Background information on TB/HIV collaboration

Two diseases, one patient: TB and HIV programmes collaborate to save lives

Collaboration between TB and HIV programmes is essential to improve access to comprehensive TB and HIV prevention, care and support services for affected populations and save lives.

The challenges of treating TB/HIV co-infected patients include drug interactions and toxicities, immune reconstitution syndrome, high pill burden, adherence, stigma and discrimination.

HIV is one of the strongest risk factors for developing active TB. As a result of HIV, world TB rates are increasing. TB is among the biggest killers of PLWHA, despite the fact that TB is a curable disease even in those who are HIV positive.

The WHO 'Interim policy on collaborative TB/HIV activities' recommends the key activities to reduce the impact of HIV related TB and save lives. Click: http://www.who.int/tb/publications/tbhiv_interim_policy/en/

Key facts

1. TB is not just part of the HIV/AIDS problem; TB programmes can be an important part of the solution.
   Up to 80% of TB patients are HIV positive and most are eligible for antiretroviral therapy (ART). These people are already in contact with the health services and are familiar with adherence to long term complicated drug regimens (some HIV programmes have reported that former TB patients make the best ART patients).

2. TB programmes are taking responsibility for reducing the impact of HIV among TB patients encouraging HIV counselling and testing to identify HIV positive people who can access ART if eligible, and providing HIV prevention services to TB patients who are HIV negative.

3. ART delivery programmes can benefit from the TB experience.
   The infrastructure established for TB control can act as a model for the ART delivery system. TB programmes implement the DOTS strategy which: builds political commitment, detects suspected cases of TB, diagnoses them accurately, ensures reliable drug supply, appropriate treatment and adherence, recording and reporting. These elements are vital to ART delivery.

4. TB programmes can benefit from collaborating with HIV programmes.
   Screening of all people living with HIV/AIDS (PLWHA) for TB at HIV diagnosis and follow up will increase TB case detection, reduce death and disease among PLWHA. Increased use of ART will reduce the incidence of TB among PLWHA and reduce the deaths among HIV positive TB patients helping TB programmes achieve the Millennium Development Goals.
5. The health system can be strengthened by collaborating TB and HIV programmes.
Collaboration can improve prevention, care and support for people affected by TB and HIV, through joint planning, capacity development, resource mobilization, advocacy, communication social mobilization, and joint monitoring and evaluation.

6. Tuberculosis is among the commonest causes of illness and death among PLWHA. Patients with HIV infection are more susceptible to TB because of immunodeficiency increases the risk of reactivation of latent TB infection and the risk of rapid progression of a recent TB infection. Concurrent HIV infection is estimated to confer more than a 100 fold increased risk for development of active TB compared to HIV negative persons. Those with advanced HIV infection (WHO clinical stage 3 and 4) are at most risk of developing active TB infection.

7. In HIV-infected patients, pulmonary TB is the commonest form of TB. In more advanced HIV infection, the typical TB chest X-ray findings of upper lobe infiltrates with cavitation are replaced by atypical findings of bilateral infiltrates (especially lower zones) with no cavitation. HIV infected patients are more likely to present with a miliary pattern on CXR and with hilar/mediastinal lymph node enlargement.

8. Diagnosis of TB in the presence of HIV infection is complicated by increased numbers of patients with pulmonary TB who are acid fast bacillus (AFB) smear negative.

9. Extrapulmonary TB is more common in HIV co-infection. Presentations include lymphadenopathy (usually cervical), pleural effusion, pericarditis, pericardial effusion, empyema and infections of the central nervous system (meningitis, tuberculoma), gastrointestinal tract, liver, kidney, adrenal glands, genital tract (orchitis, epididymitis, tubo-ovarian and endometrial infection), skin, bone and joint. TB recurrence rates among HIV positive patients are higher compared to those without HIV. (Acknowledgements WHO/WPRO HIV/AIDS Antiretroviral newsletter referenced below)

Related links:
All WHO TB/HIV publications are available on the WHO's TB/HIV web site: http://www.who.int/tb/hiv/en/

For more information on HIV/AIDS programmes at the WHO, please visit the WHO's HIV AIDS web site http://www.who.int/hiv/

For more information on the Stop TB Partnership, please visit the StopTB web site http://www.stoptb.org/

Read more about the activities of the Stop TB Partnership TB/HIV working group http://www.stoptb.org/wg/tb_hiv/