

EDITORIAL

Implementation of the Suggested Guidelines for Breast Cancer Risk, Genetics, and Risk Assessment: The Critical Need for Educating Practicing Physicians

The leading article in this issue of *The Breast Journal* is devoted to the proceedings of the 2007 International Consensus Conference on Breast Cancer Risk, Genetics, and risk management. Directed by Dr. Gordon Schwartz, a recognized authority in breast cancer surgery from Thomas Jefferson University, at Philadelphia this consensus has focused on the development of risk management strategies for high-risk individuals and has suggested guidelines for optimal patient care (1).

As any other consensus conference, this proceedings is predominantly the results of the experience, knowledge and clinical and research experience of a selected group of internationally recognized key opinion leaders who were invited to participate in this consensus conference. As stated in this article, as this proceedings is only partly evidence based, it is critically important not to consider these suggested guidelines as established standards of care. It is best to use them in conjunction with other parameters of breast health care on an individual basis.

This proceedings serves as a landmark publication which provides a comprehensive overview of the current recognized breast cancer risk factors, the impact of the associated breast cancer genes, and the appropriate risk management strategies based on the stratified level of cancer risk. Significant emphasis has also been placed on the value of providing a balanced breast cancer risk assessment by qualified physicians. It is clearly stated that the "Recommendations for genetic counseling and management of identified risk are the responsibility of individualized physician(s) and the full participation of the patient."

There is no doubt that the key to the success of implementation of the suggested guidelines in this proceedings require knowledgeable physicians and informed patients who have clear understanding of the breast cancer risk assessment process and the

available risk reduction modalities as the options. Therefore, sustainable efforts to educate physicians and patients are essential. Aside from the necessity of delivery of pertinent information about the diagnosis and therapy to a patient, it is equally important for physicians involved in breast health care to educate the patients about breast cancer risk factors. There are significant numbers of patients with no cancer, who may have significant risk factors for development of breast cancer during their life time. Recognition of high-risk individuals and appropriate counseling may have long-lasting impact on the life of a woman and her family (2,3). Currently, there is sufficient evidence to support that patient participation in decision making enhances the patients control over their health care, results in more patient oriented decision and may lead to better health outcome. Participation of patients in decision making process requires well-informed patients (4–7).

The patients experience the need for proper direction and guidance from their physicians and are often overwhelmed with scattered and fragmented breast health information (8,9). The available websites can be hard to navigate and tend to present information that is not easy to understand (8–10). Rapid advances in science and technology may render information obsolete (11). Another challenge evolves around the quality of information on the internet and the accuracy of the available findings. In addition, access to web-based breast health education may not be available to low-income and medically underserved patients (12–14). Therefore, physicians are the best educators for their patients.

The major issue among physicians involved in breast health care; however, is the low level of their knowledge about breast cancer risk factors. Several studies have already reported that physicians have limited knowledge about genetic testing for cancer (15–17). In addition, variability in the practice of breast health care among different regions of the world and in different medical centers make it difficult to offer

an educational program on breast cancer assessment for a focused group of physicians and to monitor the impact of that exercise on patient care.

Differences in the access to breast health care often places a patient in front of variety of different health care providers. Initially a patient may see a primary care physician, an obstetrics and gynecologist, a general surgeon, an internists, a physician assistant, a nurse practitioner and others such as a technical staff at a mammography unit. The challenge is how to disseminate the right information to the right physician/health care provider in a real time fashion that can make a difference in the quality of patient care.

Breast cancer education is a complex process and crosses over many disciplines with their own unique inherent differences and controversies. However, it has already been shown that physicians who are aware of their professional guidelines are more knowledgeable about breast cancer risk management compared with those who are not familiar with similar guidelines (18). Based on the results of this study, development of professional guidelines and appropriate dissemination of the information to wide range of physicians and health care providers may be an effective tool to influence the knowledge about breast cancer risk. Aside from the current proceedings, other information such as the previous publication of the "US Perspective Service Task Force" on genetic risk assessment and BRCA mutation testing for breast and ovarian cancer susceptibility provides an evidence based recommendations on which professional guidelines can be based (19).

Despite these efforts, reviews of the published reports in the literature indicate that the provision of printed materials alone is of limited usefulness in changing the pattern of clinical practice and physicians behavior (20,21). In contrast, referral guidelines are more likely to be effective if disseminated through educational interventions. In the study conducted by Watson *et al.* (22), the authors have clearly demonstrated that the development of an information pack containing referral guidelines and accompanying in practice educational sessions results in higher proportion of primary care physicians making appropriate referrals of their high-risk patients. This strategy may be the foundation for future studies on this topic.

Advances in molecular genetic testing and increased awareness of the public about breast cancer risk factors and DNA genetic susceptibility testing continue to require serious attention from scientific community

and health care providers. As a relatively new and exciting topic, the information on cancer risk and DNA genetic testing should be fully integrated during the early years of medical school training. This change will guarantee that the future graduates of medical schools and those in various residency programs will know more about breast cancer risk assessment and its impact on the quality of patient care than the current generation.

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