

## **Keynote Speech**

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### **Challenge and Urgency to scale up tuberculosis care**

Hon Minister of Health, Medical Director of MSF, distinguished guests ...

First of all I thank the organizers for inviting me to give the keynote speech for this workshop.

It is very appropriate that a discussion on the scale up of tuberculosis management starts with a reflection on the drug-resistant form of this disease in today's world. The era of anti-TB chemotherapy only started some 70 years ago, very late in the intertwined history of humanity and TB. The optimism that accompanied the introduction of what were at the time "wonder drugs" was quickly dampened by the realization that resistance to them emerged very fast. This has complicated the treatment of TB ever since, making drug regimens more complicated, toxic, and protracted. The likelihood of a successful outcome of treatment diminishes as patients with resistant strains fail to resolve their disease despite receiving medications, decide to abandon their treatment, or die. Drug-resistance emerges and propagates as a result of inadequate treatment and poor infection control. Modelling work, supported by some data from eastern Europe and elsewhere, shows that resistant strains can become very frequent if allowed to spread unchecked.

The threat of DR-TB hangs upon the head of any TB patient. It depends upon the capacity of the health system to facilitate adherence, the quality of drugs, and the prevalence of drug-resistance in the community. Thankfully, the large majority of TB cases in the world today do not harbour drug-resistant strains and can be treated effectively with a 6-month course of cheap drugs. WHO estimates that about 3% of new TB cases worldwide have multidrug-resistant TB and have thus lost sensitivity to the two most potent anti-TB drugs. The occurrence of MDR among TB patients however varies greatly between different parts of the world. Eastern Europe, including the five Central Asian republics, reports record levels of MDR-TB. In parts of the former Soviet Union over one fourth of new TB patients presenting for treatment now have MDR. One half or more of TB patients who had been treated with TB drugs in the past in Kazakhstan, Tajikistan and Uzbekistan were MDR when tested in recent surveys. Population rates of MDR in Central Asia are the highest in the world. All countries except Turkmenistan have reported cases with extensive drug-resistance (XDR), MDR-TB cases who have lost sensitivity to the two most potent second-line drugs

These countries of eastern Europe and Central Asia represent a priority for TB control in the WHO's European Region. In 2009, the five Central Asian countries reported a total of 70,000 TB cases with

TB incidence rates ranging from 68 to 202 per 100,000 population. An added concern is HIV. Nowhere in the world is this virus spreading faster than in eastern Europe and Central Asia and these are the only parts of the world where the epidemic remains clearly on the rise. This is indeed a worrying development and if left unchecked it may well reverse the declining trend in TB notification rates observed in recent years in Kazakhstan, Kyrgyzstan and Uzbekistan. We have seen this happen elsewhere.

The outcome of treatment of TB patients has been unsatisfactory. In 2008, none of the five Central Asian countries achieved the 85% treatment success target among new patients. This is partly attributed to inadequate drug regimens in the face of a cohort of patients having MDR-TB. Between 6% and 26% of patients failed their treatment. This may be partly imputed to non-adherence to treatment short of complete default, a tendency which can engender further resistance.

The surveillance data on DR-TB in the Central Asian countries remain incomplete and are based on aged surveys, sub-national studies or mathematical modelling. About 12,000 MDR-TB cases are estimated to emerge each year. The proportion of MDR-TB patients reported by the NTPs reached half or less of those to be expected among the TB cases notified in all Central Asian countries except in Kyrgyzstan. Enrolment on treatment was even lower.

The enrolment of MDR patients on quality assured programmes following WHO standards of care has been slow. Even if all Central Asian countries bar Turkmenistan now have GLC-approved projects, overall they had enrolled only 3000 patients on second line drug treatment by the end of 2009. Treatment success for GLC-project patients started on treatment in 2007 was 50 % in Kyrgyzstan and 55% in Uzbekistan, both cohorts being characterized by much default (36% and 23% respectively).

Let us now look at the TB political arena of the last four years. In October 2007, a European Ministerial Forum on tuberculosis was organized by the WHO/EUR Office in Berlin, Germany. Those present acknowledged that the European "Region has a high proportion of unfavourable treatment outcomes resulting from poor implementation of internationally accepted TB control strategies". The ensuing "Berlin Declaration" underlined the importance of a "focused action" to tackle MDR and the need to reinforce the components of the Stop TB Strategy in the Region so as to address the challenge of DR-TB.

