The 9th Symposium on Global Cancer Research: Looking Back and Charting a Path Forward in Global Cancer Control

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ABSTRACT

Throughout 2020 and 2021, the global health community as well as national and local health systems in countries around the world have been consumed by a global pandemic with consequences beyond the immediate mortality and morbidity caused by COVID-19. Many cancer-related health services, such as screening and diagnosis procedures, along with treatment and research, are experiencing extreme disruption that is causing backlogs, late diagnosis, and increased mortality (1–4). These issues are compounded by the growing burden of cancer cases in low- and middle-income countries (LMIC), estimated to account for more than 70% of cancer cases by 2040 (5). The challenge ahead for the global cancer community is not only to build back following the COVID-19 pandemic, but to build adaptable health systems in a way that can equitably deliver cancer control to all populations.

The 9th Annual Symposium on Global Cancer Research (ASGCR), held virtually on March 10–11, 2021, was an opportunity for the global cancer control community to convene to discuss these topics. ASGCR was held as a satellite meeting to the Consortium of Universities for Global Health (CUGH) Annual Conference, led by the Center for Global Health (CGH) at the NCI in partnership with CUGH, the Dan L. Duncan Comprehensive Cancer Center at Baylor College of Medicine, the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University, The University of Texas MD Anderson Cancer Center, the American Society of Clinical Oncology (ASCO), the American Association for Cancer Research (AACR), and international collaborators from the Ministry of Health in Mozambique, the Aga Khan University Hospital in Nairobi, Kenya, and the Tulane Health Office for Latin America. This flagship global cancer meeting, which began in 2013 as CUGH’s first satellite meeting, grew out of an acknowledgment that global cancer control was inadequately addressed in global health efforts and that confronting this growing burden required creating opportunities for collaboration and the exchange of knowledge. To plan the meeting each year, the NCI partners with NCI-Designated Cancer Centers located near the host city for the annual CUGH Global Health Conference. Both the 8th (2020) and 9th (2021) Annual Symposia on Global Cancer Research, which were to be held in Washington, DC and Houston, TX, respectively, pivoted to virtual events as a result of the COVID-19 pandemic. Holding ASGCR 2021 as a virtual event was done out of necessity, but it demonstrated that a virtual meeting can be more inclusive, accessible, efficient, and interactive than in-person meetings, supporting the potential benefit of remote or hybrid meetings in the future.
The virtual format allowed organizers to draw from a wide range of speakers and scientific topics to speak about current issues in global oncology realistically and representatively. The 2-day meeting included 29 speakers from 12 countries, and pre-recorded welcome remarks from NCI Director Ned Sharpless, ASCO Chief Medical Officer Julie Gralow, and Mozambique Ministry of Health Cancer Control Program Director and Scientific and Teaching Director of Maputo Central Hospital, Cesaltina Lorenzoni. A total of 428 attendees from 45 countries joined the Symposium. The majority (250) of attendees identified their primary role as researcher, with 123 clinicians, 80 students or trainees, 26 advocates, and 16 policymakers rounding out the participant list. Attendees listed a specific interest in nine cancer sites, with a majority focused on breast cancer (134 attendees) and cervical cancer (115 attendees). In response to the ongoing COVID-19 pandemic and the recent global movement for racial equity, the ASGCR steering committee developed an agenda that included a scientific plenary on building toward resilience (day 1) and another on building toward equity (day 2). Recordings of ASGCR presentations were made available for online viewing for those who could not participate live.

The first ASGCR plenary focused on building toward resilient health systems. Speakers highlighted critical gaps that have emerged in the face of acute threats and emergencies like COVID-19, climate change, and political transitions, and emphasized the importance of partnerships, adaptation, and innovation. This session discussed evidence-based and emerging strategies to bridge the research to practice gap in cancer prevention and control in LMICs. Speakers addressed the frequently temporal nature of many programs/interventions and the challenges in sustainability in the face of competing priorities and threats to stable health systems. Nonetheless, while the session reflected on past shortcomings, it also acknowledged important successes, and began the dialogue on models for building resilience.

Use of Mentimeter live polling allowed strong audience participation in this dialogue. Audience members were asked what health system resilience meant to them and what solutions and interventions are necessary to build resilient health systems. Popular themes that emerged as characteristics of resilient health systems included collaboration, sustainability, good and fair governance, adaptability, and the idea that a health system must be able to bounce back or absorb shock while still delivering routine and emergency care. The theme of sustainability also came up related to how programs within the health system are funded; specifically, comments centered around the importance of not being reliant upon external funding for specific programs that are central to health system functioning.

