National scale-up of collaborative TB/HIV activities in China: challenges and opportunities

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* TB epidemic situation
* TB/HIV collaborative activities
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HIV/AIDS Epidemic Situation in China
The HIV/AIDS Epidemic Continues to Show an Upward Trend with the Number of New Infections Controlled and Stable at A Relatively Low Level

* It is estimated that the number of currently surviving HIV infected people is still rising

* It is estimated that the number of new infections is being controlled at a relatively low level
Former HIV Infections Start to Develop AIDS and The Number of Deaths Related to AIDS Increasing

- **Annual reported number of AIDS patients**
  - Of the 14,509 cases reported in 2008 and the 39,183 cases in 2011, those previously reported as being infected with HIV stand for 26.5% and 47% of the total respectively.

- **Annual reported number of deaths related to HIV/AIDS**
  - 9,748 cases in 2008, increased to 21,234 cases in 2011 (3,723 of the 2010 cases, 17.5%, had died previously).

2008-2011 Reported Number Of Deaths Related To HIV/AIDS
Low-Level Epidemic in General, Severe Epidemic in Certain Areas

* Infection rate in the whole population is 0.058%, a low-level epidemic
* Epidemic estimates:
  * Five provinces surpass 50,000 people, accounting for 60% of the estimated total in the country;
  * 12 provinces have fewer that 5000 people, accounting for 4.8% of the estimated total in the country.
Four Free One Care

* Free VCT
* Free ART
* Free PMTCT
* Free Education for Orphans affected by AIDS
* Care for HIV/AIDS
TB Epidemic Situation in China
TB burden in China

- One of the 22 countries with highest TB burden
- 550 million population infected with TB
- 4.5 million TB patients and 1.5 million SS+ TB patients
Free Policies

* Free screening for TB suspects
* Free diagnosis and treatment for TB patients
  - Sputum smear microscopy and chest X-ray
  - Anti-TB drugs
  - DOT
* Free screening for contactors of SS+ patients
Three Major Targets Progress
2001-2009
TB/HIV collaborative activities in China
Progress of TB/HIV co-infection control in China

- MOH established the coordinating group and working group, issued the framework, carried out TB screening in HIV/AIDS
- MOH 6 counties pilot, GF project launched
- TB/HIV control in 67 counties, 14 provinces, HIV infection rate survey in TB patients of 150 counties, 14 provinces
- Second Mekong Region TB/HIV co-infection control seminar
- TB/HIV control in 134 counties, 14 provinces, HIV infection rate survey in TB patients of 119 counties, 17 provinces
- Issued the implementation plan, intensified strategy, epidemic surveillance and reporting
- GF the extension of TB/HIV control in 16 provinces
- MOH 6 counties pilot, GF project launched
- Progress of TB/HIV co-infection control of in China

- 2004
- 2005
- 2006
- 2007
- 2008
- 2009-2011

- Develop technical manual, staff training, health promotion, operational research, etc
Establish the coordinating mechanism and the expert group

---National TB/HIV control coordinating group is composed of leaders from Disease Control Bureau of MOH、China CDC、NCTB、NCAIDS、CCTB

---National TB/HIV control working group is composed of experts from NCTB、NCAIDS、CCTB、WHO and some from provincial level.
卫生部办公厅关于在艾滋病病毒感染者和艾滋病病人中筛查结核病的通知

各省、自治区、直辖市卫生厅局，新疆生产建设兵团卫生局：

为了掌握艾滋病病毒感染者和艾滋病病人中结核病患病情况及发病趋势，为结核病和艾滋病双重感染的特殊群体及时提供适当的医疗救治服务，现就对艾滋病病毒感染者和艾滋病病人实施结核病筛查的有关问题通知如下。

一、提高对这项工作的认识。各地要坚决贯彻执行《关于在艾滋病病毒感染者和艾滋病病人中实施结核病筛查的方案（试行）》的规定，切实做好艾滋病病毒感染者和艾滋病病人的筛查工作，加强领导，抓紧做好。

二、各地要利用现有的资料，对辖区已登记的艾滋病病毒感染者和艾滋病病人进行结核病筛查。对正在或者准备开展艾滋病筛查的地区和人群，要将筛查的筛查列入艾滋病的筛查工作中。今后，在日常工作中对
Case detection in TB/HIV co-infection pilot

* TB screening in HIV/AIDS
  - TB suspicious symptoms questionnaire screening in 3,879 HIV/AIDS
  - 1,751 people with positive questionnaire results (45.1%)
  - 250 TB cases in 1,222 patients with positive questionnaire result, and the TB detection rate is 6.4% (1.6% ~ 22.9%)

* HIV testing in TB patients
  - 2,505 newly registered TB patients, with 109 known HIV positive (0.43%)
  - 2,135 TB patients received HIV testing and 68 patients were HIV positive, the newly detected HIV positive rate is 3.2% (1.0% ~ 6.3%)
  - the HIV infection rate of the TB patients was 7.9% (4.3% ~ 36.3%)
Survey of HIV infection rate in TB patients (2007-2008)

• Sampling method:
  stratified cluster sampling

• Main results
  – the detection rate of HIV is 0.30%
  – the infection rate of HIV is 0.64%

