

Lessons from the field

Reaching the global tuberculosis control targets in the Western Pacific Region

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Problem In 1999, a tuberculosis (TB) crisis was declared in the Western Pacific Region.

Approach In response, WHO established the Stop TB Special Project, which sought to halve 2000 levels of TB prevalence and mortality by 2010 through first reaching the global 2005 TB targets.

Local setting Particular issues in the region were low political commitment, inadequate numbers of staff (particularly of adequately trained staff) and a wide variation in TB burden between countries.

Relevant changes WHO's leadership (especially the commitment of its Regional Director) and building of regional and national partnerships strengthened political and donor commitment. This accelerated the implementation of regional and national TB control plans, allowing the region to reach the 2005 targets for TB control.

Lessons learned The experience in the Western Pacific Region demonstrated that WHO's leadership was pivotal in generating the political commitment necessary to accelerate actions on the ground. The region's investment in building partnerships and a motivated workforce was an important contribution towards achieving the 2005 global TB targets.

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Une traduction en français de ce résumé figure à la fin de l'article. Al final del artículo se facilita una traducción al español. الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

Background

The Western Pacific Region bears a quarter of the world's tuberculosis (TB) burden, with an estimated two million incident cases annually. In 1999, only about 40% of the estimated smear-positive cases were detected and treated.¹ The WHO Regional Committee for the Western Pacific declared a "tuberculosis crisis" in the region and established the Stop TB Special Project, aimed at halving 2000 levels of TB prevalence and mortality by 2010.² A first step in the project was the Regional Strategic Plan to Stop TB 2000–2005; this involved expanding WHO's DOTS strategy³ to cover the region, with the aim of detecting at least 70% of infectious TB cases and curing at least 85% of the detected patients by 2005.

Support was provided to all countries and areas in the region, with special attention directed to seven countries with a high burden of TB (HBCs) – Cambodia, China, the Lao People's

Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam – that together bear more than 90% of the burden of TB in the region.³ Countries with an intermediate burden of TB received support to address specific issues such as ageing, migration and co-infection with TB and HIV. Separate mechanisms were established to support the 21 small Pacific island countries and areas.⁴

The regional plan, together with national TB control plans for 2000–2005, provided vision and strategic directions. Overall technical and strategic guidance were provided by a Technical Advisory Group (TAG) established by the special project and comprising nine international TB experts. To meet the ambitious but achievable 2005 targets and the 2010 goal,^{3–6} the group recommended full implementation of the regional and country 5-year plans; these were endorsed by countries in the region at the WHO Regional Committee Meeting in September 2000.

Progress 2000–2005

Over the last six years, DOTS expanded rapidly across the Western Pacific Region, and the 2005 global TB control targets were achieved overall (Fig. 1). The regional case detection rate at the end of 2005 was 76%, and the treatment success rate has consistently exceeded the 85% target over the past 10 years. Four of the seven HBCs have achieved the global TB control targets, and two more are very close to achieving these targets (Table 1).⁷ The increase in case detection rate from 2002 to 2005 can be attributed to the expansion of DOTS services to the entire region, the involvement of public hospitals in China and the involvement to some extent of the private sector, particularly in the Philippines.⁷ By the end of 2005, almost 100% of new TB cases were detected in DOTS areas (Fig. 1). Based on published estimates derived using well-documented methods,^{8,9} TB prevalence and mortality in the region declined by 21% and 19%, respectively,

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from 2000 to 2005,⁷ and are expected to decline further because of improvements in TB control.

Important factors that contributed to the achievement of the 2005 TB control targets – discussed below – were:

- strong leadership and technical guidance;
- government commitment;
- effective partnership; and
- persistent efforts of front-line TB workers in national TB programmes (NTPs).

