable and effective anti-malaria medicines in remote communities in Africa, is making rapid progress in Ghana, Kenya, Madagascar, Nigeria, Tanzania, and Uganda.

The initiative, called Affordable Medicines Facility for Malaria (AMFm) allows people to buy life-saving malaria treatment in private stores and pharmacies for less than US\$1. Comparable malaria medicines outside the programme cost up to 10 to 20 times as much.

'The innovation is working, bringing relief to millions who need quality anti-malaria medicines at affordable prices. The AMFm is a game-changer in financing access to malaria treatments,' says Dr. Olusoji Adeyi, who heads the AMFm initiative at the Global Fund in Geneva.

## WHO unveils new data to help fight tobacco deaths



Tobacco use is responsible for 5 million or 12% of all deaths of adults above the age of 30 globally each year, according to a United Nations report. For the first time the Report provides estimated mortality rates attributable to tobacco for 2004, the year before the international treaty on tobacco came into force.

The Framework Convention on Tobacco Control (FCTC) that came into force in 2005 requires parties to restrict tobacco advertising, sponsorship and promotion, set new labelling and clean indoor air controls, and strengthen laws against tobacco smuggling.

The new report by the World Health Organization (WHO), entitled 'Mortality Attributable to Tobacco,' shows that 5% of all deaths from communicable diseases worldwide and 14% of deaths resulting from non-communicable illnesses among adults aged 30 and above were attributable to tobacco use.

'Although many people associate tobacco with non-communicable diseases such as cancers, heart and respiratory diseases, tobacco is also a major cause of communicable diseases – tuberculosis

being a case in point where the disease is at times in latent or dormant state until activated by tobacco use,' said Ala Alwan, the WHO Assistant Director-General in charge of Non-communicable Diseases and Mental Health, in a forward to the report.

Globally, deaths from tobacco-related cardiovascular diseases were more likely to occur among younger adults. Thirty-eight per cent of deaths of adults resulting from ischaemic heart disease in the 30–44 age group were attributable to tobacco, while 71% of all lung cancer deaths were linked to the use of tobacco.

'The 5 million deaths translate to an incredible statistic – one death every 6 seconds,' said Dr Alwan. 'Unless strong actions are taken to halt the tobacco epidemic, 1 billion people are projected to die this century – we cannot let this happen,' he added, urging all countries to implement the Convention on tobacco control.

The report contains country-specific estimates including death rates attributable to tobacco. It is intended to help countries assess the mortality of tobacco use and measure the success of efforts to discourage the use of the substance. It follows the 2008 WHO report on the issue, which prompted some Member States to request the agency to consider generating estimates to give them an indication of their progress in combating tobacco use.

Shekhar Saxena, the head of WHO's mental health division.

Most dementia patients are cared for by relatives who shoulder the bulk of the current estimated annual cost of \$604 billion. And the financial burden is expected to rise even faster than the number of cases, WHO said in its first substantial report on the issue.

In the last few decades, dementia has become a major public health issue in rich countries. But with populations in poor and middle-income countries projected to grow and age rapidly over the coming decades, WHO appealed for greater public awareness and better support programmes everywhere.

### Dementia cases worldwide set to triple by 2050

Cases of dementia – and the heavy social and financial burdens associated with them – are expected to soar in the coming decades as life expectancy and medical care improve in poorer countries, according to the World Health Organization.

Some 35.6 million people were living with dementia in 2010, but that figure is set to double to 65.7 million by 2030, according to WHO. In 2050, it expects dementia cases to triple to 115.4 million.

'The numbers are already large and are increasing rather rapidly,' said Dr

### UNAIDS welcomes new HIV guidelines

New guidelines have been issued encouraging couples to go together for HIV testing in order to know their HIV status. The guidelines, released by the World Health Organization (WHO), also recommend that in couples who are serodiscordant – where one partner is living with HIV and the other not – antiretroviral therapy is offered to the person living with HIV to prevent his or her partner from becoming infected with the virus.

The Joint United Nations Programme on HIV/AIDS (UNAIDS) strongly welcomes the new guidelines and calls on all countries to implement them to reach the targets set in the United Nations 2011 Political Declaration on AIDS.

### Countries must recognise alcohol abuse as grave public health threat

The world needs to recognise that alcohol consumption is a big and growing public health threat and take appropriate action, experts concluded at a WHO regional meeting on the prevention and control of the non-communicable diseases (NCDs) through reduction of alcohol-related harm.

### Ancient virus DNA thrives in us

Traces of ancient viruses which infected our ancestors millions of years ago are more widespread in us than previously thought.

