
13th meeting of WHO European Region national tuberculosis programme managers and 17th Wolfheze Workshops

End TB in Europe: shifting the gears for action

The Hague, Netherlands
27–29 May 2015

MEETING REPORT



Abstract

The Wolfheze Workshops 2015, End TB in Europe: shifting the gears for action, took place on 27–29 May 2015 in The Hague, Netherlands, kindly hosted by KNCV Tuberculosis Foundation. A total of 176 participants from 47 countries and seven partners participated.

The central theme of the workshops was the translation and implementation at country level of regional action plans and the global WHO End TB Strategy. The new *Tuberculosis action plan for the WHO European Region 2016–2020* was reviewed and final inputs endorsed by the participants. The Wolfheze Health Financing Working Group and the Wolfheze Working Group on Social Determinants of TB and Drug-resistant Tuberculosis presented their findings; these groups will continue their work until 2016 and 2017, respectively. The Wolfheze Childhood TB Working Group and the Wolfheze Working Group on Active Case-finding will be dissolved when they have submitted their final reports. A call for participation has been launched for new working groups.

Acronyms and abbreviations

ACSM	advocacy, communication and social mobilization
BCG	Bacillus Calmette–Guérin
CEM	cohort event monitoring
DOT	directly observed therapy
DR–TB	drug-resistant tuberculosis
ECDC	European Centre for Disease Prevention and Control
ERS	European Respiratory Society
GDF	Global Drug Facility
GHA	Global Health Advocates
IGRA	interferon-gamma release assay
IPT	isoniazid preventive therapy
KNCV	KNCV Tuberculosis Foundation, Netherlands
LTBI	latent tuberculosis infection
M&E	monitoring and evaluation
MDR–TB	multidrug-resistant tuberculosis
NTP	national tuberculosis programme
PMDT	programmatic management of drug-resistant tuberculosis
RIVM	National Institute for Public Health and the Environment, the Netherlands
RKI	Robert Koch Institute, Germany
SORT-IT	Structured Operational Research and Training Initiative
SWOT	strengths, weaknesses, opportunities, threats
TB	tuberculosis
WG	working group
XDR–TB	extensively drug-resistant tuberculosis

Executive summary

Introduction

The Wolfheze Workshops 2015, End TB in Europe: shifting the gears for action, took place on 27–29 May 2015 in The Hague, Netherlands, kindly hosted by KNCV Tuberculosis Foundation.

The central theme of the Wolfheze Workshops in 2015 was the **translation and implementation – at country level – of regional action plans and the global WHO End TB Strategy**. The WHO Regional Office for Europe, in collaboration with partners, has been developing a new regional tuberculosis (TB) action plan for the period 2016–2020, based on the global WHO End TB Strategy, the European Health 2020 policy framework and the lessons learnt from implementation of the *Consolidated action plan to prevent and combat multidrug- and extensively drug-resistant tuberculosis in the WHO European Region, 2011–2015*. In addition, Wolfheze working groups provided follow-up on the themes identified during the 16th workshop in 2013 for discussion of common action.

A total of 176 participants from 47 countries and seven partners participated, and there was a live webcast of the event.

The new *Tuberculosis action plan for the WHO European Region 2016–2020* was reviewed and final inputs endorsed by the participants, in preparation for subsequent endorsement at the 65th session of the WHO Regional Committee for Europe, meeting in Vilnius, Lithuania.

The Wolfheze Health Financing Working Group and the Wolfheze Working Group on Social Determinants of TB and Drug-resistant Tuberculosis presented their findings; these groups will continue their work until 2016 and 2017, respectively. The meeting decided that the Wolfheze Childhood TB Working Group and the Wolfheze Working Group on Active Case-finding will be dissolved when they have submitted their final reports. It further decided that a call for participation should be launched for proposed new working groups on the following topics: TB/HIV; surgery/extrapulmonary TB; ethics and human rights; retreatment case management; TB and health-care workers; and new TB drugs and pharmacovigilance.

See Annex 1 for the programme of the meeting and Annex 2 for the list of participants.

The report of each session is presented below.

09:00–09:30

Opening session

Coordinators:	Dr Martin van den Boom (WHO), Dr Gerard de Vries (KNCV)
Chairs:	Dr Kitty van Weezenbeek (KNCV), Dr Masoud Dara (WHO)
Speakers:	Mr Lambert Grijns (Director – Social Development Department, Ministry of Foreign Affairs, the Netherlands), Ms Oxana Rucsineanu (Vice-President and Programme Director, SMIT TB Patient Association, Republic of Moldova), Dr Masoud Dara (WHO), Dr Marieke van de Werf (ECDC), Dr Kitty van Weezenbeek (KNCV)

Report

Introduction

The Wolfheze Workshops 2015, End TB in Europe: shifting the gears for action, were opened by the special ambassador for sexual and reproductive health and rights and HIV/AIDS of the Netherlands Ministry of Foreign Affairs, Mr Lambert Grijns, who made an inspirational speech about the battle against HIV/AIDS and TB. In his speech, he stressed the importance of sharing knowledge and expertise from the whole WHO European Region as well as the need to ensure continued political commitment from the Netherlands and other countries to eliminate TB from Europe. He emphasized that the Netherlands is committed to working towards a TB-free Europe: the United Nations slogan “Leave no-one behind” should also become a reality in TB control, wherever it is needed.

Mr Grijns invited the Wolfheze meeting to play a major role in the 22nd International AIDS Conference (AIDS 2018) to be held in Amsterdam, the Netherlands on 22–28 July 2018. AIDS 2018 will focus on eastern European and central Asian countries: despite the declining trend globally in the numbers of people with HIV, the epidemic is still growing substantially in this subregion. The same goes for TB and multidrug-resistant TB (MDR–TB) in the subregion, where the Russian Federation has one of the highest MDR–TB burdens. Mr Grijns therefore suggested that the Wolfheze Workshops 2017 should focus on TB/HIV integration, taking a civil-society and human-rights approach, and address the challenges of reaching and engaging the most at-risk populations. The workshops should recommend steps towards full TB/HIV integration that can be showcased at the AIDS 2018 conference.

After Mr Grijns’ speech, the floor was given to Ms Oxana Rucsineanu, a former TB patient from the Republic of Moldova, who shared her story about getting diagnosed with TB and being treated for the disease. She emphasized that ex-patients should be involved in advocacy, support and stigma-reduction activities to help current TB patients. Dr Masoud Dara, representative of the WHO Regional Office for Europe, thanked KNCV Tuberculosis Foundation for hosting the event and providing an excellent environment for an exchange of good practices. In his opening remarks, Dr Dara stated: “We know that we are missing out on patients who are infected with both HIV/AIDS and TB”. Barriers must be broken down to get more people tested for both diseases and ensure they can access quality treatment and be cured. He called upon all present to act: “We need to collect patients to get to shifting the gears for action”. Dr Marieke van der Werf, representing the European Centre for Disease Prevention and Control (ECDC) welcomed the participants and especially those who were participating for the first time. She reflected on, and informed participants about, the eastern partnership Ministerial Conference on Tuberculosis and Its Multi-drug Resistance, which was

organized by the Latvian Presidency of the Council of the European Union on 30–31 March 2015, and invited participants to work at political level in reaching agreement on the Riga Declaration. Dr Kitty van Weezenbeek (KNCV) emphasized the need to strengthen collaboration between partners and sectors of the health system relevant to TB. It is important to make the most of all available opportunities and pursue innovations in TB prevention and care more actively.

09:30–13:00

SESSION 1

Regional adaptation of the global WHO End TB Strategy: regional TB action plan

Coordinators:	Dr Martin van den Boom (WHO), Dr Barbara Hauer (Robert Koch Institute (RKI), Germany)
Chairpersons:	Dr Masoud Dara (WHO), Dr Marieke van der Werf (ECDC), Dr Frank Cobelens (KNCV)
Reporters:	Dr Colleen Acosta (WHO), Dr Martin van den Boom (WHO)

Background

The global WHO End TB Strategy was endorsed by the Sixty-seventh World Health Assembly in May 2014. This is a key TB strategic follow-up policy guidance document, building on and linking to the outgoing global Stop TB Strategy. Similarly to the current global strategy, 2015 marks the final year of the *Consolidated action plan to prevent and combat multidrug- and extensively drug-resistant tuberculosis in the WHO European Region, 2011–2015*.

In view of the new global WHO End TB Strategy, the WHO Regional Office for Europe, in collaboration with partners, is developing a new regional TB action plan for the period 2016–2020, in line with the European health policy framework, Health 2020. The new regional strategy will be based on the global WHO End TB Strategy and the lessons learnt from implementation of the consolidated action plan.

A key-stakeholder advisory committee, hosted by the WHO Regional Office for Europe and composed of representatives from key partner organizations and national governments, has been providing insights for the development of the new regional action plan. The aim is to optimize strategies and interventions that have yielded tangible benefits to date, while reconsidering others that may have fallen short of reaching their maximum potential.

The new plan builds on the achievements of the consolidated action plan and addresses existing or persisting caveats and challenges. It will place ever greater emphasis on patient-centred and patient-friendly TB services and care, continued deverticalization of TB services and their integration into an overall strengthened public health landscape that fosters health-care reform. At the same time, it will further improve innovativeness, in relation to, for example, e-surveillance, laboratory and diagnostic capacity and rational introduction of new TB drugs. The new regional action plan is expected to be endorsed by the Member States of the WHO European Region at the upcoming 65th session of the WHO Regional Committee for Europe in September 2015.

The key aim of these Wolfheze Workshops is to obtain (pre)final feedback on the current consolidated action plan and reach consensus on final developmental steps required to prepare for adoption of the new plan at the Regional Committee session in September 2015.

Objectives

The session objectives were to:

- provide countries with the latest updates on the regional adaptation of the global WHO End TB Strategy (including process and content);
- discuss the draft regional TB action plan, focusing on preselected areas and formulating input/feedback;
- share country-level experience in national (strategic) TB plan introduction, from both low- and high-burden settings; and
- agree on next steps regarding the finalization of the regional action plan.

Content

The session would focus on:

- regional action plan development stages, content and process
- good practices and challenges in plan implementation at country level.

Methodology

The session would consist of:

- presentations
- plenary discussion
- group discussions, questions and answers.

Questions for group work

The following questions were presented for group work.

- WG 1. Are there any issues which have not yet been sufficiently addressed in the regional action plan?
- WG 2. In addition to the three targets defined in the regional action plan, what added benefits may the plan bring to Member States' response to TB prevention and care?
- WG 3. What do Member States expect from WHO Regional Office with the implementation of the regional action plan?

Expected outputs

It was anticipated that the session would result in:

- developmental stages and the process of the regional action plan being understood
- feedback on the draft regional action plan being received
- consensus being reached on next steps in finalization of the plan.

Programme of work

Time	Title of talk	Speaker
09:30–09:50	Presentation of draft regional TB action plan and regional adaptation process of the global WHO End TB Strategy	Dr Masoud Dara (WHO)
09:50–10:05	Overview of regional action plan monitoring and evaluation (M&E) framework	Dr Gerard de Vries (KNCV)
10:05–10:15	The action framework for low-incidence countries: experiences and challenges in Germany	Dr Barbara Hauer (RKI)
10:15–10:25	Revised national legislation – strategic implementation of effective measures for fighting TB and X/MDR–TB ^a in Uzbekistan	Professor Mirzagaleb Tillyashaykhov (Uzbekistan)
10:25–10:30	Introduction to working groups	Dr Barbara Hauer, Dr Martin van

Time	Title of talk	Speaker
11:00–11:50	Working groups	den Boom All, facilitators
11:50–12:30	Reporting back to the plenary	Group rapporteurs/moderators
12:30–13:00	Discussion of next steps and summary	Chairs

^a XDR–TB: extensively drug-resistant TB.

