

## The Current Status of Breast Cancer Among Resource-Limited Countries

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As the leading cause of cancer deaths among women breast cancer remains a medical and social challenge, as well as a major public health problem. On a global level, it continues to be a devastating disease for which no cause or cure has been found. Over 1.1 million women worldwide are diagnosed with breast cancer each year and more than 410,000 of them die from this disease. Breast cancer accounts for 10% of all new cancer cases and for greater than 1.6% of mortality in women globally.<sup>1-3</sup>

Aside from the physical morbidity associated with breast cancer, this disease causes significant psychosexual impairment during a woman's lifetime. Breasts play an important role in a woman's sexuality and self-image. For some women, the loss of a breast to breast cancer is viewed as the loss of their sexual identity. Often breast cancer is associated with serious emotional issues such as depression, anxiety and negative perception of self image.

During the last several years, there have been significant advances in patient advocacy, early breast cancer

detection and therapy. One milestone that has been achieved is increased public awareness of breast cancer. Many patients and survivors have been willing to openly share their pain and experiences while encouraging others to join them in the fight against this disease. Their efforts have been most effective in gaining increased funding for breast cancer research and in the emphasis on breast cancer screening and early detection. Advances in breast imaging and genetics, the introduction of minimally invasive diagnostic and therapeutic procedures, and the discovery of molecular targeted therapy have resulted in significant progress in enhancing the quality of life for many breast cancer patients.<sup>4-6</sup>

There has been a remarkable change in the fundamental understanding of breast cancer. This disease is no longer viewed as a single localized disease with radical surgery as the only alternative therapy. Breast cancer is a heterogeneous systemic disease that requires the attention of an integrated team of knowledgeable and interested

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physicians and health care providers who believe in a consolidated and multidisciplinary approach to breast health care. The magnitude of the importance of an integrated approach for breast cancer care has inspired the establishment of breast health centers focused on fostering individualized therapy.

The above-mentioned progress has resulted in the reduction of mortality rate from breast cancer in resource-rich countries. In the United States and Europe, as the result of screening mammography and the use of systemic chemotherapy and hormonal therapy, the mortality rate for breast cancer has been decreasing by 1-2% per year since the early 1990's.<sup>7</sup> In contrast, in resource-limited countries, the mortality rate from breast cancer has remained the same. Ironically, the incidence of breast cancer is higher in resource-rich countries but more women with breast cancer die of this disease in resource-limited countries.<sup>3</sup>

These facts provide powerful evidence that improvement in breast cancer survival is achievable when appropriate resources are available and measures are in place to fulfill the task. In other words, it is possible to favorably impact breast cancer mortality by applying incremental changes in cancer care within a population. The barriers are numerous. Providing optimal breast health care to a geographically diverse population with different genetic backgrounds, social values, religious beliefs, lifestyle and economic status is a major task. There are also cultural and political influences, which play important roles in this process.

Traditional beliefs and negative societal attitudes concerning breast cancer in resource limited countries significantly hinder a woman's access to appropriate medical care. The loss of a breast is a terrifying experience for a woman whose husband may divorce her because of the "bad genes" that she has brought to the family and the fact that she is no longer sexually desirable.<sup>8-10</sup> Many societies with low incomes and limited medical resources are often male-dominated. In these societies women have low social status and fewer personal resources. In these circumstances,

other barriers include lack or limited health insurance, lack of transportation to a medical facility, inability to take off from work, inability to pay for child care and the fear of abandonment by their husbands after a diagnosis of breast cancer is made.<sup>11-12</sup>

These cultural taboos affect women's access to information, early detection and treatment. Associated with beliefs of fatalism, many women fall into social isolation and accept the poor outcomes. In resource-limited countries the knowledge of most women about breast cancer and its warning signs are very limited. This factor may also influence the delay in referral for treatment and increase in the incidence of late stage disease presentation. Social fear of breast cancer, cultural taboos and myths, and a lack of adequate public health educational resources are major obstacles in countries with limited resources. This has a major impact on early breast cancer detection and disease outcome. Implementation of breast cancer advocacy and public awareness programs are especially challenging. Limitations in financial support, social barriers and competing illnesses are factors that adversely affect the establishment of advocacy programs in limited-resource countries.<sup>11-13</sup>

The underlying differences in known risk factors, access to effective treatment and the influence of organized screening programs are the key factors in explaining the differences in the incidence, mortality and survival rates among different regions of the world.<sup>14,15</sup> A common feature worldwide is the rising incidence of breast cancer which ranges from 0.5% to 3% per year with a projected number of 1.4 - 1.5 million in 2010.<sup>1</sup> The emerging disparity in this long-term mortality trend, however, is the result of the growing burden of breast cancer in resource-limited countries. This problem is attributed to the common presentation of the disease at late stage when the prognosis is poor.

It is difficult to argue with health care leaders of resource-limited countries who are focused on more urgent needs such as providing clean water, sanitation and infectious disease. It is, however,

possible to implement low cost interventions that could make a difference.<sup>16</sup>

There is no doubt that treating early stage breast cancer is more cost effective than treating late stage disease. However, there is a broad variation in epidemiology between regions and significant difference in cost structure of each area. The barriers to reform are numerous and often difficult to understand. The realization of the complexity of cancer care at an international level is a necessary initial step.<sup>17,18</sup> It is also critically important to recognize that the existing guidelines for optimal breast cancer early detection, diagnosis and therapy designed for resource-rich countries are not practical for resource-limited regions.<sup>19-20</sup> This limitation has also been confirmed by the World Health Organization.<sup>21</sup>

The alternative is to develop region-specific guidelines that realistically take into consideration the financial, political, cultural and social issues surrounding each resource-limited country. The concept of resource-appropriate strategies for optimal breast cancer care is central to the framework of any proposed guidelines. This approach provides a realistic opportunity for every region of the world to make an effort to gradually improve their delivery of breast health care. This stepwise improvement is indeed a remarkable starting point, which will pave the way for a gradual progression to optimal care. Influencing the change in breast health care at global level is an ambitious task and requires a significant amount of endurance to make sure this message is heard by government heads, health care leaders, administrators, physicians, scientists, health care providers, nurses, social workers, technicians, industry, religious leaders, and more importantly, by the people of the world.

The barriers to reform are numerous and often difficult to comprehend. Therefore the realization of the complexity of cancer care at an international level is a necessary initial step. This understanding will require an orchestrated and well-planned educational program that can highlight the challenges and promises of the delivery of optimal

breast health care across the globe. We at the University of Florida College of Medicine, Jacksonville have been engaged in providing a unique "Breast Health Educational Program" which includes educational opportunities for physicians in the form of "The Breast Journal" and an "Annual Multidisciplinary Symposium on Breast Disease". In addition, our Public Forum is a platform for educating the public about the science of breast cancer via a real time communication between a multidisciplinary panel of experts and the public.

In our recent meeting at Cairo during October 25-28, 2009 we highlighted the issues surrounding breast health care in Middle East and North Africa during a "Breast Health Summit". This summit focused on the development of specific strategies relevant to the local health conditions that can be easily adapted for use in each country.

Breast cancer continues to remain a public health threat across the world. The innovation in early detection and therapy will impact the quality of life and reduces the mortality among patients in resource-rich countries. The breast cancer patients in resource-limited countries will become more aware of their right for access to a better quality of breast health care. The international advocacy move will become more effective in enhancing the knowledge about breast cancer among the public and the health care providers. Together with the assistance from a committed international breast cancer community, breast cancer will become a national public health priority in countries of limited resources. The challenge is how to accelerate the process against the time that is so essential to implement the change.

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