<table>
<thead>
<tr>
<th>Counties surveyed</th>
<th>HIV+ in TB patients tested of the county</th>
<th>Proportion(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>234</td>
<td>70.3</td>
</tr>
<tr>
<td>1</td>
<td>43</td>
<td>12.9</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>6.0</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>3.6</td>
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<td>9</td>
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<td>18</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>100</td>
<td>333</td>
<td>100.0</td>
</tr>
</tbody>
</table>
HIV infection rate of 333 sampling sites in 31 provinces

Top four

ShangCai 18/271 = 6.57%
WeiShi 11/165 = 6.67%
XiHua 10/201 = 4.98%
DaZhu 16/255 = 6.27%

*include the known HIV+ and newly detected HIV+
MOH issued “National implementation plan of TB/HIV co-infection prevention and treatment”
(28, July, 2010)
Main contents

1) TB screening and testing among people living with HIV/AIDS

* TB symptoms questionnaire screening for all PLWHA during routine follow-up
* TB testing (at least once a year)
* Referral of the newly registered PLWHA to TB dispensaries for TB testing

2) HIV testing in medium and high prevalence areas for the registered TB patients
3) Treatment and follow-up services for the patients with TB/HIV co-infection

* Provide prompt treatment (ART and ATT) for free and follow-up services for the patients with TB/HIV co-infection

4) Information sharing between TB and HIV
Diagnosed TB patients

introduce test items before treatment

Patient agree and sign

Collecting blood and send it to the lab

Lab feedback to TB control institution to register

HIV+

HIV post-counseling

HIV-

Record and report

None co-infection

Patient refuse and sign

recommend test items next time

Flow chart for TB patient referral
HIV/AIDS

Questionnaire survey any time

(-)

once again next time

(+) periodic physical examination (Questionnaire survey + X-ray)

recommend patient to TB dispensary

Diagnosis of tuberculosis with certainty

TB dispensary register and feedback to HIV/AIDS centre

Diagnosis of tuberculosis

HIV/AIDS control centre establish medical record

Diagnosis with uncertainty, refer to TB/HIV expert group

Ruled out TB

Flow chart for HIV/AIDS referral
Develop training materials and strengthen staff training

TB/HIV working group experts and NCTB,NCAIDS will organize national training class 2-3 times a year.
HIV Quality evaluation plan

Core indicator 3:

Proportion of receiving TB test among HIV/AIDS
TB questionnaire screening and Testing
Statistical analysis of the information of TB/HIV co-infection patients using the network reporting system (Jan. 2011—Oct. 2011)

- 780,326 TB patients registered nationwide
  - 120,299 received HIV testing with a testing rate of 15.4%.
  - 1822 patients were detected HIV positive with a detection rate of 1.5%.

- 95,772 patients registered in 294 counties with high and medium HIV prevalence
  - 51,643 received HIV testing with a testing rate of 53.9%.
  - 1360 patients were detected HIV positive with a detection rate of 2.6%.
Challenges

- High questionnaire screening but low testing
- Two separate system
- Lack of motivation
Reasons for “not TB testing”
– expert consultation

1. Refuse (no discomfort)
2. No confidentiality
3. Too frequent, negative last time
4. Not convenient
5. Afraid to be charged
6. Not well-informed
7. Mobility
### high rate of loss-to-follow-up

<table>
<thead>
<tr>
<th>Time period</th>
<th># of counseling</th>
<th># of testing</th>
<th># of screened positive</th>
<th># of having confirmatory testing</th>
<th># of confirmed positive</th>
<th># of CD4 testing</th>
<th>CD4&lt;35 0</th>
<th>ART</th>
</tr>
</thead>
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<td>2011.09</td>
<td>245</td>
<td>239</td>
<td>15 (6.28%)</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td></td>
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<tr>
<td>2011.10</td>
<td>370</td>
<td>366</td>
<td>30 (8.20%)</td>
<td>29</td>
<td>28</td>
<td>23</td>
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<td></td>
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<tr>
<td>2011.11</td>
<td>753</td>
<td>753</td>
<td>52 (6.91%)</td>
<td>40</td>
<td>34</td>
<td>21</td>
<td></td>
<td></td>
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<tr>
<td>2011.12</td>
<td>801</td>
<td>800</td>
<td>41 (5.13%)</td>
<td>25</td>
<td>23</td>
<td>16</td>
<td></td>
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<tr>
<td>2012.01</td>
<td>321</td>
<td>321</td>
<td>29 (9.03%)</td>
<td>14</td>
<td>13</td>
<td>11</td>
<td></td>
<td></td>
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<tr>
<td>2012.02</td>
<td>597</td>
<td>596</td>
<td>34 (5.70%)</td>
<td>27</td>
<td>22</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012.03</td>
<td>1095</td>
<td>1094</td>
<td>61 (5.58%)</td>
<td>42</td>
<td>32</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4182</strong></td>
<td><strong>4169</strong></td>
<td><strong>262 (6.28%)</strong></td>
<td><strong>177 (67.6%)</strong></td>
<td><strong>165 (93.2%)</strong></td>
<td><strong>105 (63.6%)</strong></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

- ART: ART initiation for confirmed positives where CD4 count is < 35.
Ways forward

- Law enforcement
- Further advocacy and Motivation
- More close relationship
- Client-centered service
- CBO involvement