Report

Main (discussion) points

Dr Masoud Dara of the Regional Office provided an overview of the draft regional TB action plan and the regional adaptation process of the global WHO End TB Strategy. Key elements stressed were that the plan essentially builds on the current regional Roadmap to prevent and combat M/XDR–TB in the Region (2011–2015), taking account of lessons learnt and gaps yet to be addressed. Furthermore, the regional action plan represents a regional operationalization of the global End TB Strategy, with the latter building on the Stop TB Strategy which will finish soon. To that end, the strategic direction of the plan is to intensify the strengthening of health-systems responses to drug-resistant TB (DR–TB) prevention, control and care and TB elimination, further facilitate intersectoral and intrasectoral collaboration to address social determinants and the underlying risk factors for TB, boost national and international multistakeholder partnerships, including civil societies and communities, foster collaboration for the development and use of new diagnostic tools, medicines, vaccines and other treatment and preventive approaches, and promote the rational use of existing resources, identifying gaps and mobilizing additional resources to ensure sustainability. The presentation may be considered as an introduction to those that followed, providing the topical background for the working group (WG) part of the session.

Dr Gerard de Vries from KNCV presented an overview of the regional action plan monitoring and evaluation (M&E) framework. The M&E framework is an integral part of the regional action plan, as it allows monitoring of implementation of the plan and progress towards the regional action plan 2016–2020 targets at regional, subregional and country levels. It also constitutes a benchmark for comparing individual Member States with others in the Region, allowing follow-up of the actions taken among Member States to put the End TB Strategy into practice. Last but not least, it provides a foundation for advocacy and policy development. Dr de Vries explained that the process of development was a multistep and multistakeholder one, similar to that followed in the development of the regional action plan, and that the two WGs developing the plan and the framework closely interacted and collaborated throughout the entire development process to achieve the best possible synergies. One of the main conclusions was that throughout the process, the number of indicators in the M&E framework should be further reduced, such that the indicators allow discrimination while not being so numerous as to render the M&E framework unrealistically “heavy”. This was also discussed during the later plenary part of the session and confirmed by WG outcomes.

The presentation of Dr de Vries was followed by one from Dr Barbara Hauer of the RKI, Germany, who explained the key lessons learnt from the development and implementation process of an action framework for low-incidence countries, with a focus on Germany. Key conclusions of her presentation, which were shared with the wider audience, are that in the context of all low-incidence countries, it is essential to ensure that as the TB burden diminishes, clinical experience and public awareness of TB do not disappear, as it will still be important for health-care workers to be able to detect and treat TB in all its forms promptly and efficiently. This is crucially important,

as without it, the ultimate goal of TB elimination cannot be reached. She also emphasized that stronger efforts will be required to maintain political commitment for TB care and prevention in such a context: with the decrease in the epidemiological burden, the alertness and interest of key stakeholders and (political) decision-makers may also decrease due to competing national priorities. Any approach to ultimately eliminating TB in the WHO European Region must include both high-burden and low-burden contexts, with tailored interventions and tools. The focus must increasingly be placed on targeting vulnerable and at-risk groups, particularly in low-burden contexts.

Professor Mirzagaleb Tillyashaykhov, Director of the Republican Specialized Scientific Research Medical Centre of Phthiology and Pulmonology of Uzbekistan, presented an overview of key challenges encountered in national strategic TB plan development, updating and implementation in his country (one of the 18 TB high-priority countries of the Region and among the 27 high-prevalence MDR-TB countries globally), and also with regard to the progress made in the overall TB programme over recent years. Thoughtful and progressive decentralization, coupled with targeted capacity-building at regional and local levels, improving multipartner and cross-cutting partnerships and increasing the focus on prompt and effective updating of nationally adapted technical guidance documents, such as those on childhood TB and the management and treatment of drug-resistant forms of the disease, helped reduce the burden of TB in Uzbekistan. The country and the programme encouraging more boldly the continued shift of mostly hospital-based TB prevention and care towards a more flexible and (cost-)effective outpatient and patient-centred model of care has also been helpful. The latter process is still ongoing and will take time, as will continued (external) support for advocacy at the highest levels of decision-making in the country. During the discussion that followed, the importance of complementarity between TB and X/MDR-TB in inpatient and outpatient services was broadly and clearly underscored.

Following the presentations and related discussions, with a focus on questions for clarification, the WG part of the session was introduced.

There were three WGs, with each assigned a specific question to explore, as follows.

- WG 1. Are there any issues which have so far not been sufficiently addressed in the regional TB action plan?
- WG 2. In addition to the three targets as defined in regional action plan, what are the added benefits that the regional action plan may bring to Member States' response to TB prevention and care?
- WG 3. What do Member States expect from WHO Regional Office with the implementation of the regional action plan?

WG 1 (facilitated by Dr Masoud Dara) systematically reviewed the draft of the regional action plan, beginning with the outline (vision, goal, targets, strategic directions and areas of intervention) followed by a review of plan activities under each of the areas. During the discussion of the plan's *goal*, it was suggested that sustainability of domestic funding should be emphasized, as country support from the Global Fund to Fight AIDS, Tuberculosis and Malaria is likely to be decreased after the current funding cycle. It was agreed, however, that this issue is already highlighted and well placed under the *strategic directions*.

In the discussion of the *strategic directions*, several specific suggestions for changes to language were made, including emphasizing the reduction of diagnostic delays, collaboration with the private sector, strengthening intersectoral collaboration and defining human resources. In the discussion of *targets*, the point was made that the

targets may be difficult for low-incidence countries to meet because of the small number of cases they incur. Some countries only have a few cases of MDR–TB per year, so the rate of treatment success or mortality may vary considerably from year to year. This point prompted agreement that it would be important to add some explanation in the introduction saying that countries would need to adapt this plan to country specificities.

Several specific changes to the language were suggested in the discussion of *activities*. It was also noted that the terms high-risk, hard-to-reach and vulnerable were used interchangeably throughout the plan; it was suggested that these terms be defined or used more consistently. The issue of cost–effectiveness of the activities for low-incidence countries was also raised; it was again noted that clarification about adaptation of the plan to country specificities at country level would need to be included. Other suggestions included a better definition of social determinants and a listing of comorbidities.

Regarding research, it was suggested that the importance of modelling (risk, rates, etc.) should be addressed, as well as impact research. Other suggestions were made for adding analyses of cost–effectiveness and the cost of inaction.

WG2 (facilitated by Dr Barbara Hauer) discussed a variety of added benefits that the regional action plan may bring to Member States' responses to TB prevention and care. The salient conclusions from the WG were that: the regional action plan may also be applied to high-risk populations in low-incidence countries; the regional action plan may promote the improvement of data management and collection across communicable diseases, modelling and cost–effectiveness analyses; and the regional action plan may stimulate broader discussion of access to health services beyond TB.

WG3 (facilitated by Professor Mirzagaleb Tillyashaykhov) discussed extensively the different expectations that Member States have of the Regional Office in the implementation of the regional action plan. Expectations focused on technical assistance. There was a strong consensus that technical assistance would be needed from the Regional Office to align/adapt the regional action plan in countries in areas including (but not limited to): case detection; identifying donors and sustainable financing mechanisms in collaboration with ministries of finance; health and financial system reform; governance; interagency/intersectoral collaboration in respect of Health 2020; patient-centred approaches; integration of TB services; laboratory and diagnostic algorithms; advocacy, communication and social mobilization (ACSM) materials; TB among migrants and in the penitentiary sector; human resources development (including the professional status of TB doctors); and M&E.

These results from the WGs and next steps were then summarized and reported back to the entire group during the plenary session. Participants could also email any other suggestions or comments for the regional action plan to the Regional Office TB programme.

Next steps/follow-up activities

As laid out in the final plenary session, the next steps with regards to the development of the regional TB action plan were as follows.

- The Regional Office will incorporate the valuable feedback from the workshops into the draft of the regional action plan.
- The monitoring framework will be circulated to Wolfheze participants for any final comments on the indicators.

- The regional action plan and the monitoring framework will be reviewed by the key-stakeholder advisory committee.
- A background/situation analysis, strengths/weaknesses/opportunities/threats (SWOT) analysis and financial analysis will be added to the final document.
- The regional action plan will be presented to the WHO Regional Committee for Europe in September 2015 for endorsement of the plan and the accompanying resolution.

14:00–17:30

SESSION 2

Active case-finding and management of latent TB infection in at-risk groups, including persons living with HIV

Coordinators:	Dr Connie Erkens (KNCV), Dr Andrei Dadu (WHO) and Dr Alberto Matteelli (WHO)
Chairpersons:	Dr Gerard de Vries (KNCV), Professor Giovanni Migliori (European Respiratory Society (ERS))
Reporters:	Dr Andrei Dadu (WHO), Dr Connie Erkens (KNCV)

Background

In line with the *Consolidated action plan to prevent and combat multidrug- and extensively drug-resistant tuberculosis in the WHO European Region, 2011–2015*, the Wolfheze Workshop 2013 set up a WG to improve case detection and strengthen TB prevention, control and care in the Region. The Wolfheze Workshop 2013 expressed a need for assistance for countries in the implementation of the WHO guidelines on screening for active TB, released in 2013.¹ Building on these guidelines, WHO has recently developed operational guidance and a tool to assist in the prioritization of at-risk groups for screening for active TB and the choice of screening and diagnostic algorithms. These documents and tools are mainly designed for high-burden countries. In several eastern European and central Asian countries, screening for active TB is currently done not only in high-risk groups, but also in low-risk groups, where such interventions are often inappropriate and not cost-effective.

In recognition of the importance of latent tuberculosis infection (LTBI) for TB prevention, WHO issued policy guidance in 2014 on the management of LTBI. In addition, a framework document on how to progress towards TB elimination in low-incidence countries has been produced,² which recognizes the importance of both LTBI management and screening for active TB in selected at-risk groups in low-incidence settings. In high-burden and medium-burden settings, WHO recommends LTBI preventive treatment for TB contacts younger than 5 years and persons living with HIV. In many countries, however, LTBI screening practices are continued in populations not specifically at risk for exposure to TB. The prevention of TB among TB contacts of infectious MDR-TB patients is a further challenge that calls for concerted action to identify rational approaches. This Wolfheze Workshop provides a platform to discuss challenges and approaches to improve the country-level implementation of LTBI management and screening for active TB in selected at-risk groups to improve integrated, patient-centred care and prevention (pillar 1 of the Global End-TB Strategy).

¹ Systematic screening for active tuberculosis: principles and recommendations. Geneva: World Health Organization; 2013 (<http://www.who.int/tb/tbscreening/en/>, accessed 31 August 2015).

² Towards tuberculosis elimination: an action framework for low-incidence countries. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/elimination_framework/en/, accessed 31 August 2015).

Objectives

The session objectives were to:

- inform on policies, practices and needs for screening for active TB and LTBI management in the WHO European Region;
- inform about the WHO tool to assist in at-risk group prioritization and assess the usefulness of the tool for the Region;
- inform on WHO guidelines on the management of LTBI and discuss criteria, target groups and challenges for implementation; and
- propose and discuss the elements of an M&E tool for programmatic management of LTBI.