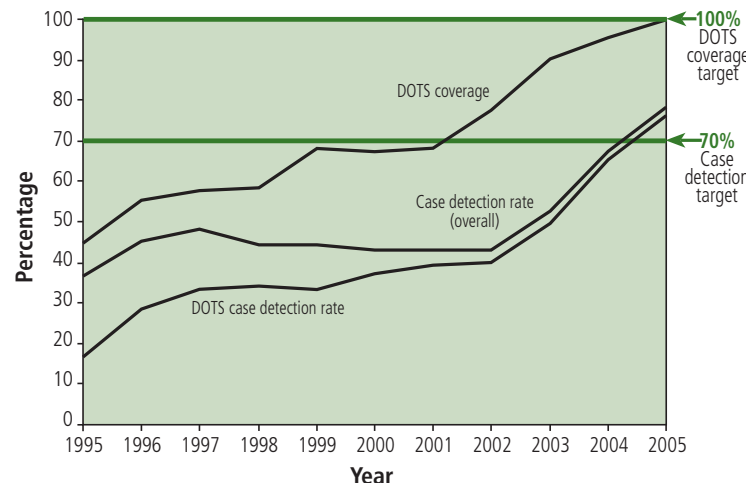
Strong leadership and technical guidance

Following the request of Member States to prioritize TB control, the WHO Regional Director in the Western Pacific, Dr Shigeru Omi, initiated the Stop TB Special Project. Dr Omi's leadership and personal commitment had an immediate impact – countries placed TB high on their political agendas; resources for TB from governments, donors and partners flowed into the region; TB has been on the agenda of every Regional Committee Meeting since 2000; the TAG met four times; and high-level meetings took place in all HBCs and in the Pacific. TB gained a high political profile, especially in countries where improved TB control was most needed, and the region was able to expand its technical capacity. For example, WHO staffing in the region increased from 2 in 2000 to 14 in 2005, facilitating regional and country-based technical assistance.

Government commitment

Human and financial resources for TB control increased in most countries and areas. This was particularly true of HBCs, where total NTP budgets increased by more than 60% from 2000 to

Fig. 1. Trends in DOTS coverage and case detection in the Western Pacific Region, 1995–2005^a



^a The acceleration in case detection, particularly between 2002 and 2005, can be attributed to both the rapid expansion of DOTS and the involvement of providers outside of the national tuberculosis control programmes (e.g. general hospitals and the private sector).

2005, with central governments providing a substantial share of the budget particularly in China (60%), the Philippines (55%) and Viet Nam (41%).⁹ A meeting in China in 2004, co-chaired by the Vice-Minister of Health and the WHO Regional Director, brought together vice-governors from 12 priority provinces to accelerate DOTS implementation at the local level. The meeting helped to boost activities in China, with case detection increasing from 37% in 2000 to 80% in 2005.^{7,10} This progress was crucial to pushing the overall case detection rate beyond the 70% target.

Effective partnerships

Establishment of the Interagency Coordinating Committee (ICC) created a broad network of partners at the regional and country levels, resulting in increased

financial resources.¹¹ The ICC helped to reduce the region's funding gap for TB control from 40% (US\$ 266 million) in 2000 to about 10% (US\$ 67 million) in 2003. External funding came mainly from the governments of Australia, Canada, Japan, the United Kingdom, the United States of America, and from the World Bank. The Global Fund to Fight AIDS, Tuberculosis and Malaria also provided funding, and by the end of 2005 had become the region's largest external funding source for TB control.

Creation of a network of international, regional and national technical partners facilitated by the Stop TB Special Project allowed for rigorous strategic discussions and coordinated technical support for countries. The pairing arrangement between agencies in the region's developed and developing countries – exemplified by the Pacific TB Laboratory Initiative and the international network of laboratories in the region^{12,13} – demonstrated how partnerships can strengthen technical capacity in resource-limited settings.

Motivated and well-trained TB-care workforce

The commitment of health workers was crucial to the success of the initiative. From 2000 to 2005, numbers of health workers directly or indirectly involved in TB control increased substantially in most HBCs. For example, in Cambodia the number of health staff working for

Table 1. Case detection rate and treatment success rate by country, 2005

Country/country groups	Case detection rate (%)	Treatment success rate ^a (%)
Cambodia	66	91
China	80	94
Lao People's Democratic Republic	68	86
Mongolia	82	88
Papua New Guinea	21	65
Philippines	75	87
Viet Nam	84	93
Pacific island countries and areas	65	92
Western Pacific Region	76	91

^a Treatment outcome for 2004 cohort.

the NTP increased from 800 to 2500 during this period (personal communication, Dr Mao Tan Eang, January 2007). The substantial number of grass-roots TB workers trained by NTPs (e.g. in Cambodia, China, the Philippines and Viet Nam¹⁴) contributed considerably to improved TB case detection and monitoring of treatment. Throughout the region, workforces were motivated by increases in staff, national and international training opportunities and incentive schemes (e.g. monetary incentives for sputum collection and patient notification and treatment completion in some countries).

