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Report on the  
**SUBREGIONAL MEETING ON TUBERCULOSIS CONTROL IN  
THE COUNTRIES OF THE NEAR EAST**

Damascus, Syrian Arab Republic, 30 May - 1 June 1998



World Health Organization  
Regional Office for the Eastern Mediterranean  
Alexandria, Egypt  
1998

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## 1. INTRODUCTION

The Regional Office for the Eastern Mediterranean (EMRO) of the World Health Organization (WHO), in collaboration with the Government of the Syrian Arab Republic, convened a subregional meeting on tuberculosis control in the countries of Near East in Damascus, Syrian Arab Republic, from 30 May to 1 June 1998. The objective of the meeting was to discuss the possibility of launching a subregional tuberculosis control initiative for the countries of the Near East, namely Cyprus, Iraq, Jordan, Lebanon, Palestine and Syrian Arab Republic. The agenda and programme of the meeting are attached in Annex 1 and 2, respectively.

The managers of national tuberculosis control programmes in the ministries of health of four countries in Near East, namely Cyprus, Jordan, Lebanon and Syrian Arab Republic attended the meeting. Iraq and Palestine were not represented. The WHO Representatives in Iraq, Lebanon and Jordan and Syrian Arab Republic as well as WHO staff from headquarters and the Regional Office. Observers from the Syrian Arab Republic also attended the meeting. The list of participants is in Annex 3.

The meeting was addressed by His Excellency Dr M.I. Chatty, Minister of Health, Syrian Arab Republic, and Dr Omer Sulieman, WHO representative in Jordan and the Syrian Arab Republic, who delivered a message from Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean.

The Minister of Health welcomed the participants to the workshop and thanked the WHO Regional Office for the Eastern Mediterranean for its continuous efforts to assist countries in various aspects of health promotion and disease control. Professor Chatty mentioned that as a practising pathologist he had noticed an increase in the past decade in the number of tuberculosis patients referred to him. That and the problem of increasing multidrug resistance indicated to him the importance of a strong programme to combat the disease. The Minister gave a general view of the activities taken by the Syrian Arab Republic to implement the regional strategy of DOTS ALL OVER [directly observed treatment, short course, throughout the whole country]. He stressed the importance of joint efforts in this regard, and called the Near East Tuberculosis Control Initiative a welcome initiative for achieving the needed coordination and cooperation of the Near East countries in their fight against tuberculosis. Dr Chatty asked the participants to indulge in purposeful discussions and be assured of the support of their relevant ministers. His address ended by wishing everybody a prosperous meeting and a pleasant stay in Damascus.

Dr Gezairy welcomed the participants and extended his gratitude to Dr Chatty and his staff for their support and the arrangements for the meeting in his message.

Dr Gezairy emphasized the importance of the regional strategy on tuberculosis control. The strategy was formulated in 1997 aiming to achieve nationwide implementation of the WHO tuberculosis control strategy of directly observed

treatment, short-course (DOTS ALL OVER) in all countries by the year 2000, and tuberculosis elimination in the countries with low incidence of tuberculosis by the year 2010. Considerable progress had been made in the implementation of the regional strategy, including human resource development, review of national programmes, advocacy of the strategy and, above all, implementation and expansion of the DOTS strategy in many countries.

The Regional Director, however, stressed that DOTS ALL OVER would remain an enormous challenge. It would need more concerted effort from all the authorities concerned and, moreover, would require a mechanism through which the effort could be maximized. In this connection, Dr Gezairy described to the participants the Region's experiences in joint tuberculosis activities. This included the tuberculosis elimination initiative in the member states of the Gulf Cooperation Council and the Horn of Africa tuberculosis control initiative. He emphasized that both initiatives had successfully facilitated and supplemented the efforts of the countries concerned in the promotion of tuberculosis control.

Dr Gezairy said that this was the reason why WHO had decided to conduct this meeting by inviting managers of national tuberculosis programmes from the countries of the Near East. These countries had common social and cultural backgrounds and, more important, were strongly committed to the achievement of DOTS ALL OVER by the year 2000. The joint tuberculosis control initiative, if it took place, would provide a good opportunity to facilitate and supplement each participating country's efforts in achieving the regional strategy. The Regional Director wished the meeting every success.

