A Time for Creative Collaboration

Gabriel N. Hortobágyi, MD

Guidelines for International Breast Health and Cancer Control—Implementation

Supplement to Cancer

Cancer is a global problem and knows no national borders. It ignores social class, economic status, and political or religious orientation. As we make progress in the treatment and prevention of other common diseases of mankind, neoplastic diseases will increase in incidence and will become an increasingly prominent cause of death around the world. Enlightened approaches to public health, better control of infectious diseases, and increasingly successful preventive interventions of other common diseases result in longer life expectancy; because the incidence of most cancers increases with age, these changes will automatically lead to more cancers around the world. We have seen this scenario unfold in industrialized countries. We will see an explosive growth in common cancers in the developing world within the next half century, as life expectancy increases there as well.1,2

There have been marked improvements in the diagnosis, prevention, and treatment of malignant diseases over the past century, and particularly over the past 2 decades.3 With the exception of tobacco-related cancers, other common cancers are being diagnosed in earlier stages, and their multidisciplinary treatment strategies are increasingly successful in controlling or curing a majority of patients. Much of this progress is because of improved understanding of the biologic underpinnings of malignant diseases in general, and each cancer in particular.4 However, a good part of recent progress would not have been possible without rapid technologic advances and the investment of huge resources in the development of novel therapeutics. Thus, progress comes at a cost, and cost places increasing obstacles to access to life-saving care.

Let us focus on breast cancer, the subject of all efforts of the Breast Health Global Initiative (BHGI). Breast cancer is the most common cancer of women in the industrialized world, and in much of the developing world.5 This year there will be an estimated 1.2 million new cases diagnosed around the globe, greater than half in the developing world.6 This figure is expected to increase markedly over the next several decades, especially as life expectancy and the standard of living increase in countries of limited resources. Incidence rates vary at least 37-fold in different parts of the world, from a low of 4 of 100,000 in Mozambique to as high as 150 of 100,000 for non-Hispanic whites in the US.4 Mortality rates also vary, from a low of 3 of 100,000 to a high of 35 of...
100,000, an 11-fold difference. The mortality to incidence ratios range from 45% in some developing countries to 88% in North America. These figures make the international disparities painfully obvious. The apparent reasons for these disparities relate to limited resources allocated to healthcare, resulting in inadequate or no access to early diagnosis, prevention, and treatment.

Whereas approximately 70% of newly diagnosed breast cancers in North America are in stages 0 and I, approximately 75% of new breast cancers in the developing world are diagnosed in stages III and IV. The 5-year survival of patients with localized breast cancer in the US is 97.5%; the 5-year survival of patients with stage IIIA is approximately 75%, whereas for those with stage IIIB and IV disease, it is 50% and 25%, respectively. Thus, earlier diagnosis has a dramatic effect on outcome, and the prevention of mortality and morbidity of the disease. All cancer treatments are more effective when applied to earlier diagnosis of breast cancer, compared with their use in later stages.

Early stage breast cancer lends itself to treatment with limited surgical interventions: breast-conserving surgery and sentinel lymph node biopsy. Advanced stages usually require a total mastectomy and axillary lymph node dissection. Early stage breast cancer requires either limited radiotherapy after breast-conserving surgery, or no radiotherapy at all after a total mastectomy. Early stage breast cancer may be appropriately treated with endocrine adjuvant therapy, whereas larger tumors will require chemotherapy. Thus, not only is the treatment of early stage breast cancer more successful in preventing mortality from breast cancer, but treatments are simpler and less morbid. From the perspective of technology, the majority of breast cancer deaths around the world are clearly preventable. One could estimate that, if we applied everything we know about breast cancer and its management to all the earth’s population, we would decrease breast cancer mortality by 66% to 75%!

The management of breast cancer is multidisciplinary in nature, and requires the thoughtful input of multiple specialties: diagnostic imaging, pathology, and surgical, medical, and radiation oncology at a minimum. In addition, psychologists, experts in palliative care, social workers, reconstructive surgeons, endocrinologists, geneticists, and neurologists have much to contribute. It has been shown that patients treated in dedicated, multispecialty breast units have better outcomes than patients treated elsewhere. However, such units exist only in a few places, and even in the richest countries are largely limited to select urban areas. Optimal management of breast cancer has multiple components, and some of them add quantitatively more to the outcome than others. Can we then select those components that have the largest impact on outcome, while requiring relatively limited resources to implement them on a global scale? We must remember that the care of patients with breast cancer must compete, in budgetary terms, with the care of patients with other cancers, and more broadly with all other health conditions and other, non–healthcare-related budgetary items. In many countries, the problem might not be a shortage of resources, but the prioritization of resources. That problem can only be solved through the political process. However, prioritization of healthcare interventions can (and should) be solved by healthcare professionals. Providing well-designed, balanced, and reasonable solutions to healthcare decision makers in any country facilitates their task of fair allocation of resources and will have a greater likelihood of favorable attention than an uncoordinated but vocal demand to address a need that is perceived to serve a narrow segment of the population.

