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Cancer care in the Commonwealth Caribbean in COVID times



The language of urgency that we have grown used to in these so-called COVID times could well be applied to the problem of cancer care and control in the small island nations of the Caribbean. As the second leading cause of death, and with the prediction that cancer cases will rise by 66% in the next 10 years, this alone should serve as an urgent call to arms for governments and health services in the region.

The COVID-19 pandemic has shown us how well we can connect virtually when we need to, and how connections and partnerships that previously did not seem likely or possible have suddenly become the bedrock of our moving forward. To promote improvements in cancer care for our populations we need to sharpen our focus in many areas. This includes nurturing young leaders, developing inter-country and intra-country collaborative partnerships, and pushing ahead with improved cancer surveillance. We must also establish clear pathways of care, especially in small island nations who can link together to provide an expert consultation service with a wide reach.

The Commonwealth Caribbean comprises 18 English-speaking nations. Many are classified as high-income countries (HICs) or upper middle-income countries by the World Bank; however, their health services, including cancer care, are unlike those of larger HICs.³ Most have small, open economies, are heavily dependent on tourism, and are increasingly susceptible to climate change. Cancer constitutes a major public health issue. The most common cancer types are prostate cancer in men and breast cancer in women, and mortality from these cancers in the Caribbean is among the highest in the world.¹ Additionally, cervical cancer, which should be entirely preventable, is still the second leading cause of cancer death in women in many Caribbean countries.¹

Although primary health-care services are generally well established in the region, secondary and tertiary services vary greatly between countries. The capacity of Caribbean health systems to provide optimal cancer care remains inadequate in the context of other competing priorities, with poor diagnostic and supporting service infrastructure, and an insufficient cadre of trained personnel to deliver the types of care needed. Advanced disease presentations are common, and diagnostic and treatment services are often poorly developed and

coordinated, costly, and overburdened. Many health-care professionals have little oncology training and do not always feel comfortable caring for patients with cancer. Consequently, cancer care tends to be centralised to better equipped teaching hospitals, tertiary care facilities, or the private sector. Patients might have to travel long distances, including air travel, often at substantial expense, to access care.³ Although core cancer treatments such as surgical oncology, medical oncology, and radiotherapy are more readily available in the larger islands (eg, The Bahamas and Jamaica), inadequate numbers of trained specialists mean there are often long waiting lists, compounding the issue of advanced disease presentations.⁴

We need to reframe and reemphasise priorities for improved cancer care in the region. First, we must devise and implement strategies for improving existing cancer care services, focusing on: better cancer surveillance and data collection; preventing the preventable; streamlining referral pathways and linkages between cancer care providers, both within and between countries; and developing and implementing resource-stratified guidelines across the cancer care continuum from prevention through to palliative and end-of-life care. Second, we must propose new strategies for the expansion of cancer care in the region that are affordable and achievable and with the principal focus on the education and training that will expand the current cadre of health-care professionals.

Data from cancer surveillance systems are critical to identify public health needs and help to drive policy, yet these are poorly developed in the Caribbean. At present, only five Caribbean countries have active, high-quality population-based cancer registries. To correct this situation, the International Agency for Research on Cancer (IARC) has launched IARC Caribbean Cancer Registry Hub offerring technical assistance for the collection of high-quality cancer care data to support an evidence-based approach to cancer care policy and planning in the region within the framework of Global Initiative for Cancer Registry Development. So far, 16 Caribbean countries have been engaged with the Caribbean Hub and 13 countries have participated in capacity-building activities.



For World Bank's country classification see https:// datahelpdesk.worldbank.org/ knowledgebase/articles/906519

For Caribbean Cancer Registry Hub resources and technical assistance see http:// caribbeancrh.carpha.org

For Global Initiative for Cancer Registry Development see https://gicr.iarc.fr/ In terms of preventing the preventable, we are reminded that cervical cancer is now earmarked for elimination in the countries of the Americas, including the Caribbean. The three main pillars for elimination are prevent, screen, and treat. Thus, continued implementation of human papillomavirus (HPV) vaccination using the 9-valent vaccine, effective against the highrisk HPV types circulating in the Caribbean,⁵ is urgently needed for 9–26 year olds,⁶ along with targeted HPV screening of high-risk women, aged 30 years or older. Countries will need to achieve screening rates of at least 80% in this population to have the greatest impact in reducing deaths from cervical cancer.