Content of the session

The session would focus on:

- survey data on screening and LTBI management policies and practices in the WHO European Region;
- WHO operational guide and tool for screening for active TB; and
- guidelines on the management of LTBI.

Methodology

The session would consist of:

- presentations;
- group work, practising with the WHO tool for prioritizing at-risk groups for screening for active TB;
- group discussion; and
- plenary discussion.

Discussion questions

The following questions were presented for discussion.

Screening for active TB

High-burden countries

- What is the usefulness of the tool in prioritizing risk groups for screening?
- What technical support is needed to use the tool effectively?
- What country data need to be inputted by the user?
- What other information than the tool outputs is needed to prioritize screening rationally?

Low-burden countries

- What information is needed to prioritize screening rationally in key high-risk groups, such as immigrants from high-burden countries?
- What is the usefulness of the tool in prioritizing risk groups for screening in low-incidence countries?

LTBI management

High-burden countries

- What are the bottlenecks in roll-out and implementation of isoniazid preventive therapy (IPT) among people living with HIV?
- What are the bottlenecks in IPT roll-out and implementation among child contacts <5 years of age?
- What are the bottlenecks in systematic LTBI management?
- What are acceptable options for the management of contacts of people with MDR-TB?

Low-burden countries:

- What are effective and feasible indicators (process and epidemiological) for the LTBI M&E system?
- What are possible process targets and a feasible data management system?

Expected outputs

Participants would be informed about:

- the WHO operational guide and tool for screening for active TB and the guidelines for LTBI management;
- practices and policies for screening for active TB and LTBI in the WHO European Region; and
- the WHO tool for prioritizing at-risk groups for screening for active TB; participants should know how they can use it in their own setting, and what other information is needed for rational prioritization of at-risk groups for screening.

Participants would discuss and share:

- best practices/country examples of how LTBI management can be implemented, monitored and evaluated in low-burden countries; and
- how to address strengths, weaknesses and challenges of systematic LTBI screening programmes in high-incidence settings and settings with high incidence of MDR–TB.

Programme of work

Time	Title of session	Speaker
14:00–14:20	WHO operational guide and tool for screening for active TB WHO LTBI management guidelines	Dr Knut Lönnroth (WHO) Dr Alberto Matteelli (WHO)
14:20–14:45	Results from the survey on policies and practices on active case-finding and LTBI in the WHO European Region Group work 1 (low-burden countries)	Dr Andrei Dadu (WHO)/Annis Sidibe (WHO) Group work 2 (high-burden countries)
14:45–15.30	Special challenges for at-risk group screening for active TB in low-incidence countries Dr Knut Lönnroth (facilitator) Country examples – Finland, Norway	Specific implementation challenges for LTBI management in high (MDR) burden countries Dr Alberto Matteelli (facilitator) Country examples – Azerbaijan, the Russian Federation
16:00–17.00	Implementation and monitoring of LTBI activities Dr Alberto Matteelli (facilitator) Country examples – the Netherlands United Kingdom	Using the WHO tool for prioritizing risk groups for screening for active TB Dr Knut Lönnroth (facilitator) Country examples, Georgia, Republic of Moldova
17:00–17:25	Plenary discussion	Chairs

Time	Title of session	Speaker
17:25–17:30	Wrap-up and next steps	Chairs

Main discussion points

Active case-finding

The new WHO tool for rational development and implementation of active case-finding and current practices in the Region were presented in the plenary meeting.

For countries with a medium-to-high TB burden (>20 per 100 000 population), country examples were presented on the use of the WHO tool for Georgia and the Republic of Moldova. Conclusions on the utility of the tool were that it:

- uses predefined data and inputs from users;
- estimates the yield (true and false positives), number needed to screen, and costs per detected case;
- does not provide simulation of transmission; and
- demonstrates the appropriate allocation of resources and possible harm through overdiagnosis when screening in low-risk groups and the general population.

It was also identified that the regional action plan needs to provide negative recommendations to stop general population screening (50%–90% in some countries).

Low-burden countries (<20 per 100 000) discussed experiences of active case-finding among immigrants, following a presentation of the country experiences of Finland and Norway. From the discussion, it was clear that there is a high heterogeneity in views about the relevance, impact and cost–effectiveness of screening, the political environment, which immigrants are screened and the preferred screening algorithm, implementation strategy and health system challenges. The WHO guidelines on active case-finding for TB do not provide specific recommendations on screening immigrants from high-incidence countries.

Next steps/follow-up activities on active case-finding

The following next steps and follow-up activities were agreed:

- countries should start using the tool and provide feedback to WHO on its usefulness;
- a Russian translation of the tool will be needed;
- the tool may need to be expanded for MDR diagnosis and LTBI screening;
- everyone is invited to test the trial version of the web-based tool;³
- more feedback can be provided directly in the web-based tool;
- review of existing evidence and modelling of different scenarios on effective screening of immigrants from high-burden areas may help to inform guidelines;
- create a research network on TB at-risk groups, including migrants from high- to low-incidence countries, which is connected to:
 - the elimination framework for low-incidence countries;
 - the global action framework for implementation of pillar 3 of the End TB Strategy; and
 - the research subgroup of the LTBI Task Force.

LTBI screening

The WHO guidelines for LTBI management and current LTBI screening practices in the Region were presented in the plenary meeting.

³ Available at: https://wpro.shinyapps.io/screen_tb/ (accessed 31 August 2015).

Challenges in LTBI management in medium- and high-burden countries were discussed following the presentation of experiences in Azerbaijan and the Russian Federation. The main points from the discussion were as follows.

- A (considerable) number of medium- and high-burden countries target populations other than the highly recommended target groups in the WHO guidelines (people living with HIV and children aged <5 years). The evidence base for targeting these groups for LTBI screening is lacking. LTBI screening seems to be used as a first step in screening for active disease in these populations, and preventive treatment is not commonly offered.
- Intensified collaboration with HIV services to reach people living with HIV is shown to be effective in increasing IPT treatment initiation.
- High levels of primary resistance to isoniazid and MDR are a concern for IPT implementation in general, as they decrease confidence in the effectiveness of IPT.
- A more specific interferon-gamma release assay (IGRA) skin test is of interest for wider use in populations (re!)-vaccinated with Bacillus Calmette–Guérin (BCG), especially if costs are comparable with tuberculin skin testing. The diagnostic test Diaskin, which is used in several eastern countries, is not validated for international standards and requirements.

Expanding LTBI management was recognized as an important component of the elimination strategy in low- and medium-burden countries. The discussion on LTBI management in low-burden countries (<20 per 100 000) focused on monitoring and evaluation. The country example of the Netherlands showed the feasibility of an M&E system for persons identified with LTBI and eligible for LTBI treatment. The country example from the United Kingdom presented the structure of an M&E system for screening and preventive treatment of (new) immigrants from high-burden countries. From the discussion, it became clear that it is challenging to design a system that includes a denominator for all target groups for LTBI screening other than immigrants, TB contacts and people living with HIV. However, the examples from the Netherlands and the United Kingdom show that it is feasible to collect data for the proposed indicators on treatment initiation and completion. During the discussion, it was agreed that an M&E system should allow discrimination between strongly recommended and conditionally recommended groups, and should include both process indicators (monitoring) and programmatic impact indicators (evaluation).

Next steps/follow-up activities on LTBI management and M&E

- Screening practices in at-risk groups other than people living with HIV and child TB contacts should be evaluated and rationalized through (operational) evidence of yield and impact of screening of conditionally recommended risk groups and non-risk populations presently being targeted in countries of the former Soviet Union.
- There is a need to assess the risk of progression among conditionally recommended populations (especially in immigrants).
- Address non-WHO-recommended policies, such as BCG-revaccination and sanatorium admission for LTBI contacts <5 years, and reallocate resources.
- Research should be promoted on alternative treatment regimens, especially for children <5 living with HIV who are contacts of people with MDR–TB.
- Best practices in integrated TB–HIV services addressing IPT should be documented.
- Reporting on preventive therapy should be expanded to include measurement of treatment initiation, completion and impact (reference to 2015 WHO M&E guide for TB/HIV activities) and the recommendations of the LTBI Task Force. In

addition, LTBI M&E registers should include data on toxicity of treatment regimens and the possibility of linking to the TB register and epidemiological data to measure impact.

- Existing diagnostic tools should be validated and screening algorithms with higher predictive value and sensitivity and specificity for development of TB disease developed.
- The role of Diaskin for testing of LTBI should be assessed by an independent, well designed comparative study (against tuberculin skin testing and IGRA). WHO can assist in this process.

Thursday 28 May 2015

08:30–10:30

SESSION 3

**Addressing inadequate treatment outcome results in the
WHO European Region (including patient support)**

Coordinators:	Dr Marieke J. van der Werf (ECDC), Dr Maria Idrissova (KNCV)
Chairpersons:	Dr Tsira Chakhaia (University Research Co., Georgia), Dr Pierpaolo de Colombani (WHO), Dr Christoph Lange (Research Centre, Borstel, Germany)
Reporter:	Dr Andreas Sandgren (ECDC)

Background

Successful control and elimination of TB requires early diagnosis and adequate treatment of all TB cases. There are several factors that may hamper reaching a successful TB treatment outcome. First of all, TB treatment requires taking several drugs for a period of 6–24 months, depending on the resistance pattern. Adherence to such long treatment regimens is often challenging, especially if patients do not receive adequate patient-centred care and support. In addition, patients may experience adverse effects from the drugs, which provide an extra challenge in completing the full course. There are also programmatic factors that may prevent TB patients from completing treatment, such as not having the drugs available for the full duration.

Globally, 86% of all TB cases were treated successfully in 2012. The WHO European Region showed the lowest results, with only 75% of TB cases being treated successfully. In both European Union and non-European Union countries in the WHO European Region, treatment outcome results for new culture-confirmed pulmonary TB cases notified in 2011 were far below the 85% target. Even though, in general, the treatment outcomes are disappointing, they vary widely across countries, with some reaching the 85% target and others failing to treat even 60% of cases successfully.

Objectives

The session objectives were to:

- identify causes that lead to inadequate treatment outcomes, at both patient and population levels; and
- discuss actions to be implemented to arrive at better treatment outcomes.

Content of the session

The session would focus on:

- factors related to treatment outcomes
- interventions to be implemented to arrive at better treatment outcomes.

Methodology

The session would consist of:

- presentations
- group work
- plenary discussion.

Questions for group work

The following questions were presented for group work.

- What are the most important factors (patient, health system, other) contributing to unfavourable treatment outcomes in your country?
- Can you give an example of an intervention that improved TB treatment outcomes?
- What actions can be implemented by different actors (ministry of health, district level, hospitals, primary health care level, patient organizations, etc.) to improve treatment outcomes?
- How can the actions best be implemented?

Expected outputs

It was anticipated that the session would result in:

- the development of a list of actions that can be implemented at national or subnational level to improve TB treatment outcomes.

