TBHIV

JOINT NEWSLETTER OF THE TB/HIV AND MDR-TB WORKING GROUPS OF THE STOP TB PARTNERSHIP

UPDATE APRIL 2009

MDR TB

INSIDE:

MORE PEOPLE LIVING WITH HIV, DYING OF TB

HOWEVER, DATA SCARCE ON LINK BETWEEN MDR/XDR-TB AND HIV

The WHO Global TB Report released in March this year, shows that in 2007 there were an estimated 1.4 million new cases of tuberculosis among HIV-infected people and 456,000 deaths, much more than previously thought.

These new estimates offer a clearer picture of the extent to which TB is affecting people living with HIV but does not reflect an increase in actual case numbers.

The Global TB Control Report 2009 reveals an increase in HIV testing among people being treated for TB, especially in Africa. In 2004, just 4% of TB patients in the region were tested for HIV; in 2007 that number rose to 37%, with several countries testing more than 75% of TB patients for their HIV status.

Because of increased testing for HIV among TB patients, more people are getting appropriate treatment though the numbers still remain very small. In 2007, 200,000 HIV-positive TB patients were enrolled on co-trimoxazole treatment to prevent opportunistic infections and 90,000 were on antiretroviral therapy.

The new estimates reinforce the need for government, decision makers, donors, HIV stakeholders, people living with HIV, faith-based and other non-governmental organizations and others delivering HIV services, to ensure acceleration of the scale up of the WHO recommended TB/HIV collaborative activities: HIV testing of TB patients, HIV care and treatment including antiretroviral therapy (ART) and co-trimoxazole preventive therapy (CPT) for those found to be HIV positive, and intensified screening and prompt treatment for TB among people living with HIV, preventing TB in people living with HIV using isoniazid preventive therapy (IPT), and infection control in health care centres especially those providing HIV care and other congregate settings. TB detection, treatment and prevention needs to be integrated into the planned decentralization of HIV services to primary care at country level.

What does the revised estimate mean for people living with HIV?

People living with HIV need to be aware of their high risk of developing TB, and what they can do in response. People living with HIV need access to HIV care that will provide IPT and ART as well as regular screening for TB. Not providing all of these should be regarded as sub-standard care. People living with HIV need to know the symptoms of TB; this includes cough for more than 2 weeks, or night sweats, fever and weight loss. They should know where to go to get screened for TB and where to access TB therapy. People living with HIV need to be aware of, and demand infection control measures in their health care settings. However only about 20% of all people living with HIV globally know their HIV status so major efforts are needed to ensure that people learn their HIV status so that they can access proper TB and HIV prevention treatment and care.

How are we doing on global implementation of TB/HIV activities? Does this change in the estimates mean that we are doing even worse than we thought?

For global implementation of collaborative TB/HIV activities this does not change the targets for testing TB patients for HIV or for screening HIV patients for TB. However, it means that we are only doing half of what we have previously thought in terms of detecting HIV related TB cases. For example in 2006 (reported in the Global TB Control Report 2008), 104,000 HIV related TB cases were notified and they represented 14% (104,000/700,000) of the estimated cases using the "old" non-revised estimate. However, according to the revised estimates these cases contribute to 7% (104,000/1,380,000).

What is the impact of the dramatic increase in TB/HIV on X/MDR TB?

There is no hard data and insufficient modelling that can answer this question. However, data on the risk of MDR-TB among HIV positive TB patients is available from just two places in the former Soviet Union, Donetsk, Ukraine, and Latvia which showed TB patients living with HIV are almost nearly twice as likely to have MDR-TB as patients without HIV. The XDR-TB outbreaks affecting primarily people living with HIV was reported from South Africa and is a cause for serious concern. We need more evidence and surveillance to systematically understand the extent of the problem. Whenever possible TB and HIV resistance surveys should be conducted together within a common infrastructure platform to harmonize resources and expertise.

