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bmj.com Conservatives announce insurance based model for social care for older people

Nobel prize in medicine is won by three scientists for work on chromosomal telomeres

Geoff Watts LONDON

As widely predicted, the 2009 Nobel prize in physiology or medicine has been awarded to one Australian and two US biologists for their work on the role of telomeres, the molecular caps that lie at the end of each of the chromosomes. Understanding the purpose and actions of telomeres has implications ranging from ageing to cancer.

The winners, who share a prize usually worth about 10 million Swedish kronor (£0.9m; €1m; \$1.4m), are Carol Greider of Johns Hopkins University School of Medicine in Baltimore, Jack Szostak of Harvard Medical School in Cambridge, Massachusetts, and Elizabeth Blackburn, of the University of California at San Francisco.

The existence of a characteristic cap at the ends of chromosomes was first noted in the 1930s by the US biologist Hermann Muller. He coined the term telomere from the Greek words *telos* (end) and *meros* (part). Although he and others speculated that telomeres protect the genetic material in some way, proof did not come for another three decades.

In the late 1970s Professor Szostak found that lengths of DNA that had been artificially inserted into yeast cells began to degrade. Why, he wondered, was the yeast cells' own DNA not also degraded? Around the same time, Professor Blackburn had been analysing telomere DNA from the chromosomes of the unicellular pond dwelling organism *Tetrahymena*. She found that they always



PAUL SAKUMA/AP/PA



ROB CARR/AP/PA



BRIAN SNYDER/REUTERS

Work by Elizabeth Blackburn (left), Carol Greider and Jack Szostak has inspired lines of cancer research

ended with the same short unique DNA sequence, repeated several times.

Professor Szostak, in collaboration with Professor Blackburn, tried joining one of her DNA sequences to another length of DNA that he once again inserted into a yeast cell. This time it did not degrade; the added sequence was indeed protecting it. Finally, in the early 1980s, Professor Greider identified the enzyme, telomerase, responsible for assembling telomeres.

Duncan Baird of the Department of Pathology at the School of Medicine in Cardiff said, "Telomere biology impacts upon cancer, the ageing process, and genetic disease."

The more times that a cell divides, the shorter the telomeres become, and at some point this shortening prompts the cell to stop dividing. It becomes senescent, said Dr Baird. "As we age there is an accumula-

tion of senescent cells that may underlie age related tissue degeneration and disease." On the other hand, he added, "by preventing unlimited cell division, telomere shortening provides a tumour suppressive mechanism." Cancer cells thrive because they can rapidly restore their lost telomere material.

Julia Cooper, who runs Cancer Research UK's telomere biology laboratory, said, "We know that a high proportion of human cancer tumours contain elevated levels of the telomerase enzyme. This groundbreaking work has led to the possibility of scientists one day being able to reset our cells' internal clocks to alleviate the effects of both ageing and cancer."

"If scientists could one day use drugs to manipulate this, it could have a significant impact on treating many cancers."

Cite this as: *BMJ* 2009;339:b4120

US health reform bill could delay generic forms of biological drugs

Janice Hopkins Tanne NEW YORK
Medical students and consumer groups in the United States have objected to parts of the proposed healthcare reform bills, which they say will make it more difficult to introduce cheap generic forms of biological drugs (drugs derived biologically rather than chemically).

The American Medical Students Association and the consumer

groups Universities Allied for Essential Medicines, Essential Action, and Knowledge Ecology International say that provisions in several Senate and House of Representatives healthcare reform bills will block the introduction of most generic biologicals. Improving the proposed bills could save \$71 bn (£45bn; €49bn) in the first decade of health reform, they say.

They are calling on Congress to create a pathway for the production of generic biological drugs.

The drug industry trade group Pharmaceutical Research and Manufacturers of America says that biological drugs should get longer protection against competition from manufacturers of generics because their development is "scientifically complex, time consuming, and

requires significant investment."

Currently in the US drugs receive five years of market exclusivity. Proposals in the reform bills would give biological drugs 12 years.

The proposed legislation would also permit manufacturers of biological drugs 12 year extensions whenever they made even minor modifications to the original drug.

