

The challenge of communicable diseases in the WHO South-East Asia Region

Jai P Narain^a & R Bhatia^a

The South-East Asia Region of the World Health Organization (WHO) is critically important from the global health perspective. Home to 25% of the world's population and to 30% of the world's poor, it suffers from high burdens of communicable and non-communicable diseases against a background of relatively poor health infrastructure. Progress in global health will not be possible without visible progress in the WHO South-East Asia Region (<http://www.who.int/about/regions/searo>).

Communicable diseases cause 6 of the region's 14 million annual deaths, which in turn contribute 42% of all the disability-adjusted life years lost.¹ An interplay of socioeconomic, environmental and behavioural factors, as well as population movements, foster the spread of communicable diseases,² both within and across borders, and threaten international health security. The situation is worsened by globalization and rapid economic activity, often unplanned and unregulated, and by the region's considerable poverty, prevailing inequities, and inability to allocate increased resources for public health.³

In spite of these challenges, the region has made enormous strides over the past decade. The regional Guinea worm disease target for global eradication was attained, leprosy was eliminated from all countries except one, and yaws was eliminated from India. Due to unprecedented national and international efforts, poliomyelitis is now on the verge of eradication globally, with cases reported from only a few pockets in northern India, northern Nigeria and the border between Afghanistan and Pakistan. Action at the local level in the form of both biomedical and social interventions, plus efforts to target unreached populations, are expected to contribute to successful outcomes in India, as articulated by Arora et al.⁴ The region

has also targeted four neglected tropical diseases for elimination: leprosy, lymphatic filariasis, visceral leishmaniasis (kala-azar) and yaws. These successes and experience can provide valuable lessons for other regions of the world.⁵ Millennium Development Goal (MDG) targets for tuberculosis control also appear within grasp.⁶

Much progress has unquestionably been made to date, yet emerging communicable diseases continue to challenge public health. Diseases like dengue and chikungunya fever, not to mention pandemic influenza A (H1N1) 2009, are spreading to newer areas and placing unprecedented demands on health services. Frequent outbreaks of cholera continue to occur.⁷ Climate change is likely to exacerbate the spread and severity of vector- and waterborne diseases. A better understanding of the ecological, environmental, and behavioural determinants of disease transmission,^{8,9} and its application in national programmes is urgently needed.

The burden of human immunodeficiency virus (HIV) infection in the region, estimated at 3.5 million people, is second only to sub-Saharan Africa's. The generic antiretrovirals produced by the region's thriving pharmaceutical industry are greatly improving the survival of patients the world over and rendering HIV infection a chronic, manageable condition. Although antiretroviral therapy delivered at health facilities is highly effective, as shown by Sharma et al.,¹⁰ nearly 60% of HIV-infected people in the region lack access to it.

Tragically, nearly 2 million children under the age of 5 years still die annually in the world from pneumonia and acute diarrhoea, mostly in the WHO African and South-East Asia regions, despite the availability of simple and cost-effective interventions.¹ A comprehensive, community-based approach to scale up prevention and

case management can yield impressive results, as demonstrated in Nepal.¹¹

Clearly, communicable diseases in the region pose enormous challenges but also special opportunities for action. All countries are striving to implement and document innovative approaches to disease control and share their experiences with each other. Core capacities are being built for detecting new pathogens early and responding to them as rapidly as required under the International Health Regulations. To generate an evidence base for decision-making, countries such as Indonesia are developing an epidemiology work force.¹² The region has a vibrant civil society and private health sector, advanced pharmaceutical and biotechnological research and development and manufacturing capacity. The international funding agencies are also providing critical inputs. Urgent priorities for member countries of the region include strengthening public health infrastructure, harnessing partnerships, and allocating sufficient national resources for health within the framework of primary health care.

Over the coming decade, the WHO South-East Asia Region is very likely to achieve the Millennium Development Goal targets for communicable diseases. By building core capacities, it will be able to detect public health threats early and respond to them quickly enough to keep them from endangering national and international health security. The region will also, in all probability, interrupt the transmission of poliomyelitis and yaws, eliminate leprosy, kala-azar, lymphatic filariasis, and congenital syphilis, and greatly reduce perinatal HIV transmission, all of which will substantially improve the quality of life and economic status of its people. ■

References

Available at: <http://www.who.int/bulletin/volumes/88/3/09-065169/en/index.html>

^a Department of Communicable Diseases, World Health Organization Regional Office for South-East Asia, IP Estate, Mahatama Gandhi Road, New Delhi, 110002, India. Correspondence to Jai P Narain (e-mail: narainj@searo.who.int).

References

1. World Health Organization. *Global burden of disease*. Geneva: WHO; 2008. Available from: http://www.who.int/healthinfo/global_burden_disease/GBD2004ReportFigures.ppt#2 [accessed 26 January 2010].
2. World Health Organization. *Global health statistics*. Geneva: WHO; 2008.
3. Gupta I, Guin P. Communicable diseases in the South-East Asia Region of the World Health Organization: towards a more effective response. *Bull World Health Organ* 2010;88:198-204.
4. Arora NK, Chaturvedi S, Dasgupta R. Global lessons from India's poliomyelitis elimination campaign. *Bull World Health Organ* 2010;88:232-234.
5. Narain JP, Dash AP, Parnell B, Bhattacharya SK, Barua S, Bhatia R, et al. Elimination of neglected tropical diseases in the South-East Asia Region of the World Health Organization. *Bull World Health Organ* 2010;88:205-209.
6. Nair N, Wares F, Sahu S. Tuberculosis in the WHO South-East Asia Region. *Bull World Health Organ* 2010;88:164.
7. Kanungo S, Sah BK, Lopez AL, Sung JS, Paisley AM, Sur D, et al. Cholera in India: an analysis of reports, 1997–2006. *Bull World Health Organ* 2010;88:184-190.
8. Suaya JA, Shepard DS, Siqueira JB, Martelli CT, Lum LCS, Tan LH, et al. Cost of dengue cases in eight countries in the Americas and Asia: a prospective study. *Am J Trop Med Hyg* 2009;80:846-55. PMID:19407136
9. Arunachalam N, Tana S, Espino F, Kittayapong P, Abeyewickreme W, Wai KT, et al. Eco-bio-social determinants of dengue vector breeding: a multicountry study in urban and periurban Asia. *Bull World Health Organ* 2010;88:173-183.
10. Sharma SK, Dhooria S, Prasad KT, George N, Ranjan S, Gupta D, et al. Outcomes of antiretroviral therapy in a northern Indian urban clinic. *Bull World Health Organ* 2010;88:222-226.
11. Ghimire M, Pradhan YV, Maskey MK. Community based interventions for diarrhoeal diseases and acute respiratory infections in Nepal. *Bull World Health Organ* 2010;88:216-221.
12. Kandun IN, Samaan G, Santoso H, Kushadiwijaya H, Juwita R, Mohadir A, et al. Strengthening Indonesia's Field Epidemiology Training Programme to address International Health Regulations requirements. *Bull World Health Organ* 2010;88:210-215.