Research on infectious diseases

Knowledge and programmatic gaps exist in the prevention and control of infectious diseases of poverty, such as dengue, HIV/AIDS, NTDs, malaria, sexually transmitted infections and tuberculosis. A regional research framework to address these diseases and gaps is needed. The Regional Office works closely with research institutions, networks, WHO collaborating centres and the WHO Special Programme for Research and Training in Tropical Diseases (TDR) in order to promote research on infectious diseases of poverty.

This past year, WHO drafted the Regional Research Framework on Infectious Diseases of Poverty through a series of consultations with stakeholders. The framework highlights the importance of research capacity-building, tool development, coordination, resource mobilization, and the translation of evidence into policies and programmes. The Regional Office for the Western Pacific will collaborate further with other regions to develop an overarching, Organization-wide research framework in 2013.

As part of the framework, WHO advanced activities for capacity-building. WHO and TDR jointly supported regional research networks such as the Regional Network for Asian Schistosomiasis and other Helminth Zoonoses (RNAS+) and the ASEAN Network for Drugs, Diagnostics and Vaccines Innovation. WHO continued to build the capacities of new researchers and disease control programme staff through workshops on writing research proposals and scientific papers. Four research projects in the Region under the Joint WHO/TDR Small Grants Programme for Operational Research in Communicable Diseases were completed, and four studies previously conducted under the programme were published in peer-reviewed journals.

HIV/AIDS and Sexually Transmitted Infections

Strategic issues

In 2010, an estimated 1.3 million adults and children were living with HIV in the Western Pacific Region, resulting in an HIV prevalence rate of 0.1%. Over the past decade, the rate of new HIV infections in the Western Pacific Region has declined, and the HIV epidemic has shown tentative signs of stability. The number of new infections declined from 150 000 in 2001 to 130 000 in 2009 and 2010. The Philippines is one of seven countries in the world—and the only country in the Region—where the HIV epidemic has been rising in recent years. Regionally, as the epidemic has matured, the annual number of AIDS-related deaths rose from 33 000 in 2001 to 80 000 in 2010, but the number has been stable from 2007 to 2010.

Now far greater awareness exists, and the implementation of effective and evidence-based prevention approaches is also much greater. Remarkable advances in treatment and prevention, as well as the development of new tools and techniques, have improved outcomes. However, a few challenges stand in the way of achieving universal access to prevention, treatment and care.

In recent years, antiretroviral treatment (ART) has increased more than tenfold, with the number of patients receiving treatment rising from 17 000 in 2004 to 203 000 in 2010. But for every person who embarks on treatment, two new infections are detected. In the current funding climate, major donors are pulling away from HIV programmes, creating a real danger that the gains of recent years might be eroded due to dwindling resources.

In some countries, notable progress has been made in reducing prevalence among the
most-at-risk populations, especially female sex workers who have been empowered to seek prevention and treatment themselves. But the situation remains alarming when it comes to injecting drug users and men who have sex with men—given the rapid spread of HIV documented in these populations in many countries.

Appropriate services to prevent mother-to-child transmission of HIV are still inadequate in the Region, even though availability of services and testing among women is increasing. As a consequence, there were 39,000 new cases of paediatric HIV in 2010. Despite the late start of paediatric treatment in the Region, evidence has shown ART coverage at 42% among children living with HIV in 2010.

**Action and results**

Future incidence of HIV/AIDS will be influenced directly by the level at which HIV prevention and treatment are sustained and strengthened. In the Western Pacific Region, efforts have focused on expanding health sector interventions to prevent HIV infection among the most-at-risk populations and providing treatment and care to people living with HIV, as well as tracking and monitoring both epidemics and responses.

Several guidance documents and tools were developed to support countries to scale up prevention interventions, including: a biregional guidance document called *Second Generation Interventions with Sex Workers in Asia and the Pacific: An Operational Guide for the Health Sector*; a training package for health-care providers serving men who have sex with men and transgender people; technical notes on amphetamine stimulants; and the *Conceptual Framework on the Elimination of New Paediatric HIV Infections and Congenital Syphilis in Asia Pacific 2011–2015*. The capacity of Member States to provide HIV intervention services to sex workers at the community level was strengthened through a field visit to the Avahan India AIDS programme.

