Stress in the Lives of Cancer Patients



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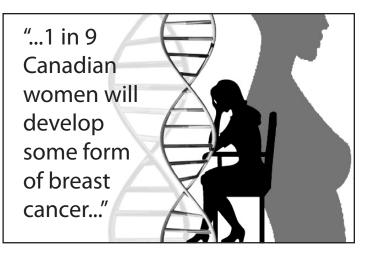
CURRENT ADVANCEMENTS IN CANCER THERAPY ARE QUICK TO CAPTURE THE ATTENTION OF SOCIETY. HOWEVER, WITH NO REAL CURE, PATIENTS MUST STRUGGLE TO LIVE WITH THE EFFECTS OF CANCER - BEYOND ITS BIOLOGICAL CONSEQUENCES. THIS ARTICLE INTRODUCES SOME OF THESE FACTORS AND THE STRESSES THAT PATIENTS FACE.

Becoming ill with cancer is a frightening thought. Amidst the brouhaha of emerging cancer therapies and endless risk factors, other implications of cancer are often unnoticed. Most understand that it can be devastating, but never truly recognize the depth at which this disease affects its patients. Not only does it have severe biological consequences in a human host, there are several other dimensions in which cancer can affect quality of life. While some factors are consistently found with each cancer, others define the specific characteristics of the disease. By looking at the psychological, physical, and familial implications of one specific cancer, such as breast cancer, we can begin to form a comprehensive understanding of the hardships that cancer patients face beyond their biological struggles.

Breast cancer is the most common cancer among women worldwide, apart from non-melanoma skin cancers (World Health Organization, 2004). According to the Canadian Cancer Society, one in nine Canadian women will develop some form of breast cancer in her lifetime. What follows is an overview of breast cancer literature on select issues pertaining to the lesser known effects of this prevalent disease.

PSYCHOLOGICAL IMPLICATIONS

A study in London, England, continually interviewed 170 women with early staged breast cancer for five years after initial diagnosis. It was found that, within the five year period, 60% of women reported episodes of anxiety and/ or depression (Burgess et al., 2005). It is not difficult to understand why these women experience feelings of distress. Apart from the obvious health concerns, there are difficult decisions that need to be made about treatment options and uncertainties regarding the future.



Unfortunately, this stress can exacerbate or be the result of pain and fatigue; these are the two most prevalent symptoms in cancer patients (Kurtz et al., 2008). Not only can these interfere with the patient's daily activities and motivation to exercise – a very important part of the healing process (Holmes et al., 2005) – but it can lead to catastrophizing. Catastrophizing is exhibited when patients display negative thoughts about themselves or the future, and do not possess a "fighting spirit" (Jacobson et al, 2004). In general, there is a strong association between depression and fatigue in breast cancer patients (Reuter et al., 2006) which can have a broad effect on many aspects of their lives during recovery.

Given these psychological effects after cancer diagnosis, research on coping mechanisms and social support has become increasingly important. In general, those who cope best with stress after diagnosis demonstrate higher psychological and physical quality of life throughout their treatment and recovery (Golden-Kreutz et al., 2005). The quality of life scores were assigned using the Medical Outcomes Study-Short Form (SF-36), a questionnaire that evaluates several categories, including physical and mental health, pain, and health perception (Ware et al., 1993). Additionally, women with more significant social support systems have lower mortality rates in some studies (Kroenke et al., 2006). These networks, formed by a collection of family, friends, and confidants, serve as an important avenue for emotional release. Therefore, it may be necessary to address the social and psychological issues facing patients throughout the course of recovery.

PHYSICAL EFFECTS

The physical appearance of cancer patients can change dramatically over the course of illness. Hair loss is a side effect of some chemotherapy regimes. Since, traditionally, hair was sometimes viewed as a symbol of culture or identity, many patients lose their self-confidence (Münstedt et al., 1997). However, nowadays, the effect of hair-loss depends on the patient's disposition: while one person may see hair-loss as a representation of their disease progression, others see it as a sign of pride and bravery (Batchelor, 2001).