Cite this as: *BMJ* 2009;339:b4088

People with asthma most at risk from H1N1 complications

Oliver Ellis *BMJ*

The government has released further information on the underlying conditions that can cause swine flu to become more dangerous, showing that asthma is the most common comorbidity found in those who are admitted to hospital.

The figures come from a study conducted by the Flu Clinical Information Network (FLU-CIN) and funded by the Department of Health, which looked at a sample of 192 patients in England who had been hospitalised with the H1N1 virus. It found that lung disease was the most common underlying condition, with more than 25% of those admitted having asthma. Cardiac disease was present in 15% of patients admitted to hospital.

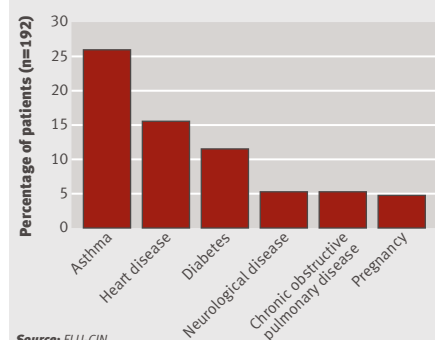
England's chief medical officer, Liam Donaldson, noted that pregnant women made up 5% of hospitalised patients who had a diagnosis of swine flu, a "small but significant proportion."

The figures also underline the dangers of swine flu to previously healthy young people. Although older people with complications resulting from swine flu often had underlying conditions, half of the 80 people aged 16-44 years and 35 of the 40 children aged under 5 years who needed hospital treatment had no known comorbidities.

Cher Piddock, lead asthma nurse at Asthma UK, said that advice to people with asthma was to be vaccinated against swine vaccine as soon as possible and to keep their condition under control. She said, "They can do this by using their preventer inhaler as prescribed, [and by] seeing their doctor or asthma nurse for an asthma review."

Cite this as: *BMJ* 2009;339:b4103

UNDERLYING CONDITIONS IN 192 HOSPITALISED PATIENTS IN ENGLAND WITH CONFIRMED SWINE FLU



Teenager who died after HPV vaccine had a chest tumour

Adrian O'Dowd *LONDON*

An English teenager who died shortly after receiving the human papilloma-virus (HPV) vaccine Cervarix had a large malignant tumour in her chest, which caused her death, public health doctors have said.

A pathologist confirmed on 1 October that results of a post mortem examination into the death of 14 year old Natalie Morton from Coventry found a tumour of unknown origin in her heart and lungs.

There was no indication that the HPV vaccine contributed to her death, "which could have arisen at any point," said Caron Grainger, joint director of public health for NHS Coventry and Coventry City Council.

The pupil of Coventry Blue Coat Church of England School and Music College was given the HPV vaccine on 28 September as part of routine vaccination against cervical cancer,



Natalie Morton died on 28 September

but she died a few hours later.

NHS Coventry quarantined the batch of vaccine used as a precautionary measure and informed the Medicines and Healthcare Products Regulatory Agency.

A spokesman for the Department of Health said that although it was asking the NHS to quarantine all stocks of HPV vaccine from the batch related to this case, the

national vaccination programme should continue.

Dr Grainger added, "We hope that this news will reassure parents that the vaccine is safe and that they should continue to encourage their daughters to be protected against cervical cancer. The HPV vaccination programme will continue as planned in the city from Monday."

See **OBSERVATIONS**, p 836

Cite this as: *BMJ* 2009;339:b4032



Tributes to Natalie Morton from pupils at Blue Coat Church of England School in Coventry

Coroner rules that treating 26 year old

Clare Dyer *BMJ*

A 26 year old woman who swallowed antifreeze and died after doctors refused to carry out lifesaving treatment against her wishes had refused the treatment "in full knowledge of the consequences and died as a result," a coroner has ruled.

Some UK media outlets reported that doctors had been

forced to let Kerrie Wooltorton, from Norwich, die because she arrived at hospital brandishing a living will.

However, she arrived fully conscious by ambulance and was deemed mentally competent and therefore by law entitled to refuse medical treatment.

Had she lapsed into unconsciousness before she

was seen by doctors the living will or advance directive would have come into play to make her intentions clear and stop doctors intervening to save her life.