A focus on strengthening and streamlining existing clinical pathways and institutional quidelines for cancer care will be critical. Implementing resource-appropriate, strategic plans to improve patient access to early diagnosis and early treatment in two or three common cancers would help reduce morbidity and mortality and health-care costs in the longer term.7 Many of the larger island nations do have extensive resources for the treatment of breast, prostate, and colorectal cancers, although these might not be united under one roof, and referral pathways and linkages between the separate services of diagnostic imaging, surgery, pathology, medical and radiation oncology, and palliative care might not be robust or clearly defined8 (Yeung L, University of British Columbia, personal communication). Resources such as the Breast Health Global Initiative's publication, Knowledge Summaries for Breast Cancer,4 provide an excellent template for health-care professionals aiming to improve patient access to existing services. Improved coordination of services requires developing strong referral networks with clear guidelines for providers on how to refer patients efficiently and appropriately through the system. Providers are encouraged to hold multi-disciplinary team meetings and tumour boards to foster better communication and regular collaboration. Our increasing use of—and familiarity with—telemedicine initiatives broght on by the COVID-19 pandemic could become a new normal for collaborative working. Another valuable innovation, relatively new to the Caribbean, is the introduction of cancer patient navigation programmes, which help to increase patient access to, and use of, appropriate resources for cancer care.9 Such programmes are already being introduced in Trinidad and Tobago and Jamaica.

For more on **Organization of Eastern Caribbean States and full list of members** see https://www.oecs.org/en/whowe-are/member-states

Strategies for the further expansion of cancer care in the Caribbean islands must take a broad view. One of the principal foci should be on education, training, and human resource capacity building to improve and broaden the scope of cancer care. There is an urgent need to embed education in oncology and palliative care medicine in nursing and medical school curricula. This approach will help develop a broader understanding of cancer among health professionals and move towards demystifying cancer as a disease that can only be managed by specialists. Primary and secondary care facilities need to be empowered to offer basic oncology and palliative care services by receiving support from a central hub of specialist oncology services. Models for this type of approach already exist in the region.³ Task shifting through education and the development of community-based services, including palliative care, is imperative as we adjust to a new normal of social distancing and increasing barriers to traveling to seek care.

Inter-island and intra-island collaborative efforts are ongoing. In the Eastern Caribbean, 11 islands working together as the Organization of Eastern Caribbean States have implemented the Eastern Caribbean Diagnostic Network. The initiative includes professionals involved in all aspects of cancer care working together to use available expertise to facilitate the provision of optimal cancer diagnostic and treatment plans for their under-resourced health systems. This approach will include shared reading of high-quality digitised pathology images, and telemedicine with support from allied oncology professionals in Canada and other HICs. The approach is to use economies of scale to ensure that patients with cancer in each country are well served by the pool of locally available resources. Larger Caribbean countries are urged to consider this type of approach that can increase collaboration and connectivity between service providers, to improve access and availability of care for all.

We believe that by taking the steps discussed, we can make substantial improvements in the cancer care that is already offered in the Caribbean and move towards offering excellent, guideline-recommended care for all people living in this region.

We declare no competing interests.

