News

Expert Committee finds little fault in Hong Kong's response to SARS

A panel of international experts commissioned by the Chief Executive of the Hong Kong Special Administrative Region found shortfalls in the government's handling of the outbreak in China, Hong Kong Special Administrative Region (Hong Kong SAR), but praised its response overall. The 172 page SARS Expert Committee report was published on 2 October and highlighted weaknesses in Hong Kong SAR's health system but did not single out any officials for individual criticism.

"Overall the epidemic in Hong Kong [Special Administrative Region] was handled well, although there were clearly significant shortcomings of system performance during the early days of the epidemic when little was known about the disease or its cause," said the report, which also went on to praise "the extraordinary hard work of people at all levels of the system in very difficult circumstances." It also pointed out that the shortcomings in the territory's health system were aggravated by key personnel succumbing to the disease.

Hong Kong SAR was the second worst hit area after the mainland itself with 299 deaths and 1755 infections. However, the fatality rate in Hong Kong SAR was much higher, showing 17.1% compared with the mainland's 7%.

The Committee was established on 28 May following criticism by Hong Kong SAR's community of its government's handling of the outbreak during the initial stages of the crisis. The Committee comprised 11 experts from Australia, China including Hong Kong SAR, the United Kingdom and the USA and was co-chaired by two British doctors, Sir Cyril Chantler and Professor Sian Griffiths. Their task was to conduct a review of the management and control of the epidemic and to identify lessons to be learned to better prepare Hong Kong SAR for any future outbreak. The Committee formed two groups to focus on hospital management and administration, and public health.

Communication was one of the main failings outlined in the report. The Department of Health (a government department reporting to the Health, Welfare and Food Bureau which has overall policy responsibility for health matters), only became aware of the first major outbreak through news media reports. This was a result of an initial failure in communication between Hong Kong SAR's Hospital Authority (an independent body responsible for the provision of all public hospital services), the Department of Health and university health experts. Guangdong, where the disease originated, was singled out for having withheld information about the disease from Hong Kong SAR and the rest of the world. "If it had been available," the report said, "we believe the epidemic might have been ameliorated."

Lack of contingency planning was also highlighted as a major weakness in the system. Referring to the outbreak at the Prince of Wales Hospital on 10 March in which 11 staff were infected, the committee noted the "absence of a predetermined hospital outbreak control plan and the inadequate involvement of Department of Health staff in critical decisions about outbreak control measures at the Prince of Wales Hospital were not conducive to the management of the outbreak." Inadequate infection control and poor environmental conditions were also cited as contributing factors to the outbreak at the Prince of Wales Hospital and other outbreaks in Hong Kong SAR. The absence of comprehensive laboratory surveillance was listed as another important gap in the system.

The report made 46 recommendations presented under 12 strategic themes with the overall aim of making sure Hong Kong SAR is better prepared for future disease outbreaks. A major recommendation was a review of the organizational structure including the relationship between the Health, Welfare and Food Bureau and the constituent government departments. Ambiguities in the relations between and roles of the departments had led to a breakdown in coordination and policy-making during the epidemic. To address these problems, the report recommended the creation of a Centre for Health Protection (CHP) with responsibility, authority and accountability for the prevention and control of communicable diseases.

Whilst the report has received some criticism from Hong SAR's media for not naming individuals, WHO has welcomed the commissioning of the report. "It is a reflection of Hong Kong [Special Administrative Region]'s continuous willingness to be transparent, even of its flaws," said Dick Thompson, Communications Officer in WHO's Department of Communicable Diseases. "What is important," he added, "is that these assessments are done and that Hong Kong [Special Administrative Region], and WHO, learn from SARS so that we are prepared for SARS II, whatever that might be."

The full report and its summary can be viewed on the Committee's web site at www.sars-expertcom.gov.hk. ■

Sarah Jane Marshall, *Bulletin*

Iraq health minister plans future Iraqi health system

Iraq's interim health minister Khudair Abbas is working on plans to transform his country's public health system that once favoured Saddam Hussein's allies to one that is more equitable and primary health care-based and reflects the dual burden of noncommunicable and communicable diseases.

Dr Abbas has been working closely with WHO, the Coalition Provisional Authority in Iraq (CPA), several UN agencies and the World Bank to identify Iraq's immediate health needs and draw up a long-term plan for public health.