Programme of work

Time	Title of talk	Speaker
08:30–08:35	Introduction	Chairs
08:35–08:50	Patient perspective on challenges of TB treatment	Dr Tsira Chakhaia (Georgia)
08:50–09:05	TB treatment outcomes in the European Union and European Economic Area: an analysis of the 10-year European Surveillance System (TESSy) data	Dr Basel Karo (RKI, Germany)
09:05–10:05	Group work	Facilitators and reporters
10:05–10:25	Reporting back from group work and discussion	Chairs
10:25–10:30	Wrap-up and next steps	Chairs

Main discussion points

Dr Tsira Chakhaia from Georgia gave the patient perspective on the challenges of TB treatment through her own experiences: how TB treatment and care are organized, especially hospitalization. Accessibility and geographical distribution of care are major concerns that make life difficult for patients.

Dr Basel Karo (RKI, Germany) presented an analysis of TB treatment outcomes among new culture-confirmed pulmonary TB cases reported between 2002 and 2011 in the European Union/European Economic Area. In summary, there were improvements in reported treatment outcomes, but some countries are still not reporting them. The 85% target was not reached in any year, and there has been a decline in successful treatment outcomes since 2006.

Contributing factors for unfavourable treatment outcomes were discussed in the group work: psychosocial factors, with mental illness or lack of motivation to seek care; social determinants such as alcohol consumption, homelessness, poverty and drug use;

cross-border migrants with inadequate treatment follow-up; ageing populations and causes of death not related to TB; duration of treatment; stigma; lack of knowledge and awareness among patients; poor management of adverse events associated with treatment; issues of accessibility of services and health care; the increasing number of people living with HIV; lack of availability of drugs; and lack of social support.

Interventions and actions that can be implemented to improve treatment outcomes are: patient-centred care, involving families and the community; adequate medical and psychosocial support to enable patients to complete their treatment; incentive programmes; temporary housing options for homeless people; addressing alcohol and drug problems; mobile (m-health) and electronic (e-health) alternatives to directly observed therapy (DOT); home-based DOT; treatment ambassadors in the community providing DOT; ensuring health insurance coverage; improved integration of HIV and TB care; improving access to high-quality drugs; working against stigma; employing outreach workers and working more closely with civil society and communities; and intersectoral cooperation.

Next steps/follow-up activities on treatment outcomes

- In order to address the challenges and needs and achieve improved treatment outcomes, all countries need to have a clear understanding of the main barriers preventing them from achieving good treatment outcomes, and how to overcome them. For this, the countries should consider conducting an analysis at national level of the barriers preventing successful treatment outcomes and plan action to overcome them.

Follow-up activities

- Countries should continue to share experiences and examples of service models, interventions and actions taken that can facilitate treatment completion for all patients, including those who are complex to treat; this can be achieved through the Regional Collaborating Committee.⁴
- Continue to improve surveillance systems so that treatment outcomes are reported for all cases. There is an opportunity to use existing systems to address the problem of loss to follow-up of migrants moving across borders within the Region.

11:00–13:00

SESSION 4

Innovations, challenges and progress in programmatic management of drug-resistant tuberculosis (PMDT)

Coordinators: Dr Valiantsin Rusovich (WHO), Dr Svetlana Pak (KNCV)

Chairpersons: Dr Agnes Gebhard (KNCV), Dr Viorel Soltan (WHO)

Reporters: Dr Svetlana Pak (KNCV), Dr Martin van den Boom (WHO), Dr Valiantsin Rusovich (WHO)

Background

While the TB situation in most countries across the Region has been slowly improving over the past decade, with an average annual decrease of about 2%, MDR-TB rates

⁴ Access at: <http://www.euro.who.int/en/health-topics/communicable-diseases/tuberculosis/activities/regional-collaborating-committee-on-tuberculosis-control-and-care-rcc-tb> (accessed 31 August 2015).

and TB–HIV coinfection have been increasing, with suboptimal treatment success rates of around 50% for MDR–TB cohorts. During the past two years, many national TB programmes achieved substantial progress in the implementation of the consolidated action plan, especially in terms of MDR–TB treatment scale-up, introducing rapid laboratory diagnostic techniques and new models of ambulatory care for M/XDR–TB patients. The emergence of new anti-TB drugs, the need for enhanced pharmacovigilance and the slow progress made in improving treatment outcomes for M/XDR–TB patients pose new challenges for countries. In particular, there are new issues of preventing the appearance of drug resistance to new anti-TB drugs and an urgent need to scale-up second-line drug-susceptibility testing as a prerequisite for appropriate use of new drug regimens for pre-XDR–TB and XDR–TB patients.

This session, which brought together national tuberculosis programme (NTP) managers, national representatives and international stakeholders, provided an excellent opportunity to discuss the main issues of PMDT and ways forward which will be supported by the new regional TB action plan for the period 2016–2020.

Objectives

The session objectives were to:

- share experiences, achievements and lessons learnt in implementing innovative approaches in PMDT, in particular in progress on scaling-up rapid TB laboratory diagnostics for drug resistance, new anti-TB drugs, expanded pharmacovigilance for anti-TB drugs, and patient-oriented models of care for MDR–TB patients; and
- make suggestions for priority areas of PMDT, in line with the new regional action plan for 2016–2020, to prevent and combat M/XDR–TB.

Content of the session

The session would focus on:

- WHO situational analyses of M/XDR–TB in the Region and main challenges to be addressed;
- sharing experiences and best practices in different areas of PMDT; and
- discussing priority PMDT areas for support from WHO and the Green Light Committee for the WHO European Region.

Methodology

The session would consist of:

- presentations
- questions and answers
- panel discussion.

Expected outputs

It was anticipated that the session would result in:

- country representatives familiarizing themselves with the challenges and progress made in implementing innovations in PMDT across the Region;
- common challenges in the introduction of new anti-TB drugs being discussed and possible solutions shared with all stakeholders; and
- priority areas to prevent and combat M/XDR–TB being identified and linked to the new regional action plan for 2016–2020.

Programme of work

Time	Title of talk	Speaker
11:00–11:15	WHO situational analysis of M/XDR–TB in the WHO	Dr Masoud Dara (WHO)

Time	Title of talk	Speaker
11:15–11:30	European Region. Achievements and lessons learnt in implementing the consolidated action plan, 2011–2015 Update on MDR–TB medicines supplies through the Global Drug Facility (GDF) Country presentations	Mr Kaspars Lunte (GDF)
11:30–11:40	Scaling-up of ambulatory patient-centred models of care for M/XDR–TB patients in Uzbekistan	Dr Nargiza Parpieva (Uzbekistan)
11:40–11.50	Patients' vision of ambulatory patient-centred model of care	Ms Gulmira Akbarova and Mr Bunyad Khasmammadov (Azerbaijan)
11:50–12:00	Experience of Belarus in introducing enhanced pharmacovigilance for linezolid in treatment of XDR–TB	Dr Alena Skrahina (Belarus)
12:00–12:15	Questions and answers	
12:15–12.45	Panel discussion on priority PMDT areas in support of the new WHO regional action plan for 2016–2020 to prevent and combat M/XDR–TB	Chairs
12:45–13:00	Wrap-up and next steps	Chairs

Main discussion points

Dr Masoud Dara, Programme Manager a.i., TB and M/XDR–TB Programme, WHO Regional Office for Europe, presented situational analyses of the M/XDR–TB consolidated action plan 2011–2015 and highlighted the main achievements and gaps.

WHO estimates that about 360 000 new TB cases occur per year in the Region, or about 1000 new TB cases per day. In the area of preventing development of M/XDR–TB cases, the main accomplishments are related to inclusion of social determinants in the drug resistance surveillance system in countries and implementing the operational research project SORT–IT in the Region. The TB/MDR–TB health system assessment tool was developed and implemented in selected countries. MDR–TB rates declined or stabilized in 24 Member States. Documented best practices in M/XDR–TB prevention, control and care were published in a special WHO compendium in 2013.

The main opportunities for improvements in this area are related to expanding patient-centred models of care, including strengthening ambulatory treatment, implementing health-care reforms and ensuring sustainable TB financing. The gaps are related to unnecessary hospitalization practices and ongoing transmission of drug-resistant TB.

Most advanced achievements are related to implementing rapid molecular diagnostics for TB, including establishing the European TB Laboratory Initiative and developing and piloting a new laboratory diagnostic algorithm. In 35 countries in the Region (including 13 high-burden MDR–TB countries), Xpert MTB/RIF is used for rapid diagnosis of TB and rifampicin resistance, but coverage of drug-susceptibility testing for second-line drugs remains low (about half the countries of the Region).

The Region is scaling-up access to effective treatment. National action plans were adopted in the Member States in line with the consolidated action plan 2011–2015. The electronic consilium is operating in collaboration with the ERS and new medicines are being introduced, with technical assistance from WHO on safe and rational use and pharmacovigilance. Treatment success rates among MDR–TB patients, however, remain

low (51% and 59% in high MDR–TB and low MDR–TB-burden countries, respectively) and availability of new third-line anti-TB drugs is lacking in many settings.

Member States have made an effort to strengthen TB and MDR–TB surveillance: nationwide drug resistance surveys were conducted in the remaining five countries and 41 Member States maintain electronic case-based data management systems for MDR–TB at national level. Data on second-line drug-susceptibility testing are limited, however, and some countries in western Europe do not monitor treatment outcomes at national level.

Intensive work on advocacy, partnership and policy guidelines has been accomplished. National MDR–TB response plans were developed with technical assistance from WHO, and external NTP programme reviews were conducted in 17 countries. There is collaboration with the United Nations Children’s Fund/United Nations Development Programme/World Bank/WHO Special Programme for Research and Training in Tropical Diseases in the Structured Operational Research and Training Initiative (SORT-IT), and with the Regional Collaborating Committee on TB Control and Care, resulting in the publication of advocacy fact sheets and the engagement of major players in TB control in the Region. High-level events have been organized in the Region, including World TB Day events (European Parliament 2013, high-level event with diplomatic missions 2014, Latvian Presidency of the Council of the European Union 2015) and ongoing collaboration with KNCV and ECDC in the framework of the Wolfheze movement. Remaining gaps in this area are related to inadequate domestic funding, limited involvement of national civil society organizations in TB control, and inefficient management of national programmes in some settings. In addition, palliative care is not available in many countries.

Future priorities are more rapid TB diagnosis and completion of treatment for all TB patients, expanded patient-centred care models, a further shift from inpatient to ambulatory care, introduction of new anti-TB drugs with shorter and more effective treatment regimens, and ongoing research on new diagnostics and vaccines. There is a need to improve surveillance systems to tailor and target appropriate interventions more effectively to different populations and settings, fostering TB-relevant health-care reforms and sustainable TB financing and addressing equity issues and stigma for TB patients. This will require more funds, but rational use of resources remains crucial.

Dr Nigorsulton Muzafarova from the GDF presented achievements in supporting countries with MDR–TB-related supplies (diagnostic Xpert MTB/RIF and anti-TB drugs) and mechanisms and possibilities for rational procurement of anti-TB drugs at low negotiated prices. Significant reductions of more than US\$ 21 million in the cost of second-line drugs have been achieved through GDF procurement, and this will provide drugs for treatment of more patients. There is also a significant reduction in lead times through the Strategic Rotating Stockpile mechanism. It was mentioned in relation to some country examples that incorrect calculation of needs and late notifications create a problem for GDF related to the redistribution of drugs. More countries use domestic funds for anti-TB drugs. Direct procurement of quality-assured drugs through GDF is possible.

