

The development of global cancer networks in a time of pandemic, decolonization and climate Change

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Independent of governments and major institutions, grassroots Global Cancer Networks are leveraging their international relationships to make a difference to the lives of people with cancer worldwide along the continuum of cancer care. This article describes three examples of how different types of Networks are addressing the shared problem of cancer across low- and middle-income countries and the challenges they face in this time of pandemic, decolonization and climate change.

Cancer is a leading cause of death worldwide with the majority of cancer deaths occurring in low- and middle-income countries (LMICs) (1). In response, the academic discipline of “Global Oncology” has developed as an area of practice, research, education and advocacy that aims to improve outcomes and achieve health equity across the cancer continuum, with a special emphasis on underserved populations around the world. In parallel, global cancer networks addressing the shared problem of cancer across countries are forming independently as a social phenomenon involving people and relationships with the ability to capitalise on the strengths of their relationships and to make a difference to the lives of people with cancer worldwide along the continuum of cancer care.

Global networks are shaped by their social context. The current situation represents a triple jeopardy with the increasing burden of cancer on top of the COVID-19 pandemic and the local effect of global climate change impacting the health and livelihoods of vulnerable communities. This paper describes three different approaches in the development of global cancer networks that have a shared aim of building capacity in cancer control and addressing global inequities.

UK Global Cancer Network

The UK has embarked upon a two pillar approach. Building on

the foundations of the pioneering annual one-day meetings on global health and cancer organised by the Royal Society of Medicine’s Oncology Section 2016–2019, an extended week-long event – London Global Cancer Week (LGCW) – has been established providing an international platform for wide ranging and influential discussions around global oncology and the challenges presented by rising cancer incidence in LMIC (2). Despite the interruption from the COVID-19 pandemic, the development of LGCW as a first supporting pillar for UK global cancer activity has been rapid. Evolving from seven events in 2019, through 22 events in 2020 with an attendance of more than 2,000 people from 97 countries, to 39 planned events in 2021 with 101 speakers from 47 countries. Aspiring to be more than a conventional peer-to-peer conference, LGCW is outcome focused and encourages its event hosts to think strategically how their participation can not only further their own missions but also help create new opportunities and spaces in global cancer.

One successful outcome has been the setting up of the UK Global Cancer Network (UKGCN) (3), providing the second pillar of the UK approach. Launched on the first day of the second LGCW on 15 November 2020 as an independent not-for-profit network of UK-based individuals and institutions already working in partnership with colleagues in LMICs,

this multidisciplinary grouping is dedicated to encouraging and facilitating active collaborations between the UK cancer community and partners in LMICs (4). In its first year UKGCN has carried out a rapid mapping exercise to identify UK colleagues who are active or interested in working with LMIC partners in the projects that strengthen cancer control through a variety of means such as research and education in poorer resourced settings. Smaller specialist multi-disciplinary groups are being formed to strengthen UK input to collaborative projects led by LMIC partners.

Canadian Global Cancer Network

In November 2020, the Canadian Partnership Against Cancer (CPAC) and the Princess Margaret Global Cancer Centre hosted a Canadian Global Oncology Workshop to bring together over a hundred Canadian leaders in global oncology and to discuss opportunities for pan-Canadian collaboration in the field. This workshop was the first step in the development of the Canadian Global Cancer Network to connect individual global cancer initiatives led by Canadians and to develop a coordinated approach to advocacy, funding and priority-setting. Canadians have a long history of engagement in global cancer control initiatives, including significant contributions to global efforts on health equity, access to treatment and universal health coverage, education and leadership development, and advocacy around the psychosocial needs of cancer patients and the need to address the patient's experience along the full continuum of care.

The Canadian Global Cancer Network is in its early stages of development and is focused on establishing a governance structure that is inclusive of investigators across the country engaged in different areas of global cancer control and that engages those with the lived experience of cancer disparities, including those from LMICs. The second Canadian Global Oncology Workshop is planned for December 2021 to provide a forum for Canadian cancer professionals to convene, share ongoing work and discuss key issues in the field. This workshop is also designed to provide an opportunity for networking and mentorship, with a focus on including junior investigators and trainees interested in developing a career in this field. Specific sessions for brainstorming along key thematic areas (e.g. health services research, clinical trials, education and health professional development) are planned to facilitate joint proposals along these themes. These proposals are aimed to leverage and build upon the infrastructure of existing partnerships between Canadian investigators and international organizations and will demonstrate to federal funding agencies that global oncology is a unique programmatic area in need of support. Through this pan-Canadian collaboration, a philosophy of international partnership that addresses inequities in cancer control and that considers the concepts of

privilege and allyship will be developed (5).

City Cancer Challenge: A multisectoral city-led partnership for improving access to quality cancer care

Launched by the Union for International Cancer Control (UICC) in 2017, City Cancer Challenge (C/Can) is a growing network of cities and partners from across sectors working together to improve access to quality cancer care. Established as a standalone Foundation in 2019, C/Can is now operational in nine cities across Africa, Asia, Eastern Europe and Latin America, and is preparing to take on a new cohort of cities throughout 2022 and 2023.

