

## Disease Control Priorities, 3rd edition: cancer package principles and overview



Most of the global cancer burden is in low-income and middle-income countries (LMICs), and their share of the burden is increasing. However, the needed investment in cancer control has not kept pace.

As part of the third volume, on cancer, of the World Bank's latest edition of *Disease Control Priorities*,<sup>1</sup> we designed a package of essential cancer control interventions to provide policy makers and funders with an adaptable model package of services for expanding locally appropriate cancer control that can be implemented over time and together with expanding universal health coverage.<sup>2</sup> Included interventions meet effectiveness, cost-effectiveness, feasibility, and affordability criteria using analytical methods that are replicable for customising packages to local needs.

We sought cost and cost-effectiveness data for a wide range of effective cancer interventions that address significant cancer burdens, with preference for data from LMICs. We applied standard criteria to these, in combination with epidemiological data, to define a set of interventions that could be considered appropriate in many LMICs.

The defined package includes: prevention of tobacco-related cancer and virus-related liver and cervical cancers; diagnosis and treatment of early breast cancer, cervical cancer, and selected childhood cancers; and widespread availability of palliative care, including opioid drugs. Once initial investments were made in infrastructure and personnel, these interventions would

cost an additional US\$20 billion per year worldwide, or about 3% of current public sector health spending in LMICs.

Implementation of a locally appropriate cancer control package would substantially reduce suffering and premature death from cancer before 2030 and result in even greater improvements thereafter. It will take years to decades to build national cancer control systems, particularly in low-income countries, but delaying planning and first steps will only delay the realisation of competent cancer control.

*Hellen Gelband, Susan Horton, David Watkins,  
Dean T Jamison, Daphne Wu, Mary Gospodarowicz,  
\*Prabhat Jha*

Global Health Consulting, Takoma, MD, USA (HG); University of Waterloo, Waterloo, ON, Canada (SH); University of Washington, Seattle, WA, USA (DWa, DTJ); Princess Margaret Cancer Centre, Toronto, ON, Canada (MG); and Centre for Global Health Research, St. Michael's Hospital, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada (HG, DWu, PJ)  
prabhat.jha@utoronto.ca

We declare no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY 4.0 license.

- 1 Gelband H, Jha P, Sankaranarayanan R, Horton S, eds. Volume 3: cancer. *Disease control priorities*, 3rd edn. Washington, DC: World Bank, 2015.
- 2 Gelband H, Sankaranarayanan R, Gauvreau CL, et al. Costs, affordability, and feasibility of an essential package of cancer control interventions in low-income and middle-income countries: key messages from *Disease Control Priorities*, 3rd edition. *Lancet* 2016; **387**: 2133–44.

Published Online  
March 1, 2018