

"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*

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



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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.

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*