Dr Nargiza Parpieva, chief TB specialist at the Ministry of Health of Uzbekistan, presented a successfully implemented pilot project on scaling-up of outpatient treatment in Uzbekistan. The situation of health-care reforms and the strengthening of the ambulatory model of treatment in Uzbekistan were shared with participants. Uzbekistan was supported by a project of the Global Fund to Fight AIDS, Tuberculosis and Malaria (US\$ 60 million) in previous years and through bilateral projects financed

by grants from the Government of Germany, the United States Agency for International Development, UNITAID and GDF. In recent years, a large-scale optimization of TB bed capacity has taken place, with a reduction in numbers of 1830 beds, especially in some small district clinics, which have become outpatient facilities. About 70 TB facilities were closed. Refurbishment and construction work has been performed at 44 sites for the total amount of US\$ 108 million from the state budget. Dr Parpieva presented the main requirements for introduction of outpatient TB care, including: capacity for rapid and accurate diagnosis of TB and MDR-TB; availability of trained staff with an adequate and effective mentoring and supervision system in place; guidelines/protocols for clinical management; an uninterrupted supply of first-line and second-line drugs, as well as auxiliary medicines for side-effect management; careful selection of patients for home-based treatment; and integration of TB, HIV/AIDS and primary health care services.

Since 2011 there have been two pilot projects in Uzbekistan on the introduction of outpatient care from day 1: in Karakalpakstan (implemented by Médecins Sans Frontières) and in the city of Tashkent. In the study of comparative effectiveness of outpatient treatment, no significant difference was observed in treatment outcomes in the study groups. Uzbekistan has made progress in rapid TB laboratory diagnosis: 24 GeneXpert machines are operational in the country, with donor support. In addition, the three regional TB laboratories are equipped with BACTEC MGIT 960 and HAIN testing facilities. In 2013, all TB patients received monthly food packages (funded by Global Fund grants). Patient selection criteria were presented for enrolling on the ambulatory model of treatment from day 1. In conclusion, the following main advantages of the ambulatory model of TB care were presented: it excludes nosocomial infection and cross-infection with drug-resistant strains of *Mycobacterium tuberculosis*; and it brings lower costs of treatment and an opportunity to save the funds of TB facilities as well as an opportunity to cure patients without affecting their usual way of life.

Mr Bunyad Khasmammadov and Ms Gulmira Akbarova, representing the Azerbaijan patient organization "World Free of TB", shared their opinions on the advantages of the ambulatory model of treatment and the need to expand it, seen from the patient's perspective. They cited the advantages of ambulatory treatment over the hospital model that are most relevant for TB patients: it prevents the acquisition of more serious forms of TB and drug-resistant TB (MDR/XDR), since the risk of acquiring other infections is higher in TB hospitals; it helps TB patients to continue taking their pills as prescribed and get complete treatment; and there is a big potential saving on beds, food, administrative and technical staff and renovation of hospital buildings. There are also other positive aspects of ambulatory treatment: it allows patients to integrate themselves into their community and family life; TB patients with noninfectious forms of the disease continue to work and make a living for their family; and they can start treatment as soon as they are diagnosed with TB, as there will be no waiting list for a hospital bed. In addition, there is flexibility over drug intake, with patients able to choose an appropriate schedule and a DOT centre where they can take their drugs. It is also very important that the DOT nurse knows the patient individually and respects his/her views, which improves their working relationship and makes the patient more likely to adhere to the treatment. From the TB patient's perspective, the following recommendations should be considered to strengthen the ambulatory model of TB care: TB should be diagnosed at primary health care level; the ambulatory model should be promoted among patients and doctors as a better option to cure TB; DOT sites should be set up at every local health-care facility and an experienced TB specialist should be designated there; and anti-TB drugs and other auxiliary medication should be available at every DOT site every time a patient needs it.

Dr Alena Skrahina, Deputy Director of the Republican Scientific and Practical Centre for Pulmonology and Tuberculosis (Belarus) shared the experience of Belarus in the introduction of cohort event monitoring (CEM) of adverse reactions during the use of new anti-TB drugs. Belarus has managed to curb the MDR-TB epidemic in recent years and has documented a decrease in the number of new MDR-TB cases over the first two years of the last decade, but there is a serious issue of XDR-TB that requires the introduction of new anti-TB drugs. The NTP is collaborating closely with the National Pharmacovigilance Centre and the Ministry of Health to introduce these drugs. A collaborative TB pharmacovigilance WG has been established and approved by the Ministry of Health. The CEM enrolment and monitoring form was developed with the support of WHO and approved by the Ministry of Health. Intensive training was provided in the course of 2014. The CEM project for linezolid-treated TB patients started in 2014 with the aim of enrolling 341 XDR-TB patients treated with linezolid. The cohort will be followed for one year and the results will be published in 2017. Intermediate results were presented: 70 XDR-TB patients were enrolled, of whom 62 (88%) had experienced one or several adverse drug reactions. The most common reactions are related to the following body systems: blood and lymphatic, hepatobiliary, renal and urinary, gastrointestinal, nervous and psychiatric, metabolism and nutrition, and ear and labyrinth-related reactions. It was acknowledged that CEM is a priority requirement in introducing new anti-TB drugs in countries, even if this increases the workload of health workers involved in CEM. Belarus, with its experience of CEM for linezolid, will start enrolment of 186 XDR-TB patients treated with bedaquiline in the course of 2015. For the expansion of new drugs, CEM will be used only for serious adverse events and analysed quarterly.

Next steps

- The new regional TB action plan, developed in line with the global WHO END TB strategy, will be finalized and approved by Member States.
- Member States will receive relevant information from GDF on the possibilities for procuring MDR-TB supplies through GDF mechanisms with the use of national state budgets.
- There is a need to expand the relevant section of the regional action plan on support for Member States in introducing new anti-TB drugs and CEM of adverse reactions to meet WHO requirements. Technical assistance is needed to implement CEM in countries.
- An appropriate monitoring and evaluation framework will be presented as a separate chapter of the TB action plan 2016–2020.

Follow-up activities

- The recently approved Global Fund regional project on high-level advocacy of health system strengthening and finance reforms provides a good opportunity for improvement of sustainable TB-relevant health financing mechanisms and patient-centred models of care.
- Strengthening of ambulatory treatment should be promoted at all levels. High-level advocacy is needed to ensure appropriate financing of new models of ambulatory treatment, patient incentives and involvement of nongovernmental organizations.
- More attention should be paid to the further roll-out of first-line and second-line molecular drug resistance testing to the stage of triage of patients for appropriate treatment.
- Ex-TB patients and the civil society and nongovernmental sector should be involved in TB programme planning, with close collaboration between TB services and civil society organizations.

- Two projects are underway: Systems for Improved Access to Pharmaceuticals and Services (SOAPS) (Management Sciences for Health) and Ely Lilly (KNCV) on quantification and forecasting for second-line drugs.

14:00–15:30

SESSION 5

Health financing in relation to TB control

Coordinators:	Mr Szabolcs Szigeti (WHO), Ms Fanny Voitzwinkler (Global Health Advocates (GHA))
Chairpersons:	Dr Saro Tsaturyan (State Health Agency, Armenia), Dr Tamás Evetovits (WHO), Dr Masoud Dara (WHO)
Reporters:	Dr Valiantsin Rusovich (WHO), Dr Rob Riesmeijer (National Institute for Public Health and the Environment (RIVM), the Netherlands), Mr Szabolcs Szigeti (WHO)

Background

Despite progress in ensuring adequate funding of TB control, many countries face significant and diverse problems in health financing. Some face financial crises and budget cuts, while others are using financing mechanisms that are not conducive to modern and effective management of resources and do not effectively prioritize resource allocation.

In line with the *Consolidated action plan to prevent and combat multidrug- and extensively drug-resistant tuberculosis in the WHO European Region, 2011–2015*, the Wolfheze Workshops 2013 decided to set up a WG to evaluate the main bottlenecks and foster opportunities for health financing of TB programmes to strengthen TB prevention, control and care in the Region. At the pilot stage of the work in 2014/2015, the WG, which has been working since January 2014, consisted of NTP representatives and health finance experts from both high- and low-incidence countries, including Armenia, Belarus, Hungary and the Netherlands.

Objectives

The session objectives were to discuss policy options and approaches within the framework of the WHO End TB Strategy on ways to:

- create supportive financing arrangements that effectively promote people-centred TB services; and
- ensure universal health coverage by eliminating catastrophic costs and financial consequences in TB control.

Content of the session

The session would focus on:

- bottlenecks and good practices in health financing from the lessons learnt in different country and health systems contexts;
- key lessons from the experience of the NTPs of good practices in health financing, along with the main bottlenecks encountered; and
- use of health financing to improve the performance of NTPs.

Methodology

The session would consist of:

- presentations
- panel and plenary discussions.

Expected outputs

It was anticipated that the session would result in:

- participants familiarizing themselves with policy alternatives for using health finance arrangements effectively to improve the performance of NTPs in different country contexts; and
- the work of the Wolfheze Health Financing Working Group being presented to the participants in an interactive way.

Programme of work

Time	Title of talk	Speakers
14:00–14:05	Introduction	Mr Szabolcs Szigeti (WHO), Dr Saro Tsaturyan (Armenia)
14:05–14:40	Country speeches: supportive financing arrangements for promoting people-centred TB services	Dr Armen Hayrapetyan (Armenia), Dr Rob Riesmeijer (Netherlands), Dr Valiantsin Rusovich (Belarus), Dr Gábor Kovács (Hungary), Ms Fanny Voitzwinkler (GHA)
14:40–15:00	Panel discussion (expert panel) Strengthening health financing for ambulatory care How to finance involvement of civil society organizations.	Members of WG and speakers
15:00–15:25	Plenary discussion: supportive financing arrangements for promoting people-centred TB services	Chairs
15:25–15:30	Wrap-up and next steps	Chairs

Main discussion points

The session presented the views of civil society organizations by emphasizing the need for more developed and institutionalized health finance arrangements to support their involvement. Apart from grants from international organizations, only a few countries offer good examples of fostering and collaborating with civil society organizations in a sustainable manner.

Belarus presented a successful pilot project for incentivizing home care and ambulatory care. As a follow-up to the national action plan to strengthen the ambulatory model of care, the Ministry of Health, with the strong support of WHO, started a pilot project on implementing incentives for TB patients and primary health care staff supporting ambulatory treatment for TB patients in Mogilev region. It was estimated that about 30% of TB patients have substandard adherence in the ambulatory phase (due to factors such as distance, alcohol addiction and living in rural areas). The objective of the pilot was to develop organizational mechanisms for shifting funds gained through savings from the TB hospital. The pilot, involving only a limited number of patients, started in 2014, was evaluated as successful and is to be extended to other regions of the country.

Armenia reported on the reform of hospital financing and the introduction of pay-for-performance in ambulatory care. One difficult issue is to transfer the saved funds from the hospital setting to ambulatory care. The National Tuberculosis Programme Control Office, in collaboration with the State Health Agency of the Ministry of Health, developed several recommendations to target the identified challenges in inpatient TB care. It was recommended that the existing financing mechanisms should be revised and a new approach implemented, directly covering all fixed costs of the facilities and

providing additional funding for each case (patient) to cover variable costs (medicines and meals). This approach may minimize overhospitalization of patients and also reduce unjustifiably long stays in hospital. Additionally, it was suggested that hospitalization of suspected cases for diagnostic purposes alone should be avoided, as well as hospitalization of smear-negative TB patients, through the introduction of specific hospitalization and discharge criteria. To increase the efficiency of the system, it was recommended that inpatient facilities serving only a limited number of patients annually should be closed down. In 2014, the newly suggested financing mechanism for inpatient facilities was enforced by Decree of the Government of Armenia. In addition, four inpatient facilities with a low workload were closed down. The State Health Agency and the National TB Control Office have assumed responsibility for monitoring and evaluating the impact of the recent reforms.