So, what can the BHGI accomplish? As a group of highly selected breast cancer and public health professionals and advocates, the BHGI has no steady sources of revenue or a strong political base. It does not control governments, large budgets, legislative bodies, or government-supported institutions. What it has is the expertise and the passion to develop solutions and the willingness to find realistic ways to do so. The guideline structure developed by the BHGI defines the minimal components of a breast health program; without these components, a society or country should not even pretend that they care for individuals at risk for, or patients with, breast cancer. Without the basic components, there is no breast health program. I believe that is a powerful statement, and empowers patients, advocates, and health professionals everywhere to demand from their political representatives that this minimal level of care be implemented and maintained. The next 3 increasingly sophisticated levels of care add more effective components that can substitute for, or improve the results of, the basic level of care. This, however, occurs at the cost of increased resources, a better trained workforce, and increased demands on the healthcare system. In a society of limited resources, such increasingly effective, but costly, levels of care should lead to an open discussion about prioritization of resources, and an understanding on the part of the public and their elected representatives of where taxes are invested. There is not a single “right” answer in this process, but there
should be a best answer for a specific country or society.

It is not the BHGI’s mission to get involved in the political process in different countries in the world. It is not the BHGI’s mission to determine how healthcare professionals should practice medicine and provide care to breast cancer patients in their countries. It is not the BHGI’s mission to be judgmental, or to criticize the actions of specific governments. In fact, it is not the BHGI’s mission to replace or substitute for existing international organizations involved in healthcare or cancer care around the world.

What the expertise of the BHGI can provide is the impartial assessment of existing evidence for best practices in the diagnosis, prevention, and treatment of breast diseases; it can distill from that the relative contribution and cost-effectiveness of each component of current, multidisciplinary breast cancer management. By providing guidelines of increasing sophistication, the BHGI can define the minimum needs for providing breast cancer care, and goals for improvement in quality of care. The BHGI guidelines also provide targets for the development of healthcare systems that are appropriately responsive to the needs of breast cancer patients, and in the process, to patients with other cancers. By identifying the need, and pointing out the unnecessary loss of life and morbidity from breast cancer, the BHGI hopes to inspire professionals, patients, advocates, and decision makers to initiate steps to improve breast cancer care in their country or region. By disseminating these principles and guidelines, the BHGI also hopes to recruit a broader constituency around the world that understands that the burden of breast cancer morbidity and mortality does not have to remain unchanged; there are tools and strategies to reduce both, often with relatively limited resources, if those are used wisely. A better educated public community and healthcare community might also choose to develop their own tools and guidelines that are more appropriate for their environments and sociopolitical reality.

It is also the hope of the BHGI that other international organizations will take notice of these guidelines and use their existing structure and networks for guideline dissemination and implementation worldwide. The education of healthcare professionals and the public at large would, in and of itself, contribute to understanding the problem and working toward the common goal of improving breast cancer care.

Finally, there is the problem of access to novel drugs and technology. In a capitalist system, for-profit companies and corporations are expected to deliver a profit to their shareholders. Thus, we understand that the manufacturers of novel diagnostic equipment, therapeutic tools, and increasingly specific and effective drugs would want to benefit from their invention and discovery. At the same time, we are all part of a community, and we should give back to the community that gave us the opportunity to prosper. The recent example of the international effort to open access to control the worldwide epidemic of human immunodeficiency virus infections is a clear indication that we can all do more. The distribution of life-saving drugs and treatment tools to communities in the developing world, matched with the offer of training and educational opportunities for their healthcare providers, could enhance the implementation of the BHGI guidelines and accelerate the rate of progress in breast cancer care around the globe.

We have the collective possibility to save nearly half a million lives every year. Unless we join hands to take on these challenges and make a difference, the difference will never come.

FINANCIAL DISCLOSURES

Funding for the BHGI, 2007 Global Summit on International Breast Health—Implementation and Guidelines for International Breast Health and Cancer Control—Implementation publication came from partnering organizations who share a commitment to medically underserved women. We thank and gratefully acknowledge these organizations and agencies for grants and conference support: Fred Hutchinson Cancer Research Center; Susan G. Komen for the Cure; American Society of Clinical Oncology (ASCO); US National Cancer Institute, Office of International Affairs (OIA); American Cancer Society; Lance Armstrong Foundation; US Agency for Healthcare Research and Quality (*Grant 1 R13 HS017218-01); US Centers for Disease Control and Prevention, Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion; American Society of Breast Disease; Oncology Nursing Society; US National Cancer Institute, Office of Women’s Health (OWH); and US National Institutes of Health, Office of Research on Women’s Health (ORWH).

*Funding for the 2007 Global Summit on International Breast Health—Implementation was made possible (in part) by Grant No. 1 R13 HS017218-01 from the Agency for Healthcare Research and Quality (AHRQ). The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations suggest endorsement by the US Government.

We thank and gratefully acknowledge the generous support of our corporate partners through unrestricted educational grants: Pfizer Inc.; AstraZeneca; Bristol-Myers Squibb Company; Ethicon Endo Surgery, Inc.; GE Healthcare; F Hoffmann-La Roche AG; and Novartis Oncology.
The BHGI is a global health alliance of organizations and individuals. We are grateful to our collaborators throughout the world who share the BHGI mission and vision. Thank you for your important contributions to this endeavor for medically underserved women.

REFERENCES