Progress and remaining challenges for cancer control in Latin America and the Caribbean

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Cancer is one of the leading causes of mortality worldwide, and an increasing threat in low-income and middle-income countries. Our findings in the 2013 Commission in *The Lancet Oncology* showed several discrepancies between the cancer landscape in Latin America and more developed countries. We reported that funding for health care was a small percentage of national gross domestic product and the percentage of health-care funds diverted to cancer care was even lower. Funds, insurance coverage, doctors, health-care workers, resources, and equipment were also very inequitably distributed between and within countries. We reported that a scarcity of cancer registries hampered the design of credible cancer plans, including initiatives for primary prevention. When we were commissioned by *The Lancet Oncology* to write an update to our report, we were sceptical that we would uncover much change. To our surprise and gratification much progress has been made in this short time. We are pleased to highlight structural reforms in health-care systems, new programmes for disenfranchised populations, expansion of cancer registries and cancer plans, and implementation of policies to improve primary cancer prevention.

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Part 1: Introduction

Our previous 2013 Commission[1] on cancer care in Latin America showed the existing and increasing burden of cancer in the region and identified several obstacles to providing optimum cancer services. Although some cancer incidences are lower in developed countries than in Latin American countries, overall cancer mortality in Latin American countries is about twice that of more developed countries. Ageing of the Latin American population, which will include more than 100 million people by 2020 (roughly a sixth of the total population), will continue to increase cancer incidence. About half of all cancers in Latin America are caused by smoke and infection[2,3] and addressing these issues urgently is imperative. Our commission also emphasised other widespread issues in which room for improvement could have been made: fragmented health infrastructures; restricted health-care coverage; insufficient funding and human resources and heterogeneity in distribution of them; and insufficient implementation of cancer registries and national cancer plans. In this 2015 update, we assess the effect of our first Commission on evolving cancer policies in Latin America since 2013, and identify remaining challenges.

We first summarise the cancer landscape and major areas that still need to be addressed in Latin America (part 1) and developments that have taken place as a direct or indirect consequence of the first Commission, with a focus on the evolution of cancer health policy and legislation in Latin America (parts 2–8). We present numerous specific examples of new projects across Latin America aimed at improving health literacy and public awareness, availability, and quality of cancer care, and at reducing cultural, geographical, and socioeconomic disparities. We show the most important of these initiatives in panel 1 and areas in which little or no change could be identified.

A move towards universal health care should be a priority for any health system, including those in developing countries.[4] Many questions remain with respect to how to accomplish this overall health care. In our 2013 Commission, we recommended adoption of changes that have led towards universal health care in some Latin American countries and promotion of financial protection for health and extension of patient coverage. Although an increase in the number of individual patients with coverage would seem the appropriate metric of change, this measurement does not necessarily include comprehensive health-care packages designed for complex diseases like cancer. In part 2, we review changing health systems in the present Latin American landscape, and emphasise the ambiguity of the use of increased numbers of people covered by health-care plans as an indicator of progress.

Cancer control needs not only the integration of prevention, screening, and a high quality diagnosis and treatment machinery but also the full range of other services, including rehabilitation, survivorship, and palliative care. In 2013, our Commission noted progress in regional palliative care services. These findings were exemplified by an increase in the number of states with palliative care programmes, the incorporation of educational courses for, and specialisation into, palliative care, an increase in opioid use for pain control, and an increase in awareness of the importance of palliative care. However, our Commission reported troubling and continuing restrictions in access to pain medication and we recommended strengthening of the training of health-care providers, promotion of palliative research, and establishment of a capacity to lobby health-care administrators to ensure wide distribution of opioid analgesics. The publication of the *Atlas of Palliative Care in Latin America*[5] has been a major advancement in palliative care and we now show progress in palliative care

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Panel 1: **Update of actions recommended in the 2013 Commission**

Increase financial resources for cancer control

- The percentage of gross national product spent on health care has increased in several countries, but is still much lower than in developed countries
- Access to high-cost drugs and procedures has increased
- Funding of expensive cancer drugs in public health systems is still scarce, which has resulted in increasing judicialisation of medicine

Restructure health-care systems

- The proportion of people covered by basic health insurance in Latin America increased from 46% to 60% between 2008 and 2013
- Actions to protect uninsured patients against catastrophic health expenses have been implemented (eg, in Mexico and Uruguay)
- Only Brazil, Cuba, and Costa Rica have true universal health care, while most countries still have highly fragmented health-care systems with persistent segregation of health care

Optimise oncology workforce to meet regional needs

- Awareness of the shortage of cancer specialists and the number of oncologists in Latin America has steadily increased, most notably in Brazil and Argentina
- Several programmes (eg, in Guatemala or Mexico), make use of patient navigators to overcome cultural and logistical barriers for indigenous and rural patients with cancer
- The number of cancer cases per oncologist is still much higher than in developed countries and the number of palliative care services and physicians is still severely low
- Despite numerous initiatives to redistribute health personnel to disenfranchised areas, most cancer specialists in Latin America still practice medicine in large, tertiary cancer centres
- Innovative strategies, including use of telemedicine, retraining of specialists, and incentive systems have yet to be widely implemented

Improve technical resources and services for cancer prevention and treatment

- Under-implementation of new technologies has not improved substantially since the past Commission in 2013 with a few exceptions, for example, the availability of PET-CT has improved in Uruguay
- Insufficient quality of histopathological assessment is still a concern, as exemplified by the poor quality of Papanicolaou smears shown in studies of cervical cancer screening
- Long waiting times are still a major issue, hampering the effectiveness of promising screening, prevention, and early detection initiatives

Invest in research and evidence-based cancer care relevant to the region

- Important steps have been undertaken to improve registry data, resulting in an increase in cancer registries of 40% in the region between 2011 and 2014
- Population coverage of registries is often still low
- In addition to registries, many ambitious new cancer plans and policies have been signed into policy, but still await full implementation
- Community-based participatory research is a promising new area of regional research in Latin America, which addresses specific barriers and interventions to overcome them
- Long-term outcomes of new initiatives, eg, with cervical cancer screening, are not systematically being monitored
- Preclinical and clinical research in oncology originating in Latin America has not increased substantially

Invest in education

- Many new postgraduate educational and training initiatives are available, mostly national scholarship programmes and programmes fostering international exchange
- Singular telemedicine networks have been implemented in Peru, Ecuador, and Colombia, but their effect on outcomes needs to be assessed
- Public awareness is being enhanced through networks of community-based participatory research and by integration of health services into existing platforms and infrastructure (eg, by the non-governmental organisation Pro Mujer in Argentina, Bolivia, Mexico, Nicaragua, and Peru)

by the increase in number of palliative care services, palliative physicians per inhabitant, education and training programmes in palliative care, and the availability of potent analgesics (part 3).

In our 2013 Commission, we also reported that most Latin American countries did not have adequate cancer registries and subsequently have been unable to develop forward-looking and cohesive national cancer control plans (NCCPs). According to WHO, an NCCP is defined as "a public health programme designed to reduce cancer incidence and mortality and to improve the quality of life of cancer patients, through the systematic and equitable implementation of evidence-based strategies for prevention, early detection, diagnosis, treatment and palliation, making the best use of available resources".[6] We, and others, have recommended urgent establishment of NCCPs in the Latin American region.[1,6,7] The development of these plans was also recommended by the World Health Assembly in its resolution 58.22 in 2005.[8,9] We report changes in the number of countries with an NCCP, identify new health cancer policies, and report on the proportion of countries with a population-based cancer registry in the region (part 4).