## **2. WHO TUBERCULOSIS CONTROL STRATEGY OF DIRECTLY OBSERVED TREATMENT, SHORT-COURSE**

The participants and the WHO secretariat reviewed the principles of the DOTS strategy. It was clearly understood that achieving a high cure rate was essential for effective tuberculosis control as it was the only way to produce a strong effect on the epidemiological situation of tuberculosis in a community. Other interventions in the field of tuberculosis control might not be effective at all if the cure rate of the programme were not high sufficiently high. This is the reason why the implementation of the DOTS strategy is so important: it is the only proven way to achieve a high cure rate.

To do so, implementation of the all components of the DOTS strategy is very important. The components are: political commitment to implementation of DOTS, passive case-finding by sputum microscopy, short-course chemotherapy under direct observation, regular supply of antituberculosis drugs and rigorous monitoring and supervision. Of these principles, political commitment is the most important, as it induces sufficient financial and human-resource support to tuberculosis control.

### **3. THE REGIONAL TUBERCULOSIS CONTROL STRATEGY**

Regional Committee Resolution EM/RC44/R.6 (October 1997) urged Member States with low incidence of tuberculosis which had not adopted the target of tuberculosis elimination to do so and those with intermediate to high incidence of tuberculosis to implement the strategy of DOTS ALL OVER by the year 2000. The target of tuberculosis elimination was to reduce incidence rate of smear positive pulmonary tuberculosis to less than 1 per 100 000 population by the year 2010.

In light of the Resolution, the participants and the WHO secretariat reviewed the progress made in DOTS implementation in many countries of the Region. This included the accomplishment of DOTS ALL OVER in Morocco and the successful expansion of the DOTS strategy in the Syrian Arab Republic. The participants concluded from these success stories that the DOTS strategy was implementable and could achieve remarkable results in many different situations; two issues were found crucial: effective political commitment and strong technical leadership.

The participants reiterated their commitment in the implementation of the DOTS strategy and requested WHO to continue its technical support in this field. The participants also requested WHO to make tuberculosis a high agenda priority in the field of health as well as general development of the society in the international community. Establishment of effective tuberculosis control would need a multisectoral approach as had been observed in the improvement of tuberculosis situation in the industrialized countries.

### **4. REVIEW OF TUBERCULOSIS CONTROL IN THE COUNTRIES OF NEAR EAST**

The participants gave presentations on tuberculosis control activities and the tuberculosis situation in their respective countries by highlighting the following key indicators:

- Epidemiological situation of tuberculosis
  - estimated incidence of tuberculosis
- Implementation/expansion of the DOTS strategy
  - the start of DOTS projects
  - current DOTS coverage by population
  - case-finding activities in the DOTS projects (proportion of smear positive cases to all pulmonary cases)
  - sputum smear conversion rate at the end of second month of treatment
  - cure rate and treatment success rate
- Case detection rate (percentage of cases detected among existing cases)

- Control of anti-tuberculosis drugs in the private sector
- Use of fixed-dose combination tablets of antituberculosis drugs.

Table 1 summarizes the country situation.

As a summary of the country presentations, the following achievements were noted in the promotion of tuberculosis control in the participating countries:

- Successful implementation and expansion of DOTS strategy  
Cyprus and Jordan have achieved DOTS ALL OVER. The Syrian Arab Republic has shown successful expansion of the DOTS strategy with a high treatment success rate (92%).