The plans, which were due to be presented at a donor's conference in Madrid on 23–24 October, require about US$ 1.6 billion in funds from 2004 to 2007 in addition to the US$ 1 billion already raised by the US Government and Iraqi oil revenue.

"Our chief priority is to jump-start the Iraqi health system so that it can provide basic functions again like disease surveillance, provision of medicines and basic hospital services," said David

David Nabarro

Health facilities in Basrah, Iraq, destroyed during the 2003 war.

Nabarro, the senior WHO official appointed by the UN and the World Bank to help prepare the health side of Iraq's needs assessment for Madrid.

Building a health system virtually from scratch is a formidable challenge amid continued violence, tension and uncertainty and is expected to cost billions. WHO has already helped Afghanistan, East Timor and, many years ago, Cambodia, rebuild their health systems from the ashes of war. After Iraq, the next such project will be to help Sudan create a public health system, Dr Nabarro said.

But humanitarian agencies in Iraq say the dire security situation there is making their mission difficult and dangerous. After the bomb attack on UN headquarters in Baghdad on 19 August, many — including Médecins Sans Frontières (MSF), the International Committee for the Red Cross (ICRC), Oxfam, Save the Children, Merlin and the United Nations High Commissioner for Refugees — scaled back their operations, withdrew international staff and moved their headquarters to neighbouring Jordan or Kuwait.

The ICRC is still working closely with local partner, the Iraqi Red Crescent Society, visiting detainees and providing emergency support for water and sanitation as well as medicines. Médecins Sans Frontières said that, despite the security situation, it was providing primary care services, with up to 2500 consultations per week.

The US-led war in Iraq triggered a complete collapse of the country's health system. Outward signs were looted hospitals and violence against health workers, especially female staff.

But the system was "already badly run down" due to previous wars, sanctions, drastically reduced spending — some estimates suggest the Iraqi health budget was cut by 90 per cent during the 1990s — as well as an inequitable health treatment policy.

Decades of weak primary health care have resulted in high rates of maternal and child mortality, and of malnutrition. Diseases like malaria and cholera are endemic in certain parts of Iraq and there is a drastic shortage of nurses, epidemiologists and public health administrators.

One of the first projects was to vaccinate all Iraqi children of five years and younger against measles, diphtheria, tetanus, whooping cough, tuberculosis, hepatitis B, and polio by the end of the year. The National Vaccination Days project is being sponsored by WHO, UNICEF, the US Government and the Iraqi health ministry. In addition, the Ministry of Health, with support from WHO, other UN agencies and external bodies, is re-establishing disease surveillance and public health programmes as well as an improved medical supply distribution system.

The UK's Department for International Development (DFID) and the European Commission have also funded a number of projects. The Government of Kuwait recently made a US$ 3 million donation to a Basrah hospital.

Dr Nabarro was optimistic that the Iraqi health bid would get a positive response from donors in Madrid but he said there was no guarantee.

"I think there is a good chance that the Health Sector will get support from investors – some conventional donor assistance through the Health Ministry, some as proposed partnerships between companies outside Iraq and the health authorities within the country, and some as support for local initiatives and NGO's," he said. ■

Fiona Fleck, *Geneva*

Malnutrition leading cause of death in post-war Angola

Malnutrition replaced violence as the main killer of displaced children and adults at the end of Angola's bloody civil war, says the medical relief organization, Médecins Sans Frontières (MSF). A survey (*BMJ* 2003;327:650-5) by the organization documents the disastrous health impact of armed conflict on an isolated population that has been largely ignored by the outside world.

The survey focused on the families of former members of the rebel movement UNITA (União Nacional para a Independência Total de Angola), which was defeated after a 27-year civil war. A ceasefire was signed in April 2002. In the last four years of the war, an international embargo prevented relief organizations from reaching UNITA-held areas so that by the time of the ceasefire, some three million people were judged to be in need of immediate help.

MSF says that death rates among the displaced UNITA families during the survey period, between mid-2001 and mid-2002, were about three times as high as expected for a population in a low-income country. Some of the deaths could have been avoided if humanitarian aid had been available, the report says. It calls for more effective humanitarian responses to the needs of people caught up in wars, whatever the political and military considerations. The report also criticizes the slowness of the aid response in the first four months after the ceasefire, blaming a "general unwillingness on the part of donor agencies" to commit money to the UN's appeals for Angola at the time.

