

CANCER IN ONE WORLD: A TIME FOR INITIATIVES IN PUBLIC HEALTH ONCOLOGY

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"If we are to avoid the bitter repercussions that will surely follow from failing to assist the economic, technological and political development of those less advantaged than ourselves; if we are to utilize to the full the most precious resource that we have, human beings, then we must broaden our concept of "us" from its present narrow confines to embrace the entire human race". John Rovert Rathgam

We live in one world. The events of fellow global citizens thousands of miles away come to our attention immediately. And, for many reasons, the illnesses and diseases of people everywhere on the planet are recognized as of concern to us all. For contagious infectious diseases, the possibility of optimal disease control can only be realized with open and rapid international communication. For non-communicable diseases like cancer, the consequences of ignoring outcomes for our less fortunate citizens are indirect, but perhaps more pernicious. The revolution in telecommunications has led to circumstances whereby a majority of people everywhere learn soon of the possibility of better outcomes from new cancer treatments. However absence of social justice, inadequate health care systems, and poverty make such treatments but dreams for the majority of those afflicted. Migration and anger are among the many responses.

The broad communicable disease medical communities are responding to their international challenges. With the assistance of the Gates Foundation in particular, but also of Former Presidents Carter, George H.W. Bush, and Clinton, tuberculosis, malaria and orphan infectious diseases are subjects of major initiatives. The AIDS community is similarly moving meaningfully towards "One World, One Hope" (1). In cancer however, our assessment is that we are behind, and recent progress in treatment and global realities make a compelling case for initiatives in our community also.

There are two big stories in cancer: the global burden is growing rapidly, and the costs of current "optimal" treatments are huge (2). Multiple factors are contributing to the former picture: population growth, better control of communicable diseases with associated long life expectancies, and increasing affluence and associated risk factors-dietary and lower fertility for examples. There continue to be large differences in incidence/mortality ratios among

and within countries (2). Systemic, particularly adjuvant therapies, are the most important contributors to decreasing cancer specific mortality in some western countries, but despite major financial contributions from public sources to their development, the costs of these newer therapies are high. For examples, the drug-only costs of adjuvant cytotoxic chemotherapy regimens in breast cancer can be \$40-50,000, a year of Herceptin costs \$60,000, and aromatase inhibitors cost \$6 a day, or \$2200 a year and multi-year therapy is being suggested by clinical trial results (3). The principle of distributive justice has not influenced decision making for use of these therapies. In the U.S. Medicare policy has been to ignore cost efficacy analyses, while on a global level the WHO Commission on Macroeconomics and Health has suggested that medical interventions which yield a year of life saved are cost effective if the price is less than the average per capita annual domestic product for that country (4). None of the above mentioned therapies for breast cancer comes close to meeting that standard *in the United States*. (Example see reference 5), and by this measure very few systemic therapies for cancer are cost effective in most developing countries.

At the same time developments in molecular biology offer powerful tools to investigate genetic, nutritional, and environmental explanations for differences in incidences and mortality with individual malignancies among populations, and well-trained and thoughtful clinical investigators can be found in most countries of the world. A decade after Magrath and Litvak heralded the international opportunities and challenges in cancer, these have been scarcely addressed (6). Then how *can* we begin to better address these opportunities, and increase our global collaborations and connectedness to better serve *all* cancer victims? We might frame areas or approaches to the challenges of bringing optimal cancer care to our global communities in three ways: *social justice and human rights, charity and development*. In this communication the first perhaps demands a slightly more expanded exposition.

Seeking social justice broadly involves addressing what Paul Farmer calls *structural violence: the diffuse and indirect forces in societies, which limits individual choices in the extreme* (7). It is sometimes difficult for the more privileged among us to imagine the extent of restrictions which affect the daily lives of the majority of global citizens. Beyond war, the ultimate destroyer of health, political terrorism, racism---in the extreme resulting in genocide (Rawanda and Darfur), cultural extremism, class discrimination, religious terrorism, gender discrimination extending to gendercide, and poverty describe widely present structural violence within our societies today. The relationships of poverty and disease are well documented: who lives

and dies is strongly related to economic status and the health outcomes between rich and poor are growing globally and within countries (8). Because these forces so dramatically affect diagnostic and treatment outcomes, cancer physicians should be concerned with such structural violence and become better educated about constructive roles we can play in addressing these overwhelming and deeply anchored conditions in our societies. But it is hard to know as an individual where to start, for we need transforming social changes and leadership. One dimension however to which we believe we can respond and explore concerns the ethical issues these causes of structural violence pose. Since its writing over half a century ago, the Universal Declaration of Human Rights has been little discussed in our public forums.

