Tuberculosis Control in Bulgaria and activities among groups at risk, with special focus on Injecting Drug Users (IDUs)

Dr. Vladimir Milanov
Chief Expert
Directorate “Public Health and Management of Specialized Donor-Funded Programmes”, Ministry of Health

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National Context and Political Commitment to National policies in the field of Tuberculosis Control

1996 – National Committee on Prevention of AIDS and STDs at the Council of Ministers

1998 – implementation of DOTS in four pilot regions

2002 – Country Coordinating Mechanism to Fight AIDS (CCM)

2003 – 100% DOTS coverage of the country

2006 – Country Coordinating Mechanism (CCM) to Fight AIDS and TB; successful application in GFATM Round 6 with project “To Improve the TB Control in Bulgaria”


2008 – CCM-Bulgaria successfully applied in GFATM Round 8 with project “To Strengthen the National TB Program in Bulgaria”

2012 – National Program for Prevention and Control of Tuberculosis in the Republic of Bulgaria for the period 2012-2015
National Context and Political Commitment to International initiatives in the field of Tuberculosis Control and control of M/XDR-TB

2003 – setting MDG targets for Bulgaria to 2015
2006 – WHO Stop TB Strategy and “Global Plan to Stop TB 2006-2015”
2007 – EU membership; Berlin Declaration on TB of the WHO European Ministerial Forum “All Against Tuberculosis”
2007 – Bulgaria is included in the “Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015”
2008 – Bulgaria is included in the “Framework Action Plan to Fight TB in the European Union”
2008 – revised MDG targets for Bulgaria to 2015
2009 – The Beijing “Call for Action” on TB Control and Patient Care: “Together addressing the Global M/XDR-TB Epidemic” of the Ministerial Meeting of 27 High M/XDR-TB Burden countries
2011 – Bulgaria is included in the “Consolidated Action Plan to Prevent and Combat MDR-TB and XDR-TB in the WHO European Region, 2011-2015”
Tuberculosis Incidence in Bulgaria for the period 1990-2012

Source: National Centre for Public Health and Analyses
average TB Incidence – 27.9 per 100,000 population
Distribution of TB cases in Bulgaria for the period 2007-2011 by previous treatment
Distribution of TB cases in Bulgaria for the period 2007-2011 by TB form, culture confirmation and DST

Extrapulmonary TB
Pulmonary, Culture (+) with DST
Pulmonary, Culture (+)
Pulmonary TB
Total

Extrapulmonary TB
Pulmonary, Culture (+) with DST
Pulmonary, Culture (+)
Pulmonary TB
Total

Distribution of TB cases in Bulgaria for the period 2007-2011 by TB form, culture confirmation and DST

Extrapulmonary TB
Pulmonary, Culture (+) with DST
Pulmonary, Culture (+)
Pulmonary TB
Total

Extrapulmonary TB
Pulmonary, Culture (+) with DST
Pulmonary, Culture (+)
Pulmonary TB
Total
### Treatment Success Rate for TB patients registered for the period 2007-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>New Pulmonary, Smear and/or Culture (+)</th>
<th>Relapses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>80.9%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>83.6%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>85.6%</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- Blue triangle: New Pulmonary, Smear and/or Culture (+)
- Red line: Relapses
## Registered MDR-TB and XDR-TB cases in Bulgaria for the period 2009-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>Retreatment</td>
<td>Total</td>
</tr>
<tr>
<td>Patient Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of cases with Culture (+) tested with DST</td>
<td>716</td>
<td>128</td>
<td>844</td>
</tr>
<tr>
<td>Number (%) of MDR-TB cases</td>
<td>12</td>
<td>31</td>
<td>43</td>
</tr>
<tr>
<td>%</td>
<td>1.7%</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>Number of XDR-TB cases</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* In 2008 Bulgaria was included in the group of 27 High M/XDR-TB burden countries, based on WHO prognostic model: 9.4% MDR-TB cases out of new TB patients, and 37% - out of re-treatment cases.

** In 2010, four XDR-TB cases were confirmed by WHO-SRL in Italy, out of MDR-TB cases registered in 2007 and started treatment with SLD in the first MDR-TB cohort.