In a narrative verdict, the Norfolk coroner William Armstrong said that Ms Wooltorton had capacity to consent to treatment, which, more likely than not, would have

More people should be tested for HIV to reduce late diagnosis

Susan Mayor LONDON

One third of deaths related to HIV in the United Kingdom could be prevented if testing for the disease were more widespread and more socially acceptable, says a summary of guidelines published on 1 October (*Clinical Medicine* 2009;9:471-6). The guidelines aim to facilitate earlier diagnosis of HIV by encouraging healthcare workers to carry out HIV tests on a wider range of people than is traditionally considered to be at high risk of infection.

The guidelines say that HIV tests should be offered to everyone who accesses sexual health services; antenatal and abortion services; drug dependency programmes; and healthcare services for people diagnosed as having tuberculosis, hepatitis B, hepatitis C, and lymphoma. Tests should also be routinely offered to anyone who presents with other clinical indicators for HIV infection or with an identified risk factor for HIV whenever they access healthcare services.

"Many people in the UK are infected with HIV but don't find this out until too late for treatment to have the best chance of working," said Adrian Palfreeman, consultant physician at University Hospitals Leicester NHS Trust and coauthor of the guideline summary, which is based on 2008 UK guidelines for HIV testing.

The latest figures estimate that more than 77 000 people in the UK are infected with HIV, but more than one quarter of these have not had the infection diagnosed. In addition, almost one third (31%) of people are diagnosed as having HIV too late to gain the full benefits of early diagnosis and treatment, including prolonged life expectancy.

Mark Pakianathan, consultant in genitourinary and HIV medicine at St George's Hospital, London, and a spokesman for the British Association for Sexual health and HIV, said, "A 20 year old diagnosed with HIV today can expect to live an additional 50 years with the treatment now available. We have an urgent responsibility to recommend testing when appropriate to avoid unnecessary death and spread of disease."

He added, "The guideline recognises that the paradigm for HIV diagnosis has shifted over the past 15 years, from one of inevitable disease and death, to being one in which early diagnosis and treatment mean long term survival. This means it is every clinician's responsibility, and part of good practice, to recognise HIV early both for the individual patient's health and to prevent transmission."

Although the guidance calls for more testing to achieve early diagnosis and prevent the spread of HIV, it recognises that testing must remain confidential and voluntary. All patients should give informed consent for HIV testing, after a discussion outlining the benefits of testing and how the result will be given. However, the guidance says that lengthy counselling before testing, as occurred before, is not necessary unless a patient requests or needs this.

If HIV tests are positive, patients should be told face to face in a confidential environment. They should be referred to HIV specialists to be seen as quickly as possible.

Virginia Beckett, a spokeswoman for the Royal College of Obstetricians and Gynaecologists and a consultant obstetrician and gynaecologist at Bradford Teaching Hospitals NHS Foundation Trust, reported that most antenatal services are already achieving high rates of HIV testing in pregnant women. HIV testing is included in routine blood tests at the first appointment with antenatal services. "Uptake of HIV testing was initially not that good, but the stigma has reduced



About half of HIV positive women at one northern city hospital find out their HIV status for the first time at an antenatal clinic

over time, and the opt-out system now used has greatly improved acceptance of testing," she said.

Dr Beckett said that in her unit about half of HIV positive women find out that they are infected for the first time at antenatal screening. "It is a really good way of picking up women who are not aware they are infected. And we can reduce vertical transmission of HIV to their babies from around 30% to less than 2%. There is not much in medicine that can achieve that much impact." Her only concern was in informing asylum seekers of their HIV status, because they generally lose access to treatment if they are denied asylum and returned to their country of origin.

Publication of the guidance is supported by a resource pack on HIV testing for clinicians, produced by the Medical Foundation for AIDS and Sexual Health.

UK National Guidelines for HIV Testing 2008 are at www.bhiva.org/cms1222621.asp.

Cite this as: *BMJ* 2009;339:b4058

woman who wanted to die would have been unlawful

prevented her death but had refused it in full knowledge of the consequences.

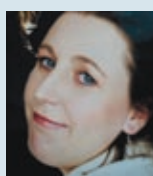
He added, "Even when she was losing consciousness she was absolutely clear in refusing treatment. Any treatment... in the absence of her consent would have been unlawful."