A regional assessment of HIV, sexually transmitted infections and other health concerns among transgender people in Asia and the Pacific was conducted, in partnership with the United Nations Development Programme, the Asia Pacific Transgender Network, and the Asia Pacific Coalition on Male Sexual Health, to support advocacy at the global, regional and country levels.

The results of a WHO-supported rapid assessment and vulnerability study among people who inject drugs in Cebu, Philippines, paved the way for the development of a comprehensive package of interventions to stop transmission among people who inject drugs.

Member States were supported to adapt, implement and monitor new WHO guidelines on ART and the prevention of mother-to-child transmission of HIV. The annual ART survey showed that countries are aligned with the new WHO guidelines, including earlier initiation of ART and the phasing out of D4T, an anti-HIV
drug, to reduce drug toxicity. WHO worked with partners, including the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the Asia Pacific Network of People Living with HIV/AIDS, to meet the increased demand for antiretrovirals due to the earlier initiation of ART and to address potential challenges to antiretroviral supplies in accordance with the Agreement on the Trade-related Aspects of Intellectual Property Rights. WHO organized a meeting with the National Institutes of Health of the United States to coordinate demonstration projects and the implementation of research in Asia on new WHO guidelines on HIV testing, counselling and ART for treatment and prevention among couples in which only one partner is HIV positive. Results will guide policy decisions, the scale up of programmes, and normative guidance development on the strategic use of antiretrovirals for prevention and treatment.

Implementation of a joint operations plan developed with the UNAIDS Regional Support Team for Asia and the Pacific has enhanced harmonization of technical support to key countries and has strengthened partnerships among cosponsors and regional civil society partners. In line with the joint operations plan, the “Treatment 2.0” steering committee and task force were established to support the scale up of HIV treatment and care in the Region. The Asia task force on the prevention of mother-to-child HIV transmission supported countries to develop plans to eliminate mother-to-child transmission of HIV and congenital syphilis. A tool to validate...
elimination of mother-to-child transmission of HIV and congenital syphilis was piloted in Malaysia and will inform global guidance.

A 10-year regional report on HIV epidemiology and response was published to track the epidemic and monitor the response from 2000 to 2011. WHO continued to lead HIV drug resistance surveillance in the Region, and a systematic review of the HIV drug resistance assessment in the Region was published. In addition, ongoing support to the gonococcal antimicrobial surveillance programme was provided.

**Future directions**

In the coming year, WHO will continue to support the “Treatment 2.0” initiative in an effort to scale up the next phase of HIV treatment and focus on prevention and comprehensive services for key affected populations. In addition, the Organization will work to eliminate paediatric HIV and congenital syphilis. It also will support health systems strengthening to sustain responses to the HIV epidemic and encourage the use of strategic information for evidence-based programming and impact monitoring.

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**Stop TB and Leprosy Elimination**

### Tuberculosis

**Strategic issues**

The Western Pacific Region faces significant challenges in tuberculosis (TB) control, including widespread TB among vulnerable and marginalized populations, TB/HIV co-infection, and the emergence and spread of multidrug-resistant TB (MDR-TB). The *Regional Strategy to Stop Tuberculosis in the Western Pacific (2011–2015)* addresses those challenges and provides guidance to Member States on the development and implementation of their national TB control strategies.

The strategy highlights the need for cross-cutting collaboration in most areas of TB control. Within WHO, the Stop TB unit works across all levels of the Organization in areas such as TB/HIV co-infection, operational research, MDR-TB, and TB monitoring among migrants and prisoners. Stop TB hosts the secretariat of the cross-divisional Antimicrobial Resistance Working Group, which addresses numerous cross-cutting health systems issues.

Over the past year, WHO supported several countries with their National TB Programme reviews and TB prevalence surveys and assisted in the preparation of proposals submitted to the Global Fund to Fight AIDS, Tuberculosis and Malaria.

**Action and results**

Significant progress has been made in TB control in the Region over the past decade. While more than 1.3 million people in the Region are diagnosed with TB annually, more than 90% of those with infectious forms of pulmonary