"These findings show that once the conflict is over and the cameras are switched off, the suffering continues," said Francesco Checchi, an epidemiologist and co-author of the report. He added that Angola's situation is unlikely to be unique given the large number of other countries currently in the midst of armed conflicts or their aftermath.

During August 2002, MSF interviewed a representative sample of more than 6500 householders in 11 demobilization camps for former UNITA families in four provinces, which together accommodated more than 149 000 people. For each death reported, householders were asked to select the most likely cause from a list: fever or malaria, diarrhoea, cough, measles, malnutrition, violence or war, or other causes.

Up to December 2001, violence or war was the leading cause of death, accounting for 34% of the reported deaths in the sample. But in 2002 malnutrition took the place of war, accounting for 34% of the deaths reported during that year. The proportion of deaths attributable to malnutrition rose steadily from 15% in the summer of 2001 to 39% in the spring of 2002. In the sample population as a whole, there were 1.5 deaths per 10 000 people per day, three times as high as in neighbouring Zambia. In children under the age of 5, the death rate was four times higher than normal for the age group: 4.5 deaths per 10 000 each day.

In young children especially, malnutrition often proves lethal when combined with a number of other diseases such as diarrhoea, malaria and measles, according to a WHO report by the Nutrition for Health and Development Department (*Nutrition for Health and Development: A global agenda for combating malnutrition, 2000*). It is relatively rare for people to die of simple hunger but in Angola Checchi said that, in addition to deaths from infectious diseases, householders consistently reported deaths from hunger in adults and children. "I have rarely seen people in such a state of destitution," he said.

However, recent data from the UN Standing Committee on Nutrition (*Report on the Nutrition Situation of Refugees and Displaced Populations, 42,* August 2003) suggest that since the end of the survey (August 2002) food security has been improving in Angola.

The MSF report concludes that, for this displaced population, "minimum standards in emergency response were not met … military and political considerations must not come in the way of effective and timely humanitarian access to populations rendered isolated by such conflicts."

In response to the paper's authors' suggestion that there had been unacceptable delays in getting aid to the UNITA families, an official from the World Food Programme in Luanda said "we were aware of the need and we responded as quickly as possible. But getting access to some of these areas is a huge problem. In many cases there are no roads, no bridges, and the areas are heavily mined. We mobilized all our resources to respond." ■

Phyllida Brown, *Exeter, England*

KEYSTONE/AP Photo/Marcelo Hernandez

A group of children look at Batista, a 2-year-old boy suffering from severe malnutrition at the "New Hope" refugee camp in Nabuangongo, Angola, some 20 kilometres (12 miles) north-east of Luanda. The study found that, of those surveyed, the death rate was four times higher than normal for children under the age of 5: 4.5 deaths per 10 000 each day.

Nations fail to agree on extent of human cloning ban

A UN treaty to ban human cloning faces an uncertain future after nations failed in October to reach a consensus on the ban's terms. Delegates agreed that the treaty should prohibit the creation of cloned embryos to produce babies. But they deadlocked on whether the prohibition should extend to so-called "therapeutic" or "research" cloning.

An "Interacademy Panel," made up of 63 national academies, signed a statement supporting a worldwide ban on human cloning. "What we said in the Interacademy Panel statement is that there should be a universal ban on reproductive cloning, but the question of whether therapeutic cloning research should go on ought to be left to individual nations," said Richard Gardner, Chairman of the United Kingdom's Royal Society working group on cloning and stem cells.

While China, Japan, South Africa and most of the European nations present agreed with the Interacademy Panel's view, more than 40 other nations did not, and instead endorsed Costa Rica's proposal for a ban on human cloning for any purpose. "A ban that permits embryonic clones to be created and forbids them to be implanted in utero legally requires the destruction of nascent human life, a morally abhorrent prospect," according to a US position statement.

US officials cite recent reports of stem cells derived from adult cells as evidence that stem cell research can proceed without the use of embryos. "It is clear that there may be other routes to developing new treatment therapies, including using adult stem cells that do not pose the same threat to human dignity as cloning of human embryos," US delegate, Ann Corkery, told the panel.

However, the Interacademy Panel statement disputes the notion that adult stem cells can substitute for embryonic ones, and Gardner says that cloned embryos might actually yield the biggest

scientific advances by answering basic questions about the genetic underpinnings of embryonic development.

