Breast Cancer in Developing Countries: Challenges for Multidisciplinary Care

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The stigma of breast cancer in developing countries, and especially in underserved communities, continues to have a deep impact on both patients' treatment and survival. We are aware that the patterns of cancer incidence are different in developing and Western countries. While the causes of increasing breast cancer incidence and mortality in low- and middle-income countries are not yet fully understood, and solutions will imperatively be country-specific, the estimated mortality-to-incidence ratios are generally lower in developed regions. More than 55% of breast cancer related deaths occur in the developing world. However, for breast cancer and other malignancies, survival rates vary both between the developing world and the developed world as a whole and between individual communities within each of these groups.

A substantial body of international research evidence today supports the view that health outcomes for breast disease can be optimized by means of specialist multidisciplinary approaches to treatment and care. This evidence indicates that such a team perspective, in which health professionals together balance treatment options and develop individual treatment plans, can reduce mortality, improve quality of life, facilitate satisfactory cosmetic results, and reduce healthcare costs. The treatment of breast cancer lends itself to a multidisciplinary approach and professional diversity, as high-quality care is most effectively realized through multimodal therapy. This implies that optimal treatment and supportive care for breast cancer patients requires input from the women themselves as well as from their surgeons, medical and radiation oncologists, radiologists and pathologists, general practitioners and nurses, and other allies. A growing number of patients with early-stage breast cancer in developing as well as developed countries are being evaluated in comprehensive, integrated breast cancer centers, yet care may also be accomplished elsewhere by consultation between professionals. Across the globe, multidisciplinary care has been incorporated

into various national clinical practice guidelines and frameworks. The diversity of healthcare delivery settings and types of care in underserved communities means that a single model of multidisciplinary care may neither be appropriate nor feasible. Thus, we encounter a series of different barriers to the implementation of multidisciplinary breast care in the setting of limited resources, throughout which large tumors, advanced disease and younger age at presentation are common. As to demographics, difficulties arise due to regional and rural areas lacking the staff requirements for multidisciplinary care and in involving visiting consultants, additionally to intricate population dispersion patterns outside metropolitan areas. Low case loads, funding and sustainability levels are related challenges in this respect. In behavioral and cultural terms, multidisciplinary care may be impeded by resistance to change and poor role definitions within the team, but also by limited cultural sensitivity and deficiencies in understanding the legal implications of decisions made by a team rather than an individual.

Certain behavioral risk factors, including lower parity levels, delayed childbearing and reduced breast-feeding, are primarily associated with a higher risk of breast cancer in postmenopausal women and are becoming more prevalent in developing countries. The patterns in which such reproductive factors relate to incidence and mortality in developing countries, where rates of postmenopausal disease are much lower than in Western countries, and are yet to be fully explored.

At the interindividual level, finally, multidisciplinary care is increasingly marked by our dedication to integrity, innovation and inclusivity. We are more and more aware that disparities in mortality are predominantly due to marginal health care, low awareness of breast disease, and cultural barriers to care. Ideally, holistic multidisciplinary care is executed as a stepwise approach across the spectrum of treatment and care, accepting the need for flexibility and leadership in the process of change.

Thus, the team approach adopted by breast health networks may link access to the fullest range of therapies and compliance with established standards of care with an emphasis on patient involvement. The reason for the global rise in breast cancer most frequently referred to is the ‘westernization’ of the developing world. Some cancers that are increasingly common in developing countries, including breast cancer, are likely to reflect longer life expectancy and progressively westernized lifestyles, reproductive behavior, diet and physical activity. This applies both to socioeconomic improvements that enhance life expectancy and allow reproductive control, and also to less desirable habits which could increase breast cancer risk. Overall, it will be important to conceptualize early-in-life changes in exercise and dietary tendencies in order to explain the growing incidence of breast cancer in developing countries.

For sure, current global figures cannot truly reflect the underlying economic and cultural diversity driving increased incidence and related mortality. While multidisciplinary care clearly has benefits for both clinicians and patients, advances in surgical techniques, radiation therapy, and systemic therapies hold promise for even better outcomes. Research and health care efforts to understand and alter the trends in incidence and mortality are under way. Early detection through mammography, targeted hormonal and anti-HER2 therapies, and improvements in chemotherapy today are key elements to the Western world’s strategic armamentarium in breast cancer care. But will they prove feasible and effective in the developing world marked by utterly different ethnic and cultural settings? In both worlds, it is still empathy and the continual communication between disciplines that allow for individualized treatments in the framework of multidisciplinary care.