

Research, Practice and Policy: Links in an essential chain for optimal national cancer control



Cary Adams,
Chief Executive Officer,
Union for International
Cancer Control.



Allen S Lichter, MD,
Chief Executive Officer,
American Society of
Clinical Oncology.

Correspondence:
E: communication@uicc.org

In September 2011, the United Nations held an historic High-level Meeting on Non-communicable Diseases (NCDs). This meeting was only the second such health summit in the history of the UN, and represented global recognition of the growing burden of cancer and other NCDs. The cancer community must now grasp this opportunity to strengthen links between research, practice and government policy—an essential chain for the control of cancer and of NCDs, generally.

We know from history that when researchers, practitioners and policymakers join hands, major improvements in cancer control are achieved. In the United States, which recently marked the fortieth anniversary of the National Cancer Act, there is strong public interest and funding for cancer programmes. Over the past 40 years, US cancer death rates have fallen 18 percent and nearly 80 percent of children with cancer can be cured [1]. Though cervical cancer used to be the number one cancer killer of women in the United States, over the past three decades its incidence and mortality in the US have declined approximately 50 percent [2].

Today, strong connections between research, practice and policy have never been more important. National policies are crucial, to support the research that realises today's scientific promise and sustaining a practice environment that can deliver on that promise. The united effort of a diverse community – researchers, physicians, patients and politicians – culminated in the formation of the National Cancer Act, which made possible many of the gains noted above. The same kind of energy is needed across the global community if we are to meet the challenges articulated so clearly at the historic United Nations High-level Meeting.

Research is the foundation upon which the global response to cancer rests. Today practitioners have a better understanding of the behaviour of cancer cells at the molecular and genetic levels. Over the past decade, the discovery of several molecular and genetic abnormalities unique to cancer cells has led to the development of novel therapies that are less toxic and more effective. Unique variations of gene mutations help separate the more aggressive tumours from those that are less aggressive, enabling physicians to individualise treatment based on genetic and molecular characteristics of a particular patient. Research has also revealed how solid tumours such as breast cancer and lung cancer are in fact extremely heterogeneous families of malignant neoplasms, with profound implications for the management of these diseases.

The exploding knowledge about cancer biology can help target resources to their most effective use, improve quality of life and return patients to productive lives. It has been estimated that reducing the mortality rate of cancer by 20% would be worth \$10 trillion (US) in economic value—more than one year's gross domestic product (GDP). And eliminating deaths from cancer would be worth about

\$47 trillion [3]. This should be an important consideration for national leaders everywhere.

Realising the benefit of scientific advances in cancer treatment depends on delivery of evidence-based high quality care. In addition, the medical, social and economic costs of inconsistent, fragmented care are well documented. Use of clinical practice guidelines and similar tools offers a successful model for assuring consistent application of what we know works. The worldwide cancer community has multidisciplinary bodies such as ASCO, the European Society for Medical Oncology (ESMO), the National Comprehensive Cancer Network (NCCN) and many others that inform medical opinion and practice, and help prioritise interventions in National Cancer Control Plans (NCCPs). The Breast Health Global Initiative builds upon this model, aiming to develop economically feasible, culturally appropriate guidelines for breast health and cancer control in low- and middle-income countries. More approaches like this are needed for regions with limited resources and a growing cancer burden. In addition to clinical guidance tools, quality measurement programmes can offer insight about how care is delivered, how resources are deployed and how patients navigate their cancer experience. ASCO's Quality Oncology Practice Initiative (QOPI) offers one model for improving oncology practice quality through the analysis of clinical data against evidence-based quality indicators. By consistently delivering high quality, evidence-based care, oncology professionals can assure the most effective deployment of national resources.

National cancer control plans (NCCPs) offer a way to forge the vital link between research, practice and policy. NCCPs play a central role in guiding national cancer control efforts, as they promote the implementation of evidence-based strategies for prevention, early detection, diagnosis, treatment, and palliation [4]. Such plans rely on cancer research that identifies effective interventions and strategies, and on population-based cancer registries that inform policy and programme development, monitoring and evaluation of policies and programmes, and future research priorities [5].

Still, there are clear breaks in the research-practice-policy chain. Not all countries have developed and implemented NCCPs. Government-sponsored cancer research is under threat from global financial pressures and domestic fiscal constraints. And as one of the more noteworthy examples, though we have known for decades that tobacco is the leading cause of preventable cancer death, we have not yet seen universal ratification of the Framework Convention for Tobacco Control. Regrettably, the United States remains one of the outliers.

Putting research into policy is a complex process, perhaps more so than putting research into practice. As a community we need to ask ourselves how we can be more effective in communicating research and its implications to policy-makers. This may mean

being more aware of factors that influence the political dialogue, understanding the interactions of key stakeholders, and fostering closer collaboration between researchers and practitioners in the policy realm. This approach seems to have improved the discovery-to-delivery gap in primary care [6-7]. Moreover, a transdisciplinary approach to linking research to practice and policy, taking sociocultural, environmental and physiological factors into account may be necessary [8]. Lastly, the cancer community must work to advance implementation research that provides the evidence base for cost-effectiveness analysis. It is often economics that has the greatest influence on political opinion.

Translating evidence into clear recommendations for policy makers is a skill in which we need to excel for the benefit of cancer patients. The World Cancer Congress will provide a unique platform, and one of the few opportunities, for researchers, clinicians and policy makers to interact (see box). We encourage all to seize opportunities like the Congress and other national fora to put research into practice – and both into policy. ■

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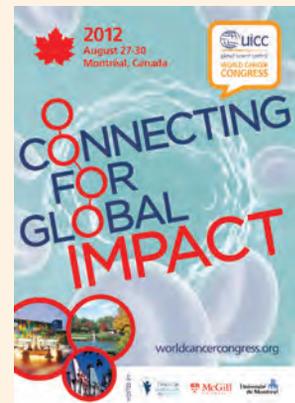
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World Cancer Congress:

UICC and its hosts Fondation québécoise du cancer, McGill University and Université de Montréal; are pleased to announce that the next UICC World Cancer Congress will take place from the 27-30 August 2012 at the Palais des Congrès Montréal, Canada.

Held every two years, the Congress represents a unique and ideal platform for the international cancer control community to meet, discuss, share, learn and connect in order to find solutions to reduce the impact of cancer on communities around the world. With this in mind the theme for the for the 2012 congress is "Connecting for Global Impact" and highlights the need for continued support and momentum in translating the benefits of knowledge gained through research and practice to those living with and affected by cancer.

To learn more and register visit:
www.worldcancercongress.org/



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