

## Brazilian Amazon nearly halves malaria cases in a year



WHO/DR/Mark Edwards

A Yanomami Indian girl from Brazil's Amazon region, suffering from severe cerebral malaria, being taken to a plane for transfer to a hospital.

The Brazilian government announced in mid-September a major victory over malaria in a part of the country that accounts for 99.7% of Brazil's malaria cases and about half of the cases reported throughout Latin America. Over the first eight months of this year 237 000 malaria cases were reported in Brazil's Amazon region — a 43% drop compared with the 420 000 reported for the same period last year. Throughout the last decade Brazil recorded an average of about 500 000 cases a year.

One likely explanation for the drop in the Amazon region's malaria cases, according to Brazilian health ministry official Dr José Lázaro de Brito Ladislau, coordinator of the region's malaria control programme, is the programme's emphasis on decentralization. "Efforts to control the disease are now managed locally — in the regions and states, and on down to local municipal authorities and local health workers." Ladislau, who works in the ministry's national health foundation unit (FUNASA), adds: "We are also expanding our network of surveillance, diagnosis and treatment, which means that malaria cases are detected faster and we can more rapidly break the chain of transmission of the infection."

Another possible reason for the region's successful struggle against malaria is the government's decision to give top priority to battling the disease and to invest the necessary funds in the fight. This year it tripled its annual spending on Brazil's national disease control efforts in the

Amazon region, which now runs at US\$ 54 million.

Dr Carlos Catão Prates Loiola, a Pan American Health Organization consultant in Brazil, commented to the *Bulletin*: "In practice, what we are seeing is both an increase in resources and an increase in the mobilization and competence of state and local staff. But there is no doubt that the extra health ministry funding was critical." ■

Luisa Massarani, *Rio de Janeiro, Brazil*

## UNICEF report flags failures of 1990 child summit goals

In a report released in September, UNICEF chronicles the extent to which goals set at the 1990 world summit for children have — or have not — been met. It finds "net progress" in some areas but "setbacks, slippage and ... real retrogression" in others. Overall, it says, the world has fallen short of achieving most of the goals "largely because of insufficient investment".

The report, titled *We the Children — end-decade review of the follow-up to the World Summit for Children*, was prepared for the long-planned UN General Assembly special session on children scheduled to have taken place 19–21 September. Because of the 11 September hijacking attacks, the session has been rescheduled for an as yet unspecified time during the first half of 2002.

Specific goals set at the 1990 summit included reduction of infant and under-five

mortality by at least one-third; a halving of maternal mortality and of severe and moderate malnutrition among under-five-year-olds; and universal access to safe drinking-water and basic education. Another objective was immunization of at least 90% of children under one year against diphtheria, pertussis, tetanus, measles, poliomyelitis, and tuberculosis.

The *We the Children* report states that, though 63 countries have achieved a one-third reduction in mortality among children under the age of five, there was only a one-fifth reduction in over 100 countries. And, despite positive advances in health and literacy, over 10 million children still die each year, often from readily preventable causes. In addition, an estimated 150 million children are malnourished and over 100 million are still out of school, 60% of them girls.

One clear achievement of the 1990s, the report says, was the almost complete eradication of polio, with a 99% reduction in the number of reported polio cases in the world compared to a decade ago. The success of national immunization campaigns in the developing world has also facilitated the widespread provision of vitamin A supplements, "which have sharply reduced severe forms of vitamin A deficiency, including blindness".

US epidemiologist and child health expert Dr William Foege, senior adviser on health policy at the Carter Center in Atlanta, USA, believes the forthcoming UN special session for children "will require a deliberate focus on determining shared priorities, increasing resources, and making tools, such as vaccines, more available, and far more attention to the development of delivery infrastructures in developing countries." Foege played a key role in bringing the leaders of over 150 countries together at the 1990 summit. ■

Stephen Rose, *New York, USA*

## Job discontent fuels aggressive recruitment of nurses

A worldwide shortage of nurses has led wealthier nations to conduct aggressive campaigns to recruit nurses from poorer countries. While the nurses who leave may find higher wages and better working conditions in their new locations, the home countries they leave behind suffer the loss of highly trained health personnel who are not easily replaced.

