

BREAST HEALTH CARE IN COUNTRIES WITH LIMITED RESOURCES

Benjamin O. Anderson, M.D.

Director and Chair, Breast Health Global Initiative Fred Hutchinson Cancer Research CenterProfessor of Surgery, University of Washington Seattle, Washington

Cancer therapy in limited resource settings

Resource-constrained countries have differing financial needs, resource limitations, social constraints and competing illness profiles that frame how national cancer programs should be implemented. Evidence-based guidelines from wealthy countries define optimal goals for resource-constrained countries, although these countries commonly lack the fundamental infrastructure that is required for direct implementation. Health care systems cannot be transformed at once. Improvements in early detection, diagnosis and treatment of cancer require organized, sequentially implemented steps to achieve improved outcome.

In studying cancer care implementation in limited resource countries, it is necessary to examine disease-specific applications. The causes, incidence, required resources for therapy and outcome vary by cancer-type. Some cancers are preventable by avoidance of exposure to toxins. Tobacco use in all forms is responsible for about 30% of all cancer deaths in developed countries, which could largely be prevented by limiting or eliminating the use of tobacco.1 Optimal treatment of people diagnosed with certain types of cancer detected early, such as cancers of the uterine cervix and corpus, breast, testis, and melanoma, will result in 5-year survival rates of 75% or more. The significant morbidity and mortality of cervical cancer in limited resource countries can be dramatically improved with cost-effective screening and prevention programs in limited resource countries.2 Diagnosis and treatment of most other cancers require sophisticated technology that is available only in locations with substantial resources. If we are to make headway in the global control of cancer, thoughtful study will be needed to determine how care for these other more common, more treatable, but more resource-demanding cancers can be best implemented in limited resource settings.

Breast cancer in limited resource settings

Breast cancer is the most common cause of cancer-related death for women worldwide.3 Countries with established and adequately funded health care systems have higher breast cancer diagnosis rates, but also have improved breast cancer survival.4 Early breast cancer detection and comprehensive cancer treatment appear to play synergistic roles in creating improved outcomes. In economically developed countries, guidelines outlining optimal approaches to early detection, diagnosis and treatment of breast cancer have been defined and disseminated.5-7

Breast cancer mortality rates are highest among economically disadvantaged countries.8 Low and mid-level income countries typically lack major components of heath care infrastructure and resources necessary to implement improved methods for early detection, diagnosis and treatment of breast cancer.9 Existing guidelines defining optimal breast cancer therapy lack consideration of this infrastructure and resource deficit. They do not include implementation costs and provide no guidance as to how an existing system can be improved incrementally toward the ideal delivery system. As pointed out by the World Health Organization (WHO), guidelines defining optimal breast care and services have limited utility in resource-constrained countries.1

Resource-constrained countries lack the financial resources to implement optimal breast health care programs. As a result, breast care guidelines from economically privileged regions such as the U.S. and Western Europe have limited utility in low-level or midlevel resource countries. Instead, these countries need to implement breast cancer control programs that are appropriate for their country's resources and competing health care needs.

Evidence-based guidelines can define strategies by which economically practical incremental improvements can be sequentially introduced within the context of resource constraints to create measurable improvements in health care administration and outcome.

Breast care guidelines for limited resource countries

The development of international evidence-based breast health care guidelines oriented to developing countries of the world with low-level and medium-level financial resources is a crucial step toward improving breast health care and cancer treatment in these countries. It is possible to define evidence-based "best practices with limited resources" for breast healthcare for use in countries where access to healthcare is challenged, breast cancer awareness is limited and cultural barriers need to be overcome.

Guidelines for countries of limited resources may require that alternate strategies for care to those adopted in wealthy countries to allow sequential steps in improvement provided that those alternate strategies are not defining a "lowered" standard of care for that country.

The Breast Health Global Initiative (BHGI) is a program that strives to develop evidence-based, economically feasible, and culturally appropriate guidelines for underdeveloped nations to improve



breast health outcomes. Resource-constrained countries have differing financial needs, resource limitations, social constraints and competing illness profiles that frame how national breast health care programs should be implemented. While evidence-based guidelines from wealthy countries define optimal goals for resource-constrained countries, these countries commonly lack the fundamental infrastructure that is required for direct implementation. Thus, the development of international evidence-based breast health care guidelines oriented to developing countries of the world with low-level and medium-level financial resources is a crucial step toward improving breast health care and cancer treatment in these countries.