Ms Wooltorton was said during the inquest to have an

"untreatable" emotionally unstable personality disorder.

Her living will said that she was "100 per cent aware" of the consequences of her action and did not want to be treated.

Alexander Heaton, consultant renal physician, told the inquest that it was his duty to act on Ms Wooltorton's wishes. Had



Kerrie Wooltorton had attempted suicide nine times

he gone against them it would legally have been an assault.

He and his team had monitored her for any sign of ambivalence after she arrived at the hospital on 18 September 2007.

Mr Armstrong said, "The doctor went over and above what was required of him. He discussed the case with clinical colleagues, took a

second opinion from a fellow consultant, and sought advice from the medical director.

"A deliberate decision to die may appear repugnant, but any treatment to have saved Kerrie's life in the absence of her consent would have been unlawful."

See **OBSERVATIONS**, p 837

Cite this as: *BMJ* 2009;339:b4070

Cochrane says antiviral drugs are not effective in Bell's palsy

Roger Dobson ABERGAVENNY

Antiviral drugs that are widely prescribed to treat Bell's palsy are ineffective, new research from the Cochrane Database shows.

High quality evidence from randomised controlled trials of *Herpes simplex* antiviral drugs showed that they were no more effective than placebo, say the authors (*Cochrane Database of Systematic Reviews* 2009;4:CD001869). They recommend that research should now focus on discovering other potential causes and treatments of the condition, which affects between 11 and 40 in every 100 000 people.

"These results cast doubt on research that suggests *Herpes simplex* causes the condition," said the study's lead author, Pauline Lockhart, of the Centre for Primary Care and Population Research at the University of Dundee. "In view of this, further research should be aimed at discovering alternative causes and treatments."

She added, "It is worth pointing out that a 10 day course of the antivirals often prescribed for Bell's palsy can cost in excess of £10 [€11; \$16] in the UK. Obviously, widespread prescription of drugs that we know do not work is a waste of resources."

Some studies have suggested that the condition, a disease of the facial nerve that causes one side of the face to be paralysed, is caused by infection with *Herpes simplex*. Treat-



Infection with *Herpes simplex* is no longer the prime suspect

ment with an antiviral drug is commonly based on the idea that infection with the virus causes inflammation of the facial nerve and that antivirals will eradicate the infectious agent, while corticosteroids reduce the swelling of the facial nerve.

One of the coauthors of the Cochrane paper, Frank Sullivan, won the research paper of the year award at the BMJ Group Awards this year. The award was for a paper in the *New England Journal of Medicine* (2007;357:1598-607) that found no evidence of a benefit of acyclovir for Bell's palsy either given alone or in combination with prednisolone.

In the new study the researchers analysed data from seven randomised controlled trials of antivirals with and without corticosteroids, involving a total of 1987 people.

The results showed little difference between antivirals and placebo in the recovery of participants (relative risk 0.9 (95% confidence interval 0.7 to 1.2)). Also, participants receiving corticosteroids were more likely to recover than those receiving antivirals (relative risk 2.8 (1.1 to 7.32)).

"This updated review provided high quality evidence that antivirals are no more effective than placebo treatment in producing complete recovery," says the report.

Cite this as: *BMJ* 2009;339:b4086

Charity calls for pooling of patents for newer HIV drugs

Susan Mayor LONDON

The international medical aid organisation Médecins Sans Frontières (MSF) is calling on nine of the world's largest drug companies to pool their patents on newer HIV drugs and to make them available in developing countries.

The campaign is inviting the companies, which include Abbott Laboratories, GlaxoSmithKline, and Pfizer, to place the patents for a list of HIV drugs into a patent pool recently set up by Unitaaid, an international agency that partners with organisations, including the World Health Organization and UNAIDS, to purchase drugs for developing countries.

The concept of a patent pool is that it brings together several patents held by different companies and makes them available to others for production or further development. MSF describes the idea as a "one stop shop" for patents, which companies and researchers can access in exchange for royalty payments that go back to the individual companies.

Michelle Childs, director of policy and advocacy at MSF's campaign for access to essential medicines, said, "It's a simple idea: companies share their knowledge in return for fair royalty payments."