Women with breast cancer face another body image problem that can especially affect their sexuality. Women report less satisfaction with themselves, due to factors such as weight gain, breast surgeries, hair loss, and problems with sexual activity. The latter issue is compounded if they feel that their partners do not understand the sexual implications of the disease (Fobair et al., 2006). Mastectomies (removal of the breast) and lumpectomies (removal of an isolated part of the breast) adds another dimension of fear and anxiety about rejection from a partner or suppressed self image. In one study, 41% of mastectomy patients felt uncomfortable and unhappy with their bodies six months after surgery. Of lumpectomy patients, 8% felt a similar way. In general, perceived body image after breast surgery becomes less of a problem over time (Schain et al., 2006). However, it plays a large part in treatment decisions as the outcome is often irreversible, except in the case of breast reconstruction. Yet, even with reconstruction, relationships may not revert back to their original charm since some become fearful of hurting their partners or reopening scars when intimate (Sandham & Harcourt, 2006).

FAMILIAL CONCERNS

While there are considerable personal issues to face during cancer recovery, many patients often think of the disease implications on their loved ones. Due to the nature of genetics, some cancers have a familial component, which naturally places relatives at an elevated risk compared to the general population. For example, the risk of breast cancer in women increases as the number of first-degree relatives with breast cancer increases (Collaborative Group on Hormonal Factors in Breast Cancer, 2001). The familial links between patients with breast cancer has spurred much research into mutated genes that may predispose cancer. The *BRCA1* and *BRCA2* genes have been heavily studied within populations of people with breast and ovarian cancer. In one study, it was found that approximately 25% of patients who were identified within families at risk of breast cancer carry a mutation in either gene (Shih et al., 2002; Simard et al., 2007). However, the actual population prevalence of mutations in the *BRCA1* and *BRCA2* genes is low within those affected by breast cancer (Risch et al., 2001).

Given the more sensitive methods of detecting genetic mutations and earlier detection of cancerrisks, women are becoming more stressed with genetic consultation. Patients and professionals feel that at the time of diagnosis, cancer patients would rather avoid the extra anticipation of genetic testing unless it played a role in altering treatment decisions (Ardern-Jones, 2005). Additionally, the joint occurrence of cancer diagnosis and positive cancer gene screening can result in perceived urgency from the patient, thereby giving them less time for rationalization of treatment options. This can lead to major changes, as in the case of mastectomies, and overtreatment (Ardern-Jones, 2005). The impact of genetic testing becomes even more important as studies have found an increase in post-traumatic stress disorder in mutated BRCA1/2 carriers when compared to those who do not have the mutation (Hamann et al., 2005).

CLOSING REMARKS

While the example of breast cancer has been used to explore some of the difficulties that patients face, it is important to keep in mind that many of these hardships are applicable to patients with other types of cancer. The variety of stresses experienced by patients is by no means limited to the factors introduced here. One must also be cognizant of specific complications arising from different therapies, the effect on one's career, as well as the implications for those who consider having children. Financial burden can be disheartening, while religious obligations may also add pressure to the patient. By understanding the multifaceted effects of cancer, support networks and health providers can better assist patients with their struggles. In realizing that cancer therapy is not just a battle against rogue cells, society can play a role in helping to maintain quality of life and happiness in the infirm.