The Universal Declaration of Human Rights

Article 25:

Everyone has the right to a standard of living adequate for the health and well being of himself and his family.

Article 26:

Everyone has the right to share on scientific advancement and its benefits.

Surely we need to talk more now about health care as a human right. Is our patient contract a social or business relationship? The ethical corollaries of the central issues in health are the duties to assist and to do no harm. These are less easily addressed than stated. The aims, extent and completion of our assistance are challenging. In many ways the duty to do no harm may be more important than the duty to assist. Whatever we consider doing in moving to better address cancer in "one world", the global bioethical dimensions deserve our thoughtful consideration first.

Charity has been the time-honored way of addressing structural violence such as poverty, but increasingly large and small efforts and organizations have been strongly criticized as often counter productive (9). As we consider initiatives in cancer therefore, we should surely reflect on the myriad of lessons learned.

Broadly, development has been seen as the key to addressing poverty, but rigorous critics from de Soto to Stiglitz and Reich have argued that considerable developments in societal infrastructure are prerequisite to success in individual countries (10,11,12).

We have discoursed on these frameworks for addressing global inequalities in cancer health because we have had direct experience of their importance and relevance in working on cancer problems in developing countries and to argue that the challenges of doing good for our afflicted citizens around the world will take breadth of vision and intellect, knowledge and interaction, and skill. What then might our initiatives be?

Through its educational committee and annual and semi-annual meetings ASCO could be a focus for “one world” efforts in cancer in four areas. First, with respect to social justice and human rights, we suggest that a new part of the meetings be a Cancer Global Bioethics forum to which eminent leaders are invited to make presentations on ways to reconcile our concerns with and activities in addressing social violence. A central presence of such a forum in the annual meeting would additionally send strong messages of concern to our foreign visitor colleagues and of solidarity to now “forgotten” cancer patients worldwide. Paul Farmer, Jimmy Carter and the faculty of the global bioethics project at Harvard, among others, are people the oncology community should be listening to for ideas about how we can practice broad public health oncology.

Next, ASCO should facilitate and champion a “Partners for Progress” initiative and sister institutional “market” with workshops seeking to assist cancer centers (both academic and community) and investigators in the United States and other western countries in “twinning” with hospitals in developing countries. Franco Cavalli from Switzerland and St. Jude Children’s Research Hospital in the United States have successfully used this model in pediatric oncology and some institutions in the U.S. have major collaborative relationships with hospitals or cancer programs abroad (13,14). In the United States a generation of clinical oncologists who have been very successful financially, is approaching retirement. From among these experienced individuals there is a core of manpower for such an initiative. Next ASCO needs to provide a forum and leadership in addressing issues of the costs of cancer therapies in the same way Medecins sans Frontieres has done for AIDS pharmaceuticals (15).

Finally in research, at a time when in the United States the federal budget for support of cancer research is likely to be flat or even decrease, ASCO should itself encourage or create a mechanism marshalling resources to support international public health oncology research. Such clinical research should be bold –perhaps better characterized as high risk-high gain, and grounded in our developing and stunning insights in biologic science, but focused on identifying practical, non-toxic, cost-effective (by global standards) strategies and

interventions in cancer (16). We need to actively seek better value for the resources spent in addressing malignancies in all populations.

These are but some ideas. Other thoughtful individuals will creatively and constructively modify these and offer others. In cancer such efforts are overdue. It is time for the cancer community to move from being perceived as part of the problem of mis-allocation of scarce medical resources to leading in finding global solutions for all cancer victims.

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