A study shows how extensively viruses from as far back as the dinosaur era still thrive in our genetic material. It sheds light on the origins of a big proportion of our genetic material, much of which is still not understood.

The scientists investigated the genomes of 38 mammals including humans, mice, rats, elephants, and dolphins.

The research was carried out at Oxford University, the Aaron Diamond AIDS Research Centre in New York, and the Rega Institute in Belgium and is reported in the journal *Proceedings of the National Academy of Sciences*.



## Ban urges countries to step up efforts to stop TB



The UN Secretary-General Ban Ki-moon has urged countries to step up their efforts to prevent tuberculosis (TB), including by increasing access to treatments and improving the quality of their health services to be able to 'stop TB in our lifetime.'

TB remains a leading cause of death from infectious diseases worldwide, second only to HIV/AIDS. Last year alone, 8.4 million people contracted TB and 1.4 million died from the disease.

'For too long, the response has been insufficient,' Mr Ban said at the Institute of Respiratory Medicine in Kuala Lumpur, Malaysia, adding that countries have the means to prevent unnecessary deaths, but need to implement policies that not only raise awareness about the issue but provide accessible healthcare to their citizens.

Speaking ahead of **World Tuberculosis Day**, observed annually on 24 March, Mr Ban called for 'intensified global solidarity to ensure that the children and people of all the countries

get medical support, so that they can breathe with health.'

In a related development, the World Health Organization (WHO) and the Stop TB Partnership have warned that childhood TB continues to be overlooked despite availability of treatment, as the disease often goes undiagnosed in children under the age of 15 because they lack access to health services or health workers do not recognise the signs and symptoms of TB in that age group.

'We have made progress on TB: death rates are down 40% overall compared to 1990 and millions of lives have been saved,' said Mario Raviglione, Director of WHO's Stop TB Department. 'But unfortunately, to a large extent, children have been left behind, and childhood TB remains a hidden epidemic in most countries. It is time to act and address it everywhere.'

WHO recommends that any child living with a TB patient who has an unexplained fever be evaluated by a health worker for TB. Those found to be healthy should be protected against the disease through preventive therapy with the drug isoniazid, while those who are ill should receive full treatment.

'Two hundred children die from TB every day. Yet it costs less than three cents a day to provide therapy that will prevent children from becoming ill with TB and 50 cents a day to provide treatment that will cure the disease,' said Lucica Ditiu, Executive Secretary of the Stop TB Partnership.

### Huntingdon's disease 'lowers' cancer risk

People with Huntington's disease, a debilitating brain condition, appear have a 'protection' from cancer, according to a study in Sweden.

Nearly 40 years of medical records showed patients with Huntington's had half the normal expected risk of developing tumours.

Researchers, writing in the *Lancet Oncology*, said the reason was unclear.

Cancer Research UK said the find-

ings presented another avenue to explore in tackling cancer.

Academics at Lund University analysed Swedish hospital data from 1969 to 2008. They found 1510 patients with Huntington's disease.

During the study period, 91 of those patients subsequently developed cancer. The authors said that was 53% lower than the levels expected for the general population.

Huntington's is one of a group of illnesses called 'polyglutamine diseases'. Data from other polyglutamine diseases also showed lower levels of cancer.

### World Water Day: rural poor missing out

As the world commemorated World Water Day on March 22, UNICEF called on governments to pay particular attention to those who are being left behind in their countries' progress, especially with regard to access to safe drinking water and basic sanitation.

Two weeks previously a UNICEF and World Health Organization report showed conclusively that poor people in rural areas are overwhelmingly those without these most basic necessities for life.

'Governments must make sure that their resources achieve real results for the poorest people,' said Sanjay Wijesekera, UNICEF's chief of water, sanitation and hygiene. 'Otherwise they risk leaving large portions of their populations, particularly children, increasingly vulnerable to disease.'

### UNAIDS welcomes Kenya High Court judgment on anti-counterfeit law

UNAIDS commends the High Court of Kenya for a ruling that will safeguard access to affordable and quality life-saving generic medicines. The decision by the High Court found that the definition of 'anti-counterfeit' within the 2008 Anti-Counterfeit Act was too broad.

'The Act is vague and could undermine access to affordable generic medicines since the Act had failed to clearly distinguish between counterfeit and generic medicines,' said High Court Judge Mumbi Ngugi in her ruling.

The High Court called on Kenya's Parliament to review the Act and remove ambiguities that could result in arbitrary seizures of generic medicines under the pretext of fighting counterfeit drugs. The judgment also stated that intellectual property rights should not override the right to life and health.

