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Editorial

The Need for Holistic Cancer Care Framework: Breast Cancer Care as an Example

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Breast cancer (BC) is the most common cancer in females in the Sultanate of Oman, with significant physical and psychological burden. By studying two cohorts of patients diagnosed over a twelve year period between 1996 and 2008, we have previously demonstrated that BC in Oman presents in advanced stages in younger patients with aggressive biological characteristics such as triple negative phenotype and poor tumor differentiation.[1,2] The advanced stage at presentation is the most important prognostic factor and impacts negatively on outcome in terms of overall survival.[3] It has been disappointing to observe that there has been no change in advanced stage presentation with stages III and IV forming 51% and 59% in the two periods studied, 1996-2002 and 2003-2008, respectively.[1,2] However, we have observed an improvement in 5 years survival between the two cohorts with improvement from 64% to 78% between the two periods of study, respectively.[1,2] These findings strongly suggest that the improvement in survival has been due to optimization of surgical and medical management with the introduction of various new chemotherapeutic regimens and targeted therapy. However, treatment of advanced breast cancer is costly and represents a significant financial burden. It is estimated that the cost for a breast cancer patient ranged between $20,000 and $100,000 in the USA in 2009, with increasing cost for patients presenting in advanced stages of BC.[4] Therefore, it can be safely concluded that the failure to detect BC at early stages impacts negatively on patient survival in Oman, with significant physical and psychological morbidity and increased financial expenditure at the national level.

Obviously, the question that arises is why patients present in advanced stages of breast cancer in Oman? It is likely due to be multifactorial with interplay of social, psychological and religious factors, as well as a lack of awareness and early detection programs, inaccessibility of specialized BC healthcare and suboptimal surgical and medical management.[3,5] The wide scope of contributing factors to advanced stage presentation of BC in Oman necessitates the advocacy of new cancer care framework in general and BC in particular based on a holistic approach recognizing that cancer care is a "continuum."[6] The types of care in a cancer care continuum include risk assessment, primary secondary prevention, early detection, diagnosis, treatment, follow-up and end of life care.[6]

Since the establishment of cancer care in Oman, the emphasis has been on three types of care that included diagnosis, treatment, and follow-up. In contrast, other types of care in cancer continuum such as risk assessment, primary secondary prevention, early detection, and end of life care are under developed or non-existent. More importantly, the implementation of all types of care within the cancer care continuum allows the definition of measurable patient and population outcome goals and assessment of care processes such as safety, equity, and efficiency. However, the successful implementation of cancer care continuum involves interaction between multiple levels of organizational hierarchies that ultimately shape the individual health outcome and in turn may result in failure or success of types of care within the cancer continuum.[6,7] It has been described that these organizational hierarchies involve national health policy and environment, local community environment, organization and practice setting, team care provided, family and social support, as well as the individual patient.[6,7] Obviously, the interaction between and within these organizational hierarchies is complex and requires massive coordination. In a recent paper, Zapaka et al. described multilevel intervention strategies for early detection of breast and cervical cancers spanning across the organizational structures and aimed at changing the perception, knowledge, skills and behavior of patients, cares, and organizations, in addition to focusing on identification of focusing on failures that may occur at any step of care.[7] Therefore, in order for us to address the current problem in hand which is the advanced breast cancer presentation, we need to understand and analyze the national health policies, organizational and care provider processes and procedures, and ultimately medical management outcome. This is in glaring contrast to the current practice of cancer care in Oman that focuses solely on treatment of diagnosed cases of breast cancer. The current approach is obviously costly and will not result in the desired patient and population outcomes.

In conclusion, there is urgent need to review our current approach to cancer care in Oman and breast cancer care in particular. The adoption of cancer care continuum with provision of all types of care through coordinated efforts of various organizational hierarchies and implementation of interventional strategies is required. It is time to move forward towards a new holistic cancer care approach to enhance quality, efficiency, accountability, and patient outcome.

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