World Health Organization

HTM cluster

HIV/AIDS, TUBERCULOSIS AND MALARIA

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Welcome to the 2nd issue of the HTM newsletter!

2005 is a year of challenge for WHO and the HIV/AIDS, Tuberculosis and Malaria (HTM) cluster. The tragic tsunami of 26 December 2004 that struck several countries of South-East and South Asia instigated one of biggest humanitarian relief operations in history. I have just been to Banda Aceh in Indonesia, to see how HTM can best help to reduce the risk of malaria and other vector-borne diseases in tsunami-stricken areas. I witnessed immense generosity and solidarity. In Banda Aceh alone some 100 000 insecticide-treated mosquito nets, 20 000 rapid diagnostic tests for malaria and 150 000 treatment courses of artemisinin-based combination therapy – the most effective available antimalarial treatment – have been made available by private donors and United Nations (UN) agencies. You can read more about WHO's malaria prevention efforts in the feature story on page 2.

For our staff and partners working in support of people living with HIV/AIDS, 2005 started with encouraging news. At this year's World Economic Forum held in Davos, Switzerland, we released the second progress report with latest numbers of people on antiretroviral treatment (ART). With the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Global Fund to Fight AIDS, Tuberculosis and Malaria, the United States President's Emergency Plan for AIDS Relief and other partners, we reported our estimate that currently 700 000 people living with HIV/AIDS in developing countries are receiving ART through the investments and efforts of national governments, donors and a broad spectrum of partners. This is an increase of approximately 75% in the total number of people receiving treatment compared with that of a year ago.

Overall, 2005 is a year in global health in which we take stock of progress and spotlight continuing challenges and needs. In 2000, at the UN Millennium Summit, national heads of state set 2005 as a milestone on the pathway towards the Millennium Development Goals (MDGs). The global fight against HIV/AIDS, tuberculosis (TB) and malaria is integral to the MDGs and the 2005 targets for work in the three diseases are ambitious. HIV/AIDS: provide three million people living with HIV/AIDS with ART; TB: reach 70% case detection and 85% treatment success; malaria: provide at least 60% of those suffering from malaria with access to appropriate treatment and provide at least 60% of those at risk of malaria, including pregnant women, with access to preventive measures.

We have identified key operational priorities for 2005. Prime among our many important endeavours: we will expand and intensify our "3 by 5" efforts, working with colleagues throughout WHO, UNAIDS, the UN family, Member States, and other organizations to accelerate scale-up of treatment and prevention, improve access to essential pharmaceuticals and diagnostics, and promote leadership and advocacy at country and community levels. We will also continue to intensify our work to broaden DOTS[1] and DOTS-Plus[2] programmes for TB and multidrug-resistant TB respectively and will expand work to incorporate collaborative TB/HIV activities in both TB and HIV programmes.

We will be working to promote distribution of free and low-cost insecticide-treated bednets, working to expand or to initiate adoption of artemisinin-combination therapy against malaria, and further developing the new Malaria Medicines and Supplies Service to promote access through operational collaborations.

All of these activities will rely critically upon continued cooperation and coordination with our alliance of supporters. We look forward to working with our partners in making 2005 a landmark year in the fight against HIV/AIDS, TB and malaria.

Dr Jack C. Chow, *Assistant Director-General, HIV/AIDS, tuberculosis and malaria*

[1] The internationally recommended strategy for TB control.
[2] The WHO-recommended strategy for control and management of multidrug-resistant TB.

Effective malaria prevention in tsunami-stricken Indonesia

It was not long after the early morning earthquake and ensuing flood that shattered the quiet Sunday morning in Indonesia's provincial capital of Banda Aceh that Dr Steven Bjorge knew he and his colleagues were facing a disaster that would outstrip any challenge they had ever faced before.

Dr Bjorge, a WHO Technical Officer for malaria, vector-borne and parasitic diseases, is WHO's resident expert for communicable diseases in Indonesia. His expertise covers malaria in all its forms, dengue, filariasis and a wide variety of other communicable diseases. As the magnitude of the disaster became clearer, Dr Bjorge and his team realized that Banda Aceh would face serious public health challenges in the weeks and months to come.

Wound infections, especially tetanus, waterborne diseases, diarrhoea, and acute respiratory infections emerged as the most urgent health priorities during the first two weeks after the disaster. At the same time WHO and its partners worked to prevent eventual future outbreaks of malaria. Malaria, dengue and other diseases spread by mosquitoes and other insects are endemic across wide swathes of the tsunami-affected countries around the Indian Ocean basin.

A close collaboration between the government and WHO kept malaria under control for years. But the province lost many health professionals in the 26 December 2004 earthquake and flood. The provincial health office and many district health offices were overwhelmed, pharmaceutical stores obliterated, equipment and vehicles washed away and lines of communication cut. Ministry officials estimate it will take five years to restore public health services to their pre-earthquake/tsunami level.