Stop TB Partnership

World Health Organization

The Secretariats of the TB/HIV and MDR-TB Working Groups are provided by WHO Stop TB Department

EDITORIAL

In August 2007, I decided to visit Swaziland having lived and worked there 20 years ago. I visited a project in rural Swaziland managed by a faith-based organization (FBO), the Missionary Sisters at St Philip's Mission Hospital.

Dr. Mario Raviglione, Director, Stop TB, WHO

The program run by the FBO in the hospital includes HIV testing, prevention of mother to child transmission of HIV (PMTCT), provision of antiretroviral therapy (ART) for people living with HIV, as well as TB treatment to HIV-positive patients, MDR-TB treatment, and a shelter for orphans and other vulnerable children. The program also runs home-based care in remote and inaccessible rural areas of the country. Nurses visit patients in their homes, crossing miles of rural, isolated, dirt roads, to provide treatment and treatment support including ART and daily MDR-TB treatment. Siphofanemi, the closest village is about an hour's drive on a dirt road from St. Philip's.

The day I arrived, the staff at St. Philip's took me to visit a woman who was living with HIV and had been diagnosed with MDR-TB. She lived in a tent a further 25 minutes drive from St. Philips, up and down hilly terrain further into the countryside. The woman was initially diagnosed with TB but after she failed treatment the nurses realized she needed further tests. A sample of sputum was sent to a laboratory in South Africa, and the diagnosis of MDR-TB was made. Nurses from St. Philips visited her daily to give her an injection, oral drugs, and food to ensure she was eating.

I was struck by the challenges that patients like this woman face day after day. Soberly, I realized that without the full engagement of non-governmental organizations, community leaders, and faith-based organizations we are unlikely to achieve our targets, globally, nationally, at regional or district levels. Without leadership by governments to proactively include these organizations in the design, development, implementation, monitoring and evaluation of TB, TB/HIV and MDR-TB programs we will remain where we are - subsumed in an emergency situation with no light at the end of the tunnel.

I also realized, even more clearly, the importance of integrated service delivery for HIV and TB, and MDR-TB. It is a fairly straight forward task to simply add TB and MDR-TB interventions to any HIV package and provide safer environments by addressing infection control. This includes actively screening for TB regularly in all people living with HIV, anti-TB treatment for sick people, the provision of isoniazid preventive therapy for those without active disease, and the implementation of simple, yet effective infection control measures. It also includes testing all TB patients for HIV, so that those infected can be offered cotrimoxazole prophylaxis and ART as early as needed. Finally, accurate and timely diagnosis for MDR-TB, and the provision of treatment and community-based care are all approaches that need to be put in place urgently.

If we aim to have patient-centered approaches and ensure that all possible avenues of service delivery are explored and utilized, we might be able to prevent TB in people living with HIV, to provide proper care to those affected by MDR-TB and, ultimately, to reverse the increasing number of people who get TB each year. This is an effort worth taking, as the cost of inaction is not just money lost, but, much more importantly, unnecessary lives taken away by this preventable and curable disease.

A RACE TO **SAVE LIVES**

Dimitry Gagarin, HIV-positive MDR-TB patient at the National TB Center in Almaty, Kazakhstan.
Photo: ©WHO/Dominic Chavez 2009

ALMATY , Kazakhstan – Through the centuries, great powers have fought in this region over influence and resources, such as the modern scramble for vast energy supplies buried in Central Asian earth. But now an echo of those races is being waged here almost entirely out of view, one with thousands of lives at stake – the struggle to control both MDR-TB and the more serious XDR -TB.

One troublesome area in Kazakhstan remains inside prisons. The prisons are run by the Ministry of Justice who are now starting to expand laboratory diagnostic services, train health-care workers and improve patient care services.

Dimitry Gagarin, aged 33, laments that while serving time at the Chimkent prison in south Kazakhstan from 2004 to 2007 for illegal drug use, he contracted TB. Years earlier, he had been diagnosed with HIV – now he was living with two deadly infections.

