However, it is only recently that funds have been pledged. At the beginning of June, the UN still faced a funding gap of US\$ 236 million needed for aid in the region until the end of the year. The US pledged US\$ 188 million and the European Union pledged over US\$ 12 million, in addition to the US\$ 45 million it had already provided. WHO is seeking US\$ 7.6 million to assist the Sudanese Government in coordinating the response of the international health sector and to tackle disease outbreaks, improve sanitation, respond to public health needs and improve access to medical care. It has so far been promised US\$ 3.9 million for its response.

"Delivering much-needed aid is an immense challenge in Darfur because people are scattered over a vast land area, and communications have been badly disrupted," said Dr Hussein Gezairy, WHO Regional Director for the Eastern Mediterranean Region. "Accessing those in need requires intense collaboration by all."

The United Nations refugee agency, UNHCR, which has been working to provide relief for the Sudanese refugees in Chad is to launch an appeal in mid-June for US\$ 55.8 representing an increase of US\$ 35 million over their previous appeal. "The increased budget takes into account the ongoing arrival of new refugees in Chad and plans to help 200 000 refugees by the end of the year," said UNHCR spokesperson Kris Janowski.

Recent reports have highlighted continuing increases in levels of malnutrition (doubling each week in some settings), diarrhoea, measles and deaths. WHO and UNICEF began a measles immunization programme in early June hoping to reach 2.26 million children by the end of the month.

"Almost a quarter of the children are already showing signs of malnourishment, making the threat of the measles virus even greater," said Carol Bellamy, UNICEF Executive Director. Vaccinators are also using the opportunity to provide life-saving vitamin A supplementation and to immunize at least 90% of children under five years against poliomyelitis.

The UN and other nongovernmental organizations have experienced difficulties in getting aid into Darfur over the past few months. WHO has welcomed recent assurances from the Government of Sudan that permits for humanitarian workers to travel from Khartoum to Darfur will be issued within 48 hours and that the movement of relief supplies will be facilitated.

The latest on the health situation in Darfur is available from: http://www.who.int/disasters

Sarah Jane Marshall, Bulletin

## HIV/AIDS, hunger and malaria are the world's most urgent problems, say economists

The top global priority for spending on international aid is combating HIV/AIDS, concluded an international panel of economists, following the week-long Copenhagen Consensus conference which took place in Denmark at the end of May. The eight economists — three of them Nobel laureates — also placed efforts to combat hunger and the eradication of malaria at the top of the list.

Their report, commissioned by Denmark's Environmental Assessment Institute and the British news journal, *The Economist*, concluded that 28 million cases of HIV/AIDS could be prevented by 2010 and that although the cost of this would be US\$ 27 billion, the benefits could be almost forty times as high.

"Fighting disease is a good investment," said expert panelist, Bruno Frey. "Disease causes nine out of ten preventable deaths in developing countries among children and adults."

The panelists were asked to consider a list of ten global challenges established through a cost—benefit analysis: civil conflict, climate change, communicable diseases, education, financial stability, governance, hunger and malnutrition, migration, trade reform, and water and sanitation. Their task was to allocate a hypothetical US\$ 50 billion to solve some of the world's most important challenges. The panelists unanimously recommended spending US\$ 27 billion to fight HIV/AIDS, US\$ 12 billion to fight malnutrition and US\$ 13 billion to fight malaria.

"The starting point of the Copenhagen Consensus is that the world faces many problems, and we cannot afford to solve them all, here and now ... HIV/AIDS, malnutrition, trade barriers, and malaria — these are problems that can be addressed effectively," said *The Economist* Deputy Editor, Clive Crook, who participated in the experts' meeting.

Expanding programmes to prevent the spread of HIV infection was ranked as the top priority. Distributing micronutrients to combat malnutrition came second with trade liberalization third and malaria prevention and treatment fourth. In selecting HIV/AIDS, the panel agreed with a paper presented by health economist Anne Mills of the London School of Hygiene and Tropical Medicine. In her paper, Mills argued that spending US\$ 60 billion to promote condom use and distribute antiretroviral drugs — particularly in sub-Saharan Africa would save US\$ 3 trillion in healthcare costs and human productivity. The panelists' recommendations focused on prevention strategies rather than treatment because of "the rapid change of drug prices and the lack of clear data on outcome, which make calculating the cost-benefit ratio of treatment difficult."

The International AIDS Society, a professional association of scientists and health workers, welcomed the Copenhagen Consensus conclusions. But the group — along with other public health organizations fighting the HIV epidemic — was troubled by the lack of focus on the potential benefits of treatment for the millions already infected. "We emphasize that all the tools available to deal with the HIV epidemic must be made available to all who need them," said Craig McClure, the group's Executive Director. And that includes "antiretroviral drugs for all those people living with HIV/AIDS," he added.

Behind HIV/AIDS prevention strategies came policies to reverse micronutrient deficiencies. The economists identified food fortification to reverse iron-deficiency anaemia as the measure with the highest benefit—cost ratio. "We were delighted with their conclusion, which confirmed what we have been saying for years," said Ibrahim Daibes, Communications Manager for the Canadian based non-profit Micronutrient Initiative.

