

Premature birth rates increase in most of the world



In 2010, almost 15 million infants were born prematurely worldwide. That is over one in ten babies born. South Asia and sub-Saharan Africa account for 60% of premature births.

According to the first ever national level estimates only three countries managed to reduce preterm birth rates within the past two decades.

Worldwide, preterm birth, i.e. births before week 37 of gestation, is still the single biggest cause of neonatal death and ranks in second place as the most common cause of mortality in children below the age of 5 years, claiming the lives of 1.1 million infants every year.

World Heart Federation welcomes first global target on NCDs

At the 65th World Health Assembly, held in Geneva, Switzerland in May, world leaders agreed the first ever global target to prevent and control non-communicable diseases (NCDs), including cardiovascular disease, cancer, diabetes, and lung disease. The Target is to reduce premature deaths from NCDs by 25% by 2025

The adoption of the Target is a significant milestone in the fight against cardiovascular disease, and was welcomed by leadership at the World Heart Federation. However, there is still work to be done, to ensure the Target brings concrete outcomes. Johanna Ralston, CEO at the World Heart Federation, said. 'We congratulate world leaders on making significant progress in the battle against the leading causes of death worldwide. The Target will compel action by all to prevent and control cardiovascular diseases, including heart disease and stroke. If met, the Target will literally be

In order to estimate preterm birth rates for 2010 by country, region, and worldwide, Joy Lawn from Save the Children in South Africa and her team utilised data from various sources, such as national registries and reproductive health surveys, using statistical models to evaluate data for 184 countries. In addition, they also calculated time trends for 65 countries, including Latin America and the Caribbean from 1990 onwards.

They established that in the majority of the 65 countries premature birth rates increased, with a decrease of preterm birth rates being observed only in Croatia, Ecuador, and Estonia between 1990 and 2010. Premature birth rates in the 14 other countries remained more or less stable with an annual change of less than 0.5%.

On average, the preterm birth rate increased from 7.5% in 1990 with a total preterm birth rate of 2 million in the 65 countries to 8.6% in 2010 with a total of 2.2 million preterm births.

lifesaving.

Deaths from cardiovascular disease represent the highest proportion of NCD deaths. To achieve the Target, governments urgently need to implement strategies to reduce the prevalence and ensure timely management of heart disease and stroke, and their risk factors. We know how to avert these deaths, using proven and affordable interventions that can save lives across the globe. Now we need to put our knowledge into practice.'

The World Heart Federation is calling for the agreement on additional targets to:

- reduce the consumption of tobacco, salt, alcohol, and trans-fats;
- reduce the prevalence of physical inactivity, blood pressure, and obesity;
- ensure the availability of essential medicines for persons living and coping with NCDs.

Discussion about these targets is ongoing, with agreement expected to be reached at a meeting of Member States in October.

Smoking and drinking has 'little effect' on sperm counts

Lifestyle advice given to tackle male infertility may be futile and could delay other options, according to researchers in the UK.

Their study in the journal *Human Reproduction* said smoking, alcohol consumption and being obese did not affect semen quality. However, they warned that avoiding them was still 'good health advice'.

HIV quad pill 'may improve care'

A new once-a-day pill which combines four HIV drugs into a single daily treatment is safe and effective, according to a US study. It is hoped the four-in-one 'quad pill' will make it easier for patients to stick to their medication, improving the effects of their treatment.

A study in the *Lancet* said it could be an 'important new treatment option'.

Researchers and drug companies have combined some drugs into single pills so that taking the correct medication at the right time of day is easier.

The quad pill is the first to include a type of anti-HIV drug known as an integrase inhibitor, which stops the virus replicating.

Bush travels to Africa to raise cancer awareness

Former US President George W Bush visited Zambia and Botswana in early July to promote a health initiative that focuses on cervical and breast cancer prevention and treatment.

In the Zambian city of Kabwe, Bush worked with local residents to refurbish a clinic used to screen, diagnose, and treat cervical cancer. He then travelled to the capital Lusaka, where he designated a cancer centre at a university teaching hospital and met with governmental and healthcare leaders.

The trip to both nations is part of the Pink Ribbon Red Ribbon initiative spearheaded by the Bush Foundation that seeks to expand cervical and breast cancer screening and treatment in sub-Saharan Africa.

Diesel exhausts do cause cancer



Exhaust fumes from diesel engines do cause cancer, a panel of experts working for the World Health Organization says. It concluded that the exhausts were definitely a cause of lung cancer and may also cause tumours in the bladder.