MSF says that this would help tackle some of the gaps in HIV treatment in developing countries by facilitating production of cheaper, generic versions of newer HIV drugs and enabling development of paediatric formulations. Having the patents held in one place would also make it simpler to develop combination

Drug company and charity agree to collaborate to develop

Bob Roehr WASHINGTON, DC

The Drugs for Neglected Diseases initiative (DNDi) has entered into an agreement with a drug company to develop the first new compound in nearly 40 years to treat Chagas' disease. An estimated eight million people are infected with the parasite that causes the disease, *Trypanosoma cruzi*, a third of whom will die of heart or intestinal disease if left untreated.

Chagas' disease is endemic in Latin American and Caribbean countries, and migration patterns have spread it worldwide. About 300 000 people in the United States are thought to be infected with it (*BMJ* 2009;339:b2859).

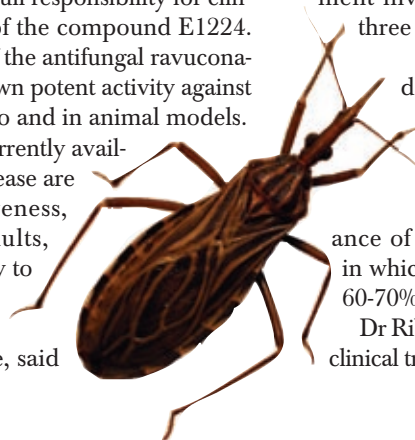
In an agreement with the Japanese company Eisai, DNDi, a collaboration formed in 2003 by seven organisations around the world, will assume full responsibility for clinical development of the compound E1224. This is a prodrug of the antifungal ravuconazole, which has shown potent activity against the infection in vitro and in animal models.

The two drugs currently available to treat the disease are of limited effectiveness, particularly in adults, who are more likely to have a well established chronic stage of the disease, said

Isabela Ribeiro, who is coordinating the project at DNDi. The drugs also sometimes have fatal side effects, and a course of treatment involves taking the drug two or three times a day for 30 to 90 days.

The prodrug compound being developed has a very long half life, which will allow dosing once a week. The initial proof of concept trial will aim to achieve maximum clearance of the parasite in chronic cases, in which current drugs are effective in 60-70% of cases.

Dr Ribeiro anticipates initiating the first clinical trials next year, with confirmation





Many HIV patients in South Africa have developed resistance to older drugs

drugs. A company that wanted to develop a new combination of several drugs would need to deal only with the pool rather than with the different companies that make each of the drugs.

"This is an opportunity for these drug companies to demonstrate that they are genuinely committed to effective measures that allow access to life saving medicines for people with HIV in developing countries," explained Ms Childs. "Some companies have expressed interest in the idea, but we need them to go further and put key patents in the pool."

Stephen Rea, a spokesperson for GlaxoSmithKline, London, said that the company has been in discussions with Unitaids about the pool for several months. "In principle, we haven't ruled anything out but we want to see more detailed proposals about how the scheme would work and how placing patents in a pool would stimulate research in HIV," he said.

He noted that GlaxoSmithKline already has a patent pool for neglected tropical diseases, including malaria, dengue fever, and encephalitis. "We have put all our patents for relevant drugs into the pool so people can access them. The only requirement is that people use the drugs in efforts to target these diseases.

"So we have already broken the holy grail of the intellectual property code in order to stimulate research," he said. He added that GlaxoSmithKline has already offered to give patents for three of the HIV drugs listed in the MSF campaign (lamivudine, abacavir, and fosamprenavir) to generic manufacturers to produce, with no royalty fee, as long as they meet the required quality standards.

MSF argues that a patent pool would simplify the provision of cheaper HIV drugs.

See www.msf.org.uk.

Cite this as: *BMJ* 2009;339:b4056

a new treatment for Chagas' disease

of activity by early 2011. Regulatory approval could come as early as 2014.

Sergio Sosa-Estani, an expert in endemic tropical diseases at the University of Buenos Aires, said that research into Chagas' disease is so dated and so oriented towards prevention that the field of treatment has to be practically reinvented.

The clinical trials for this compound will help to reinvigorate the field, he said.

The traditional method of monitoring treatment has been to measure antibodies to *T cruzi*. Although useful, this method is not very accurate, and antibodies can persist for years after the parasite has been eradicated.