**Table 1. DOTS and tuberculosis status in the countries of the Near East**

	Cyprus	Iraq	Jordan	Lebanon	Syrian Arab Republic
Estimated tuberculosis incidence	Low (7) <sup>a</sup>	High (133) <sup>a</sup>	Low (10) <sup>a</sup>	Medium (25) <sup>a</sup>	Medium (40) <sup>a</sup>
When DOTS projects started	1/98	4/98	1/98	Not yet	1/97
Current DOTS coverage	100%	5%	100%	Not yet	42%
% smear-positive among pulmonary tuberculosis	59%	39%	50%	40%	59% (DOTS) 43% (non-DOTS)
Smear conversion rate	NA	NA	NA	NA	85% (2nd mo.) 91% (3rd mo.)
Cure rate	96%	63%	79%	37%	91% (DOTS) 53% (non-DOTS)
Treatment success rate	96%	77%	79%	80%	91% (DOTS) 53% (non-DOTS)
Case detection rate	>80%	NA	>80%	50%	30%
Availability of anti-tuberculosis drugs in private sector	No	No	Yes (RFP <sup>b</sup> only)	Yes (except PZA <sup>c</sup> )	No
Use of combination tablets	Yes	Yes	Yes	No	Yes

Information from Palestine was not available.

<sup>a</sup> Figures in blankets indicate estimated incidence rate per 100 000 population

<sup>b</sup> RFP<sup>†</sup>: rifampicin

<sup>c</sup> PZA: pyrazinamide

- Control of anti-tuberculosis drugs in private sector  
Anti-tuberculosis drugs were not available over the counter in Cyprus, Iraq and Syria. The sale of anti-tuberculosis drugs over the counter was recently banned in Syria in accordance with the relevant Ministerial Decree.
- Continuous human resource development  
All tuberculosis managers at the national level and many tuberculosis coordinators at the intermediate levels were trained on the DOTS strategy

The major challenge for the participating countries was to achieve the Regional Committee Resolution (EM/RC44/R.6) targets by the set year. This would mean that Cyprus and Jordan, which have low incidence of tuberculosis and have achieved DOTS ALL OVER would need to move towards tuberculosis elimination. All other participating countries that had medium to high incidence of tuberculosis should put more efforts in the expansion of the DOTS strategy to achieve DOTS ALL OVER by the year 2000.

To do so, the following activities need to take place:

- induce more political commitment so as to obtain more financial resources to the programmes
- promote intersectoral collaboration and cooperation, in particular with private sector, academic society and nongovernmental organizations
- promote intrasectoral collaboration and cooperation, in particular for the integration of tuberculosis control programmes into the network of primary health care
- establish a laboratory network which could carry out quality control on sputum smear examination and antituberculosis drug resistant surveillance
- promote human resource development, with emphasis on training of general health personnel
- control the sale of antituberculosis drugs over the counter in the private sector
- establish an effective system for the control of tuberculosis cases among mobile populations and non-nationals.

## 5. NEAR EAST TUBERCULOSIS CONTROL INITIATIVE

### 5.1 Proposed areas for collaborative activities for the Near East Tuberculosis Control Initiative

In view of the above country presentations, it is clear that there are still a number of weak points in tuberculosis control programmes common to all the participating countries. A joint tuberculosis control initiative would facilitate and supplement efforts of each participating country in tuberculosis control by jointly solving common weak points.

Therefore, the following areas of collaboration were proposed by the WHO secretariat to the participants:

- Exchange of information
  - establishment of a system of intercountry information exchange
  - exchange periodic reports on tuberculosis situation and control activities
  - exchange of information about specific points in relation to tuberculosis control:
    - experience in involving the private sector
    - specific experience in DOTS implementation
    - experience about regulations regarding the use of anti-tuberculosis drugs
    - information on drug resistance
    - exchange of printed material on tuberculosis
- Coordinating tuberculosis control activities in mobile populations
  - strengthening tuberculosis control services in border areas
  - strengthening communication across borders
  - adoption of unified patient transfer form between countries
- Antituberculosis drug policy
  - standardizing drug policy in the participating countries
  - cooperation in antituberculosis drug production/procurement
  - joint regulations to prevent the sale of antituberculosis drugs over the counter
  - standardization of tuberculosis treatment regimens
  - encouragement of fixed dose combination drugs
- Cooperation in laboratory work
  - establishment of a subregional reference laboratory for tuberculosis
  - standardizing procedures of quality control of smear examination
  - coordinating drug resistance surveillance in the countries
- Training activities
  - establishment of joint training activities for different levels

- establishment of a field training centre for the participating countries
- joint training activities
- Establishment of a joint system of evaluation on tuberculosis control activities
- Exchange of tuberculosis control experts
- Joint operational research projects in tuberculosis control

## **5.2 Plenary discussions**

Based on the presentation on the proposed areas for collaborative activities for the Near East Tuberculosis Control Initiative, extensive discussions were held among the participants and the WHO secretariat.

