# **Post-Traumatic Stress Disorder Related to the Cancer Experience**

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wasn't sure if it was a question or a statement, but when a family member commented, "It is the one-year anniversary of your cancer diagnosis. You must feel better," I found myself comforting her by replying, "Yes, I feel better." In reality, I felt worse. It was five months after my treatment ended and I still couldn't find myself. Was I even the same self? This is when I understood that I was experiencing a form of post-traumatic stress disorder (PTSD) after my diagnosis and treatment for ovarian and breast cancer.

Many healthcare professionals think about PTSD in the context of soldiers returning from war zones, victims of abuse, or trauma survivors. Beginning in 1994, PTSD also was applied to patients with cancer when the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (DSM-IV) redefined trauma criteria to include life-threatening illness such as cancer (American Psychiatric Association [APA], 2000). Many oncology nurses may be surprised by the prevalence and severity of PTSD in cancer survivors.

After many years of experience as an oncology nurse and with a specialty in clinical psychology, I was now one of the patients. A routine appendectomy revealed a 5 cm tumor diagnosed as stage II ovarian cancer. Scans found a breast mass that turned out to be a stage I breast cancer. Surgeries to treat both would be followed with six cycles of paclitaxel and carboplatin and seven weeks of radiation therapy. I felt like I was in a nightmare. How could this be happening to me? What about my job as a nurse practitioner working with patients with breast and ovarian cancer? I will lose my hair! How will this affect my family after years of prior stressors? Can I face the challenge with the courage of my patients who, throughout my career, have taught me the values of hope and resilience?

# Criteria for Post-Traumatic Stress Disorder

Research literature supports a range of psychological stressors that are associated with a cancer diagnosis and subse-

quent treatment. Psychological responses of distress are most often reported at major transition points, such as diagnosis, treatment, conclusion of treatment, recurrence, and terminal disease, and include but are not limited to shock, denial, fear, anxiety, panic, sadness, depression, and appetite and sleep disturbances. Less researched is the potential for cancer survivors to experience distress attributable to their cancer experience long after primary treatment ends and long into their survivor continuum (Andrykowski, Lykins, & Floyd, 2008). Depression and anxiety in patients with cancer have been a focus of psychological research (Andrykowski et al.); however, diagnosis and treatment of the two disorders still fall behind recognition and intervention at the professional level (Bush, 2008). Symptoms associated with depression, such as sadness, sleep disturbances, and anxiety (fear, panic, phobia), also may fit criteria for PTSD.

The essential feature of PTSD, as defined by APA (2000), is the development of characteristic symptoms following exposure to an extreme traumatic stressor. The diagnosis of PTSD is "severe and disabling anxiety and phobic reactions displayed by individuals in the wake of a traumatic experience" (Smith, Redd, Peyser, & Vogl, 1999, p. 521). Figure 1 summarizes the six criteria put forth by the APA to be met for a PTSD diagnosis. Inherent in criterion A is the objective severity of the traumatic event and the subjective appraisal of the event (Smith et al.). Historically, individuals diagnosed with PTSD have been traumatized by experiencing events ranging from military combat or hostage situations, terrorist acts, violent personal assault, or man-made or natural disasters. According to the APA, an individual diagnosed with a life-threatening illness, such as cancer, is included in the list of traumatic events. Criterion A also includes the witnessing of traumatic events or hearing about tragic events, such as learning that a loved one or child is facing a lifethreatening illness or being told of a sudden, unexpected death of a close friend or family member.

Criterion B outlines distressing reexperiencing of the traumatic event by intrusive and recurrent memories in the form of nightmares, flashbacks, and physical or psychological fear at exposure to an internal or external cue that symbolizes the event. Criterion C outlines symptoms of numbing or avoidance that the individual may develop to prevent stimuli that are reminiscent of the trauma. This may range from avoiding people, places, or activities that recall the trauma to feelings of estrangement from others. Persistent arousal is defined by criterion D and includes a range of behaviors from hypervigilance, to difficulty falling asleep or staying awake, to irritability and outbursts of anger. Criterion E specifies that the duration of symptoms is more than one month (which differentiates PTSD from acute stress disorder), and criterion F signifies that trauma causes clinically significant distress or impairment in important areas of life-functioning, such as social and occupational roles. Kwekkeboom and Seng (2002) defined PTSD as a chronic, disabling response to an overwhelming trauma characterized by a three-symptom cluster: intrusive reexperiencing of trauma, avoidance and numbing, and hyperarousal.

