Global progress: Implementation of collaborative activities and CG recommendations

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Overview of Remarks

- Global progress in TB/HIV activities
- TB Prevention
- Call to Action for the Region
- Meeting output
Strategy – The Core Group

- Characterize the HIV/TB epidemic
- Set framework, guidelines and targets for response
- Catalyze and monitor implementation
- Promote research
- Marshal global, regional and local organizations
- Establish political visibility
The HIV/TB Epidemic: HIV prevalence in new TB cases, 2008

Estimated HIV prevalence in new TB cases, 2008

1.4 million HIV/TB CASES  500,000 DEATHS
HIV testing for TB patients 2003-2008

Data are only shown for countries for which data were reported on both the number of cases for whom HIV status was known and the number of cases that were HIV-positive.
HIV testing for TB patients, 2008
Progress of HIV testing for TB patients in Africa

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion of TB patients tested for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>11%</td>
</tr>
<tr>
<td>2006</td>
<td>22%</td>
</tr>
<tr>
<td>2007</td>
<td>37%</td>
</tr>
<tr>
<td>2008</td>
<td>45%</td>
</tr>
</tbody>
</table>

Key:
- No reported activity
- < 15%
- 15 to 50%
- 51 to 74%
- More than 75%
## HIV Testing in TB patients by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>HIV tested</th>
<th>HIV infected</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>45%</td>
<td>46%</td>
</tr>
<tr>
<td>AMR</td>
<td>49%</td>
<td>15%</td>
</tr>
<tr>
<td>EMR</td>
<td>5.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>EUR</td>
<td>79%</td>
<td>3.3%</td>
</tr>
<tr>
<td>SEAR</td>
<td>4.1%</td>
<td>18%</td>
</tr>
<tr>
<td>WPR</td>
<td>11%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Country</td>
<td>Proportion TB patients with HIV status known 2007</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.10%</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>0.03%</td>
<td></td>
</tr>
</tbody>
</table>

• What is state of our reporting of HIV testing among TB cases in the region?
• What are HIV prevalence rates in these regions?
• What countries have been most successful and how can we build on this?
ART for Patients with TB

- ART is life saving in patients with TB and should be provided to all patients regardless of CD4.
- Patients should start ART as soon as possible, BEFORE they finish TB therapy.
- HIV and TB efforts must be integrated.
## ART in TB patients by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>STARTED ON ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>30%</td>
</tr>
<tr>
<td>AMR</td>
<td>67%</td>
</tr>
<tr>
<td>EMR</td>
<td>55%</td>
</tr>
<tr>
<td>EUR</td>
<td>29%</td>
</tr>
<tr>
<td>SEAR</td>
<td>35%</td>
</tr>
<tr>
<td>WPR</td>
<td>28%</td>
</tr>
</tbody>
</table>
Intensified Case Finding and IPT 2005-2008

Intensified TB case-finding and IPT provision among HIV-positive people. Numbers (bars) and percentages (above bars) of estimated HIV-positive people screened for TB (red) and started on IPTa (grey). Numbers under bars show the number of countries reporting data followed by the percentage of total estimated HIV-positive people accounted for by reporting countries.

Number of HIV-positive people screened for TB (red) and started on IPT (grey) in thousands:

- 0.6% in 2005
- 1.9% in 2006
- 1.9% in 2007
- 4.1% in 2008

a Percentages for IPT figures are calculated using the estimated number of HIV-positive people without active TB.
New TB screening and IPT guidelines

- TB screening and IPT in tandem
- Symptom based clinical algorithm for TB screening developed—4 simple questions
- INH for 6 (strong) and 36 (conditional) months recommended
- Pregnant women, children and people receiving ART included.
- TST is not a requirement
- Should be core function of HIV services
IPT in the setting of high level resistance to INH

- Will INH use create more resistance?
- Does INH work in INH resistant latent TB?
- Should INH be used in countries with high levels of INH resistance?
IPT does not increase resistance

Effect size (95% CI)

- Hong Kong: 1.22 (0.34, 4.33)
- Katz: 2.04 (0.51, 8.08)
- Horwitz: 1.98 (0.18, 21.31)
- Pamra: 0.88 (0.25, 3.16)
- Ferebee '60: 1.87 (0.31, 11.19)
- Ferebee '56: 1.28 (0.20, 8.08)
- Hawken: 6.88 (0.01, 3881.07)
- Mwinga: 0.05 (0.00, 28.18)
- Johnson: 4.04 (0.50, 32.79)
- Gordin: 0.99 (0.00, 6306.83)
- Rivero: 0.70 (0.16, 3.03)
- Moreno: 21.95 (0.04, 11581.42)
- Comstock: 4.07 (0.47, 34.95)

Summary RR - all studies: 1.45 (0.85, 2.47)

Summary RR - excluding zero studies*: 1.44 (0.84, 2.47)
Not all INH resistance is equal
Among households, not all have the same strain

<table>
<thead>
<tr>
<th>Gene</th>
<th>Gene function</th>
<th>Role</th>
<th>Mechanism</th>
<th>resistant strains</th>
<th>Degree resistant conferred</th>
<th>Overcome with high dose INH?</th>
</tr>
</thead>
<tbody>
<tr>
<td>kat G</td>
<td>catalase-peroxidase</td>
<td>pro-drug conversion</td>
<td>inhibition of mycolic acid biosynthesis and other effects</td>
<td>50-95%</td>
<td>high</td>
<td>no</td>
</tr>
<tr>
<td>inh A</td>
<td>enoyl ACP reductase</td>
<td>drug target</td>
<td></td>
<td>8-43%</td>
<td>low</td>
<td>yes</td>
</tr>
</tbody>
</table>

adapted from Zhang IJTLD 2009;13:1320
## IPT use where isoniazid resistance, new cases, >15%