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- 1 Razzaghi H, Quesnel-Crooks S, Sherman R, et al. Leading Causes of Cancer Mortality - Caribbean Region, 2003-2013. MMWR Morb Mortal Wkly Rep 2016; 65: 1395-400.
- 2 Bray F, Piñeros M. Cancer patterns, trends and projections in Latin America and the Caribbean: a global context. Salud Publica Mex 2016; 58: 104–17.
- 3 Spence D, Dyer R, Andall-Brereton G, et al. Cancer control in the Caribbean island countries and territories: some progress but the journey continues. Lancet Oncol 2019; 20: e503–21.
- 4 Anderson BO, Dvaladze A, Ilbawi A, Luciani S, Torode J, Zujewski JA. Improving access to breast cancer care. Seattle, WA: Fred Hutch, 2017. https://www.fredhutch.org/content/dam/www/research/divisions/publichealth-sciences/epidemiology/bci-25/KSPDF/KS%20Planning%20 Access%20030617.pdf (accessed June 29, 2020).
- 5 Andall-Brereton G, Brown E, Slater S, et al. Prevalence of high-risk human papillomavirus among women in two English-speaking Caribbean countries. Rev Panam Salud Publica; 2017; 41: e41.
- 6 ACIP. Grading of Recommendations Assessment, Development and Evaluation (GRADE) for use of HPV vaccine in adults ages 27 through 45 years. Aug 16, 2019. https://www.cdc.gov/vaccines/acip/recs/grade/ HPV-adults.html (accessed July 12, 2020).
- 7 Knaul F, Gralow J, Atun R, Bhadelia A. Closing the Cancer Divide: An Equity Imperative. Boston: Harvard University Press, 2012.
- 8 Brown CR, Hambleton IR, Hercules SM, et al. Social determinants of breast cancer in the Caribbean: a systematic review. Int J Equity Health 2017; published online April 5. DOI:10.1186/s12939-017-0540-z.
- 9 Braun KL, Kagawa-Singer M, Holden AEC, et al. Cancer patient navigator tasks across the cancer care continuum. J Health Care Poor Underserved 2012; 23: 398–413.

100 European core quality standards for cancer care and research centres



There have been calls for consensus around defining quality standards for cancer care, treatment, and research in Europe, with a focus on cancer hospitals, centres, and networks. Although cancer survival is generally improving, large variation in cancer survival between countries remains, as shown by results in the EUROCARE-5 study.¹

The European Commissioner for Health and Food Safety has launched Europe's Beating Cancer Plan. In addition, a cancer mission is being drafted by the European Commission,² with some objectives most likely to be focused on the need to ensure quality of treatment, care, and research, and to create more comprehensive cancer centres and infrastructure.^{3,4}

In Europe, many cancer centres, which act as hubs of interlocking clinical research networks, provide state-of-the-art cancer services. Thus, mechanisms for monitoring compliance with high-quality standards of care and translational research for cancer centres across Europe are crucial. Furthermore, some EU member states lag behind in the formation of comprehensive cancer centres. Therefore, an aim for both the cancer mission and Beating Cancer Plan could be to establish at least one comprehensive cancer centre or large clinical centre in each small EU member state, and to have one comprehensive cancer centre for every 5–10 million people in the population in larger EU member states, as part of an integrated infrastructure.⁵

In 2008, the Organisation of European Cancer Institutes (OECI) created a quality assurance Accreditation and

Designation Programme for cancer centres,⁶ which includes 50 of the largest cancer centres in 14 of 27 EU member states, plus Norway and the UK. Collectively, these centres produce more than 12 400 peer-reviewed publications on cancer research annually, have a total annual research budget of over €1 billion, and have treated more than 1 million new patients since accreditation. Although these centres treat only 10% of patients diagnosed with cancer in the EU each year, their effect on the quality of cancer care and research is substantial, as they are considered as national reference centres.

The Accreditation and Designation Programme focuses on institutional quality and capabilities, with the objective of providing comprehensive accreditation for quality oncology care, including prevention, care, research, education, networking, and patient involvement. The programme addresses fundamental issues in cancer: the integration of research and clinical care, and the translation of research findings into practice changes in cancer treatment. Inclusion of these issues is a unique feature of this OECI programme, compared with cancer accreditation systems in the USA and Germany, where clinical care and cancer research are generally accredited separately. In addition, the OECI standards have been accredited by the International Society for Quality in Health Care.

The 50 participating cancer centres are shown in the appendix (p 1). Distinguishing factors between the two designation categories (comprehensive cancer



See Online for appendix