Lessons learned

The experience of this region demonstrated the importance of leadership in advancing TB control. By establishing the Stop TB Special Project, sharing his

vision and ensuring its implementation, the WHO Regional Director was pivotal in generating regional political commitment. The resulting increase in human and financial resources for TB control paved the way for successful regional expansion of the DOTS strategy.

Innovative approaches, such as the involvement of health-care providers outside the NTP network in the Philippines and in China and the building of national and regional laboratory networks, helped to achieve the case detection target. Effective technical assistance by WHO and its partners, combined with increased government support, strengthened NTPs. Tapping into resources from local governments, communities, public agencies and the private sector in some countries allowed NTPs to extend the reach of DOTS services.

Mechanisms at national and regional levels for discussing and adapting

strategic directions and evaluating programme implementation were crucial. Rigorous monitoring of progress helped countries to optimize programme implementation.

Four factors were critical to achievement of the 2005 TB control targets in the Western Pacific Region: leadership (both political and technical), government commitment, partnership, and a motivated and well-trained workforce. The region is now better positioned to reach the goal of halving TB prevalence and mortality by 2010. ■

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Competing interests: None declared.

Résumé

Réalisation des objectifs mondiaux de la lutte antituberculeuse dans la Région du Pacifique occidental

Problématique En 1999, une « crise de la tuberculose (TB) » a été déclarée dans la Région du Pacifique Occidental.

Démarche En réponse à cette situation, l'OMS a mis en place un projet spécial Halte à la tuberculose, ayant pour objectif de diviser par deux d'ici 2010 la prévalence de la TB et la mortalité due à cette maladie par rapport à la valeur de ces paramètres pour l'année 2000, en réalisant au préalable les objectifs mondiaux pour 2005 concernant la TB.

Contexte local Les problèmes particuliers à cette région sont le faible engagement des pouvoirs publics, le manque de personnel (et notamment de personnel correctement formé) et la grande variabilité de la charge de tuberculose entre les divers pays.

Modifications pertinentes Le rôle mobilisateur joué par l'OMS (et notamment l'implication de son directeur régional)

et l'établissement de partenariats régionaux et nationaux ont permis de renforcer l'engagement des dirigeants politiques et des donateurs. Ces interventions ont accéléré la mise en œuvre des plans régionaux et nationaux de lutte antituberculeuse et la région a ainsi pu atteindre les objectifs pour 2005 en matière de lutte contre la TB.

Enseignements tirés L'expérience acquise dans la Région du Pacifique Occidental a mis en évidence le rôle mobilisateur essentiel de l'OMS pour obtenir l'implication des dirigeants politiques nécessaire à l'accélération des interventions sur le terrain. L'effort de la région pour constituer des partenariats et la présence d'une main d'œuvre motivée ont largement contribué à la réalisation des objectifs pour 2005 en matière de lutte contre la TB.

Resumen

Logro de las metas mundiales de control de la tuberculosis en la Región del Pacífico Occidental

Problema En 1999 se declaró una crisis de tuberculosis en la Región del Pacífico Occidental.

Métodos En respuesta al problema, la OMS estableció el Proyecto Especial Alto a la Tuberculosis, con el objetivo de llegar a 2010 habiendo reducido a la mitad, respecto a 2000, las cifras de la prevalencia de tuberculosis y la mortalidad por esa causa, tras haber alcanzado antes las metas mundiales de 2005 para esa enfermedad.

Contexto local Los problemas particulares de la región eran el bajo compromiso político, la falta de personal (en especial de personal adecuadamente preparado) y la amplia variación de la carga de tuberculosis entre países.

Cambios destacables El liderazgo de la OMS (especialmente el compromiso de su Director Regional) y la creación de alianzas

regionales y nacionales reforzaron el compromiso político y de los donantes. Esto aceleró la puesta en marcha de planes regionales y nacionales de lucha antituberculosa y permitió a la región alcanzar los objetivos de control de la tuberculosis fijados para 2005.

Enseñanzas resultantes La experiencia adquirida en la Región del Pacífico Occidental demostró que el liderazgo de la OMS era fundamental si se quería generar el compromiso político necesario para acelerar las intervenciones sobre el terreno. La inversión de la Región en la creación de fórmulas de colaboración y en una fuerza laboral motivada fue una contribución importante para el logro de las metas mundiales de 2005 contra la tuberculosis.