In prison, Gagarin was locked in a large cell block with 127 other prisoners.

"No one talked about TB in there – no one cared," he said. "*It was very easy to get TB. It was like being on a crowded train or bus, all the time."*

A prison doctor started treating him for TB with a four-drug regimen, but Gagarin said the prison sometimes ran out of the drugs. Only a few months after finishing his six-month treatment, Gagarin became sick again – this time with MDR-TB. After one year of treatment at the national TB control center in Almaty, he was feeling better.

"But I have two diseases – MDR-TB and HIV – that are very dangerous," he said. "*It's like I have sticks of dynamite in my body. I'm waiting to see which one will kill me."*

Contribution by John Donnelly, AIRBORNE
http://www.who.int/tb_beijingmeeting/media/en/index.html

WHAT NEEDS TO BE DONE TO ADDRESS MDR AND XDR-TB IN PEOPLE LIVING WITH HIV?

- We need to understand the extent of the problem systematically and promptly, and find out the extent of the MDR problem in people living with HIV including children. An urgent review of the extent and magnitude of the convergence of the HIV and drug resistant TB epidemics is needed, particularly in Africa and Eastern Europe. High quality anti-TB drug resistance surveys which include HIV testing as an essential component are needed. Whenever possible TB and HIV resistance surveys should be conducted together within a common infrastructure platform to harmonize resources and expertise.
- We need to harmonize global coordination and call for more national leadership to strengthen laboratory services for TB and HIV. For example, capitalizing on the similar infrastructure needs for the expansion of molecular based TB and HIV diagnostics (such as polymerase chain reaction, PCR) would offer an excellent opportunity of synergy for resources and expertise.
- We need to emphasize prevention, early diagnosis, and treatment of TB, including drug resistant TB, for people living with HIV. Effective TB infection control measures are essential in all HIV care and treatment settings. Mechanisms to enhance intensified and prompt TB case finding particularly among people living with HIV need to be prioritized. In those people living with HIV without active TB disease, TB preventive treatment must be provided as part of routine standard of care.
- We need much more meaningful involvement of HIV stakeholders in the design and delivery of quality basic TB prevention, diagnosis and treatment services for people living with HIV. Expansion of HIV testing by all TB service providers, to all TB patients should be scaled up as standard practice.
- Establish a standard monitoring and evaluation system aligned to existing national systems for use by all stakeholders to effectively document and monitor the implementation of activities related to the diagnosis and treatment of drug resistant TB among people living with HIV.

KEY HIV/TB RESEARCH PRIORITY AREAS DISCUSSED AT CROI

The Stop TB Department of WHO in collaboration with the Consortium to Respond Effectively to the AIDS/TB Epidemic (CREATE) organized a meeting affiliated with the 16th Conference on Retroviruses and Opportunistic Infections (CROI 2009) in Montreal, Canada. This is the third in a series of meetings organized since 2007.

The meetings have successfully raised the profile of HIV/TB among HIV researchers in particular by sharing data from ongoing studies, identifying research gaps and stimulating further HIV/TB research. The main objective of the meeting at CROI 2009 was to promote high level scientific interchange of ideas and research priorities to have a better understanding of the magnitude and burden of TB (including drug resistant strains) especially in HIV prevalent settings.

Presentations include one that showed better treatment outcomes including mortality of 42% (less than previous reports of as high as 98%) of HIV infected patients with XDR-TB from Tugela Ferry, South Africa. However, this finding was later contested as it only represented those few patients who managed to access hospital care. Most patients still die before reaching the hospital as there is a considerable delay of up to 70 days between diagnosis and start of treatment for XDR-TB patients in the area. The progress in pharmacokinetics studies of new TB drugs and ARVs was also presented as encouraging . Further promotion of such studies including in children was highlighted as an urgent priority for research. It was encouraging to discover that issues discussed at previous meetings in this series have been taken up by researchers and presented during the main conference.