Objective 1. Effective management and coordination of the National Programme for TB prevention and control

Objective 2. Timely diagnosis and control of tuberculosis

Objective 3. Successful treatment of tuberculosis in Bulgaria

Objective 4. Successful treatment and control of MDR-TB and XDR-TB

Objective 5. Control of tuberculosis in children

Objective 6. Reducing the transmission of tuberculosis in the prisons in Bulgaria

Objective 7. Reducing the spread of tuberculosis among Roma community and other vulnerable groups

Objective 8. Diagnosis and treatment of cases with LTBI

Objective 9. Raising public awareness
Vulnerable groups

- Roma community (gypsies)
- Injecting drug users and alcohol-dependent people
- Prisoners
- Refugees and asylum seekers, migrants
- Children on the street and youths living in social homes
- People living with HIV
TB Diagnosis, Treatment, Immune prophylaxis and LTBI Preventive Treatment are covered by MoH budget and are free of charge for all TB patients, regardless of their health insurance status:

- Reagents and consumables for microscopy and culture investigations for all TB laboratories in the country
- First-line anti-TB drugs for all TB patients
- MoH Methodology for subsidies of the health facilities for hospital and prolonged treatment of TB patients
- Drugs (Isoniazid) for chemoprophylaxis (preventive treatment) of cases with LTBI
- BCG-vaccine and PPD-tuberculin as part of Bulgarian Immunization Calendar
Programmes Grant Agreements between the GFATM and the Ministry of Health of Bulgaria

- Programme „To Improve the Tuberculosis Control in Bulgaria” – 2008-2012 - BUL-607-G02-T – **Round 6 TB**
  The GA was ratified by Law in the State Gazette issues 67/29.07.2008 and issue 70/07.09.2010
  **EUR 14,224,465**

- Programme „Strengthen the National Tuberculosis Programme in Bulgaria” – 2010-2012 - BUL-809-G03-T – **Round 8 TB**
  The GA was ratified by Law in the State Gazette and promulgated in #15/23.10.2010 and issue 30/21.04.2010 (2010-2011)
  **EUR 3,282,695**
  Phase 2 (2012-2014) – **EUR 6,187,681 (GA)**
  **Total: EUR 9,470,376**
Objectives of the Programme “To Improve the TB Control in Bulgaria”, funded by the Round 6 GFATM

**Objective 1.** To strengthen the management and coordination of the National TB Programme

**Objective 2.** To improve the effectiveness of TB diagnosis and treatment in Bulgaria

**Objective 3.** To reduce the transmission of TB in the prisons in Bulgaria

**Objective 4.** To reduce the transmission of TB among injecting drug users; alcoholics; street children and refugees and asylum seekers

**Objective 5.** To improve TB case detection and treatment success among Roma population
Objective 1. To ensure the efficient management and coordination of the National TB Program

Objective 2. To improve the effectiveness of TB diagnosis and treatment in Bulgaria

Objective 3. To reduce the transmission of TB in prisons in Bulgaria

Objective 4. To increase access to TB care for high risk groups – refugees and asylum seekers, immigrants, youth at risk, injecting drug users and alcohol-dependent people

Objective 5. To increase the coverage of the Roma population with efficient community TB care
Objective 1. To strengthen the management and coordination of the National TB Programme

- Electronic TB Information system developed and implemented in all districts in the country, with case-based data for all registered TB cases and outcome of treatment in the National TB Registry.
Program documents developed with the support of the GFATM Round 6 TB Grant (7 guidelines)
Quality Assurance of TB microbiological diagnosis

NRL-TB at NCIPD provides Quality Assurance of TB microbiological diagnosis in all 33 peripheral laboratories:

- On Site Evaluation
- Panel Testing of microscopy investigations
- Blinded Rechecking of microscopy results
- Panel Testing of culture investigations
- Panel Testing of Drug Susceptibility Testing (DST)
WHO – SRL
Italy

INSTAND
Germany

DST for 1\textsuperscript{st} and 2\textsuperscript{nd} line anti-TB drugs

Microscopy – 100%
Culture – 100%
Identification – 75%
Nucleic Acid Amplif. – 100%

panel testing
on site evaluation
blinded rechecking

National network
of laboratories for TB diagnosis
Structure of TB health facilities before 31.10.2010