ملخص

بلوغ الأهداف العالمية لمكافحة السل في إقليم غرب المحيط الهادئ

المشكلة: في عام 1999 أُعلن أن السل يمثل أزمة في إقليم غرب المحيط الهادئ.

الأسلوب: واستجابةً لذلك أُسست منظمة الصحة العالمية المشروع الخاص لدحر السل، والذي كان يتوخى إنقاص معدلات انتشار ووفيات السل في عام 2010 إلى نصف ما كانت عليه في عام 2000، وذلك من خلال البدء ببلوغ الأهداف العالمية لمكافحة السل لعام 2005.

الموقع المحلي: لقد كانت المشكلات الخاصة بالإقليم هي ضعف الالتزام السياسي، وقلّة أعداد العاملين (ولاسيّما المدربين منهم) مع تفاوت كبير بين البلدان في ما تتحمّله من أعباء السل.

التبدلات الملائمة: لقد أدّت القيادة الرشيدة لمنظمة الصحة العالمية، (ولاسيّما

ما أظهره المدير الإقليمي من التزام) وبناء الشراكات الوطنية والإقليمية إلى تقوية الالتزام السياسي والتزام المانحين، مما عجل من تنفيذ الخطط الوطنية والإقليمية لمكافحة السل، وسمح للبلدان ببلوغ أهداف عام 2005 لمكافحة السل.

الدروس المستفادة: أظهرت الخبرات المكتسبة في إقليم غرب المحيط الهادئ أن قيادة منظمة الصحة العالمية على درجة بالغة من الأهمية في توليد الالتزام السياسي اللازم لتعجيل تنفيذ الأنشطة الميدانية. وقد كان استثمار الإقليم في بناء الشراكات والقوى العاملة التي تتمتع بالحوافز مساهمة هامة نحو تحقيق الأهداف العالمية لمكافحة السل لعام 2005.

References

1. *Tuberculosis control in the WHO Western Pacific Region. 2000 report.* Manila: WHO Regional Office for the Western Pacific; 2000.
2. *Resolution WPR/RC51.R4. Tuberculosis prevention and control. Report from the fifty-first session of the Regional Committee for the Western Pacific Region, Manila, 18–22 September 2000.* Manila: WHO Regional Office for the Western Pacific; 2000.
3. *Regional strategic plan to stop TB in the Western Pacific, 2000–2005.* Manila: WHO Regional Office for the Western Pacific; 2000.
4. *Report on the First Stop TB Meeting in the Pacific Islands, Noumea, Caledonia, 26–29 June 2000.* Manila: WHO Regional Office for the Western Pacific; 2000.
5. *Strategic Plan to Stop TB in the Western Pacific 2006–2010.* Manila: WHO Regional Office for the Western Pacific; 2006.
6. Styblo K, Bumgarner JR. *Tuberculosis can be controlled with existing technologies: evidence.* The Hague: Tuberculosis Surveillance Research Unit; 1991, pp. 60–72.
7. *Tuberculosis control in the Western Pacific Region. 2007 report.* Manila: WHO Regional Office for the Western Pacific; 2007.
8. Dye C, Scheele S, Dolin P, Pathania V, Raviglione MC. Global burden of tuberculosis: estimated incidence, prevalence, mortality by country. *JAMA* 1999;282:677-86.
9. *Global tuberculosis control: surveillance, planning and financing. WHO report 2006.* Geneva: WHO; 2006.
10. *Tuberculosis control in the Western Pacific Region. 2002 report.* Manila: WHO Regional Office for the Western Pacific; 2002.
11. *Fighting TB — forging ahead: overview of the Stop TB Special Project in the Western Pacific Region.* Manila: WHO Regional Office for the Western Pacific; 2002.
12. *Report on the second Stop TB meeting in the Pacific Islands, Noumea, New Caledonia, 30 March – 2 April 2004.* Manila: WHO Regional Office for the Western Pacific; 2004.
13. *The work of WHO in the Western Pacific Region: report of the Regional Director, 1 July 2004 – 30 June 2005.* Manila: WHO Regional Office for the Western Pacific; 2005.
14. The role of communications in Viet Nam's fight against tuberculosis. In: *Health communication insights, September 2004.* Baltimore: Health Communication Partnership; 2004.