In 2009, two landmark events gave renewed impetus to the drive for global DR-TB control. In April, Ministers of Health of the 27 countries with the highest burden of MDR-TB in the world - including Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan - attended a meeting in Beijing, China to which both the Director-General of WHO and Bill Gates participated. The Call for Action from that meeting

was aimed at building consensus and political commitment globally and supporting immediate action on a number of perceived bottlenecks that stood in the way of the effective implementation of measures to avert and treat MDR-TB. Riding on the crest of that wave, in the following month, the World Health Assembly passed an important resolution titled "Prevention and control of multidrug-resistant tuberculosis and extensively drug-resistant tuberculosis".

Little more could one ask of such events insofar as legitimacy and political will are concerned. The analysis of constraints and limitations was based on the best available information and the opinion of world-class experts in TB control. The way forward to provide MDR-TB patients with better opportunities of care was clearly paved. WHO and its partners now had a solid basis on which to pin the roadmap for national programmes to follow.

So where are we two years down the road from those conclusions ?

Short of listing all the key elements of the roadmap, I want to highlight those elements which are of particular relevance to Central Asia.

Firstly, efforts to "turn off the tap" of fresh DR-TB in Central Asia remain insufficient. Apart from the fact that all countries fell short of the 85% target for treatment success among new TB patients, previously treated TB patients fared even worse with treatment failure reaching 32% in one country and default 9%. In addition, three countries (Kyrgyzstan, Tajikistan, Uzbekistan) did not achieve the 70% target for detection of TB cases in 2009.

Secondly, financing of MDR-TB control remains low. In 2009, only Kazakhstan, Kyrgyzstan and Uzbekistan reported a budget for MDR management. The combined budget for MDR management was US\$2.6 million, with Uzbekistan accounting for four-fifths of that amount. Sixty-eight percent of the needs for MDR management in these three countries were reported as a funding gap. This implies that mobilization of both internal and external funds has been ineffectual. Efforts at maximizing internal resources rather than seeking outside funding are expected to become more important in the coming years.

Thirdly, a set of measures were identified by the WHA Resolution to achieve universal access to diagnosis and treatment for MDR-TB patients. From reports available to WHO, we believe that there remains much space for improvement on all of these fronts in the Central Asian republics. These include the creation of a more enabling environment for patients to seek care, particularly displaced persons, ex-prisoners and other vulnerable groups. We need properly trained human resources for health care, enhancements in laboratory diagnostic capacity - particularly rapid drug susceptibility

testing for rifampin, a supply of adequate drugs as well as steps to preserve their effectiveness, and huge improvements in coverage and completeness of data for the surveillance and the monitoring of the response against national targets for patient enrollment and treatment. Durable solutions using systems worthy of the 21<sup>st</sup> century are needed to streamline both the management of patient data and those generated by the laboratories doing DST. Lastly, infection control remains an important consideration in patient management both in the hospital and community settings.

We are now thirty-two years after the Almaty Declaration. And yet TB control services in most of eastern Europe continue to be discharged in a predominantly vertical fashion, with very poor integration in primary health care. Despite high TB notification rates in Central Asia, there are between one and five family doctors for each smear positive TB case reported.

MDR-TB is now a Regional priority for the WHO/EURO office. The vision is to have MDR-TB tackled through health system strengthening. A Consolidated Action Plan to Prevent and Combat M/XDR-TB 2011-2015 is being developed as a road map for Member States, WHO/Europe and its partners to follow. The Plan is being prepared in region-wide consultation with experts, patients and communities suffering from the disease. MSF has crucial role for the implementation of this plan. It will be submitted for endorsement by the WHO Regional Committee for Europe in Azerbaijan in September 2011 along with an accompanying resolution.

During your event you will hold discussions on the crucial issue of models of TB patient care. Hospitalisation has for very long been a mainstay of MDR-TB patient care in Central Asia. A recent review we did in four countries comparing MDR-TB treatment based mainly on ambulatory care with others based largely on inpatient treatment did not show evidence for better outcomes in the hospital based model. The provision of hospital care is an important backup to manage the sick patient who cannot be treated elsewhere. Nonetheless it bears disadvantages in distancing the patient from his home and from social networks and with the attendant risk of nosocomial infection with TB. WHO thus recommends that ambulatory care for MDR-TB patients be favoured wherever possible, reserving hospitalization only for very serious cases. It will take a bold decision indeed to move away from the paradigm of obligatory hospitalization to a more pragmatic way of doing things. But this is precisely an example of the weaknesses of the health care systems that have to be fixed through policy changes should we really want to make quick progress in MDR-TB control. So we place our trust in a new generation of inspired leaders in health care to break off from this legacy.

With these thoughts I wish you all success and we at WHO look forward to learn about the constructive recommendations from the coming two days of discussions.