In addition to the onset and duration of symptoms, the symptom response pattern to the extreme stressor is important for differentiating PTSD from other mental illnesses. For example, newly diagnosed patients with cancer often respond with sadness and anxiety or even develop depression at specific transition points along the continuum of their treatment (Bush, 2008). These shortterm, normal, and expected responses may only require a psychiatric diagnosis if symptoms persist or if symptoms cause significant distress and interfere with clinical treatment; impact family, social, and occupational functioning; or negatively affect quality of life. If the symptom responses meet the criteria for PTSD, the disorder should be specified

as acute: duration of symptoms is less than three months; chronic: duration of symptoms is three months or more; or delayed onset: onset of symptoms is at least six months after the stressor. A review of literature also has denoted two other distinctions: current PTSD if the patient has had symptoms present for at least one month and present for the past six months, and lifetime PTSD if the person has had symptoms at any point prior to the previous six months at the time of evaluation (Smith et al., 1999).

# Post-Traumatic Stress Disorder and the Cancer Experience

The first question I asked my radiation oncologist after completing treatment was, "When can I plan to go back to my job?" I remember him looking at me skeptically and replying,"Considering the work you do, I would think that eight weeks of rest and recovery is the minimum." I left the clinic with my certificate of completion and a card containing a philosophical message of survivorship. That day, I felt as though I was walking on air. I did it. Eight weeks later I woke up tired after my now common sleepless nights, I was still bald, the peripheral neuropathy in my hands and feet remained crippling, and the aromatase inhibitor I had been prescribed made me feel like I had arthritis from head to toe. Where was my energy? Where was my soft blonde hair? Why couldn't I think straight? I realized that it wasn't an option to go back to my position as a nurse practitioner. I couldn't physically, emotionally, or cognitively do the work in fairness to myself or my patients. I resigned a rewarding job I cherished and I began to feel like I was drowning.

The concept of PTSD in patients with cancer is relatively new and remains somewhat controversial (Kwekkeboom & Seng, 2002; National Cancer Institute [NCI], 2009; Palmer, Kagee, Coyne, & De-Michele, 2004; Smith et al., 1999). Research has demonstrated that patients with cancer experience traumatic symptoms such as fear, anxiety, and helplessness. These symptoms often are displayed as constant worry, fears of recurrence, nightmares about the illness or treatments, and additional psychological symptoms such as irritability and anger that may negatively affect relationships and role functioning (Kwekkeboom & Seng). The question regarding inclusion of a cancer diagnosis as meeting PTSD criteria includes the identification of one traumatic event or trigger, and the duration, severity, and control over the event. The experience of cancer differs from traditionally viewed

#### **Criterion A**

The person has been exposed to a traumatic event in which both of the following were present.

- The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
- The person's response involved intense fear, helplessness, or horror.

#### **Criterion B**

The traumatic event is persistently reexperienced in one (or more) of the following ways.

- Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions
- Recurrent distressing dreams of the event
- Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
- Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

#### Criterion C

Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following.

- Efforts to avoid thoughts, feelings, or conversations associated with the trauma
- Efforts to avoid activities, places, or people that arouse recollections of the trauma
- Markedly diminished interest or participation in significant activities
- Feelings of detachment or estrangement from others
- Restricted range of affect (e.g., unable to have loving feelings)
- Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

#### **Criterion D**

Persistent symptoms of increased arousal (not present before the trauma), as indicated by two or more of the following.

- Difficulty falling or staying asleep
- · Irritability or outbursts of anger
- · Difficulty concentrating
- Hypervigilance
- Exaggerated startle response

#### **Criterion E**

Duration of the disturbance (symptoms in Criterion B, C, and D) is more than one month.

#### **Criterion F**

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

# Figure 1. *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) Criteria for Post-Traumatic Stress Disorder

Note. From the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text revision, pp. 467–468), by the American Psychiatric Association, 2000, Washington, DC: Author. Copyright 2000 by the American Psychiatric Association. Reprinted with permission.

traumatic events in that the experience is not a singular, short-lived trauma, but one that extends from diagnosis into survivorship, possibly extending throughout the patient's life (Smith et al.). A cancer diagnosis easily meets the PTSD criteria of a life-threatening illness, but objective disease variables such as stage at diagnosis, treatment requirements, and prognostic factors will influence and impact the inherent threat to life. Patients' subjective appraisal of the event, their personality characteristics, coping mechanisms, and previous traumas or psychiatric illnesses also affect response. Two seminal reviews supported the inclusion of the cancer experience within the context of PTSD (McGrath, 1999; Smith et al.) and provided insight into the risk factors contributing to acquiring PTSD related to cancer. Research since the late 1990s has continued to investigate the occurrence of PTSD and trauma-related symptoms. Findings range from 3%–4% of patients with early-stage

cancer meeting full PTSD criteria, and as high as 35% in patients evaluated after treatment (NCI). Research also has identified that 20% of cancer survivors with early-stage disease and 80% of patients diagnosed with recurrence may have subsyndromal or "partial" PTSD symptoms (Knobf, 2007; NCI; Shelby, Golden-Kreutz, & Andersen, 2008).