Dr Sosa-Estani says that researchers have

developed two standardised polymerase chain reaction tests that detect *T cruzi* in blood. The first is a qualitative test that many South American countries and the US have rolled out over the past few years to screen donated blood and prevent transmission of the infection. It can also be used to identify infection in individual patients.

The second is a quantitative test that will help give a better understanding of the course and staging of the disease and response to treatment. Evidence indicates an association between *T cruzi* levels, inflammation, and organ damage. That test is in the process of being validated.

Cite this as: *BMJ* 2009;339:b4084

NHS will now be "preferred provider" of care, says Burnham

Nicholas Timmins *FINANCIAL TIMES*

NHS organisations are now the "preferred provider" of NHS care, insists Andy Burnham, England's health secretary. The announcement has been welcomed by the health service unions, including Unison, the BMA, and the Royal College of Nursing.

But it produced a rather different reaction among private providers of NHS care, whose trade body, the NHS Partners Network, described it as "completely irresponsible."

From the Department of Health it brought a claim that policy "has not changed"—despite the fact that, Mr Burnham said, three separate parts of the NHS's existing guidance and operating rules will have to be rewritten.

Mr Burnham's initial announcement came in a speech last month to the healthcare think tank the King's Fund. But details of what the policy will mean were outlined in draft guidance to the NHS that was agreed with the health service unions and spelt out in a letter to Brendan Barber, general secretary of the Trades Union Congress.

According to that guidance, NHS organisations must be given "at least two" formal chances to improve where they are underperforming. Even then, alternative providers should be considered only where the continuing underperformance is "significant."

Where incremental improvements in services are sought, existing staff should be given "at least two" chances to provide an acceptable service plan before any move to put the service out to alternative providers.

By contrast, however, where a contract with the private or voluntary sector expires, that should automatically go out to tender, however well the external provider has performed, with NHS organisations allowed to bid.

The BMA said the change was "a very positive sign" that the government was listening to its concerns about the increasing commercialisation of the NHS. Unison welcomed it as "a significant policy shift." It said that proof of the shift would come when primary care trusts stopped being encouraged to divest themselves of their community services and other direct provision.

Alan Milburn, the former Labour health secretary who introduced independent sector treatment centres in the NHS, said, "This is a retrograde step."

Cite this as: *BMJ* 2009;339:b4085

IN BRIEF

Third swine flu vaccine is approved in Europe:

The European Medicines Agency has approved another vaccine against A/H1N1 flu, Baxter's Celvapan, for licensing by the European Commission. Two other vaccines, Focetria from Novartis and Pandemrix from GlaxoSmithKline, were licensed by the European Commission on 29 September. Celvapan and Pandemrix will be used in the United Kingdom's vaccination programme.

Wales considers banning use of sunbeds by young people:

The Welsh Assembly's health minister, Edwina Hart, has warned that the unregulated use of sunbeds is a public health problem. She said, "I am particularly concerned about the use of sunbeds by people under the age of 18 and by the use of coin operated sunbeds. It is my intention to prohibit the use of sunbeds by persons under 18 years of age and also to ban the operation of unstaffed sunbed salons in Wales."

MHRA issues warning over unlicensed "herbal valium":

The UK Medicines and Healthcare Products Regulatory Agency is warning people of the dangers of taking unlicensed herbal medicines that contain the plant extract aconite, also known as monkhood. It has been portrayed in the media as "herbal valium" but is extremely poisonous and is toxic to the heart. The agency has received two suspected adverse reactions to aconite.

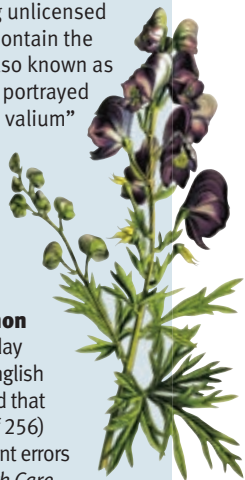
Drug errors are common in care homes:

A half day snapshot survey of 55 English nursing homes has found that 70% of residents (178 of 256) were exposed to treatment errors (*Quality & Safety in Health Care* 2009;18:341-6). The most common mistakes were wrong dosages, drugs given at the wrong times, and insufficient monitoring after the drugs had been taken.