The findings were based on research in high-risk workers such as miners, railway workers, and truck drivers. However, the panel said everyone should try to reduce their exposure to diesel exhaust fumes.

The International Agency for Research on Cancer, a part of the World Health Organization, had previously labelled diesel exhausts as probably carcinogenic to humans.

IARC has now labelled exhausts as a definite cause of cancer, although it

does not compare how risky different carcinogens are. Diesel exhausts are now in the same group as carcinogens ranging from wood chippings to plutonium and sunlight to alcohol.

It is thought people working in at-risk industries have about a 40% increased risk of developing lung cancer.

Dr Christopher Portier, who led the assessment, said, 'the scientific evidence was compelling and the Working Group's conclusion was unanimous, diesel engine exhaust causes lung cancer in humans. Given the additional health impacts from diesel particulates, exposure to this mixture of chemicals should be reduced worldwide.'

The impact on the wider population, which is exposed to diesel fumes at much lower levels and for shorter periods of time, is unknown. Dr Kurt Straif, also from IARC, said, 'For most of the carcinogens when there is high exposure the risk is higher, when there is lower exposure the risk is lower.'

There have been considerable efforts to clean up diesel exhausts. Lower sulphur fuel and engines which burn the fuel more efficiently are now in use.

Kenyan doctors push for drive to reduce cervical cancer deaths

In Kenya non-communicable diseases (NCDs) such as cancer have not, in the past, been seen as a priority. Many public health specialists are saying that must change. 'Every year, Kenya loses approximately 3400 women to cervical cancer,' says Dr Lucy Muchiri, a pathologist who specialises in the disease at the Kenyatta National Hospital and the University of Nairobi.

Dr Muchiri suspects that the numbers of cervical cancer fatalities are significantly higher because there is no accurate tally of cancer rates in remote rural areas. 'Not everyone has access to laboratory diagnosis,' she says, 'so a lot of Kenyans die of disease or are being treated at home without medical diagnosis.' Health advocates and researchers estimate that fewer than 5% of Kenyan women are screened for cervical cancer annually.

Fortunately, the past decade has yielded another powerful tool in the

fight against cervical cancer worldwide. In 2006, the pharmaceutical companies Merck and GlaxoSmith-Kline both released vaccines designed to protect women from the human papillomavirus (HPV), which causes cervical cancer. By 2009, 33 developed countries had included the HPV vaccine as part of their national immunisation programmes.

Up to now, appeals to Kenyan policymakers – including targeted lobbying of women representatives – have failed to achieve provision of the HPV vaccine as part of the government's reproductive health strategy. But government agencies recently said they are beginning the process of applying for HPV vaccines to enable mass vaccination campaigns. KNH's Dr Gathari Ndirangu cautions, however, that more than acquiring vaccines is needed. Careful planning, he says, will be required to handle the HPV vaccine, which must be kept at an appropriate temperature. 'Logistics for vaccines,' Ndirangu says, 'take up much more resources than the actual procurement.'

Awards

1. Kenyan wins award for improving health in the community

Rolex Awards for Enterprise are given to exceptional individuals in the fields of science, the environment, and technology.

This year one such award has been given to Aggrey Otieno, who returned to the Nairobi slum of his birth determined to use his US masters degree to improve the health of the community in which he grew up. Korogocho is the fourth largest slum in Nairobi and among its estimated 200 000 inhabitants many mothers and babies die in childbirth each year.

Otieno proposes to build a slum telemedicine centre with an on-call doctor and van. The centre will advise birth attendants via text message and, if necessary, dispatch the van to transport the woman to hospital. The service will be enhanced with a community education package on maternal health.

2. UK doctor wins award for work in Africa

A UK doctor has won the prestigious title of Junior Doctor of the Year for his work in helping promote health education in Africa.

It was the third year the category has run at the British Medical Journal Group Improving Health Awards. Dr Finlayson won the award for his 'varying and impressive' work across clinical medicine, including his most notable achievement, MedicineAfrica.

The programme was initially set up in Somalia and it aims to offer medical students and doctors in the country the chance to receive expert health education, often where there is no obvious career path for them.

'MedicineAfrica is supporting isolated healthcare workers in low- and middle-income countries using UK NHS [National Health Service] workers' expertise and using their experience to offer the support for people where there is no natural career path in difficult circumstances,' Dr Finlayson said.

The programme has been successful and has now incorporated the African countries Tanzania and Ghana, as well as spreading into Asia in Palestine.