"In all regions of the world there are countries recruiting and countries sending

nurses,” says Dr Nacema Al-Gasseer, senior scientist for nursing and midwifery at WHO. “The issue is not the behaviour of the countries but rather of establishing a code of practice to ensure that countries respect the right of these health professionals to free movement and that their movement does not impair the health of the populations in both recipient and sending countries.”

One example of that movement is the United States’ recruitment of nurses from the Philippines, whose government has a policy allowing nurses to migrate to other countries. According to Ms Cheryl Peterson, director of the International Nursing Center at the American Nurses Association (ANA), special schools with curricula and testing standards comparable to those in the US have been established by the Philippines’ government to train nurses for work in the US. The problem, says Peterson, is that the US is not only recruiting graduates from these programmes but has also started tapping more highly skilled — and less easily replaced — nurses, such as those who work in emergency rooms.

But the US isn’t alone in aggressive recruitment of nurses. A recent WHO survey found that 77% of developed nations are experiencing nursing shortages and are nearly all looking abroad to fill the gap. During a meeting last year of WHO’s Global Advisory Group on Nursing and Midwifery, the group’s experts discussed data showing that the number of nurses going to the UK had risen by 48% in the past year. Nurses went to the UK primarily from Australia, New Zealand, the Philippines, South Africa, and the West Indies. Meanwhile, Spanish nurses are leaving Spain in large numbers to accept nursing jobs elsewhere in Europe. The advisory group called upon WHO to

establish international guidelines for the recruitment of nurses and to set up a global enquiry on the nursing shortages.

Job dissatisfaction, hazardous working conditions, and low job status are behind the nursing shortage in Western countries, according to a study published in the May/June 2001 issue of *Nurses Reports* by Dr Linda Aiken, a professor of nursing at the University of Pennsylvania School of Nursing in the USA. The study surveyed 43 000 nurses from more than 700 hospitals in Canada, Germany, the UK (England and Scotland), and the US. Among nurses under the age of 30 who planned to leave nursing within a year, young English and Scottish nurses were the most discontented, with 53% and 46% respectively planning on leaving. Salaries were also considered inadequate by a large proportion of the nurses surveyed, with only 20% of English nurses and only 26% of Scottish nurses reporting that their wages were acceptable. In the US, according to ANA estimates, approximately half-a-million men and women with active registered nurse licences have left the profession.

This is not just a problem of rich countries. According to WHO, ten years ago in Poland over 10 000 new nurses were being graduated annually from educational courses. That figure has fallen to 3000. And in Chile only 8000 of the country’s 18 000 nurses are actively working, according to the Chilean Nursing Association.

How to stem the tide? Improving working conditions for nurses at home and abroad is one way, say the experts. “The global nursing shortage, acute in many regions, can only be solved through serious and strategic partnerships between national nursing associations, government representatives and human resource planners,” said

Ms Judith Oulton, chief executive officer of the International Council of Nurses (ICN), in a recent press release. The ICN, based in Geneva, Switzerland, is the largest international nursing organization.

WHO’s Al-Gasseer notes that many countries are trying to improve nurses’ working environments and career prospects. She cites the Caribbean countries, where nurse experts are working with decision-makers to develop strategies for managing nurse migration. In the UK, she says, the Royal College of Nurses has been very active in ensuring that nurses are treated well regardless of their origin. The UK government has published guidelines on international recruitment of nurses, as well as a code of practice for the UK’s National Health Service officials involved in international recruitment of nurses. ■

Terri Rutter, *Westerville, Ohio, USA*

## New global plan to halt TB

A new US\$ 9.3 billion global plan for massive expansion of tuberculosis control has been launched by the *Global Partnership to Stop TB* in response to what the plan describes as “perhaps the gravest global public health crisis of this millennium”. The partnership embraces about 120 public and private organizations, including the World Bank and the George Soros’ Open Society Institute. Its secretariat is housed in WHO’s Stop TB department.