Presentations from the meeting are available at: www.stoptb.org/wg/tb_hiv

RIO COMMUNITIES DECLARATION: NEED FOR URGENT ACTION THROUGH PARTNERSHIPS

The Rio Communities Declaration issued during the 3rd Partners Forum of the Stop TB Partnership, on March 24, 2009 in Rio de Janeiro builds on previous declarations that had a significant impact on TB control.

The Rio Communities Declaration calls attention to that fact that though governments have the ultimate responsibility of meeting their communities' health needs, TB control targets will not be met without an increased investment of resources and effort on the part of all of us - donors, global and national policy and program leadership, researchers, as well as civil society. The declaration emphasizes the critical need for these communities, who engage with each other much too infrequently, to work together in a coordinated partnership to address the challenges that TB control is now facing.

The Rio Declaration calls for:

- Policies and programs to formulate patient centered responses that protect the human rights of people affected by TB, especially those who are most marginalized. It emphasizes the need for national TB programs (NTPs) to partner with organizations rooted in affected communities to implement these interventions.
- The $44 billion that needs to be invested between 2009 and 2015 to achieve the goals of the Global Plan as well as the $5 billion to fill the funding gap at the Global Fund to be urgently resourced.
- Researchers to work collaboratively and with a greater sense of urgency to develop improved tools and for research to document how the currently available tools can be made more accessible and put to best use, and for donors and government to fund the $2 billion needed annually to address the research needs for TB.
- Civil society, especially communities affected by TB, to be supported to take on TB advocacy. Program implementers and researchers must nourish and harness the power of civil society to improve TB program outcomes and increase resources for research and programs.

The Rio Declaration also calls on the leadership that will convene at the Ministerial Meeting of high M/XDR-TB burden countries to take action to protect patient rights in M/XDR-TB control efforts. The declaration underscores the need to prevent and treat M/XDR-TB, especially in people living with HIV who are at great risk of disease and death due to M/XDR-TB. Ministers at the Beijing meeting must make diagnostics and treatment for drug resistant TB widely accessible in low resource settings where they are needed urgently. The call advocates for the need for MDR-TB control efforts to move beyond mandatory hospitalization to community based treatment models as a way to increase accessibility of MDR services.

Contribution by Javid Syed, TB/HIV Project Director, Treatment Action Group

INTERNATIONAL MEETING ON HIV/TB RESEARCH AND NETWORKING ANNOUNCED

The TB/HIV Working Group of the Stop TB Partnership and WHO in conjunction with other partners such as the International AIDS Society and CREATE, will host an international meeting in order to enhance networking and scientific interest for priority HIV/TB research issues.

The meeting will bring notable researchers and leaders in the areas of TB prevention, childhood TB/HIV, TB treatment and diagnosis, and the interaction between HIV and drug resistant TB. It is also intended to create a forum to exchange ongoing research activities, including data among researchers.

The meeting will also inform the revision of the WHO HIV/TB research priorities. The meeting will be held in the Desmond Tutu HIV Center, University of Cape Town on July 18-19, 2009, prior to the opening of the 5TH International Conference on HIV Pathogenesis Treatment and Prevention Conference.

Deadline for registration: Registration should be submitted no later than June 15, 2009 by emailing Mrs Edma Rosalie at edmar@who.int mention "HIV/TB research meeting" in the subject line.

FROM DOTS PLUS PILOT PROJECT TO A REGIONAL MODEL TB CENTER FOR MDR-TB

SHARE YOUR EXPERIENCES THE F@RUM

Staff workers and patient volunteers supervise the treatment of MDR-TB patients at the Makati Medical Center

Patient receiving a prize during the Makati Medical Center Christmas celebration

Ten years ago on World TB Day (1999), the Makati Medical Center DOTS Clinic in the Philippines was established. One of the first public-private-mix DOTS facilities to provide equitable access to TB care, it was initiated by the Tropical Disease Foundation (TDF), a non-government, non-profit science foundation, the Makati Medical Center, a private tertiary hospital, the Department of Health (DOH) of the Philippines, and Barangay San Lorenzo (BSL), the local government unit. In its initial months of implementation, a DOTS patient, (a return after default) was found to have MDR-TB. Six more patients who failed DOTS that year all turned out to also have MDR-TB. The alarm was raised at the clinic as at the time they were only able to provide first-line drug treatment. Guided by the available literature then, TDF procured appropriate anti-TB drugs and requested donations of expensive second-line drugs from drug manufacturers.