Dr Bjorge knew he was dealing with a population at risk for epidemics of vector-borne diseases. "We feared that pools of salt water, diluted by seasonal rains, would create ideal breeding conditions for *Anopheles sundaicus*, the mosquito most active in transmitting malaria in coastal areas of Indonesia", Dr Bjorge recalls. "And we were right. Since the end of December we have been examining the brackish water in the worst devastated areas in Banda Aceh on a regular basis. We have found extensive *A. sundaicus* breeding sites. Areas further inland were not devastated, houses are intact, but they were subject to some flooding at the limit of the tsunami wave. In these areas we also found mosquito breeding, both nuisance mosquitoes (*Culex*) as well as malaria mosquitoes (*Anopheles*). The risk of dengue fever transmitted by the *Aedes* mosquito also continues. We knew we would have to act quickly to help our counterparts at the Ministry of Health to mount an effective vector-control operation."

Dr Bjorge and the WHO Representative in Indonesia, Dr Georg Petersen, were soon in contact with WHO headquarters. There, the Health Action in Crises (HAC) Department had already swung into action. Since then, HAC has been coordinating WHO's overall response to the catastrophe, while WHO country and regional offices are organizing the on-the-ground responses to the specific needs of each situation.

In the ensuing days and weeks after the tsunami, the Roll Back Malaria Department in Geneva, in coordination with regional and country offices, prepared risk assessments in the affected areas and detailed strategies on how to control malaria in these situations. WHO's malaria experts also gathered infor-mation on the availability of commodities from its partners and advised public and private partners on how to be prepared for eventual malaria outbreaks.

As Aceh moved from the immediate emergency response to crisis management, WHO began its longer-term public health response. Using the remnants of the government's public health system and field reports from nongovernmental organization (NGO) partners delivering basic health services in the field, WHO experts from the Global Outbreak Alert and Response Network were able to establish an early warning disease surveillance and reporting system that continues to track the evolving infectious disease situation.

In the first few weeks, WHO supplied 12 500 malaria rapid diagnostic kits, which were donated by Binax Inc., to field workers. Investigation teams were dispatched whenever suspicious clusters of disease surfaced. Working with WHO, the UNICEF and NGOs, the Indonesian Ministry of Health has begun to launch an effective malaria prevention programme, including the distribution of more than 100 000 insecticide-treated mosquito nets. Private donors, WHO and UNICEF are supplying more than 150 000 treatment courses of artemisinin-based medication.

Dr Jack Chow feels the response was timely and well coordinated. "We responded effectively. It is clear that WHO is challenged by the scope of this disaster – so many people are affected over such a wide area. But so far, we have been able to contain the outbreaks we feared – not just the vector-borne diseases that my cluster is concerned with, but the waterborne threats too."

But even with the initial successes, Dr Bjorge and his colleagues know they are in for the long haul. Long after the spotlight has left Aceh and other aid agencies have moved on, WHO will still be working in the province.

Bob Dietz

Roll Back Malaria takes action to address short fall of artemisinin-based combination therapies

The Roll Back Malaria Department (RBM) is turning its sights on East Africa for urgently needed new stocks of *Artemisia annua*, the source of artemisinin. Since 2001, WHO has recommended that countries where malaria is resistant to conventional treatments such as chloroquine should switch to artemisinin-based combination therapies (ACTs). WHO currently recommends four ACTs: artemether + lumefantrine; artesunate + mefloquine; artesunate + amodiaquine; and artesunate + sulfadoxine/pyrimethamine.

A dearth of artemisinin led to a shortfall last autumn of artemether + lumefantrine – the only such drug currently available in fixed-dose formulation. WHO announced the impending shortage in November 2004.

Until now, almost all of the world's supply of artemisinin has been produced in China and Viet Nam. With WHO's assistance, two pilot cultivation projects are under way in Kenya and the United Republic of Tanzania. The first harvests are expected mid-year. "We hope it will be possible to secure at least 20 million treatments from the two projects by the end of this year," said Dr Fatoumata Nafo-Traore, Director of RBM.

The RBM team hopes this project is just the beginning of a massive scale-up in artemisinin production. There are 300 to 500 million cases of malaria each year, and most of them should be treated with ACTs. So far, 42 countries have officially adopted ACTs for the treatment of malaria. A total of 18 countries adopted them in 2004 alone, and this translates into increased orders for 2005.

"We estimate that countries will be prepared to order at least 71 to 120 million treatment courses of ACTs during 2005, and 150 to 250 million treatment courses in 2006. And those are low estimates based on epidemiological morbidity data," said Dr Andrea Bosman, a Medical Officer with RBM.

WHO is providing technical assistance to countries facing the consequences of the shortage of artemether + lumefantrine. It is also informing each country that has placed an order for artemether + lumefantrine about availability and delivery schedules.

RBM partners including WHO have increased their efforts in malaria prevention. But all malaria experts recognize that access to ACTs is key to the battle against this scourge.

Judith Mandelbaum-Schmid

DID YOU KNOW?