A key factor of the C/Can city engagement process (6) is to support and connect cities through a growing portfolio of technical cooperation and capacity development programmes including international expert consultations, twinning arrangements, peer exchange, and scientific visits.

For example, in Cali, Colombia, resource-appropriate guidelines for the management of breast, cervical, prostate and colorectal cancers were developed by local experts in collaboration with the National Cancer Institute of Colombia and with support from experts designated by C/Can partners including The American Society of Clinical Oncology, American Society of Clinical Pathology, International Society of Nurses in Cancer Care, Oncology Nurse Society and the Latin-American Palliative Care Association.

Despite the unique challenges presented by the global health pandemic, cities like Cali have shown remarkable resilience and adapted quickly, including by harnessing digital solutions. For example, the Rwanda Biomedical Centre is leading a new collaboration to establish information systems that can work together to ensure cancer data connectivity in Kigali, Rwanda. Other notable progress in C/Can city projects over the last 18 months (7) include: completion and dissemination of a quality control manual for pathology labs across Cali (8), and development of a Quality Assurance Programme for radiotherapy services in Kumasi, Ghana.

One of the enduring challenges is ensuring the sustainability and scalability of projects. The pandemic has reinforced the criticality of engaging local sustainability partners early in the process. Part of this is providing tangible ways to foster the continued exchange of best practices and peer-to-peer discussion among cities, such as through C/Can's online TeleECHOTM programme. As C/Can is demonstrating, convening networks of cities, partners and people with a shared commitment to cancer control can be a powerful driver in accelerating local action for sustainable impact.

Discussion

There is a growing awareness worldwide of the rapidly enlarging

gap between the needs of cancer patients in LMICs and the resources and infrastructure available to meet their needs. For some years individuals and institutions in high-income countries (HICs) committed to this cause have been working alongside colleagues in LMICs to address these inequities and have made important local progress. However, these projects have tended to work in isolation and have struggled to create sustainable models to address these problems.

The three types of Global Cancer Networks described in this paper provide examples of how individuals and institutions can be drawn together to develop collaborations in which expertise, commitment and resources are shared to make a more strategic and sustainable partnerships in global cancer control.

The UKGCN, the Canadian Global Cancer Network and the City Cancer Challenge, in addition to having similar goals, share important characteristics. Firstly, they are all organizations which have been developed by workers in the field who have recognized the advantages of such partnerships. They have emerged from “the coal face” rather from national or governmental initiatives. Secondly, they recognize the importance of equal partnership between colleagues in HICs and LMICs. There is increasing evidence that those from HIC health backgrounds who engage in global health activities benefit from enhanced knowledge, motivation and leadership skills. Thirdly, the three networks all emphasise the importance of interdisciplinary cooperation in delivering healthcare. Finally, they all share the ethos of enabling and supporting current successful work in the field and have no desire to influence or interfere with cancer collaborations which are working well. They see the potential for sharing good practice between ongoing projects and acting as a catalyst and an enabler for new programmes.

Different networks inevitably will have differing approaches to attaining their goals. Rather than this being a drawback, this is something to be encouraged. Each will bring their own perspective and experience, and the variety will enrich the whole.

Where do these global cancer networks stand in relation to the COVID19 pandemic, the challenge of climate change and the drive towards decolonization? COVID-19, Climate change and conflict are all disrupters of cancer care across the world. Whereas conflict almost entirely has a negative effect, COVID-19 has illustrated to us our global interdependency in healthcare and our ability, when forced to develop a rapid and effective response. Global cancer networks should draw on the same principles to effectively tackle global cancer. The need to recognize our global interdependency was further demonstrated at the recent COP26 summit meeting in Glasgow. Climate change represents a significant threat to

health and healthcare delivery, particularly in low-resourced health settings where cancer is an increasing problem. Global cancer networks with their multidisciplinary ethos are well placed to draw on the full breadth of appropriate professional expertise (e.g. health economists, environmentalists, agronomists) to address these challenges.

In the past, HIC /LMIC collaborations had a tendency for the balance of the agenda to be weighed in the direction of the HIC rather than meeting the needs of the LMIC. Nowhere is this more clearly illustrated than in the field of research where leadership, authorship and acknowledgement have primarily sat with the high-income country partner. Here, a global cancer network, free from the restrictions and responsibilities of a single institution, can ensure that the LMIC partner takes on the leadership role and that their projects focus entirely on the needs of the LMIC. Similarly, the polarity of fellowships travelling almost entirely in the direction of the HIC could be reversed by initiatives driven by global health networks. As Paul Farmer has noted (9):

“Cancer is everywhere and we need to treat it where we find it. Eighty percent of the burden of disease in your specialty falls on the developing world. The pathologies are the largely the same, and the treatments can be the same, too. The diagnostic and therapeutic advances of the past half-century have been astounding, particularly in oncology. The challenge, of course, is delivery. So, we need to meet it. We need to deliver high-quality care, and we need to deliver on our promise to care for patients to the best of our ability and training.”

By investing effort in helping build capacity, global cancer networks can play their part in redressing the balance from cancer control to cancer care. Cancer is an example of what can be achieved to improve health by cooperation, collaboration, and mutual learning across the globe. ■

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