The participants agreed in principle with the start of the joint tuberculosis control initiative in the countries of Near East. The participants recognized that there were several common weak points among their tuberculosis control programmes, and in view of the challenge in front of them, the participants realized that a joint initiative would facilitate and supplement the efforts to improve and strengthen their programmes.

In this connection, the participants extensively discussed the possible areas for collaborative work and agreed in principle with the proposed areas in the above chapter. The participants at the same time made several important remarks to clarify the course of collaboration in the joint initiative as highlighted hereafter:

- DOTS ALL OVER is the most important component of the Near East Tuberculosis Control Initiative (NETCI). Efforts should be continued by the participating countries which have not yet achieved DOTS ALL OVER namely Iraq, Lebanon, Palestine and Syrian Arab Republic, to ensure the achievement of DOTS ALL OVER by the year 2000. Those who have already achieved DOTS ALL OVER, namely Cyprus and Jordan, should move toward the tuberculosis elimination by the year 2010 as they have low incidence of tuberculosis.
- For the success of the Initiative, effort should be made to put tuberculosis as a high agenda priority in the field of health as well as social development in the countries of Near East. Lessons from the past indicate that social and economical development of the society did contribute the improvement of epidemiological situation of tuberculosis in the community. The joint Initiative should therefore take comprehensive approach in conjunction with other social development plans.

- In view of the presence of a strong private sector and other organizations in the field of health in the countries of the Near East, the role they should play in tuberculosis control should be elaborated in the joint Initiative. An intersectoral approach would be one of the key activities in the Initiative. For example, a meeting with national tuberculosis plan (NTP) managers and representatives of antituberculosis associations and other nongovernmental organizations concerned could take place to explore the most effective way of mutual collaboration.
- In addition, collaboration between general health services and tuberculosis control programmes is also crucial for the success of the joint Initiative. The intrasectoral approach would also need to be emphasized in the Near East Tuberculosis Control Initiative. Integration of the DOTS strategy into the network of primary health care is one facet of this approach.
- Mobilization of funds is important for the promotion of the Initiative. To do so, cost-effectiveness analysis of the DOTS strategy would be needed in the participating countries. The analysis would compare cost-effectiveness in DOTS project areas and non-DOTS project areas. The results could further convince decision-makers to provide more funds and support for the expansion of the DOTS projects.
- Antituberculosis drug policy is a sensitive matter for each participating country as it directly relates to internal policy. The Initiative should give due consideration to this point and should start situation analysis from the beginning.
- In order to facilitate and monitor the joint activities, the Initiative would need a coordinator. The participants nominated the manager of the national tuberculosis programme of Syria as a coordinator.

### **5.3 Joint plan of action for the Near East Tuberculosis Control Initiative**

The participants, with the help of the WHO secretariat, prepared a draft joint plan of action for the Initiative in line with the proposed areas for collaborative activities and the issues discussed in the plenary session. The main areas of collaboration are exchange of information, master training, mobile populations, laboratory network, anti-tuberculosis drug policy, joint operational researches, advocacy and resource mobilization. Each activity composed of action, product, responsible person (unit) and expected time for activities as shown hereafter:

*Information Exchange*

<b>Action</b>	<b>Product</b>	<b>Responsible</b>	<b>Timing</b>
Exchange documents such as manuals and training materials	Files compiled documents	NETCI coordinator, NTP, WHO	June 1998
Exchange experiences on DOTS implementation by issuing newsletter	NETCI newsletter	NETCI coordinator, NTP, WHO	By September 1998
Exchange and issue annual reports of tuberculosis control	Annual report	NETCI coordinator, NTP, WHO	By January 1999