The US\$ 13 billion for malaria prevention and treatment was spread across three strategies: making insecticide-treated mosquito nets available to an additional 60 million children under five years, providing two-stage anti-malarial treatment to 90% of women in their first pregnancy and giving artemisinin-based combination therapy (ACT) to 280 million infected people annually with the objective of halving malaria prevalence by 2015. Together, these

anti-malarial measures would deliver benefits of more than US\$ 400 billion, according to the report.

Dr Fatoumata Nafo-Traore, director of WHO's Roll Back Malaria Department, said she was quite happy to see malaria ranked as it was. "The panel acknowledged that malaria prevention and treatment have a high benefit—cost ratio. Their proposal would make a huge difference. From our viewpoint, however, we should be allocating even more resources. Most countries are ready to tackle this problem. They just lack the financial means," she said.

Information on the Copenhagen Consensus is available from: www. copenhagenconsensus.com ■ Judith Mandelbaum-Schmid, *Zurich* 

## Mental health a major priority in reconstruction of Iraq's health system

When outgoing interim Iraqi Health Minister, Dr Khudair Abbas, embarked on the reconstruction of Iraq's collapsed health system last summer, he was shocked to find that there were only two psychiatric hospitals for a country of 24 million people.

According to Abbas, patients with mental health problems had been kept under prison-like conditions and many escaped when their institutions were looted and vandalized last year. Inhumane treatment of patients was symptomatic of Saddam Hussein's dictatorship which tortured and murdered thousands of citizens, said Abbas.

"[It is] not only the trauma of the past. We have to address the effect of the current conflict on the people," said Dr R. Srinivasa Murthy from WHO's Regional Office for the Eastern Mediterranean, who is responsible for mental health in the region.

In July 2003, WHO hosted an expert consultation in Cairo to discuss the mental health and rehabilitation of psychiatric services in post-conflict and complex emergencies in a number of countries, including Iraq. They found that these populations were traumatized by acute and chronic stress.

"Most of the population needs support to master the situation," Dr Murthy said, referring to countries like Iraq.

When Abbas became health minister in September 2003 he drafted a

health needs assessment with the help of WHO and other international experts, including James K Haveman, a public administrator from the US, appointed by the Coalition Provisional Authority (CPA) to advise him. They singled out mental health, alongside infectious diseases and cancer treatment, as the three top priorities.

In February, Dr Abbas appointed Iraqi-born psychiatrist Sabah Sadik, who had been in exile in the UK for 25 years, as Iraq's National Advisor for mental health. An Iraqi Mental Health Council representing a wide range of disciplines was then formed and a draft Mental Health Act has been submitted to Iraq's Governing Council.

In May, 16 psychiatrists from across Iraq attended a WHO training workshop in Beirut, Lebanon, to review Iraq's mental health needs, update their own knowledge and discuss the proposed mental health reforms. The same month, the Iraqi health ministry prepared a one-year mental health plan financed by a US\$ 6 million donation from Japan to focus on mental health services, training new staff and rebuilding a mental health infrastructure.

Iraqi psychiatrists have received training in Jordan, Kuwait, the US and the UK. In addition, the US Substance Abuse and Mental Health Services Administration has sent over mental health professionals to Iraq to help train local staff.

Sadik's key focus is to create a community-based mental health system that is integrated into some 1200 primary health-care centres now operating across the country. That means creating psychiatric departments within many Iraqi hospitals, rather than the previous system under which patients were isolated from society.

Abbas said that under the old regime, psychiatry and mental healthcare were neglected, plagued by under-staffing and lack of medicines and equipment. Counselling and psychological support services for people suffering post-traumatic stress syndrome and depression were largely unavailable. To address this, a group of Iraqis recently attended psychosocial workshops in Amman, Jordan, to train as counsellors to work with children in schools.

Under the new mental health system, all hospitals will aim to provide counselling to patients with serious or terminal illnesses such as cancer. Some hospitals are already offering such support. Noful Daoud hospital in Baghdad where torture victims — such as army deserters who had their ears amputated — undergo cosmetic surgery, also receive counselling to help them recover from their experiences.

Abbas's successor — the former education minister, Dr Ala Alwan, will take charge of the health ministry which unlike most other Iraqi Government ministries was returned to Iraqi hands in May 2004.

When he takes over on 30 June Alwan, who was previously WHO Representative in Amman, Jordan, faces several challenges including spiraling reconstruction costs due to growing security concerns in the country. Progress in reconstructing the health service has been slow as Iraq's hospitals and primary health-care centres suffer from power cuts and unreliable clean water supplies, and the ministry has also had to learn to respond to emergencies, said Abbas.

Multiple explosions in Karbala and Baghdad in March that killed 58 and injured more than 100 caught the fledgling health system totally unprepared and prompted the health ministry to ask WHO to help set up a system which would lead to effective and predictable responses to health crises throughout the country.

Fiona Fleck, Geneva

## In brief

## BCG vaccine effective for 50 years

The bacille Calmette–Guérin (BCG) vaccine provides protection against tuberculosis for 50 to 60 years, a new study has shown. Although the vaccine has been in use for 80 years, its long-term efficacy was not known. Naomi Aronson and colleagues whose study was published in *JAMA* (2204;291:2086-91) reviewed medical records and death certificates of participants in a placebo-controlled, single dose BCG vaccine trial which took place between 1935 and 1938. The investigation followed patients up until 1998 and spanned two generations.