MDR tuberculosis in people with drug and alcohol dependencies
Tomsk Oblast

P Golubchikov, S Mishustin, G Yanova
Tomsk Oblast TB service
Tomsk Oblast

Population: 1.0407 million people, surface area = 316.9 thousand km², 600 x 780 km
Key stages in developing the anti-TB program

- **DOTS program** (drug-susceptible TB):
  - from 1994 to 2003, Merlin,(UK) Great Britain
  - from 1998 to 2000 - NIIZ+++ (PHRI, USA), Partners in Health, Boston USA

- **DOTS Plus program** (MDRTB):
  - from 2000 - Partners in Health, USA - 244 patients.

- Approval from the Green Light Committee (GLC) - Sept. 2001.
- Lilly Endowment (training initiatives) - from 2002.
- Grant from the Global Fund to Fight Against AIDS, Tuberculosis, and Malaria, third round ($10.7 million) - 2004-2009: 950 MDRTB.
- Global Fund grant (non-governmental financing mechanism, USD 13.4) - 2009-2015 - 957 MDR patients.
Effectiveness of therapy in the first cohort of MDRTB patients (2000-2002) (N=244)

<table>
<thead>
<tr>
<th>Total</th>
<th>Cured</th>
<th>Failure</th>
<th>Died</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>244</td>
<td>191</td>
<td>16</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>100%</td>
<td>78.3%</td>
<td>6.6%</td>
<td>4.9%</td>
<td>10.2%</td>
</tr>
</tbody>
</table>
Comparison of outcomes of the 2000-2002 (N=244) cohort and the 2004-2005 cohort (N=230)

In 2004-2005, the main reason for the outcomes of 'default' and 'failure' were alcoholism and drug addiction, 52 out of 75 (72%) patients
Main areas of work

- Alcohol harm-reduction program
- Narcotics harm-reduction program
- Social support program for patients
- Development of patient-centered approaches
- Administrative measures
- Training programs for staff and patients
Alcohol harm-reduction program covering the period of treatment

• AUDIT test of all patients before the beginning of treatment
• If alcohol dependence is detected: counseling by a substance-abuse professional and specialist help before the start of treatment
• Counseling and specialist help available from a substance-abuse professional throughout the course of therapy
• 'Drying out' (free):
  – If BK(+): in a TB inpatient facility or the TB department of a psychiatric hospital;
  – If BK (-): in a drug-abuse clinic
• Research into the effectiveness of naltrexone
• Psychological support
• Separate consulting rooms for the substance-abuse professional and the psychologist
Narcotics harm-reduction program covering the period of treatment

- Counseling and specialist help available from a substance-abuse professional throughout the course of therapy
- Involvement of outreach workers from the 'Nasha Klinika' ('Our Clinic') foundation to encourage IDU and MDRTB patients to receive treatment
- Cooperation with nongovernmental, not-for-profit rehabilitation centers for IDUs
- Arranging for patients to visit a drug-abuse clinic to cure their addiction or reduce doses
Social support program for patients

- Weekly distribution of a selection of foods
- Weekly distribution of a selection of hygiene products
- Distribution of clothes
- Free travel to outpatient facilities
- Hot meals at local TB day-patient facilities
- Social worker (reissue of documents; help with applying for disability benefits; free local travel)
Development of patient-centered approaches

- Expansion of day-patient facilities - two hot meals served daily
- Home care (60 patients)
- 'Sputnik' program - development of home visits for persistent or potential defaulters from TB treatment (medical and psychological intervention and social support with some elements of operational work and case detection).
- Treatment at village health centers
- Expansion of a network of volunteers in remote districts
Administrative measures

• Mobile 'default team' - visits the houses of patients who have missed their morning dose that day
• Decrease in premature discharges from the inpatient clinic
• Creation of a 'default committee' (deputy head doctor, head of department, doctor, psychologist, substance-abuse professional and a social worker) to discuss patients who have missed their medication for more than three days
• Home visits by a substance-abuse professional, psychologist and social workers
Training courses

• Training for health professionals:
  • Clinical management of MDRTB
  • Detection and treatment of side effects
  • Working with 'difficult' patients (alcohol and drugs dependence)

• For patients:
  • 'Schools of Health'
  • Talks on tuberculosis
  • Involvement of specialists from 'Alcoholics Anonymous'
  • Involvement of the Russian Orthodox Church
  • Accessibility of the management staff of TB facilities to patients
  • Arranging for cured TB patients to talk to current patients
Comparison of treatment results
(2004-2009, 648 MDR patients with a known outcome)
Changes in defaults among outcomes for MDR patients treated by DOTS Plus, civilian population (%)
Changes in TB incidence in the Tomsk Oblast, the Siberian Federal District and the Russian Federation (per 100,000, figures per area)
Proportion of MDRTB among new bacteriologically-proven cases of pulmonary TB investigated for drug susceptibility (%)
Level of XDRTB among all positive susceptibility tests (%)

Average from 2000 to 2009 – 1.7%
Changes in TB mortality in the Tomsk Oblast, the Siberian Federal District and Russia (per 100 000)

DOTS Plus
Changes in TB prevalence in the Tomsk Oblast, the Siberian Federal District and the Russian Federation (per 100,000, by area)
Reservoir of infectious MDRTB cases in the Tomsk Oblast, civilian sector (abs. no.)
Thank you for listening!

http://www.pih.ru