<table>
<thead>
<tr>
<th>country</th>
<th>year of resistance survey</th>
<th>prevalence any isoniazid resistance, new TB cases</th>
<th>started IPT, 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominican Republic</td>
<td>1995</td>
<td>19%</td>
<td>443</td>
</tr>
<tr>
<td>Georgia</td>
<td>2006</td>
<td>23%</td>
<td>301</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>2001</td>
<td>42.8%</td>
<td>656</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1999</td>
<td>16.5%</td>
<td>724</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2006</td>
<td>19%</td>
<td>500</td>
</tr>
</tbody>
</table>

WHO drug resistance survey 2008; IPT data courtesy WHO.
Combination TB prevention

THE 3 Is

Infection Control

Intensified Case Finding

Isoniazid Preventive Therapy

ANTIRETROVIRAL THERAPY

THE 4TH I

ART IS THE STRONGEST PREVENTIVE MEASURE AGAINST TB

Adapted from WHO, 2009
ART to Prevent TB

- Antiretroviral therapy is strongest preventive measure against TB
- Works for drug sensitive and drug resistant TB
- It is now recommended for all HIV+ persons with CD4 count <350
- How are we doing in this region in terms of ART roll out?
Regional The Call to Action

- Expand HIV testing for TB patients and liberalise HIV testing
- Screen people living with HIV for TB
- For TB patients, provide them with prompt ART
- For HIV patients without TB, provide INH
- Integrate TB services in AIDS centers and HIV services in TB centres
Regional Opportunities

- Global focus on the region at upcoming meetings
  - Euro meeting July 16-17
  - Vienna IAS July 18-23
- UNAIDS renewed commitment to HIV/TB human rights
- Interest in research collaboration including implementation science
  - New diagnostics
  - New TB drugs for MDR/XDR
This Meeting– what we want to accomplish

- Understanding: HIV testing, integration of HIV/TB services, State of response to 4Is, MDR epidemiology, IDU/HIV
- Statement: Priority Focus Areas
- Commitment: Action plans to enhance progress in the region
- Follow-up: Euro and IAS meeting
Core business: Let's get serious- where are we and where are we going?

General announcements and updates

Administrative issues
  - Institutional membership discussion
  - Individual membership decision
THE HIV/TB Working Group – Let's Get Serious

2003-2006

SET THE FRAMEWORK
HIV/TB Guidelines
Community Activism
Research priorities

2006-2009

SET THE PLAN IN MOTION
Heighten visibility
Push implementation
Improve monitoring
Enhance research

2010-2013

LETS GET SERIOUS

Bring in HIV

REDUCE TB BURDEN, REDUCE HIV/TB DEATHS
Let's Get Serious- IMPLEMENTATION!!

- **Overall Approach**
  - Huge push for *prevention* strategies
    - IPT, ICF, IC
    - ART
  - Integrate HIV/TB– models
  - Focus on Country/Community
    - SE Asia region
    - Euro region

More emphasis on HIV Care programs/integration MDR/XDR- need information/develop strategy
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2010-2013

LET'S GET SERIOUS
TB Prevent 2010
Integrate HIV/TB
Country/community

Bring in HIV

REDUCE TB BURDEN, REDUCE HIV/TB DEATHS
TB Prevent 2010

- IPT/ICF Guidelines final documents
  - Roll out at Vienna
- Repackaged version 3 Is, IPT
  - FAQs
- Infection control—Advocacy policy
  - TB infection control committee and USAID in final review
- ART— the threat to the roll out—what are we doing?
Progress since last meeting
INTEGRATION OF SERVICES -

- Position paper on HIV/TB Care Models
  - Mean Chi, Ritta, Joseph, Joeroen

- Reviews on HIV/TB Service Integration
  - Published evidence on TB/HIV service integration
  - Strengthened referral, partial integration, complete integration

- Situation Analysis – ART/TB Delivery
  - Cameroun, DRC, Ethiopia, Mali, Zambia
  - Followup national consultation in Mali– Dec
  - Followup planned for Kenya
Regional /Community focus

- Regional implementation meetings
  - Almaty Meeting
  - Euro Meeting July 16-17 pre –Vienna
  - Vienna IAS
  - Caribbean in the future
Political Visibility/Advocacy

- Vienna IAS meeting
  - Special Session
  - Multiple bridging and symposium sessions
  - Abstract sessions and poster oral discussions
  - HIV/TB Award
  - Plenary MOH South Africa
- UNAIDS-STOP TB partnership compact
  - Endorsed by the Board in Hanoi, May, 2010
Research

- CROI meeting, Feb, 2010 with focus on Prevention
- Research Review Document in final stages
- Will develop dissemination and advocacy strategy for research priorities document
Discussion

- What are we missing in our priorities?
- Where can we make the greatest gains in implementation?
- Prevention 2010—what can the core group do to maximize the success?
- Is our monitoring keeping pace with roll out?
- Are we involved enough in the ART dialogue?
- Preparing for next 2 days- key issues..e.g. IPT
Regional Challenges: Intersection of IDU/HIV/TB

- Serious problem in Asia/Pacific and Eastern Europe region
- Overlap and challenges with the incarcerated population
- Lack of information on MDR/XDR specific to HIV population
- Data on MDR in incarcerated, HIV, TB population extremely concerning