REFERENCES

- Ardern-Jones, A., Kenen, R., Eeles, R. (2005). Too much, too soon? Patients and health professionals' views concerning the impact of genetic testing at the time of breast cancer diagnosis in women under the age of 40. European Journal of Cancer Care. 14(3):272-281.
- Batchelor, D. (2001). Hair and cancer chemotherapy: Consequences and nursing care—A literature study. European Journal of Cancer Care. 10:147–163.
- Burgess, C., Cornelius, V., Love, S., Graham, J., Richards, M., Ramirez, A. (2005). Depression and anxiety in women with early breast cancer: five year observational cohort study. British Medical Journal. 330:702.
- Canadian Cancer Society/National Cancer Institute of Canada: Canadian Cancer Statistics 2008, Toronto, Canada, 2008.
- Collaborative Group on Hormonal Factors in Breast Cancer. (2001). Familial breast cancer: collaborative reanalysis of individual data from 52 epidemiological studies including 58 209 women with breast cancer and 101 986 women without the disease. The Lancet. 358(9291):1389-1399.
- Fann, Jesse, Thomas-Rich, A., Katon, W., Cowley, D., Pepping, M., McGregor, B., Gralow, J. (2007). Major depression after breast cancer: a review of epidemiology and treatment. General Hospital Psychiatry. 30(2): 112-126.
- Fobair, P. Stewart, S., Chang, S., D'Onofrio, C., Banks, P., Bloom, J. (2006). Body image and sexual problems in young women with breast cancer. Psycho-Oncology. 15:579-594.
- Golden-Kreutz, D., Thornton, L., Wells-Di Gregorio, S., Frierson, G., Jim, H., Carpenter, K., Shelby, R., Andersen, B. (2005). Traumatic Stress, Perceived Global Stress, and Life Events: Prospectively Predicting Quality of Life in Breast Cancer Patients. Health Psychology. 24(3):288-296.
- Hamann, H., Somers, T., Smith, A., Inslicht, S., Baum, A. (2005). Posttraumatic Stress Associated With Cancer History and BRCA1/2 Genetic Testing. Psychosomatic Medicine. 67:766-772.
- Holmes, M., Chen, W., Feskanich, D., Kroenke, Colditz, G. (2005). Physical Activity and Survival After Breast Cancer Diagnosis. Obstetrical & Gynecological Survey. 60(12): 798-800.

- Jacobsen P., Andykowski, M., Thors, C. (2004). Catastrophizing among women receiving treatment for breast cancer. Journal of Consulting and Clinical Psychology. 72(2): 355–361.
- Münstedt, K., Manthey, N., Sachsse, S., Vahrson, H., (1997). Changes in selfconcept and body image during alopecia induced cancer chemotherapy. Support Care Cancer. 5:139–143.
- Reuter, K., Classen, C., Roscoe, J., Morrow, G., Kirshner, J., Rosenbluth, R., Flynn, P., Shedlock, K., Spiegel, D. (2006). Association of coping style, pain, age, and depression with fatigue in women with primary breast cancer. Psycho-Oncology. 15:722-779.
- Risch, H., McLaughlin, J., Cole, D., Rosen, B., Bradley, L., Kwan, E., Jack, E., Vesprini, D., Kuperstein, G., Abrahamson, J., Fan, I., Wong, B., Narod, S. (2001). Prevalence and Penetrance of Germline BRCA1 and BRCA2 Mutations in a Population Series of 649 Women with Ovarian Cancer. The American Society of Human Genetics. 68(3):700-710.
- Sandham, C. & Harcourt, D. (2006) Partner experiences of breast reconstruction post mastectomy. European Journal of Oncology Nursing. 11(1):66-73.
- Schain, W., d'Angelo, T., Dunn, M., Lichter, A., Pierce, L. (2006). Mastectomy versus conservative surgery and radiation therapy. Psychosocial consequences. Psycho-Oncology. 73(4):1221-1228.
- Shih, H., Couch, F., Nathanson, K., Blackwood, A., Rebbeck, T., Armstrong, K., Calzone, K., Stopfer, J., Seal, S., Stratton, M., Weber, B. BRCA1 and BRCA2 Mutation Frequency in Women Evaluated in a Breast Cancer Risk Evaluation Clinic. Journal of Clinical Oncology. 20(4):994-999.
- Simard, J., Dumont, M., Moisan, A., Gaborieau, V., Vézine, H., Durocher, F., et al. (2006). Evaluation of BRCA1 and BRCA2 mutation prevalence, risk prediction models and a multistep testing approach in French-Canadian families with high risk of breast and ovarian cancer. Journal of Medical Genetics. 44:107-121.
- Ware, J., Snow, M., Kosinski, B., (1993). SF-36 Health Survey: Manual and interpretation guide. Lincoln, RI: Quality Metric Incorporated.
- World Health Organization Department of Measurement and Health Information. (2004). Mortality and Health Status: Causes of Death. Geneva: World Health Organization.

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