- Specialized Hospital for Active Treatment of Lung Diseases, incl. TB (6)
- Regional TB Dispensary (13)
- Multiprofile Hospital for Active Treatment with TB Ward/Office (9)
## “Open Doors” Campaigns – Results for the period 2009-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of people screened for TB risk</th>
<th>Number of people with medical examination and laboratory investigations (sputum, TST, Chest X-Ray)</th>
<th>Number of cases found with active TB</th>
<th>Number of cases with LTBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>11,557</td>
<td>7,920</td>
<td>120</td>
<td>339</td>
</tr>
<tr>
<td>2010</td>
<td>20,217</td>
<td>13,149</td>
<td>181</td>
<td>820</td>
</tr>
<tr>
<td>2011</td>
<td>19,048</td>
<td>12,528</td>
<td>215</td>
<td>705</td>
</tr>
<tr>
<td>2012</td>
<td>11,994</td>
<td>7,578</td>
<td>176</td>
<td>335</td>
</tr>
<tr>
<td>Total</td>
<td>62,816</td>
<td>41,175</td>
<td>692</td>
<td>2,199</td>
</tr>
</tbody>
</table>
Activities of the regional DOTS managers and patronage nurses

28 Regional DOTS managers contracted to oversee TB control at regional level:
- Relationship between the regional TB health facility, NGOs and other institutions involved in TB control, with Programme Management Unit of the Programmes funded by the GFATM
- Direct control of the activities carried out by the patronage nurses
- Responsible for DOTS implementation at regional level
- Regular visits in regional TB laboratories

100 patronage nurses:
- Follow-up the treatment of TB patients during continuation phase
- Active contact tracing
- Collaboration with NGOs working with vulnerable groups
- Cooperation for the investigation of TB suspects
- Submission of quarterly and annual case-based data to the Central TB Surveillance Unit
TB contact investigations for the period 2007-2012

Investigated TB contacts
Persons received LTBI preventive treatment
Main achievements in MDR-TB control in Bulgaria

- **September 2008** – MoH applied to the GLC
- **April 2009** – contract with the GLC; funding by the GFATM Rd6 TB Grant
- **September 2009** – Expert Commission for treatment monitoring of MDR-TB patients at Gabrovo Hospital
- **September 2009-March 2010** – all **50 MDR-TB patients** from 1-st cohort enrolled on treatment with SLD in Gabrovo
- **2010 – Drug Resistance Survey** – enrolled 563 TB patients (482 new and 81 previously treated). MDR-TB detected in 2.1% of new and 11.1% of previously treated TB patients
- **January-October 2011** – all **55 MDR-TB patients** from 2-nd cohort enrolled on treatment with SLD
- **November 2011-up to now** – 48 out of 60 MDR-TB patients from 3-rd cohort enrolled on treatment with SLD
- **Daily DOT** of drug intake during the ambulatory phase of treatment, including PHC specialists in the remote areas, and motivation of MDR-TB patients with incentives (**food vouchers**)
Objective 4. To reduce the transmission of TB among injecting drug users; alcoholics; street children and refugees and asylum seekers

Objective 5. To improve TB case detection and treatment success among Roma population

**NGOs working with groups at risk:**
- conduct screening for TB risk;
- tracing, counseling and referral, including accompanying TB suspects and cases among the risk population, to TB facilities;
- support TB health facilities for the DOT in the continuation phase;
- motivation and follow-up of the preventive treatment of TB contacts and cases with LTBI;
- distributing of specifically designed informational and educational materials.
Injecting Drug Users (10)
Roma community (29)
Street children and youth at risk (7)
Refugees, asylum seekers and migrants (7)

Map of NGO activities working with vulnerable groups under the TB Programmes funded by the GFATM
### Activities under Objective 4 and Objective 5 for the period 2010-2012

<table>
<thead>
<tr>
<th>Activity</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people screened for TB risk through individual questionnaire</td>
<td>16,047</td>
<td>26,139</td>
<td>23,661</td>
</tr>
<tr>
<td>Number of people referred to TB health facilities, who undergo medical examination</td>
<td>6,141</td>
<td>9,966</td>
<td>6,947</td>
</tr>
<tr>
<td>Out of people referred to TB health facilities – number of cases diagnosed with TB</td>
<td>73</td>
<td>162</td>
<td>128</td>
</tr>
<tr>
<td>Out of people referred to TB health facilities – number of cases diagnosed with LTBI</td>
<td>328</td>
<td>665</td>
<td>649</td>
</tr>
<tr>
<td>Number of distributed information materials</td>
<td>44,904</td>
<td>44,534</td>
<td>37,436</td>
</tr>
<tr>
<td>Number of persons from the Roma communities reached for a positive change of behavior with respect to TB prevention, treatment and support</td>
<td>25,505</td>
<td>35,493</td>
<td>42,296</td>
</tr>
</tbody>
</table>
THANK YOU FOR THE ATTENTION!