*Master training*

<b>Action</b>	<b>Product</b>	<b>Responsible</b>	<b>Timing</b>
Joint training for tuberculosis coordinators	Trained tuberculosis coordinators	NETCI coordinator, WHO, NTP	October 1998
Laboratory training for national reference laboratory staff	Trained laboratory staff	NETCI coordinator, WHO, NTP	1999

*Mobile populations*

<b>Action</b>	<b>Product</b>	<b>Responsible</b>	<b>Timing</b>
Cross-border tuberculosis control system between Jordan, Lebanon and Syrian Arab Republic	Plan for the system, including referral form and guidelines	NTPs, NETCI coordinators	Finalize plan by September 1998

*Laboratory network*

- The details of activities will be discussed after establishing national reference laboratory for tuberculosis control in each participating country and training the staff of the laboratory in 1998 and 1999.

- The potential areas for collaboration would be:
  - standardized procedures on quality control of smear examination
  - coordination on anti-tuberculosis drug resistance surveillance
  - subregional reference laboratory on tuberculosis

*Anti-tuberculosis drug policy*

Action	Product	Responsible	Timing
Survey on antituberculosis drug policy/use: treatment regimens strength of antituberculosis drugs fixed dose combination tablets	Survey results	NETCI coordinator, NTP, WHO	September 1998

*Joint operational researches*

- Preparation of protocols on the following research subjects in collaboration with the Regional Office, Global Tuberculosis Programme and other potential agencies by September 1998
  - cost-effectiveness analysis on DOTS and non-DOTS projects
  - integration of DOTS and community mobilization (basic minimum needs, healthy villages)
  - involvement of the private sector.

*Advocacy and resource mobilization*

Action	Product	Responsible	Timing
Issue press release on the launch of the initiative	Press release	NETCI coordinator, NTP, WHO	June 1998
Making list of antituberculosis associations and other concerned nongovernmental organizations	Mailing list	NETCI coordinator, NTP, WHO	June 1998
Meeting with antituberculosis associations and nongovernmental organizations	Collaboration, plan of action	NETCI coordinator, NTP, WHO	September 1998
World Tuberculosis Day	Increased awareness	NETCI coordinator, NTP, WHO	24 March 1999

## 6. RECOMMENDATIONS

In line with the Regional Committee Resolution (EM/RC44/R.6, October 1997) urging Member States with low incidence of tuberculosis which have not yet adopted the target of tuberculosis elimination to do so and those with intermediate to high incidence of tuberculosis to implement the strategy of DOTS ALL OVER, and in view of the proximity of the set year of the global targets for tuberculosis control and the changes in the epidemiological pattern of tuberculosis caused by the anticipated HIV epidemic, emergence of multidrug-resistance and socioeconomic changes, and in consideration that successful implementation of the DOTS strategy needs comprehensive multisectoral approach, the participants of the Meeting felt that joint tuberculosis control activities by the participating countries were needed to facilitate and supplement the successful implementation of the above Resolution in their countries. The participants accordingly propose that:

1. The Ministers of Health of Cyprus, Iraq, Jordan, Lebanon, Palestine and Syrian Arab Republic endorse and launch the joint tuberculosis control initiative in these countries, the Near East Tuberculosis Control Initiative (NETCI), using the most appropriate means, as a mechanism to supplement and facilitate the effort of national tuberculosis control programmes in accomplishing the Regional Committee Resolution (EM/RC44/R.6) and the global targets.
2. The following areas of joint actions identified by the participants should form the basis for the Near East Tuberculosis Control Initiative
  - exchange of information and experiences in DOTS implementation
  - master training for tuberculosis coordinators and for staff at the national reference laboratories on tuberculosis control
  - establishment of tuberculosis control systems for mobile populations
  - establishment of a laboratory network for tuberculosis control
  - development of a common antituberculosis drug policy
  - joint operational research
  - promotion and establishment of strong collaborative activities with nongovernmental organizations in the field of tuberculosis control
  - promotion of advocacy activities to ensure political and community support for the programme and resource mobilization.