New rotavirus vaccine for diarrhoea reaches Rwanda

More than 3000 Rwandan children die every year from diarrhoea. But health officials say that's about to change with the introduction of the rotavirus vaccine. Rwanda is the latest in a growing number of African countries to receive the vaccine.

It is estimated that worldwide more than 1200 children die each day from rotavirus infection. Almost all of them are in developing countries.

'Rotavirus is the leading cause of diarrhoea. In fact, in Africa, 40% of children who are hospitalised for diarrhoea have rotavirus. And therefore it's a major killer causing a lot of the child mortality that still exists on the continent,' said Dr Seth Berkley, CEO of the GAVI Alliance, a Geneva-based public-private health partnership.

'Rwanda of course is a country that has enormous attention to public health. It's done a very good job. They have an immunisation rate that's greater than 95%. But they still have children that die of diarrhoea and particularly rotavirus. The expectation is that about 3500

Rwandan children die every year from rotavirus diseases, accounting for close to 10% of all the under-5 deaths,' he said, adding that virtually all of those deaths can be prevented.

'We're in the process of trying to get this out to all of the countries. So since 2006, 28 GAVI eligible countries have been approved to receive it. And so we're trying to scale-up even more than that, although obviously it takes time to get it out to all the countries and some are more prepared than others,' he said.

Dr Berkley is the founder and former head of IAVI, the International AIDS Vaccine Initiative. He said he foresees the day when an HIV vaccine will become part of routine immunisations.

The second biggest killer of children under 5 is pneumonia. Dr Berkley says pneumococcal vaccine is rolling out even faster than the rotavirus vaccine. Rwanda has already made it part of its immunisation programme and was one of the first developing countries to do so.

H1N1 swine flu may have killed 15 times more than first stated

The swine flu virus, H1N1, may have killed 15 times the number of people counted by the World Health Organization, according to a new study. And unlike the seasonal flu, the H1N1 pandemic struck down mostly young people, many living in Africa and Southeast Asia.

Beginning in 2009, the virus swept the globe, and WHO counted 18 500 swine flu deaths that had been confirmed by laboratory tests. But, according to new estimates from researchers at the US Centers for Disease Control and Prevention, the virus probably killed between 105 700 and 400 000 people around the world in its first year alone; an additional 46 000 to 179 000 people possibly died of cardiovascular complications from the virus.

Although a wide gap in death rates this is not unusual. The numbers of flu

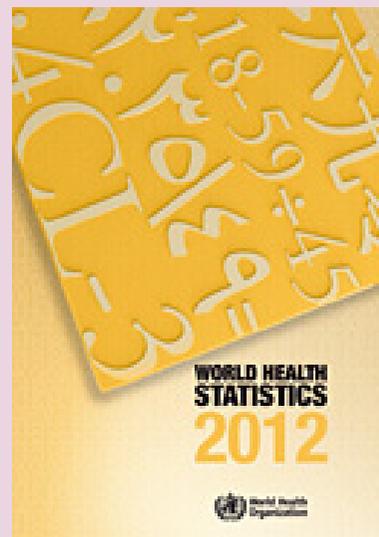
deaths confirmed by lab tests usually understate how many people actually died from the virus, simply because most doctors around the world don't have the time or the resources to test their patients for the virus and report cases to health authorities. The problem is greater in countries with few medical resources.

The study, published in the *Lancet* medical journal is the first attempt to provide a global estimate of how many deaths actually occurred during the first year of the swine flu pandemic.

Researchers were more surprised by who the virus targeted. According to the CDC analysis, 80% of deaths from the swine flu pandemic were of people under age 65, not the older, frail adults who are typically the victims of seasonal flu. Geographically, 59% of the deaths were in Africa and Southeast Asia.

Though the virus was deadly, the swine flu pandemic is still considered to have been a fairly mild one.

World Health Statistics 2012



World Health Statistics 2012 contains WHO's annual compilation of health-related data for its 194 Member States, and includes a summary of the progress made towards achieving the health-related Millennium Development Goals (MDGs) and associated targets.

This year, it also includes highlight summaries on the topics of non-communicable diseases, universal health coverage, and civil registration coverage.

To download the report go to http://www.who.int/gho/publications/world_health_statistics/2012/en/

20 million free rapid HIV tests distributed

To mark HIV testing day (28th June) The global healthcare company Abbott, and the medical relief organisation Direct Relief International, have announced that they have reached a major milestone with the distribution of 20 million free rapid HIV tests in 43 developing countries over the past decade.