Publicly unveiled at the World Bank in Washington DC in October, the plan is an attempt to stem the steadily mounting incidence of TB — up by 9% between 1997 and 2000 from 8 million to 8.7 million new cases a year, according to the latest unpublished estimates. Of these 8.7 million cases, nearly 4 million are infectious (or “smear-positive”) cases. Last year, by these same estimates, there were almost 2 million deaths from this ancient scourge — more than in any previous year in history. Worldwide, an estimated 17.3 million people are currently sick with TB.

Dr Jong Wook Lee, who heads WHO’s Stop TB department, said the increase in TB incidence was being fuelled by the rising tide of co-infection with HIV and TB, especially in sub-Saharan Africa. “Unless action is taken now to improve access to TB treatment,” he told the *Bulletin*, “in some sub-Saharan African countries the number of active TB cases will have doubled in 10 years’ time.”

In South Africa, for example, which has more HIV cases than any other country in the world, *Stop TB* estimates that 60% of TB patients are infected with HIV. There were an estimated 228 000 new TB cases in South Africa last year — 9% more than in the previous year. And this rate is expected



KEYSTONE/AP Photo/Obed Zilva

Ellen Dube, a South African nurse, helping an AIDS patient who lives at home. Nurses in poorer countries are increasingly lured by higher wages and other benefits to work in richer countries, heightening the shortage of skilled nursing staff in their home countries.

### Tuberculosis in the news

- In Oxford, UK, adult volunteers are being recruited to take part in phase I trials of a new candidate tuberculosis vaccine. The candidate vaccine, code-named MVA85A, is a recombinant vaccine based on an attenuated vaccinia virus. It is intended to be used in conjunction with the existing BCG vaccine to boost the efficacy of BCG, which wanes during adolescence. The trial is being funded by the UK's Wellcome Trust. Once the initial safety trials have been completed, parallel trials will be launched in Africa.
- The Republic of Moldova recently received a shipment of high-quality TB drugs in October in what was the first delivery of free TB drugs through a "global TB drug facility" set up earlier this year by WHO and the Stop TB partnership, with initial funding from the Canadian government. The drugs will be used to treat almost 4000 TB patients in the Republic of Moldova. Just before this issue went to press, on 20 November, WHO announced delivery of TB drugs to the Democratic People's Republic of Korea via the new drug facility. An additional 14 countries have been approved for support from the facility.
- The 11 October issue of *The New England Journal of Medicine* published a study by researchers from the US Food and Drug Administration (FDA) showing that the anti-inflammatory drug infliximab (Remicade), used to treat pain associated with arthritis and Crohn's disease, almost quadruples the risk of developing TB among people with latent TB infection. The study found that between August 1998 (when the drug was approved) and May 2000, 70 people who were taking Remicade developed TB, and of those, four died. The drug counters inflammatory processes through a mechanism that has the potential to inhibit immunity and thereby risk the rekindling of a latent TB infection. The manufacturers of the drug, Johnson and Johnson, now recommend that doctors test patients for TB infection before prescribing the drug.

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to continue to rise until the HIV/AIDS epidemic has peaked.

WHO's Stop TB department says an estimated 13 million of the 34 million people living with HIV/AIDS worldwide are also infected with TB. Of these 13 million, it is likely that 30–40% will develop the disease.

Meanwhile, health officials are concerned that the already high incidence of TB in Afghanistan and neighbouring Pakistan could increase due to population movements and overcrowding in refugee camps on both sides of the border. Over the past year, there were an estimated 70 000 new TB cases in Afghanistan and 19 000 deaths. In Pakistan, an estimated 247 000 people contracted the disease and 57 000 people died from it. The two countries are among the 22 that account for 80% of the global TB burden.

Lee anticipates "many more cases" of TB in this region — especially among difficult-to-reach populations inside Afghanistan. The new plan says poor sanitation, malnutrition and crowding are "the great incubators of TB" and warns that TB diagnosis and treatment must be included in relief efforts during humanitarian emergencies.