Global Summit 2002 (Seattle) and 2005 (Bethesda)

The BHGI held the first biennial Global Summit Consensus Conference on International Breast Health Care held in Seattle, Washington in October 2002 to establish breast health guidelines to address how care may best be provided in countries where significant gaps in health care resources exist.10The guideline development followed consensus panel analysis of evidence-based breast care modeling. Based on definitions created by the WHO for national cancer programs,1 panels of breast cancer experts representing 17 countries and 9 world regions created guidelines to address early detection, diagnosis and treatment of breast cancer in countries with limited health care resources.11-14 The breast health care guidelines were published in 2003 and have been made available in an unrestricted fashion on the internet for world-wide access. To date, these are the only written consensus guidelines that specifically address issues of breast care implementation in countries of limited resources.

References

- Executive summary of the national cancer control programmes: policies and managerial guidelines. Geneva: World Health Organization, 2002: 1-24.
- Planning and implementing cervical cancer prevention and control programs: A manual for managers. Seattle: Alliance for Cervical Cancer Prevention (ACCP), 2004.
- Parkin DM, Pisani P, Ferlay J. Global cancer statistics. CA Cancer J Clin 1999;49(1):33-64.
- Jemal A, Thomas A, Murray T, Thun M. Cancer statistics, 2002. CA Cancer J Clin 2002;52(1):23-47.
- Carlson RW, Anderson BO, Bensinger W, et al. NCCN Practice Guidelines for Breast Cancer. Oncology (Huntingt) 2000;14(11A):33-49.
- Morrow M, Strom EA, Bassett LW, et al. Standard for breast conservation therapy in the management of invasive breast carcinoma. CA Cancer J Clin 2002;52(5):277-300.
- Smith RA. Breast cancer screening among women younger than age 50: a current assessment of the issues. CA Cancer J Clin 2000;50(5):312-36.

With extended multilateral sponsorship of national and international collaborating organizations, the BHGI guidelines were reexamined, revised and extended at the biennial Global Summit

Consensus Conference, January 12-15, 2005, hosted by the Office of International Affairs of the National Cancer Institute (NCI) in Bethesda, Maryland. Twelve national and international groups joined BHGI as collaborating organizations. In addition, BHGI established affiliations with three WHO programs to provide input into guideline development: the Cancer Control Program, Health System Policies and Operations, and the Alliance for Health Policy and Systems Research. In order to implement BHGI guidelines into practice, a separate but integrated effort will be made to establish a core resource for epidemiological outcomes analysis to be developed in conjunction with guideline revision and expansion.

Over 60 international experts were gathered from around the world in related fields of breast cancer screening, surgery, oncology, radiation therapy, pathology/cytology, and health economic analysis, to review and update the previously published international breast health care and cancer treatment guidelines for developing countries. These experts were organized in four panels: 1) Early Detection and Access to Care, 2) Diagnosis and Pathology, 3) Cancer Treatment and Allocation of Resources, 4)

Health Care Systems and Public Policy. The updated guidelines will be published in a second monograph in the Breast Journal in the January/February 2006 issue, will be made available on the internet, and that site will be linked to the WHO website, which receives 50 million hits per month.

- Greenlee RT, Murray T, Bolden S, Wingo PA. Cancer statistics, 2000. CA Cancer J Clin 2000;50(1):7-33.
- Zotov V, Shyyan R. Introduction of breast cancer screening in Chernihiv Oblast in the Ukraine: report of a PATH Breast Cancer Assistance Program experience. Breast J 2003;9 Suppl 2:S75-80.
- Anderson BO. Global summit consensus conference on international breast health care: guidelines for countries with limited resources. Breast J 2003;9 Suppl 2:S40-1.
- Anderson BO, Braun S, Carlson RW, et al. Overview of breast health care guidelines for countries with limited resources. Breast J 2003;9 Suppl 2:S42-50.
- Anderson BO, Braun S, Lim S, Smith RA, Taplin S, Thomas DB. Early detection of breast cancer in countries with limited resources. Breast J 2003;9 Suppl 2:S51-9.
- 13. Vargas HI, Anderson BO, Chopra R, et al. Diagnosis of breast cancer in countries with limited resources. Breast J 2003;9 Suppl 2:S60-6.
- Carlson RW, Anderson BO, Chopra R, et al. Treatment of breast cancer in countries with limited resources. Breast J 2003;9 Suppl 2:S67-74.