

Editorial

A New Era for Cancer Prevention and Control Research

Commentary re: R. A. Hiatt and B. K. Rimer, A New Strategy for Cancer Control Research. *Cancer Epidemiol. Biomark. Prev.*, 8: 957–964, 1999

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The review by Hiatt and Rimer (1) describes a new strategy for cancer control research. The good news is that there is a plan for cancer control research, and it is grounded in fundamental basic research using measured observation, structured intervention, and careful surveillance for evaluation.

As a cancer control investigator who wrestled with the definition of cancer control when the Division of Cancer Control and Rehabilitation funded demonstration projects but did not support research and in the 1980s when all cancer control activities were defined by five phases, I probably appreciate the history of cancer control more than most readers. There have been accomplishments, but I suspect that the credit is only partly due to the NCI,² DCPC. For instance, the tobacco control success story is dependent not only on the ambitious community intervention program laid out in 1983 by Joseph Cullen and Peter Greenwald but is also the result of militant antitobacco forces that worked through the judicial adversarial system, public sentiment, and legislative action. As a member (1986–1987) and chairman (1988–1989) of the DCPC Scientific Advisory Committee, I was concerned that there was too much emphasis on large group intervention that was supported through requests for application, and too little regard for investigator-initiated research funded by the R01 pool. In the 1980s, it was also evident that NCI cancer control efforts were not fully coordinated with activities or services of the Centers for Disease Control, the American Cancer Society (ACS), and regional public health agencies.

Hiatt and Rimer do an excellent job of highlighting the challenges for cancer control research: (a) tobacco control in special populations; (b) cancer screening in underserved populations; (c) applying behavioral interventions to realize diet, lifestyle, and weight control; and (d) addressing the inequalities in cancer care and prevention due to race, ethnicity, and low socioeconomic status. Fortunately for the nation, the appointment of Dr. Richard Klausner to the NCI directorship fostered institutional self-evaluation and reorganization. Perhaps in no other function of the NCI has this mandate had a larger impact: two stellar review committees reviewed and recommended changes in the function, strategy, direction, and organization of

DCPC and created two new programs, the Division of Cancer Prevention and the DCCPS.

The review makes a convincing argument for organizing the DCCPS to tackle important cancer control problems, *i.e.*, tobacco use in adolescents and lower-income populations, population acceptance and response to diet and exercise guidelines, overexposure to sun and cancer-causing infectious agents, promotion of proven screening methods among hard-to-reach populations, fostering interdisciplinary research in genetics and cancer, addressing the issue of cancer survivorship, and cancer in minorities and underserved populations.

The most refreshing part of the review is the presentation of a new framework for cancer control. The focus or foundation of the DCCPS is behavioral intervention “grounded in epidemiologic and surveillance research and informed by biomedical discoveries” (1). The espoused biobehavioral model will be encouraging to psychologists, sociologists, and biologists as they prepare to take on tobacco use, nicotine addiction, prudent diet compliance, cancer screening, and population research.

I am delighted that Hiatt and Rimer propose to use the Framework for Cancer Control adopted by the ACOCC of the NCIC (2). As a member of ACOCC, I had the pleasure of chairing the *ad hoc* international committee that developed the framework (3). As Hiatt and Rimer point out, all worthwhile cancer control programs must address five questions: (a) what do we know? (*i.e.*, fundamental research assessment); (b) what works? (*i.e.*, intervention research results); (c) how do we deliver it? (*i.e.*, program delivery); (d) what have we accomplished? (*i.e.*, surveillance and monitoring); and (e) what is the next step? (*i.e.*, knowledge synthesis and decision-making).

Although Hiatt and Rimer allude to it, the ACOCC writing committee felt strongly that the framework process has the best chance for successful application when the following key principals are affirmed: (a) accountability (*i.e.*, the need to report, explain, or justify actions taken); (b) empowerment (*i.e.*, full participation of investigators and subjects or stake-holders in decision making); (c) ethics (*i.e.*, right conduct, fairness, and scientific merit); and (d) efficiency (*i.e.*, benefits or outcome proportional to costs and efforts expended).

It should be pointed out that the ACOCC uses the Framework for Cancer Control as a measure to help prioritized National Cancer Institute of Canada research programs, as a basis for investigators to justify the significance of their proposals, and as a system to help provincial and city health departments plan population-based cancer control interventions or services. In 1997, a series of articles appeared in *Cancer Prevention and Control* critiquing the framework. Cameron *et al.* (4) noted that the framework: (a) facilitated systematic thinking about research options and priorities; (b) helped foster clear communication; (c) linked service and practice; (d) assisted grant review panels in placing proposed studies in the proper context; and (e) emphasized important values. In 1998, ACOCC issued a request for proposal (RFP) to have an outside

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² The abbreviations used are: NCI, National Cancer Institute (United States); DCPC, Division of Cancer Prevention and Control (NCI); DCCPS, Division of Cancer Control and Population Studies; ACOCC, Advisory Committee for Cancer Control (National Cancer Institute of Canada).

agency assess the impact of ACOCC projects in light of the framework.³ Key informants perceived that the framework was more useful for planning cancer control activities than for the implementation of research or practice, that the framework was too theoretical, and the categories and principles espoused by the framework were vague. Certainly, Hiatt and Rimer and their colleagues will need to address some of these issues if the framework is going to serve a purpose for United States investigators.

It is clear to me that by incorporating the ACOCC framework for cancer control, the DCCPS has placed new emphasis on the contribution of epidemiology and surveillance as well as basic science to behavioral interventions. Hiatt and Rimer also underscore the importance of partnerships between the NCI and Centers for Disease Control, American Cancer Society, private foundations, and professional organizations like American So-

³ I. Rutman, M. Goldstad, F. Asbury, and B. Leland-Jones, Evaluation of the impact of ACOCC projects report submitted to the Advisory Committee on Cancer Control, National Cancer Institute of Canada, personal communication.

ciety of Preventive Oncology, American Society of Clinical Oncology, and American College of Radiology. This expansion of cancer control research will greatly benefit cancer care specialists, cancer centers, public health institutions, and, most importantly, cancer patients and citizens who are at risk for cancer. I, along with my colleagues involved in cancer control research, look forward to a long, exciting, and fruitful relationship with Dr. Rimer and her staff at DCCPS, knowing they espouse the principles and approaches discussed in their review article.

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