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• The Breast Health Global Initiative (BHGI)



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Purpose and Specific Aims



The Breast Health Global Initiative (BHGI) strives to develop evidence-based, economically feasible, and culturally appropriate guidelines for developing countries to improve breast health outcomes. The guidelines outline a stepwise systematic approach to breast health care improvement for limited resource settings, focusing on early detection, diagnosis and treatment of breast cancer. The process of guideline development creates a hub for linkage and alliances among the clinical community, health care policy makers, advocacy groups and non-governmental organizations (NGOs) and the public health sciences research community.

Background

Breast cancer is the most common cause of cancer-related death among women around the globe. Each year, breast cancer is newly diagnosed in more than 1.1 million women, and these cases represent more than 10% of all new cancer cases. With more than 410,000 deaths each year, breast cancer accounts for over 1.6% of all female deaths worldwide. Breast cancer already is an urgent public health problem in high resource regions, and is becoming an increasingly urgent problem in low resource regions, where incidence rates have been increasing by up to 5% per year.

Low resource countries have generally not identified cancer as a priority health care issue because infectious disease is the predominant public health threat in such settings. Nonetheless, resources are inevitably spent on cancer treatment when patients seek medical care for what is typically advanced-stage disease. Cancer becomes an increasing problem in such countries as the control of communicable

diseases improves and life expectancy increases. However, obstacles to improving cancer care arise from multiple sources, including deficits in public knowledge and awareness, social and cultural barriers, challenges in organizing health care, and insufficient resources.

In high resource countries, evidence-based guidelines outlining optimal approaches to early detection, diagnosis, and treatment of breast cancer have been defined and disseminated. These guidelines from wealthy countries do not consider variable resource distributions and are likely to be unworkable in the face of the ubiquitous infrastructure and resources deficits in limited-resource countries. Moreover, these guidelines are not designed to consider implementation costs or provide guidance as to how a suboptimal system can be improved incrementally toward an optimal system. As pointed out by WHO, guidelines defining ideal cancer care and services have limited utility in resource-constrained countries. Thus, there has been a lack of resource-based guidance related to strategies to reduce the burden of breast cancer in settings where ideal care is not feasible.

The Global Summits 2002, 2005 And 2007 Global Summit 2002 (Seattle)

The first biennial Global Summit was held in Seattle, October 2002, to establish the first breast health Guidelines to address how care may best be provided in countries where significant gaps in health care resources exist. Guidelines development followed consensus panel analysis of evidence-based breast care

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modeling. Panels of breast cancer experts representing 17 countries and nine world regions created Guidelines for breast cancer in countries with limited health care resources based upon definitions created by the World Health Organization (WHO) for national cancer programs. The breast health care Guidelines were published as a supplement publication in *The Breast Journal* in 2003 and have been made freely available in an unrestricted fashion on the internet for world-wide access (<http://www.fhcr.org/science/phs/bhgi/>). To date, these are the only written consensus guidelines that specifically address issues of breast care implementation in countries of limited resources.

Global Summit 2005 (Bethesda)

To update and expand on the BHGI guidelines published in 2003, the 2005 BHGI panels outlined a stepwise, systematic approach to health care improvement in the areas of early detection and access to care, diagnosis and pathology, treatment and resource allocation, and health care systems and public policy, as they relate to breast health care in limited-resource settings. A tiered system of resource allotment was defined using four levels—basic, limited, enhanced, and maximal—based on the contribution of each resource toward improving clinical outcomes. During this analysis, a number of key points were identified and/or demonstrated:

- Early breast cancer detection improves outcome in a cost effective fashion assuming treatment is available;
- The effectiveness of early detection programs require public education to foster active patient participation in diagnosis and treatment;
- Clinical breast examination combined with diagnostic breast imaging (breast ultrasound with or without diagnostic mammography) can facilitate cost-effective tissue sampling techniques for cytological or histological diagnosis;
- Breast conserving therapy with partial mastectomy and radiation requires more health care resources and infrastructure than mastectomy, but can be provided in a thoughtfully designed limited resource setting;

- The availability and administration of systemic therapy are critical to improving breast cancer survival;
- Estrogen receptor testing allows patient selection for hormonal treatments (tamoxifen, oophorectomy) which is both better for patient care and allows proper distribution of services;
- Chemotherapy, which requires some allocation of resources and infrastructure, is needed to treat node-positive, locally advanced breast cancers, which represent the most common clinical presentation of disease in low-resource countries;
- When chemotherapy is unavailable, patients presenting with locally advanced, hormone receptor negative cancers can only receive palliative therapy.

Tables that delineate cancer detection, diagnosis and treatment resources and services within an organized stratification schema are published in a January/February 2006 supplement to the *Breast Journal* and are available on line (<http://www.fhcr.org/science/phs/bhgi/>). These tools can be used to communicate programmatic needs to hospital administrations, government officials and/or health care ministries. It is the thesis of the BHGI that these works create a framework for change, by defining practical pathways through which breast cancer care can be improved in an incremental and cost-effective fashion.

Global Summit 2007 (International Site To-be-determined)

The 2007 Global Summit format will fundamentally adhere to the 2005 Summit structure, bringing together some of the best minds in medicine, science, policy, public health and health economics to address “best practices with limited resources.” A host organization and international summit site is to-be-determined.

Panels will address early detection and access to care, diagnosis and pathology, treatment and allocation of resources, and health care systems and public policy. However, the 2007 summit focus will shift, from development and expansion of the 2006 Guidelines for International Breast Health and



FIGURE 1: BHGI is a structure for linkages

Cancer Treatment, to address effective implementation and integration of breast health care interventions described in the Guidelines. Reallocation of existing resources and incorporation of a breast health care program with existing programs to potentially improve outcomes in a cost-sensitive manner and infrastructure will be explored.

BHGI Organizational Linkages

The BHGI is a structure for linkages through interdisciplinary communication, cooperation and alliance-building via the Global Summits, on-going communications, the website, and pilot research and demonstration projects between three core groups, (Figure 1):

1. **Clinicians and governmental health care agencies** (health care systems, physicians, scientists and government agencies);
2. **Advocacy and non-governmental organizations** (communication, patient advocacy, public education);
3. **Public health researchers** (outcomes analysis, economic modeling, demonstration projects, social impact studies)

Pilot Research & Demonstration Projects

Guidelines do not in-and-of themselves improve outcome for women. Implementation is the critical step by which the value of the guidelines may be measured. The BHGI operates as a catalyst for international breast cancer pilot research and demonstration projects with partnering organizations. In order to implement the Guidelines, the BHGI is developing project proposals that fit with the mission of the BHGI and follow the Guidelines framework. Currently, under development are proposals for:

- Pilot research projects
- Guideline demonstration
- Public education and provider training projects
- Special technology development projects

The results of pilot research projects and demonstration projects need to be studied and reported, both to determine the effectiveness of the guidelines, and to create evidence that will allow guideline implementation in other places. In this way, the BHGI endeavors to help women cope with and survive the ravages of the most common cancer and most common cancer killer among women.

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