The plan's target for 2005 is to ensure that 70% of new TB cases are found and properly diagnosed and managed, and that 85% of them are successfully treated. At present, fewer than one in four of the estimated 3.8 million people diagnosed with infectious TB every year receive treatment under DOTS — the WHO-recommended TB control strategy. TB drugs cost as little as US\$ 10 for a complete course for one patient.

The plan also provides for a four-year investment of about US\$ 1 billion to tackle what it calls "the clear and present danger" of bacterial resistance to TB drugs, which could undermine the success of DOTS

programmes worldwide. Overall, an estimated 3% of all new TB cases are now multidrug-resistant. But in some parts of Eastern Europe — especially Estonia, Latvia, and parts of Russia — over 10% of new cases are multidrug-resistant.

The plan, which will require donors to fill a current funding shortfall of US\$4.5 billion, also calls for greater investment in the research and development of new tools to combat TB, including a more effective vaccine with longer-lasting protection than BCG, the current vaccine. New drugs are also needed to shorten the existing six-month treatment regimen. Better diagnostic tests are also high on the new plan's wish-list. ■

Sheila Davey, *Geneva, Switzerland*

### Caesarean section delivery, an increasingly popular option

The number of women having babies born by caesarean section is growing exponentially in many parts of the world, if a UK audit released in October by the Royal College of Obstetricians and Gynaecologists is anything to go by. The audit reports that 22% of British babies are now being born by this method, vs 4% 30 years ago. In parts of the country, rates of more than 24% are not uncommon.

Examples abound of other countries where caesarean section is enjoying unprecedented popularity. The US rate is about the same as that of the UK. In Chile, 40% of births are by this route, a record for Latin America. And in Brazil's public hospitals, up to 80% of pregnant women reportedly give birth by caesarean section. In sub-Saharan Africa, rates of around 22% and more are not uncommon.

Clearly, in both industrialized and developing countries WHO's recommended rate of 15% doesn't carry much weight. Dr José Villar, WHO's coordinator for family and community health, says this level was established by about 1985 and represents "a reasonable figure set in accordance with expert opinion and based on what was known at the time".

Why the growing popularity of caesarean delivery? Convenience may be one reason: with caesarean section, a woman — and her obstetrician — can choose the time of childbirth. Safety could be another.

Dr Alexandre Dumont of Senegal's health ministry notes in a review of caesarean section use in Africa (published in the 20 October 2001 issue of *The Lancet*), that three-quarters of caesarean deliveries in sub-Saharan hospitals are nearly all carried out for one or more of six reasons — protracted labour, previous caesarean section, difficult fetal presentation, premature detachment of the placenta (abruptio placentae), placental presentation (placenta praevia), and eclampsia. Caesarean section, he says, is "one of the most effective means of reducing maternal mortality".

It also seems to be relatively safe, compared with vaginal delivery. A randomized 26-country trial in 2088 breech presentation pregnancies, reported in the 27 March 1999 issue of *The Lancet* by Canada's term breech trial collaborative group, found significantly lower perinatal and neonatal mortality rates and lower severe neonatal morbidity rates for the pregnancies where caesarean delivery was chosen than for the group of women who delivered by the vaginal route. In the same issue of *The Lancet*, the European mode of delivery collaboration, a consortium of 43 obstetric clinics in six European countries, reported evidence from a randomized clinical trial involving 436 women that caesarean section significantly lowers the risk of mother-to-child transmission of HIV infection without increasing the risk of complications to the mother.

Villar and his colleagues believe that there is "an unfortunate imbalance": some high-risk populations with very low caesarean section rates should increase the availability of caesarean section, where indicated by obstetrical complications. Other populations, with very high rates, might introduce ways of discouraging unnecessary recourse to caesarean section. But just what "excessive" is and what the right rate should be await definition. "We are collaborating with all interested parties around the world," says Villar, "in order to identify what a realistic and safe range would be." ■

Laszlo Dosa, *Jupiter, Florida, USA*