Both "reproductive" and "therapeutic" cloning begin with scientists removing the genetic material from an egg cell and replacing it with the genetic material from an adult cell. When nudged into dividing, the manipulated cell can continue to split and develop into an embryo. Reproductive cloning would then require implanting the cloned embryo into a woman's uterus where it could develop into a baby.

During therapeutic cloning, by contrast, the cloned cell is prevented from developing into an advanced-stage embryo and is instead turned into cell lines for research use. Embryos produced through cloning could be used to generate stem cells — cells that are capable of differentiating into a wide variety of specialized cell types.

Given the widespread agreement on a reproductive cloning ban, some nations supported a two-step approach that would immediately ban reproductive cloning while allowing more time to discuss the question of therapeutic cloning. However, those in favour of the Costa Rican proposal refused such a plan and continued to push for a total ban.

As a result of this dispute, the treaty's outcome remains unresolved. The working group's report was to be discussed before the UN's Sixth (Legal) Committee on 20 and 21 October, but an agreement appeared unlikely, said Alex Capron, Director of WHO's Department of Ethics, Trade, Human Rights, and Health Law.

In the wake of the UN impasse, the Human Cloning Policy Institute (HCPO), a US-based group of scientists and law experts, has called on the UN General Assembly to request an advisory opinion from the International Court of Justice declaring human reproductive cloning a "crime against humanity." The outcome of the HCPO drive is unclear, but one thing is certain: the cloning debate will not be settled anytime soon. ■

Christie Aschwanden, *St. Moritz, Switzerland*

Developing countries overstate vaccination coverage

Official national reports of several developing countries tend to overstate the number of children fully vaccinated against childhood diseases, according to WHO experts (*Lancet* 2003;362:1022-7). This finding indicates that, although such reports are generally the most widely available data for assessing vaccination coverage, their validity for measuring changes in coverage over time is "highly questionable."

To reach these conclusions, researchers with WHO's Department of Health Service Provision, compared vaccination coverage reported between 1990 and 2000 in the official reports of 45 developing countries with that assessed in 67 Demographic and Health Surveys (DHS). These household surveys were conducted, with government approval, by Macro International in collaboration with local counterparts and under the auspices of USAID. DHS are considered a "gold standard" for evaluating immunization rates, but they are relatively costly to implement.

The researchers also focused on DTP (diphtheria–tetanus–pertussis)3 vaccinations, which protect against DTP, or whooping cough. However, unlike the measles vaccine, the DTP serum must be administered in three separate doses. (Hence, the '3' in its acronym.) Ideally, the first dose should be given when a child is at least six weeks old and the two subsequent doses at a minimum of four weeks apart. All three injections should be completed by a child's first birthday.

"Since this vaccine is a little more demanding, we thought that it better represents access to health services and access to quality care," says Bakhuti Shengelia, who led the study. "It's also widely used for the assessment of immunization programmes."

Using DHS data, Shengelia and his colleagues estimated that *valid* (i.e. those that followed the recommended timetable) DTP3 vaccination coverage rates ranged from 11% to 77% in the 45 countries studied. However, official national reports of valid DTP3 coverage were "systematically high" in comparison, with more than half of them indicating vaccination rates at least 20% higher than the DHS estimates. The researchers also noted that the higher the officially reported DTP3 coverage, the bigger the gap between the official rate and the DHS estimate.

The researchers suspect that the discrepancies are due to multiple causes. These range from relying on records that report all vaccinations, not just those delivered in accordance with the recommended schedule, to the weak health information systems used for transferring data from the people giving the injections all the way to the officials who tally them up.

Another problem may be intentional inflation of the numbers in order to receive the financial incentives given to governments that increase the absolute number of children vaccinated. However, "it's difficult to say how important a role [incentives] played," says Shengelia. "We didn't have the possibility to control for that in this study."

Improvements in vaccination reporting procedures are already under way. In 2000, for example, reporting forms were changed to diminish the number of unintentional errors. According to Shengelia, vaccination reporting can be made even more accurate by improving health information systems.

He also recommends using data from multiple sources and subjecting it to scrupulous scientific assessment when evaluating the cost of health programmes. "We often see studies and reports that measure access without reference to the quality," says Shengelia. "But access to poor quality service could be harmful, or at least not as beneficial to the population as policy-makers had intended. So, the international community has to be really concerned with the quality of the services they deliver." ■

Charlene Crabb, *Paris*