The Ministers of Health should endorse the above plans of action for the launch of NETCI and provide necessary political and financial support.

3. WHO should provide necessary support within its capacity for the successful launch of the NETCI and implementation of the plans of action particularly for the joint master training on tuberculosis, establishment of a subregional laboratory network for tuberculosis control and in operational research, advocacy and resource mobilization efforts.

4. WHO should initiate steps to ensure collaborative support from potential donors in the field of tuberculosis control.
5. The authorities concerned, particularly the ministries of health and WHO, should take necessary steps to strengthen collaboration and cooperation among the national tuberculosis programmes, private sector and nongovernmental organizations.

## 6. CLOSING

Dr Z. Hallaj, regional adviser on control of communicable diseases, WHO Regional Office for the Eastern Mediterranean, acknowledged the enthusiastic participation and contribution of the participants in the meeting. This has resulted in an agreement to initiate the Near East Tuberculosis Control Initiative (NETCI) and possible areas for collaborative activities in the future. Dr O. Sulieman, WHO Representative to Jordan and the Syrian Arab Republic, remarked that he was impressed by the strong team spirit of the managers of national tuberculosis programmes and WHO secretariat, which reminded him of the enthusiasm during the smallpox eradication campaign in the 1960s.

The participants and the WHO secretariat underlined once again the importance of the monitoring of the implementation of the joint action plan according to its time schedule, and the meeting was closed.

**Annex 1**

**AGENDA**

1. Registration
2. Opening session
3. Introduction of participants
4. WHO DOTS strategy
5. Eastern Mediterranean Region tuberculosis control strategy
6. Tuberculosis situation and control in countries of the Near East
7. Outline of joint action plans in tuberculosis control
8. Developing country action plans and a joint action plan
9. Recommendations
10. Closing session

**Annex 2**

**PROGRAMME**

**Saturday, 30 May 1998**

- |             |                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:30–09:00 | Registration                                                                                                                                                                                   |
| 09:00–09:30 | Opening session<br>Message from H.E. Minister of Health, Syrian Arab Republic<br>Message from the Regional Director, WHO/EMRO<br>Introduction of participants<br>Objectives and method of work |
| 10:00–10:30 | WHO DOTS strategy<br>Dr J. Kumarsan, WHO/HQ                                                                                                                                                    |
| 10:30–11:30 | EMRO tuberculosis control strategy<br>Dr Z. Hallaj, WHO/EMRO                                                                                                                                   |
| 11:30–15:30 | Country presentations                                                                                                                                                                          |

**Sunday, 31 May 1998**

- |             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| 09:00–10:00 | TB situation and control in countries of the Near East (a summary)              |
| 10:00–10:30 | Outline of joint action plans in tuberculosis control<br>Dr Z. Hallaj, WHO/EMRO |
| 10:30–11:00 | Guidelines for action plans<br>Dr A. Seita, WHO/EMRO                            |
| 11:30–15:30 | Developing country action plans and a joint action plan                         |

**Monday, 1 June 1998**

09:00–10:00	Presentation of country action plans
10:00–10:30	Presentation of joint action plan
11:00–12:00	Final discussions, recommendations and closing session

**Annex 3**

**LIST OF PARTICIPANTS**

**CYPRUS**

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WHO Representative  
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Dr Omer Sulieman  
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**SYRIAN ARAB REPUBLIC**

Dr Samiha Baghdady  
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**Damascus**

Dr Omer Sulieman  
WHO Representative  
**Damascus**

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Dr Hussam Tibi  
Field Disease Control Officer  
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### **OBSERVERS**

Fadia Maamori, Tuberculosis Coordinator, Tartous, Syrian Arab Republic

Dr Hasasan Kabhani, Medical Doctor, Damascus Centre for Tuberculosis Control,  
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Dr George Al Assafin, Member, National Committee for Tuberculosis Control, Syrian  
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Dr Mona Jaradeh, Coordinator of Lattakia Tuberculosis Control Programme, Syrian  
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