Facts and figures on ART scale-up

"3 by 5" progress since June 2004

- WHO/UNAIDS estimate that 700 000 people in developing countries were on ART by the end of 2004.[1] This reaches the "3 by 5" milestone for December 2004. Botswana and more than 10 countries in Latin America have already reached the "3 by 5" goal.[2]
- Uganda and Thailand are expected to reach the "3 by 5" target in the first half of 2005.
- Cambodia, Cameroon, Kenya and Zambia are all treating over 10% of the people in need of ART.
- In sub-Saharan Africa, the number of people on ART has more than doubled over the past six months, from 150 000 to 310 000.
- In Asia, that figure has doubled from 50 000 to 100 000. over the past six months
- In Latin America & the Caribbean there are now 275 000 people on ART. Brazil has universal access to ART.
- Recent data show that adherence to simplified ART, particularly regimens using fixed-dose combinations, is very high (around 90%). An initiative sponsored by the Government of Senegal has maintained good adherence (80–90%) over 2–3 years.
- The survival rate of HIV/AIDS patients is improving with increased access to ART. In a clinical trial in Entebbe, Uganda, since January 2003, 90% of participants on ART were alive after 15 months of treatment.

Challenges

- Another 2.3 million people need to initiate ART by the end 2005 for the "3 by 5" target to be met.
- Overall 72% of unmet need for ART is in sub-Saharan Africa; 22% is in Asia.
- South Africa, India and Nigeria alone account for 41% of the overall need for ART.
- Of the estimated US$ 3.5–3.8 billion required to achieve the global "3 by 5" target, at least US$ 2 billion is still needed.

Beth Magne-Watts

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[1] The 700 000 estimate includes the numbers of people on treatment supported by the United States President's Plan For AIDS Relief, the Global Fund, the World Bank and other partners.

[2] The "3 by 5" target across countries is to treat 50% of those in need, as set out in the 2003 WHO/UNAIDS strategy.

ACTION

Global Fund, Round 5 applications

The decision to proceed with Round 5 applications to the Global Fund to Fight AIDS, Tuberculosis and Malaria was made at the board meeting which took place in Arusha, United Republic of Tanzania, on 18–19 November 2004. Application guidelines and forms will be available on 17 March 2005 and must be completed by 10 June 2005. Approval for grants will be given at the end of September 2005.

• For further information, see http://www.theglobalfund.org.

TB/HIV to be integrated into TB and HIV proposals

The Global Fund Board considers that collaboration between TB and HIV programmes is important in settings where HIV is driving the TB epidemic; therefore all countries submitting an HIV proposal should include strategies to minimize the impact of TB especially among people living with HIV/AIDS and all countries submitting TB proposals should include strategies to minimize the impact of HIV/AIDS in TB patients. Details of collaborative TB/HIV activities can be found in the WHO-recommended *Interim policy on collaborative TB/HIV activities* (http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004.330.pdf). This change makes the separate TB/HIV category for applications unnecessary and so it has been removed. Countries should take time to review the revised guidelines and forms for Round 5 applications in view of these changes.

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Carol Francis

Q&A on TB: *Global progress and challenges*

The WHO 2005 report *Global tuberculosis control: surveillance, planning and financing* will be launched in London, England, by the Director-General of WHO, Dr Lee, on 24 March 2005, World TB Day.

What key messages are in the 2005 report?

Based on latest available data (2003), the findings reveal that the TB incidence rate is still slowly rising, but prevalence and death rates are falling. From a regional perspective, the incidence rate is falling or stable in every WHO region, apart from the African Region, where intensified action is needed to achieve a sustained impact on TB.

The Millennium Development Goals (MDGs) are critical targets for WHO. Does the report give any indication that the target for TB will be achieved?

The MDG TB target for 2015 is to halt and begin to reverse incidence; and between 1990 and 2015, to halve TB prevalence and death rates. Whether the burden of TB can be reduced to meet this target depends on how rapidly DOTS programmes can be implemented by a diversity of health-care providers, and how effectively they can be adapted to face the challenges of HIV coinfection (especially in Africa) and drug resistance (especially in eastern Europe).

How is the report compiled?

A total of 210 countries report their findings to WHO's TB Monitoring and Evaluation (M&E) team through the WHO regional offices. The team are responsible for the production of the global report and analysing surveillance, planning and financing for TB control, plus the latest data on case notifications and treatment outcomes. They are also responsible for compiling a profile of each of the 22 TB high-burden countries, which includes details of plans, budgets, expenditures and progress in expanding the DOTS strategy.

What role does M&E play in the control of global TB?

Since 1980, 81 million TB patients have been reported through WHO's surveillance system, including 17 million notified by DOTS programmes since 1995. The officers who work in monitoring and evaluation play a vital role in providing valuable information on global TB epidemiology, coordinating surveillance activities, producing models on the burden of TB and measuring the impact of control strategies, as well as carrying out research into health metrics and financial monitoring. The Global TB Surveillance, Planning and Financing Project is regarded as a formidable instrument for monitoring and evaluating progress in TB control. The goal of this series of annual reports is to chart progress in global TB control and, in particular, to evaluate progress in implementing the DOTS strategy.

Glenn Thomas

• The report can be downloaded from the STB website: www.who.int/tb