The focus of this donation programme has been to reach pregnant women and their families to prevent mother-to-child transmission of HIV. More than 150 partner organisations and 8000 health facilities have received donated tests, helping prevent more than 150 000 HIV cases in children.

Turning Africa health research into treatments for its people

A recent article in the UK's *Guardian* newspaper says Africa must turn its health research into treatments for African people. Africa already has the research and the potential to improve the health of its people, says the author, but changing perceptions is the first step.

Despite large investments being made by donors in health products and delivery of health services, a large percentage of Africans still have limited access to sufficient and quality healthcare. The burden of diseases such as HIV, tuberculosis, and malaria, coupled with the lack of health workers and management, as well as organisational failures, have all contributed to this dire situation.

The author quotes a recent report, *Investing in health for Africa* – released by the World Health Organization (WHO), World Bank and USAID which says average additional spending in sub-Saharan Africa of US\$21–36 could in 2015 alone save more than 3 million lives, 90% of which would be women and children. This would also generate US\$100bn in economic benefits.

Forum 2012 in Cape Town in April revealed that the major funding of health research comes from national governments across Africa and not international

aid from developed countries, which is a common misconception. It also showed that a significant amount of health-related research is being carried out across the continent, but it is not being turned into products or treatments in a systematic way, which would be of benefit to the continent.

National governments must set their own priorities for research, train people to work in laboratories and universities, and provide incentives for innovation. Countries also need to work towards independence and away from donor aid – but not at the expense of tackling the problem directly.

The author concludes that as many developed countries begin to cut aid budgets, it is imperative that African-led innovation is applied to address African health needs. African researchers must become involved in finding solutions for the problems of their own continent. New communication technologies are making up for a lack of infrastructure and resources, and the possibilities are exciting – virtual collaboration, sharing of data, and the use of mobile health technology to reach remote rural areas are among some of the exciting trends in the health sector.

Launch of off-grid radios



Aimed at organisations engaged in aid and development work, disaster relief, and emergency response planning, the company Freeplay has launched a low-cost, compact, and robust range of multi-band radios.

Each radio is powered by a solar panel and a hand-operated dynamo, and includes a mobile phone charging point, a built-in reading light, and an easy-to-replace aerial.

Announcing the launch of the Encore range, Freeplay's Managing Director, John McGrath, says, 'Radio broadcasts continue to play a vital role in the developing world by giving people daily access to critical information and educational content.

We are delighted to launch Freeplay's range of radios which make it possible for people living without power or the money to buy batteries to receive these broadcasts daily. And, with the huge increase in use in the developing world of that other vital communication tool – the mobile phone – the integrated phone charging point makes it easier for people to stay in touch.'

Freeplay's radios are already making a difference to people's lives in some of the most difficult environments on earth. They are offering access to information about health and the promotion of life-saving messages, such as how to prepare drinking water, how to fight malaria and water-borne diseases, and raising awareness of disease outbreak.

To read more about the phones go to <http://www.freeplayenergy.com>.



The XIXth International AIDS Conference

The XIXth International AIDS Conference (AIDS 2012) will take place in Washington DC, USA from 22nd to 27 July. It will be one of the central events of the year in global health and HIV. The conference theme is 'Turning the tide together', which emphasises the decisive actions needed in today's defining phase of the epidemic.

The WHO HIV programme is planning to participate in the conference specifically focusing the themes of treatment for prevention, treatment 2.0, and more broadly, the strategic use of antiretroviral drugs.

To find out more about the conference go to <http://www.aids2012.org/>.

Meningococcal disease: situation in the African meningitis belt

From 1 January to 17 April 2012, outbreaks of meningococcal disease were reported in 42 districts in 10 of the 14 countries of the African Meningitis Belt 1. The 10 countries (Benin, Burkina Faso, Chad, Central African Republic, Côte d'Ivoire, Gambia, Ghana, Mali, Nigeria, and Sudan) reported a total of 11 647 meningitis cases, including 960 deaths, resulting in a case fatality ratio of 8.2%. The outbreaks were mainly caused by the W135 serogroup of *Neisseria meningitidis* (Nm) bacteria.

Drug-resistant gonorrhoea on the rise, warns WHO

THE World Health Organization has warned of a spreading resistance to drugs used to treat the STD gonorrhoea. Millions of people with the condition may be at risk of running out of treatment options unless urgent action is taken.

Several countries have reported cases of resistance to cephalosporin antibiotics – the last treatment option against gonorrhoea.

WHO has called for greater vigilance on the correct use of antibiotics and more research into alternative treatments.