In the years that followed, more cases emerged to be MDR-TB. TDF then applied to the Green Light Committee (GLC), and became in year 2000, the first DOTS-Plus pilot project authorized to procure second-line drugs at concessional prices for 200 MDR-TB patients.

In 2003, further funding was sought and MDR-TB services were mainstreamed into the National TB Control Program. As a result, two satellite MDR-TB treatment centers were established, 500 more cases were treated, and all cities and municipalities in the Metro Manila area were engaged in MDR-TB services. 36% of local DOTS units and 13 faith-based organizations (FBOs) and other NGOs participated in MDR-TB management. The decentralization of patients to the communities where they live for the continuation phase of treatment is intended to diminish defaults and improve treatment adherence.

MDR-TB management has emerged to be a complex intervention. The increasing number of patients, coupled with issues on drug management, co-infection with HIV, infection control, capacity building, information management, and the involvement of more and more stakeholders has greatly widened. The small pilot project has since been transformed into large scale programmatic management of drug-resistant TB.

Adding to the complexity for patients were adverse drug reactions, the psycho-social effects of chronic illness, adherence to the long treatment, and difficulties accessing services. Psychosocial support and empowerment of patients has now become an integral essential component of MDR-TB care.

The National TB Reference laboratory now leads a laboratory network with supranational quality assurance. By 2011, all 17 regions will have been reached with two to three MDR-TB treatment centers established plus a regional TB laboratory and a regional warehouse (for drugs).

Recently, WHO-Western Pacific Regional Office named the Tropical Disease Foundation through its Philippine Institute of TB (PIT) as a Regional Model TB Center (RMCT) for MDR-TB with support from USAID. This RMCT will provide technical assistance to other countries, essential to strengthen the regional capacity.

It has been a challenging transformation and the TDF now embarks on a daunting task in the region. This journey has taken the TDF from a public-private-mix DOTS unit, to a DOTS-Plus pilot project, to programmatic management of MDR-TB, and now to Regional TB Model Center for MDR-TB. Through this dynamic public-private partnership we are stopping TB.

Contribution by Dr. Thelma Tupasi, Executive Director, Tropical Disease Foundation

UPCOMING EVENTS

APRIL

Harm Reduction and Human Rights: International Harm Reduction Association 20th International Conference
When: **19-23**
Where: **Bangkok, Thailand**
More Information: **www.ihra.net/Thailand**

MAY

TB/HIV Workshop for Francophone African Countries
When: **11-15**
Where: **Dakar, Senegal**
More Information: **sculierd@who.int**

JUNE

HIV Implementers Meeting
When: **10-14**
Where: **Windhoek, Namibia**
More Information: **www.hivimplementers.com**

JULY

HIV/TB Research Meeting
When: **18-19**
Where: **Cape Town, South Africa**
More information: sculierd@who.int

HIV Pathogenesis, Treatment and Prevention Conference
When: **19-22**
Where: **Cape Town, South Africa**
More Information: **http://www.ias2009.org/**

AUGUST

From Mekong to Bali: the scale up of TB/HIV collaborative activities in Asia Pacific
When: **8-9**
Where: **Bali, Indonesia**
More information: **gunnerbergc@who.int**

International Congress on AIDS in Asia and the Pacific
When: **9-13**
Where: **Bali, Indonesia**
More Information: **http://www.icaap9.org/**