'A vast majority of people in Kenya rely on quality generic drugs for their daily survival. Through this important ruling, the High Court of Kenya has upheld a fundamental element of the right to health,' said UNAIDS Executive Director Michel Sidibé. 'This decision will set an important precedent for ensuring access to life-saving drugs around the world.'

## Worldwide Fistula Fund opens new centre in Niger



In February this year, The Worldwide Fistula Fund opened a new, free-standing, fistula hospital in Danja, Niger.

The hospital has a 42-bed ward, an outpatient clinic, hostel facilities for long-term care, and a surgical theatre capable of handling three operations simultaneously. When fully operational, the Danja Fistula Center should be able to carry out 1200 operations per year and will be a major centre for surgical training, nursing education, clinical research, and patient care.

In many parts of Africa the absence of skilled midwifery or obstetric care means even small abnormalities in obstetrical mechanics can prolong labour for days, often resulting in serious maternal injuries.

Estimates suggest that more than



3 million African women suffer from a fistula and tens of thousands of new cases develop each year. Throughout Africa, surgical services are inadequate to meet patient needs – not only for life-saving cesarean delivery, but also to repair the injuries that many women sustain during childbirth – and fistulas will not heal without surgery.

The Worldwide Fistula Fund is a non-profit public charity started in the US in 1995. It developed the Danja Fistula Center with the support of thousands of donors and in partnership with SIM, a Christian mission organisation that has been active in Niger for over 85 years

To read about the Worldwide Fistula Fund and the Danja Fistula Center see <http://www.WorldwideFistulaFund.org>.

## Cost-effective strategies to prevent CVD

Annually, 29% of deaths worldwide are attributable to cardiovascular disease (CVD), causing a significant social and economic burden. A study published in the *BMJ* and led by Dr Ortégón from the US Universidad del Rosario considers the cost-effectiveness of interventions to prevent and treat CVD – such as reducing tobacco use, and combination drug therapy for at-risk patients in sub-Saharan Africa and south-east Asia.

The research team undertook a cost-effectiveness analysis of 123 prevention and treatment strategies for CVD, diabetes, and tobacco use, at both the population and individual level. Demographic and epidemiological data were taken from the WHO's databases of mortality and global burden of disease, alongside data on intervention coverage and effectiveness from clinical trials,

observational studies, and treatment guidelines. Costs were drawn from the WHO-CHOICE price database. It was revealed that most of the 123 single or combined prevention and treatment strategies studied were considered highly cost-effective, thereby identifying a set of strategies for the control of CVD in low-resource settings.

The research indicates a combination of individual and population-wide strategies is required for optimal CVD risk reduction; in this study, these combinations averted more than 5000 disability-adjusted life years per one million people annually. Most strategies studied were deemed cost-effective as they generated 1 healthy year of life at a cost of less than \$Int2,000. Combination drug therapy for people with a greater than 25% risk of experiencing a CV event over the next decade was one intervention shown to offer particularly good monetary value.

## Early milk feeds 'benefits premature babies'

At-risk premature babies would benefit from being given milk feeds earlier, a study has suggested.

The University of Oxford study found babies were not at a higher risk of severe bowel problems if moved off IV-feeds early, as was feared.

Four hundred babies, born at least 5 weeks early and small for their age, were studied for the *Pediatrics* paper.

## New plan to control and eliminate measles and rubella

The Measles and Rubella Initiative recently announced a new global strategy aimed at reducing measles deaths and congenital rubella syndrome to zero.

The announcement came with the publication of new data using a state-of-the-art methodology showing that accelerated efforts to reduce measles deaths have resulted in a 74% reduction in global measles mortality, from an estimated 535 300 deaths in 2000 to 139 300 in 2010.

Vaccination has been key to this progress. Through increased routine immunisation coverage and large-scale immunisation campaigns, sub-Saharan Africa made the most progress with an 85% drop in measles deaths between 2000 and 2010, according to a new study published in the *Lancet*.

## World Immunization Week: 21–28 April 2012

To underscore the importance of immunisation in saving lives, and to encourage families to vaccinate their children against deadly diseases WHO united countries across the globe for a week of vaccination campaigns, public education, and information-sharing under the umbrella of World Immunization Week.

Immunisation is one of the most successful and cost-effective health interventions. It prevents between 2 and 3 million deaths every year. Immunisation prevents debilitating illness, disability, and death from vaccine-preventable diseases such as diphtheria, hepatitis A and B, measles, mumps, pneumococcal disease, polio, rotavirus diarrhoea, tetanus, and yellow fever.