Hungary emphasized the need for more coherently aligned output-based payment methods and also the lack of appropriate governance in health financing. The bottlenecks and enablers were presented, emphasizing the point that, although the Hungarian health system has very good capacity for IT collection and proper overall organizational arrangements for providing services free of charge, the NTP is still facing several bottlenecks in health finance, such as: the lack of regular systematic cost and expenditure assessments; lack of incentives for treating patients in the ambulatory care setting; resource allocation is distorted (outpatient services, too many staff, but modern technology is not financed) with weak governance of health finance; and the volume limitation on services influences the care provided and creates a complicated administration burden in the financing of drugs for MDR–TB patients.

The Netherlands presented the good health finance practices of its NTP, including: well resourced and high-quality TB services, including two specialized TB centres; a well funded public health TB programme; health insurance schemes in place for asylum-seekers and prisoners, without any financial cost to these persons; and a system in place to cover the health-care costs of undocumented migrants before and after diagnosis. On the other hand, it was pointed out that there is lack of free access to TB services as a result of the deductible applied by the insurers for TB patients.

Questions and comments from the plenary focused on the examples and potential ways of improving collaboration between civil society organizations and NTPs (examples from Tajikistan). Other speakers questioned the good examples of supervision of the work of nurses in ambulatory care in the context of pay-for-performance providing incentives for their work. Finally, there were comments that appropriate organizational arrangements should be made to ensure income-replacement benefits for patients during their treatment.

Next steps

- The WG will continue its work up to June 2016. Armenia indicated that the WG is very important as a reference in developing its health financing reforms and that it needs this support in the coming years.
- Specific needs to be addressed are:
 - elaborating the concept for funding of civil society organization activities in TB control; and
 - working on technical options for ensuring transfers of saved funds from the hospital setting to ambulatory care.
- The Regional Office needs this type of network of experts to foster the translation of knowledge of health financing arrangements into the practices of NTPs. It will support the exchange of lessons learnt between NTP managers and health financing experts from different country settings in coming years.

Follow-up activities

- The WG is going to continue its work as a WG of the Wolfheze movement. There will be two WebEx meetings in the second half of 2015 and one or two WebEx meetings in 2016. A face-to-face meeting is planned for June 2016 in Bratislava, Slovakia as a side meeting of the 7th Conference of the European Region of the International Union against TB and Lung Disease.

16:00–18:00

SESSION 6

Understanding social determinants and reaching out to vulnerable groups

Coordinators:	Dr Pierpaolo de Colombani (WHO), Ms Fanny Voitzwinkler (GHA)
Chairpersons:	Dr Knut Lönnroth (WHO), Dr Andreas Sandgren (ECDC)
Reporter:	Dr Pierpaolo de Colombani (WHO)

Background

The new global WHO End TB Strategy calls for additional action on the social determinants of TB through social protection and poverty alleviation. These interventions must be built into the next regional TB action plan 2016–2020 and should be implemented by policy-makers, service providers and civil society. The 12th WHO National TB Programme Managers' Meeting and 16th Wolfheze Workshops, held in 2013, decided to set up a new WG on social determinants and risk factors for TB and DR–TB. This session was organized to review the WG's activities and determine future activities.

Objectives

The session objectives were to:

- update participants on the activities of the WG;
- discuss social determinants and risk factors for TB from the perspective of civil society organizations; and
- agree on the future activities of the WG.

Content of the session

The session would focus on:

- results of two surveys conducted to document how risk factors and social determinants are currently recorded in the national TB databases and which specific interventions were/are taken by countries to address them; and
- the importance, particularly for civil society organizations, of ACSM and operational research to address the social determinants of TB.

Methodology

The session would consist of:

- presentations
- panel discussion.

Expected outputs

It was anticipated that the session would result in:

- the accomplishment of a report on the objectives; and
- decisions on future work being taken, considering the perspective of civil society organizations and including the major strategic directions in ACSM and planning for operational research.

Programme of work

Time	Title of talk	Speaker
16:00–16:15	Reporting the results of two surveys: 1) how countries record social determinants and risk factors; 2) how countries tackle them	Dr Pierpaolo de Colombani (WHO), Dr Wouter Arrazola de Onate (Belgian Lung and TB Association, Brussels)
16:15–17:00	Discussion in panel 1: what more can NTP managers do to tackle social determinants/risk factors?	Panellists: chair, two country representatives
17:00–17:10	Is ACSM important in addressing social determinants of TB and in what way? The civil society perspective	Dr Jamilya Ismoilova (Project HOPE) and Dr Faromuzova Kataen (local nongovernmental organization, Tajikistan)
17:10–17:20	What are the needs for operational research to address social determinants of TB? The civil society perspective	Mr Jonathan Stillo (City University of New York)
17:20–17:45	Discussion in panel 2: how should civil society organizations and NTPs work together?	Panellists: chair, two country representatives
17:45–18:00	Discussion in plenary: should the WG continue its work? What and how?	Chairs
17:55–18:00	Wrap-up and next steps	Chairs

Main discussion points

The Wolfheze Working Group on Social Determinants of TB and Drug-resistant TB, established after the Wolfheze Workshops 2013, reported the results of two surveys: 1) some social determinants and risk factors are already collected by countries and it is possible to include in ECDC/WHO annual reporting those collected by the majority of countries, such as occupation/employment, homelessness, diabetes and use of alcohol; there is a need to develop/standardize epidemiological case definitions; and 2) only 12 countries responded, providing interesting but insufficient examples of past/present interventions on social determinants and risk factors. A lively discussion followed, with requests for clarification on previous and future work of ECDC on this topic and the feasibility of expanding ECDC/WHO regional surveillance.

The two following presentations highlighted how civil society organizations can: 1) address social determinants through mapping in the community, facilitation of local planning and ACSM; and 2) foster a wider-ranging coalition involving civil society organizations in areas other than TB as well as scientists (public health, anthropologists, sociologists, geographers, etc.). The panel discussion focused on practices in Belarus (NTP expanding patient support), Greenland (intersectoral committee with high political representation) and Georgia (state funding of nongovernmental organizations through a collaboration framework).

Next steps

- The Wolfheze Working Group on Social Determinants of TB and Drug-resistant TB will continue for one more year with the same terms of reference (that is, pursuing the two missing objectives of developing action plans for ACSM and operational research) or different; accordingly, the membership of the group should be revised.

- To avoid overlapping of activities with other Wolfheze WGs or others, the terms of reference of each Wolfheze WG should be widely circulated. Close coordination is needed between ECDC and the Regional Office on regional surveillance.
- There is a need to evaluate the need for developing European standard case definitions of social determinants and risk factors for better monitoring at country level.
- There is a need to evaluate the feasibility of expanding the ECDC/WHO annual report to include additional variables, based on the survey results presented in the session.

Follow-up activities

- The Wolfheze Working Group on Social Determinants of TB and Drug-resistant TB will revise its terms of reference and membership.
- ECDC and the Regional Office will further discuss joint efforts towards strengthening surveillance of social determinants and risk factors at regional and country levels.
- The Wolfheze Working Group on Social Determinants of TB and Drug-resistant TB will report to the next Wolfheze Workshops in 2017.

Friday 29 May 2015

8:30–10:30

SESSION 7

Childhood TB

Coordinators:	Dr Connie Erkens (KNCV), Dr Martin van den Boom (WHO)
Chairpersons:	Dr Malgosia Grzemska (WHO), Dr Henadz Hurevich (Republican Scientific and Practical Centre for Pulmonology and Tuberculosis, Belarus)
Reporters:	Dr Valiantsin Rusovich (WHO), Dr Andreas Sandgren (ECDC)

Background

TB in adolescents differs from TB in younger children, as adolescents are more likely to present with clinical and radiographic findings similar to adults and are more likely to be infectious than younger children. This facilitates diagnosis in adolescents, but adolescents with TB can be more affected by stigma, which can hamper treatment adherence. Prolonged admission can disrupt schooling and disturb social development. To assess the nature and extent of these issues for adolescents with TB in the Region and how they are/can be addressed, the Childhood TB Task Force performed a survey of TB policies and practices directed at exploring and assessing specific challenges related to adolescent TB, including both policy and practice. Based on the survey results, further actions were recommended by the audience for follow-up.

WHO published a framework for conducting reviews of national TB programmes in 2014.⁵ A TB programme review assesses the performance of the strategy implemented to fight TB and identifies the strengths and weaknesses of interventions that have been put in place. The general objective of the WHO framework document is to guide reviewers in assessing specific components of the TB control programme, recommend strategies to address gaps and enhance TB prevention and care. The WHO framework

⁵ Framework for conducting reviews of tuberculosis programmes. Geneva: World Health Organization; 2014
(http://apps.who.int/iris/bitstream/10665/127943/1/9789241507103_eng.pdf, accessed 31 August 2014).

includes a checklist to assess childhood TB.⁶ Based on this checklist, KNCV developed a benchmarking tool to measure progress in childhood TB aspects of TB programmes. The Wolfheze Childhood TB Task Force shared and discussed initial experiences with the checklist, the KNCV benchmark tool and other methodologies used to date, to obtain suggestions for further implementation.

Objectives

The session objectives were to:

- share experiences, best strategies and achievements for the introduction of new policies in TB prevention and care, with a focus on adolescents (country perspective); and
- share and discuss methods of assessing childhood TB, such as the checklist “Assessing activities to address childhood TB” from the WHO TB framework for conducting reviews of TB programmes and the related KNCV benchmark tool.

Content of the session

The session would focus on:

- Wolfheze Workshops/WHO situation analysis of childhood TB in the Region, with a focus on adolescent TB;
- best practice and challenges in adolescents with TB;
- a management perspective of childhood TB, with a focus on adolescents;
- the framework for conducting TB reviews, with a focus on childhood TB; and
- the checklist “Assessing activities to address childhood TB” and the KNCV benchmark tool for childhood TB progress.

Methodology

The session would consist of:

- presentations
- plenary discussions
- panel discussion.

Topics/questions for plenary discussion:

The following questions were presented for discussion in the plenary session.

- Outcome of the adolescent TB survey: are specific adolescent-TB-related actions needed? If so, to what extent?
- Utilization of childhood TB programmatic tools: what are the opportunities and challenges, and are adaptations needed for the Region?
- Which further steps on childhood TB should the European Task Force embark upon?

Expected outputs

It was anticipated that the session would result in:

- countries’ programmatic and technical awareness being oriented toward the needs of the adolescent patient group and the need to adapt policy and practices accordingly; and
- next steps in improving TB control in the Region being identified.

Programme of work

Time	Title of talk	Speaker
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⁶ Assessing activities to address childhood TB. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/tb_framework_checklist12.pdf, accessed 31 August 2015).

