

EDITORIAL

Potential of the Internet to Meet the Needs of Women with Breast Cancer

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Women with breast cancer require substantial informational and emotional support from health care providers. The threats posed by the cancer diagnosis, the uncertainties in treatment outcome, and the physical and psychological hardships of cancer therapy are distressing under any circumstance, but even more so when women do not receive provider support (1-3) Effective communication between physicians and patients leads to improved diagnosis and outcomes, greater adherence to medication regimes, increased compliance with preventive care measures, and fewer malpractice claims (4-6) In addition, women with breast cancer who are adequately informed about their illness and treatment and who appropriately communicate with physicians are better able to reduce their feelings of distress (7-9) However. communication is less than optimal and patients often find it difficult to obtain the support they need. The unfortunate consequence is greater dissatisfaction, misinformation, and misunderstanding within the clinical relationship than necessary.

The emergence of the Internet has changed how patients learn about health and illness. The Internet is often the first place patients go to seek health information, advice, reassurance and support. It is estimated that more people search the Internet for health information everyday than see a doctor. (10) Indeed, health sites and discussion lists are among the most popular web desti-

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Samsung Comprehensive Cancer Center, Samsung Medical Center, 50 Ilwon-dong, Gangnam-gu, Seoul 135–750, Korea Tel: 02–3410–1448, Fax: 02–3410–6639 E-mail: jh1448.cho@samsung.com nations. An increasing number of breast cancer patients use the Internet to communicate with physicians, both directly and indirectly using email exchanges, webmessaging, or question and answer boards. (11–13) In this editorial, we describe the potential benefits of Internet-based communications between physicians and patients to meet the needs of breast cancer patients,

The Internet has considerable potential to improve patients' access to physicians. It allows patients to communicate with physicians and obtain informational and emotional support without additional office visits or telephone calls. At every stage of their journey, cancer patients face many stressful situations that impact on their quality of life, such as making sense of complex medical information, making difficult treatment decisions, dealing with treatment side effects, and living with the fear of recurrence. (9) Although physicians are the preferred information resource for women with breast cancer, patients have often limited access to physicians. (14) The Internet provides additional opportunities for physicians to meet their patients' informational and emotional needs, which may in turn to reduce the disruption in their quality of life. Online communication allows patients to receive informational and emotional support from their home and possibly at times when support and access to faceto-face communication is unlikely to be available. (15) Moreover, because online communication is written and often asynchronous, both patients and physicians have more time to compose and revise messages before sending. Such time to reflect is rarely available in face-to-face interaction. This may result in a more articulate formu2 Juhee Cho, Katherine Smith

lation of patients' needs and of physicians' responses. In other words, it will increase patient participation and decrease the power imbalance that typifies traditional doctor-patient communication.

Women with breast cancer have a sustained need of information and emotional support even after active treatment (9) The Internet is a feasible communication or support tool for a broad range of women with breast cancer to obtain continuing support from physicians. Women who are in the diagnosis or self-management period may have less face-to-face interaction with physicians than patients who are receiving on-going treatment and who see their physicians regularly. Patients in the diagnostic period usually experience a high level of anxiety and uncertainty, and they may obtain proper emotional support through online communication with physicians while they have limited access to physician. Similarly, the Internet may be useful for asking questions of physicians when patients had physical changes or lifestyle modification or if they are unsure whether or not they need to see a doctor. Also, the Internet can be an efficient medium to transmit information and emotional support for women who are undergoing active treatment. Patients receiving chemotherapy or hormone therapy often seek information related to complications and side effects of their treatments. These complications may result in treatment delays, poor compliance, or premature treatment termination if patients are unable to perform self-care activities appropriately. As there are limited opportunities for patients to discuss these problems with oncology specialists or physicians, the Internet can be a good medium for physicians to communicate with patients about management of side effects and selfcare during treatment. Enhanced information can lead to a direct reduction in occurrence and/or severity of side effects and such communication would be efficient both patients and physicians regarding time, access, and resources.

A further opportunity for the Internet to improve (and not simply extend) communication between breast cancer patients and their physicians is that it may be easier for women to express their emotions and to discuss sensitive

topics with their physicians when communication is not face-to-face. Studies of online health discussion groups have found that participants tend to seek online support for conditions that they deem to be stigmatizing, including breast cancer (16) Patients may be more likely to communicate to physicians on the Internet when they have personal or potentially embarrassing questions that they cannot ask in front of physicians. Patients tend not to ask physicians many questions during their doctors' visits. Patients may not know what to ask or they may not able to formulate questions until they have had time to process the input. (17) Online communication may remove some of these barriers because patients are not in front of their doctor asking about sensitive topics and also because online interaction provides more time and space to process information and to formulate questions in response. Online communication has therefore been conceptualized as a potential 'visit extender', allowing physicians to learn about their patients' needs and concerns in ways that are not possible within the structure of conventional health care. (18) This is particularly beneficial in settings where patients have relatively little time to talk to physicians during their office visits.

The Internet may offer the greatest potential for younger women with breast cancer who are more likely to comfortable with Internet use. While younger women are more likely to seek for informational and emotional support from physicians rather than from other sources, (9,14) studies show that young women with breast cancer are particularly in need of online support as they are less likely to receive appropriate information and emotional support from other sources such as more traditional support groups.

In conclusion, the Internet has the potential to facilitate patient-physician communication and enhance the informational and emotional support physicians provide to their patients with breast cancer. Although physicians have been slow to adopt available web-based communication with patients, particularly email exchange and the integrated electronic medical record, adoption is likely to accelerate in the next few years. Because these innovations in communication technology and clinical data

systems are evolving rapidly, there is both optimism and uncertainty with respect to the consequences of these new tools for patient care. The most challenging and the most critical measure of this technological advance will be the degree to which these new tools support the therapeutic power of a strong doctor-patient relationship and patient-centered care.

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