Article in support of animal experiments wins support:

A recent commentary in the *Journal of Neuroscience* (2009;29:11417-8) urging the scientific community to stand together to fight misconceptions about experiments that use animals has become the most highly rated paper of the past few years on the Faculty of 1000 Biology website (<http://f1000biology.com/article/gqpn6j58z732zfl/id/1164890>).

Cite this as: *BMJ* 2009;339:b4107



UN and agencies step up medical

John Zarocostas GENEVA

United Nations relief agencies, governments, and charities have launched a major humanitarian aid effort, including the dispatch of surgical and medical teams and supplies, to help thousands of people in urgent need in earthquake hit Sumatra.

Christine South, operations coordinator for the International Federation of Red Cross and Red Crescent Societies, said that additional medical staff, including surgeons, GPs, and nurses, were needed.

Elizabeth Byrs, spokeswoman for the UN's Office for the Coordination of Humanitarian Affairs, said that immediate needs included medical supplies and personnel, hygiene kits, petrol generators, and heavy equipment to support search and rescue efforts.

Emergency shelter equipment is another top priority, and thousands of tents are needed, said UN relief experts.

On 4 October Indonesia's National Disaster Management Agency said that the

number of confirmed dead from the 7.6 magnitude earthquake that struck on 30 September stood at 603 but that more casualties were expected as rubble was cleared. The agency said that 412 people were seriously injured, 2039 are slightly injured, and 343 people are missing. A further 618 people are believed to have been killed when landslides triggered by the earthquake buried three villages in Padang Pariaman district in West Sumatra province.

The agency, which has yet to complete its assessment, reported that nearly 180 000 houses were damaged. Hospitals are among the many damaged public buildings.

The World Health Organization, which is helping the Indonesian Ministry of Health's crisis centre coordinate the response, said that the main hospital in Padang, the capital of West Sumatra Province, was "severely damaged, and patients are being treated outside the building."

A report by Action by Churches Together

German health policy is predicted to become more pro-doctor

Ned Stafford HAMBURG

In the wake of Germany's federal parliamentary election last month, healthcare policy has emerged as one of the most contentious issues facing Chancellor Angela Merkel as she begins talks with other party leaders to form a coalition government for the next four years.

Coalition talks began on 5 October in Berlin and are expected to last several weeks. Although the detail of the final healthcare package is still in question, it seems certain that the new government will be much more supportive of the wishes of doctors and private health insurers than were recent governments, said Heinz Rothgang, director of healthcare economics, policy, and research at the University of Bremen's Centre for Social Politics.

This new support for doctors will come mainly as a result of the return to government of the small pro-business Free Democratic Party (FDP), which has been on the sidelines in the past 11 years, when healthcare policy was determined by the centre left Social Democratic Party (SPD).

"Traditionally the FDP backs the agenda of doctors and private insurers," said Professor

Rothgang. "I think they will act as guardians for doctors."

At the top of the FDP's healthcare agenda is abolition of the health insurance fund that was approved by the current grand coalition of the Christian Democratic Union (CDU), the Christian Social Union (CSU), and the SPD and that took effect only this year.

Under this new law, the more than 90% of Germans who are covered by public health insurance pay the same percentage of their income into the fund, currently about 14.9%. The fund then uses a complex set of rules to channel money to the approximately 186 public health insurers.

Before that each public health insurer was free to set its own income percentage scheme, and clients could switch to insurers with lower rates. At the very least the FDP wants to go back to the previous system.

Chancellor Merkel has insisted that the health insurance fund is off limits in coalition talks. But she made those comments before the news earlier this week that the public health insurance system faces a deficit in 2010 of up to €9bn (£8.3bn; \$13.3bn).

Rudolf Henke, head of the Marburger Bund, Germany's association of hospital doctors, said that in principle he supports the health insurance fund, but it should be refined. "Advanced medicine and capped budgets just don't match," he said.

Cite this as: *BMJ* 2009;339:b4126

relief efforts in Sumatra and Pacific islands

International, which has sent a medical team to the affected area, says that “emergency systems at the hospital failed, even though the hospitals regularly conducted mock drills. Patients are being treated in the hallways due to overcrowding, and an open air morgue has been set up outside the hospital.”