Time	Title of talk	Speaker
08:30–08:35	Introduction	Chairs
08:35–08:45	Presentation of Wolfheze Workshops/WHO inventory on policy and practices of TB in adolescents the WHO European Region	Dr Martin van den Boom (WHO)
08:45–09:00	Good practice and challenges in managing TB in adolescents (country experience)	Dr Oktam Bobokhojaev (Tajikistan)
09:00–09:10	Presentation-related questions and clarifications	
09:10–09:25	Discussion on adolescent TB care aspects	Plenary discussion
09:25–09:40	Addressing challenges in childhood TB programmes through the use of policy guidance and standardized tools	Dr Malgosia Grzemska (WHO)
09:40–09:50	Introduction to KNCV benchmark tool for childhood TB programme implementation	Dr Agnes Gebhard (KNCV)
09:50–10:25	Panel discussion: assessing childhood TB and initial country experiences with the KNCV benchmark tool, and discussing further implementation	Dr Agnes Gebhard (KNCV), WHO, ECDC and country representatives
10:25–10:30	Wrap-up and next steps	Chairs

Main discussion points

Dr Martin van den Boom of WHO presented a survey on adolescent TB in the Region. Schooling came out as a key topic of relevance, and there are a range of different practices for addressing it. Mass screening using tuberculin skin testing and BCG revaccination persist in some countries, but this should be discouraged. Problems with adherence seems to be a specific issue.

Dr Oktam Bobokhojaev presented on TB among children and adolescents in Tajikistan as an illustrative country example. Through work funded by Médecins Sans Frontières, there is an ongoing project for the provision of a comprehensive patient-centred model of care for children.

Dr Malgosia Grzemska presented the challenges of TB in children identified through NTP reviews in the Region. It was concluded that national policies are often not based on evidence, but on continuing a tradition in the way it has always been done. Another contributing reason is that the WHO tools available are not being translated into all languages.

Dr Agnes Gebhard presented the benchmark tool for childhood TB policies and practice developed by KNCV. The aim is to develop a tool that can be used for self-assessment and that will facilitate a discussion and strategic direction within the country. It provides insight into several areas: political commitment, coordination and stakeholder engagement at national level; technical approaches; engaging all providers and access to quality childhood TB prevention, diagnosis and care, recording and reporting, and child-centred care. The tool allows countries to choose priorities, define the next steps and monitor progress.

Participants congratulated the Childhood TB Working Group on its completed tasks.

Next steps

A decision was taken to sunset the activities of the Childhood TB Working Group⁷ as a formal Wolfheze WG and look for other modes of activity to support the issues of childhood TB in the Region. This could, for example, mean convening thematic training meetings or workshops for sharing best practices in case detection and treatment of childhood TB. A full report of the survey on TB among adolescents will be prepared and shared. The report will support countries in adopting WHO-recommended policies on childhood TB based on best-practice experiences from neighbouring countries. The KNCV self-assessment benchmark tool for childhood TB policies should be promoted for use. Recommendations to stop ineffective policies in childhood TB prevention and case-finding (abolishing BCG revaccination and annual mass screening with tuberculin skin testing in the child population) should be considered for inclusion in the updated version of the tool. Methods of disseminating the tool to other regions should be explored. To promote it, the tool should be presented at the 2015 conference of the International Union against Tuberculosis and Lung Disease in Cape Town, South Africa, and countries' experiences, results and actions from using the tool should be presented at the next Wolfheze Workshops. It would also be a valuable tool for assessment of TB in general, so it should be considered whether it should be developed further into a general benchmark tool.

Follow-up activities

- A Russian translation of the most recent WHO recommendations on childhood TB should be published to facilitate the updating of policies on childhood TB in the Region. A recommendation on abolishing repeated BCG revaccination should be included in the relevant part of the new regional action plan for 2016–2020. Advocacy with the Global Fund that running projects need to procure childhood formulations of anti-TB drugs to cover existing needs is necessary. Informal continuation of communication within the established network of childhood TB specialists is highly recommended.

11:00–12:35

SESSION 8

Wolfheze WGs: reporting back, past and future targets

Coordinators: Dr Martin van den Boom (WHO), Dr Connie Erkens (KNCV)

Chairpersons: Dr Masoud Dara (WHO), Dr Kitty van Weezenbeek (KNCV)

Background

The Wolfheze Conference or Workshops offers an opportunity to stakeholders in national TB programmes to meet with policy-makers in WHO and representatives of ECDC and share experience between western and eastern Europe and central Asia. The conference focuses on management and coordination of TB control efforts in European countries. During previous sessions, participants have exchanged experiences and identified priorities for action and coordination of efforts in existing or newly formed Wolfheze WGs. In the coming period, these WGs will prepare consensus policy documents on specific topics in TB control, based on available scientific evidence and expert opinion, to be discussed and modified during upcoming meetings and the next pan-European conference in 2017.

⁷ Note: while a decision was taken to sunset the Childhood TB Working Group as a Wolfheze WG, the European Childhood TB Task Force, hosted by the Joint TB, HIV and Viral Hepatitis programme of the WHO Regional Office for Europe, continues to exist.

Content

The session would focus on:

- (new) Wolfheze WGs: terms of reference, deliverables and planning.

Methodology

The session would consist of:

- presentation
- plenary discussion.

Objectives

The session objectives were to:

- agree on terms of reference and work plans of existing and new Wolfheze WGs
- agree on priorities for further collaboration and coordination.

Expected outputs

It was anticipated that the session would result in:

- participants agreeing on priorities for future collaboration and coordination; and
- participants providing inputs on the terms of reference, desired outputs and work plans of new and existing WGs.

Main discussion points

Two “refresher” slides of the main conclusions and next steps from previous sessions were presented by the reporters of each session.

Future activities and priorities for (new) topics and themes for Wolfheze Workshops 2017 and new WGs (including deliverables) were discussed. It was agreed that after publication of the final reports of surveys on active case-finding activities and adolescent TB, the Wolfheze WGs on active case-finding and childhood TB could be closed. The activities for both these groups will continue in other task forces and international collaborative initiatives supported by ECDC, the Regional Office and KNCV. The Wolfheze Working Group on Social Determinants will be continued with revised terms of reference. The Wolfheze Working Group on Health Finance will also continue its activities.

The Wolfheze programme committee suggested the following subjects to be addressed by new WGs:

- TB–HIV (bottlenecks/best practices in TB–HIV integration of services and other issues);
- cross-border and internal migration (issues related to access to diagnosis and care);
- dealing with/addressing stigma;
- pharmacovigilance;
- guidelines for surgery and TB: survey of current practices/expert opinion leading to a consensus document; and
- health-care workers – consensus on screening: do’s and don’ts.

In addition, participants suggested “Ethics and human rights” and “Retreatment case management”. It was agreed that dealing with stigma could be addressed in the topic “Ethics and human rights”.

It was decided that the efforts of Wolfheze WGs should be focused in two or three new WGs. Further prioritization and a call for participation would take place through the

online evaluation of the Wolfheze Workshops 2015 programme and organization for the following topics:

- TB/HIV (initiators: Dr Ogtay Gozalov, Dr Kitty van Weezenbeek);
- surgery/extrapulmonary TB (initiators: Dr Masoud Dara, Dr Ivan Solovic);
- ethics and human rights (initiators: Dr Kitty van Weezenbeek, Ms Fanny Voitzwinkler);
- retreatment case management (initiator: Dr Raquel Duarte);
- health-care workers – infection control (initiators: Dr Gerard de Vries, Dr Marieke van der Werf); and
- new TB drugs – introduction and pharmacovigilance (initiators: Dr Alena Skrahina, Dr Judith Bruchfeld, Dr Andrei Dadu, Dr Martin van den Boom).

The initiators will draft the terms of reference for the WGs, which should be product-oriented. The Wolfheze Programme Committee will then prioritize two or three new WGs. The products of the new WGs will be presented/discussed at the Wolfheze 2017 conference.

12:35–13:00

Closing session

Representatives of all co-organizing agencies thanked the participants profoundly for their valuable contributions and ongoing will to continue its consensus-building work for patient-centred, innovative and holistic care to further improve TB-related health outcomes and people's well-being.

Annex 1. Programme of work of the meeting

Tuesday 26 May

- 09:00–17:30 WHO–ECDC Joint Surveillance meeting
18:00–19:00 Welcome reception, Wolfheze Workshops 2015

Wednesday 27 May

Joint Wolfheze Workshops meeting day for NTP managers, TB experts, officials of the Wolfheze movement and Joint ECDC/WHO Regional Office for Europe Tuberculosis Surveillance Network

- 09:00–09:30 Opening session
09:30–13:00 Regional adaptation of the WHO End TB Strategy: regional TB action plan
14:00–17:30 Active case-finding and LTBI management in risk groups, including persons living with HIV

Thursday 28 May

- 08:30–10:30 Addressing inadequate treatment outcome results in the WHO European Region
11:00–13:00 Innovations, challenges and progress in programmatic management of drug-resistant (DR) TB
14:00–15:30 Health financing in relation to TB control
16:00–18:00 Understanding social determinants and reaching out to vulnerable groups

Friday 29 May

- 08:30–10:30 Childhood TB
11:15–12:30 (New) Wolfheze working groups: reporting back, priorities, deliverables and next steps
12:30–13:00 Closing of Wolfheze Workshops 2015 and adjournment

Annex 2. List of participants

Annual meeting of the Joint ECDC/WHO European Tuberculosis Surveillance Network; 17th Wolfheze Workshops for TB experts and officials of the Wolfheze movement and 13th WHO National TB Programme Managers' Meeting, 27–29 May 2015

Surname	Forename	Organization	Country
Abubakar	Ibrahim	University College London	United Kingdom
Acosta	Colleen	WHO Regional Office for Europe	Denmark
Ahmedov	Sevim	United States Agency for International Development (USAID)	United States of America
Akbarova	Gulmira	World Free of TB Public Union	Azerbaijan
Alikhanova	Natavan	Scientific Research Institute of Lung Diseases	Azerbaijan
Alves	Sandra	European Centre for Disease Prevention and Control	Sweden
Anderson	Sarah	Public Health England	United Kingdom
Antoine	Delphine	InVS – Institut de Veille Sanitaire	France
Arrazola de Onate	Wouter	Flemish Association for Respiratory Health Care and Tuberculosis	Belgium
Avaliani	Zaza	National Centre for Tuberculosis and Lung Diseases	Georgia
Babaley	Magali	Global Drug Facility	Switzerland
Babamuradov	Bakhtiyar	Project HOPE	Kazakhstan
Bakos	Ágnes	National Koranyi Institute for TB and Pulmonology	Hungary
Bardhi	Donika Mema	University Hospital for Lung Disease	Albania
Bestrashnova	Yana	National Centre of TB Problems	Kazakhstan
Bobokhojaev	Oktam	Republican TB Centre, Ministry of Health	Tajikistan
Bogdanov	Oleksii	PATH	Ukraine
Bojovic	Olivera	Hospital for Lung Diseases and TB, Brezovik	Montenegro
Boom van den	Martin	WHO Regional Office for Europe	Denmark
Borkus	San	Municipal Health Services, Bussum	Netherlands
Boveneind van't	Natasha	Municipal Health Services, The Hague	Netherlands
Brix	Martina	Federal Ministry of Health	Austria
Brodhun	Bonita	Robert Koch Institute	Germany
Bruchfeld	Judith	Karolinska University Hospital, Clinic of Infectious Diseases	Sweden
Butu	Cassandra	WHO Country Office	Romania
Chakhaia	Tsira	University Research Co., URC. USAID TB Prevention Project	Georgia
Chemtob	Daniel	Ministry of Health	Israel
Chiotan	Domnica Ioana	Marius Nasta Institute	Romania
Chorgoliani	Dato (Tariel)	International Committee of the Red Cross	Kyrgyzstan
Christoffersen	Oluf	WHO Regional Office for Europe	Denmark
Ciancio	Bruno	European Centre for Disease Prevention and Control	Sweden
Ciobanu	Ana	Institute of Phthisiopneumology "Chiril Draganiuc"	Republic of Moldova
Ciobanu	Silviu	WHO Country Office	Republic of Moldova
Cobelens	Frank	KNCV Tuberculosis Foundation	Netherlands
Colombani de	Pierpaolo	WHO Regional Office for Europe	Denmark
Comolet	Thierry	Ministry of Health	France
Curcic	Radmila	Municipal Institute for Lung Disease and TB	Serbia
Dadu	Andrei	WHO Regional Office for Europe	Denmark
Dara	Masoud	WHO Regional Office for Europe	Belgium
Davidaviciene	Edita	Infection diseases/tuberculosis hospital of Santariskiu Klinikos Vilnius	Lithuania
Delic	Sasa	WHO Regional Office for Europe	Denmark
Duarte	Raquel	Directorate-General of Health	Portugal
Ehsani	Soudeh	WHO Regional Office for Europe	Denmark
Erkens	Connie	KNCV Tuberculosis Foundation	Netherlands
Evetovits	Tamás	WHO	Spain
Farrugia	Brian	Department of Health	Malta
Filipa	Ilze		Latvia
Filippovych	Sergey	International HIV/AIDS Alliance in Ukraine	Ukraine