The second plenary focused on equity in global cancer research, including acknowledgment of translation gaps in the field. Pivotal breakthroughs in cancer science have often been made possible through research in LMICs, such as early Burkitt lymphoma chemotherapy trials in Uganda and human papillomavirus vaccination trials in Costa Rica (6, 7). The benefits of this progress have often not been equitably delivered back to LMIC communities who contributed to these successes. Moreover, inequities in cancer between high-income countries (HIC) and LMICs result in research that does not reflect the global burden of disease nor the full scientific value of studies conducted in LMICs (8). Entrenched power asymmetries often linked to funding sources can contribute to local expertise being undermined and the career advancement of HIC investigators being favored over LMIC collaborators. Through a facilitated discussion with experts representing four world regions and distinct academic disciplines, a robust discussion was had about HIC-LMIC research collaborations.

The speakers and audience, again engaged by means of Mentimeter, stressed the need for locally driven research questions, robust community engagement, and intersectional approaches to addressing global cancer disparities. There was acknowledgment of the need to increase participation of researchers in LMICs and country commitments to support health research: many countries in sub-Saharan Africa still have less than 0.9% of the GDP on health research despite an African Union commitment of at least 1% in 2010 (9). A need to develop structures and processes that are truly responsive to local community needs was strongly endorsed. The need for advanced training in specific disciplines and competing clinical demands were raised as some of the barriers to conducting high-quality research in these settings. A call for “real-world” health systems research that addresses the urgent concerns of patients was also made.

Suggestions that arose included multisectoral stakeholder engagement across whole health systems, for example, finance and education, to ensure translation of research findings, and appropriate humility and listening on the part of HIC researchers and funders. In addition, the opportunity for bidirectional knowledge exchange and learning, showing respect for local expertise, and building trust to ensuring effective partnerships were mentioned. Effective partnerships alongside robust community engagement were, in turn, seen as the path to successful translation and dissemination of research findings.

In addition to the two scientific panels, 101 abstracts were accepted for oral or poster presentation and publication in this special issue of AACR Cancer Epidemiology, Biomarkers, and Prevention. Abstracts represented 71 institutions in 25 countries, with research taking place in 68 countries. The virtual format of the Symposium provided the ability to accept a record number of abstracts compared with prior years. Posters were displayed on the event website and were searchable by keyword, cancer site, and author institution country. Ten abstracts were selected for oral presentation as pre-recorded, 5-minute flash talks, followed by a live question and answer session with authors. Abstracts spanned the cancer continuum, but the majority focused on early detection, diagnosis, and prognosis (34 abstracts) or cancer control survivorship, and outcomes research (29 abstracts). The majority of site-specific research in the abstracts was on cervical cancer (27) or breast cancer (21), aligning with the interests of attendees and global burden of cancer data. The accepted scientific abstract posters were accessible on the event website through June 2021.

At the close of the meeting, the Scientific Committee presented the Rachel Pearlline Award, named in honor of the late Rachel Pearlline, MD, MPH, a dedicated and passionate global cancer research and control professional, who received the award posthumously in 2016 following her death at age 38 from gastric cancer in 2015. The award recognizes outstanding professionals for their excellence in global cancer research and practice focused in LMICs. The 2020 and 2021 recipients were Frederick Chite Asirwa, Consultant Physician, Medical Oncologist and Hematologist, and CEO of the International Cancer Institute, Eldoret, Kenya; and Karla Alfaro, Medical Director of Basic Health International in San Salvador, El Salvador. Both awardees delivered keynote addresses and shared their experiences around innovations that help to address the challenges of health care provision and cancer research in LMICs.

Throughout 2021, the NCI Center for Global Health is celebrating its 10th anniversary, and the 50th anniversary of the U.S. National Cancer Act. With these milestones, NCI and the global oncology
community renew our commitment to reduce worldwide cancer suffering through scientific discovery and dissemination that advance and support the NCI mission. The ASGCR is a flagship meeting that enables exchange and collaboration among scientists, physicians, implementors, trainees, and other stakeholders. As the field of global oncology continues to grow, we look forward to continued advancement of global cancer research and control which builds on the 2021 meeting. The abstracts that follow highlight such exciting ongoing progress, and as the ASGCR scientific steering committee, we are pleased to share them with you.

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References
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