Fadela Chaib, a WHO spokeswoman, said that the health department of Sumatra has opened two mobile hospitals in the affected region and that more than 150 doctors have been deployed but are encountering problems in accessing those affected.

Healthcare personnel have also been dispatched to the region to monitor the emergence of epidemics, she said. A large number of medical teams have been sent by many governments and charity groups from around the globe.

Médecins Sans Frontières said that it has sent emergency medical teams from Australia, Japan, and Europe, including three nephrologists, to carry out dialysis to treat

people with crush syndrome, a condition in which muscle tissue damaged by severe internal injury may release massive quantities of toxins into the bloodstream and lead to kidney failure.

The UN children’s agency, Unicef, said that it is providing assistance to 50 000 families, including 40 000 hygiene kits, water pumps, and water storage equipment.

International relief has also been mobilised to help the victims of the tsunami that struck Samoa, American Samoa, and Tonga on 29 September. The tsunami, which was triggered by an 8.3 magnitude undersea earthquake, resulted in the deaths of 176 people and left 32 000 injured or homeless.

UN agencies, private relief organisations, and medical teams from Australia and New Zealand are helping the authorities with the deployment of personnel and supplies.

Potential health risks in the coming days include typhoid, cholera, and diarrhoea.

Cite this as: *BMJ* 2009;339:b4090



Landslides buried villages in Padang Pariaman district after the earthquake in Sumatra

ADEK BERRY/AFP/GETTY IMAGES

Hot-pink bras, cracked knuckles, and bar room brawls are winners at the Ig Nobel awards

Jeanne Lenzer BOSTON

To the delight of the packed crowd at the 19th annual Ig Nobel prize ceremony at Harvard University, one of the winners reached inside the top of her dress and whipped out her hot-pink bra that doubles as a face mask. Another winner raised his hands high for the audience to see the results of cracking the knuckles of his left hand for more than 50 years.

The ceremony, sponsored by the *Annals of Improbable Research*, awarded prizes in 10 fields for “science that first makes you laugh—and then makes you think.” Ten laureates of the real Nobel prize handed out the awards—a large pair of dice—to the winners, who came from four continents at their own expense to receive their awards.

Dice were selected to symbolise this year’s theme of “risk.” Members of the “Big Bank Opera” performed skits of Wall Street money manipulators in swanky bars where they figure out ways to squeeze profits from a collapsing economy.

The theme was further underscored by the Ig Nobel winners themselves. The public health prize went to the inventor of the bra face mask, Elena Bodnar, director of the Trauma Risk Research Institute in Chicago.

Dr Bodnar, a native Ukrainian, was a medical student in 1986 at the time of the Chernobyl disaster. She said that bra face masks might have dramatically reduced the amount of iodine 131 that Chernobyl residents inhaled. The audience roared with laughter as she placed a hot-pink brassiere gas mask over the deeply flushed face of Paul Krugman, the 2008 Nobel economics laureate.

Dr Bodnar told the audience that a single bra, which converts into two masks, is easy to use. “It takes only 25 seconds [for a woman] to use this protective personal device: 5 seconds to remove, convert, and put on her own



Dr Elena Bodnar was prompted to develop her mask by the Chernobyl tragedy in her native Ukraine

mask and 20 seconds to look around and wonder which lucky man she will save with the second mask,” she said.

The medicine prize went to Donald Ungar, an immunologist from California, who twice a day cracked the knuckles of his left hand but not of his right hand to learn whether his mother’s dire warning that knuckle cracking would cause arthritis was true. As he held his hands up for all to see, Dr Ungar said he could not see any difference between the fingers of either hand.

Forensic scientists from Switzerland won the peace prize for determining which is riskier: bashing a colleague over the head with a full or an empty bottle of beer. Stephan Bollinger, head of the department of forensic medicine at the Institute for Forensic Medicine in Bern, smashed an empty bottle of ale over his own head while accepting his award. He later told the *BMJ* that he used a prop bottle that smashed easily because “the neurosurgeons told me I might come out pretty badly otherwise.” It turns out that empty and full beer bottles can break a human skull, but empty bottles are actually more dangerous.

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ALEXEY ELISEV/ANNALS OF IMPROBABLE RESEARCH