Surname	Forename	Organization	Country
Gadoev	Jamshid	WHO Country Office	Uzbekistan
Gamazina	Kateryna	PATH	Ukraine
Gebhard	Agnes	KNCV Tuberculosis Foundation	Netherlands
Geliukh	Evgenia	International HIV/AIDS Alliance in Ukraine	Ukraine
Ghukasyan	Gayane	WHO Country Office	Armenia
Gibson	Shelly	Municipal Health Services, The Hague	Netherlands
Gjocaj	Majlinda	Ministry of Health	Kosovo (in accordance with Security Council resolution 1244 (1999))
Gozalov	Ogtay	WHO Country Office	Uzbekistan
Grierson	Sirkku	Finnish Lung Health Association	Finland
Grigoryan	Astghik	USAID	Armenia
Grijns	Lambert	Social Development Department, Ministry of Foreign Affairs	Netherlands
Grzemska	Malgosia	World Health Organization	Switzerland
Hasanova	Sayohat	WHO Country Office	Tajikistan
Hauer	Barbara	Robert Koch Institute	Germany
Hayrapetyan	Armen	National TB Control Office, Ministry of Health	Armenia
Helbling	Peter	Federal Department of Home Affairs	Switzerland
Hest van	Rob	Municipal Health Services, Rotterdam	Netherlands
Hirtl	Thomas	Verein Heilanstalt Alland; Amt der NÖ Landesregierung	Austria
Hof van den Hollo	Susan Vahur	KNCV Tuberculosis Foundation European Centre for Disease Prevention and Control	Netherlands Sweden
Hurevich	Henadz	Republican Scientific and Practical Centre for Pulmonology and TB	Belarus
Idrissova	Maria	KNCV Tuberculosis Foundation	Netherlands
Ilievska Poposka	Biljana	Institute for Lung Diseases and Tuberculosis	The former Yugoslav Republic of Macedonia
Ismoilova	Jamilya	Project HOPE	Tajikistan
Jansen	Niesje	KNCV Tuberculosis Foundation	Netherlands
Jonsson	Jerker	The Public Health Agency of Sweden	Sweden
Kadyrov	Abdulat	National Centre of Phthisiatry	Kyrgyzstan
Kalkouni	Ourania	Hellenic Centre for Disease Control and Prevention	Greece
Kamphorst	Margeet	Municipal Health Services, Rotterdam	Netherlands
Karo	Basel	Robert Koch Institute	Germany
Kasaeva	Teresa	Ministry of Health and Social Development	Russian Federation
Kataen	Faromuzova	Local nongovernmental organization	Tajikistan
Khasmammadov	Bunyad	"World Free of TB" Public Union, patients' organization	Azerbaijan
Kilicaslan	Zeki	Federation of Turkish Anti-TB Associations	Turkey
Kissné Horváth	Ildikó	National Korányi Institute for TB and Pulmonology	Hungary
Klein	Jean-Paul	Ministry of Health	Austria
Kodmon	Csaba	European Centre for Disease Prevention and Control	Sweden
Korzeniewska-Kosela	Maria	National Tuberculosis and Lung Diseases Research Institute	Poland
Kovács	Gábor	National Korányi Institute for TB and Pulmonology	Hungary
Labelle	Soleil	World Health Organization	Switzerland
Lange	Christoph	Research Centre, Borstel	Germany
Lashkarbekova	Zulfiya	RESULTS UK	United Kingdom
Latifov	Abdusamad	STOP TB Partnership, Tajikistan	Tajikistan
Leimane	Ieva	KNCV Tuberculosis Foundation	Netherlands
Lillebaek	Troels	Statens Serum Institute	Denmark
Lomtadze	Nino	National Centre for Tuberculosis and Lung Diseases	Georgia
Lönnroth	Knut	WHO	Switzerland
Mamulashvili	Nino	WHO Country Office	Georgia
Manescu	Nicoleta	Romanian Angel Appeal Foundation	Romania
Matteelli	Alberto	WHO	Italy
Matuleviciute	Irma	WHO Regional Office for Europe	Denmark
Mehdiyev	Rafail	Main Medical Department of the Ministry of Justice	Azerbaijan
Melo	Raquel	Directorate-General of Health	Portugal
Migliori	Giovanni Battis	European Respiratory Society and WHO Collaborating Centre, Tradate	Italy
Mihalovska	Dace	Centre for Disease Prevention and	Latvia

Surname	Forename	Organization	Country
Mirazimov	Doniyor M	Control Ministry of Health	Uzbekistan
Mirzoyan	Artashes	The Global Fund	Switzerland
Muzafarova	Nigorsulton	Global Drug Facility	Switzerland
Nasidze	Nikoloz	WHO Country Office	Kyrgyzstan
Neville	Liz	WHO Regional Office for Europe	Denmark
Niakrasava	Ina	UNDP/Global Fund	Belarus
Nizova	Nataliya	Ukrainian Centre for Socially Dangerous Disease Control, Ministry of Health	Ukraine
O'Flanagan	Darina	Health Protection Surveillance Centre	Ireland
Orcau	Àngels	Public Health Agency of Barcelona	Spain
Pak	Svetlana	KNCV Tuberculosis Foundation	Kazakhstan
Parpieva	Nargiza	Ministry of Health	Uzbekistan
Pashkevich	Dmitry	WHO Country Office	Russian Federation
Pavlova	Olga	Ukrainian Centre for Socially Dangerous Disease Control, Ministry of Health	Ukraine
Poghosyan	Vahan	Ministry of Health	Armenia
Polunina	Tatiana	WHO	Russian Federation
Rajahlati	Iiris	Finnish Lung Health Association	Finland
Reichman	Lee	New Jersey Medical School Global Tuberculosis Institute	United States of America
Reulet	Ines	European Centre for Disease Prevention and Control	Sweden
Riesmeijer	Rob	National Institute for Public Health and the Environment	Netherlands
Rodés Monegal	Anna	Health Department, Catalonia	Spain
Rodríguez Valín	Elena	Carlos III Institute of Health	Spain
Rønning	Karin	Institute of Public Health	Norway
Rucsineanu	Oxana	SMIT TB Patient Association	Republic of Moldova
Rusovich	Valiantsin	WHO Country Office	Belarus
Samedova	Inara	The Global Fund	Switzerland
Sandgren	Andreas	European Centre for Disease Prevention and Control	Sweden
Schenkel	Karl	German Central Committee against TB	Germany
Schmidgruber	Beatrix	Vienna Public Health Service	Austria
Shcherbak- Verlan	Bogdana	WHO Country Office	Ukraine
Sianozova	Mariam	Project Director	Armenia
Sidibe	Anissa	WHO	Italy
Simunovic	Aleksandar	Institute of Public Health	Croatia
Skrahina	Alena	Republican Research and Practical Centre for Pulmonology and TB	Belarus
Slavuckij	Andrej	WHO Country Office	Ukraine
Slump	Erika	National Institute for Public Health and the Environment	Netherlands
Sofineti	Daniel		Romania
Soini	Hanna	National Institute for Health and Welfare	Finland
Solovic	Ivan	National Institute for Tuberculosis	Slovakia
Soltan	Viorel	WHO Regional Office for Europe	Denmark
Sommerfeld	Paul	TB ALERT	United Kingdom
Spinu	Vinu	NTP Romania	Romania
Stefan	Mihaela	NTP Romania	Romania
Stenz	Flemming Kleis	Government of Greenland/National Board of Health	Greenland
Stickers	Beatrijs	KNCV Tuberculosis Foundation	Netherlands
Stillo	Jonathan	TB Europe Coalition/Global TB Community Advisory Board	United States of America
Suez-Panama	Nathalie	WHO Regional Office for Europe	Denmark
Suleymanova	Javahir	WHO Country Office	Azerbaijan
Svetina-Sorli	Petra	University Clinic of Respiratory and Allergic Diseases, Golnik	Slovenia
Szigeti	Szabolcs	WHO Country Office	Hungary
Thomas	Lucy	Public Health England – Centre for Infectious Disease Surveillance and Control	United Kingdom
Tigani	Bahri	Community Development Fund	Kosovo (in accordance with Security Council resolution 1244 (1999))
Tillyashaykhov	Mirzagaleb	Republican TB Centre	Uzbekistan
Timmers	Janine	Reference Centre for Screening	Netherlands
Tkachova	Alena	Ministry of Health	Belarus
Toumanian	Sophie	Municipal Health Services	Netherlands
Tsaturyan	Saro	State Health Agency, Ministry of Health	Armenia
Turusbekova	Nonna	TBC Consult	Netherlands
Varleva	Tonka	Ministry of Health	Bulgaria
Verhagen	Maurits	Committee TB Policy	Netherlands

Surname	Forename	Organization	Country
Viiklepp	Piret	National Institute for Health Development	Estonia
Voitzwinkler	Fanny	Global Health Advocates	Belgium
Vries de	Gerard	KNCV Tuberculosis Foundation	Netherlands
Wallenfels	Jiří	National TB Surveillance Unit, Hospital Bulovka	Czech Republic
Wanlin	Maryse	Belgian Lung and TB Association	Belgium
Warwick	Bruce	RESULTS UK	United Kingdom
Weezenbeek van	Kitty	KNCV Tuberculosis Foundation	Netherlands
Werf van der	Marieke	European Centre for Disease Prevention and Control	Sweden
Whalen	Christine	KNCV Tuberculosis Foundation	Netherlands
Wieser	Marianne	KNCV Tuberculosis Foundation	Netherlands
Yurastova	Lyudmila	CTRI RAMS	Russian Federation
Zakoska	Maja	PHI Institute for Lung Diseases and Tuberculosis	The former Yugoslav Republic of Macedonia
Zenner	Dominik	Public Health England	United Kingdom
Zhuri	Gazmend	WHO Country Office	Kosovo (in accordance with Security Council resolution 1244 (1999))