## **Risk Factors**

In patients with cancer, the exact nature of the traumatic stressor may be difficult to differentiate because of the multiple crises that constitute the cancer experience over time (NCI, 2009). The severity of the trauma itself—intensity, duration, and controllability—has been implicated in the development of PTSD (Smith et al., 1999). The PTSD literature identified numerous risk factors, including physical and psychiatric health status and a family history of psychiatric disorders,

specifically depression and anxiety. Sociodemographic variables influencing risk include younger age, gender (more women than men), lower income and education, and less social support (Knopf, 2007; NCI; Shelby et al., 2008; Smith et al.). The use of avoidant coping also has been found to increase risk (NCI), and avoidant behaviors are a criterion of PTSD.

Variables specific to patients with cancer may include type of tumor, diagnosis, stage of disease, extent of cancer treatment, recurrence, and prognosis. A prior history of personal or family history of cancer also may increase risk. Patients who felt perfectly healthy at the time of diagnosis often react with fear, horror, and feelings of helplessness-all of which contribute to PTSD (Smith et al., 1999). Two classes of variables have been proposed to directly affect the psychological response to cancer—the stress and burden posed by the cancer experience and the resources available to cope with this stress and burden (Andrykowski et al., 2008). The stress and burden of cancer and the supportive resources available are not static but change constantly throughout the cancer trajectory. In addition, understanding the patient's psychological health must include the objective stresses facing the patient and family at each point of the experience and the patient and family's subjective appraisal of the burdens and the resources available. At diagnosis and treatment, anxiety, uncertainty, and existential fears often are at the forefront of concerns contributing to acute PTSD. After treatment ends, financial burdens, family and occupational role changes, and difficulties with sexuality and intimacy may be the triggers for chronic PTSD (Andrykowski et al.). Finally, essential for risk assessment is evaluation of the number of traumas experienced in the patient's life history and the stressful events occurring during the timeframe when the trauma is experienced (Smith et al.). Fears of recurrence contributing to one's future being cut short is a defining symptom used for a diagnosis (Kwekkeboom & Seng, 2002).

My risk factors for PTSD were measurable. I had experienced many losses since I was a young adult. These included my husband's diagnosis of an autoimmune muscle disease at age 20, followed by my diagnosis of melanoma at age 28. After years of infertility, miscarriages, failed adoption attempts, and eight in vitro procedures, I gave birth to a son. My husband was diagnosed with melanoma when our son was in the fourth grade. The six years prior to my diagnosis were fraught with family traumas. Our son experienced a clinical depression

during his freshman year of high school, demanding ongoing psychiatric evaluation and treatment. My younger sister was diagnosed with breast cancer. My father was diagnosed and died of Alzheimer disease, and a stepsister was involved in a near fatal car accident. My husband was diagnosed with a second muscle disease that required weekly IV immunoglobulin therapy. My sister and I moved our elderly mother, with early dementia, from Florida to live closer to us for caretaking. Two weeks after I completed my radiation therapy for breast cancer, my mother-in-law was diagnosed with stage III breast cancer.

I had other PTSD risk factors. My family history was positive for depression and anxiety disorders. I had bouts of situational depression related to infertility treatments and my son's clinical depression and my husband's illnesses. Regardless of how much constitutional strength and endurance I believed I had, trying to carry out a life of normalcy amid the realistic and unpredictable stressors was accomplished in a constant state of anxiety and hyperarousal.

# **Symptom Responses**

Early psychosocial research identified adverse psychosocial adjustment in cancer survivors that met certain criteria for diagnoses of adjustment disorder, anxiety disorders, and other significant long-term psychiatric and social consequences that could be considered traumatic, imposing a negative impact on quality of life (Kornblith et al., 1992). In later literature, the cancer experience was compared to another well-documented stressor that has been studied extensively in the PTSD literature, active military combat exposure (Smith et al. 1999). Patients with cancer, like combat soldiers, experience a series of threats followed by long periods of passive vigilance interspersed by intervals of high arousal. For the cancer survivor fearing recurrence, hypervigilance is common, and waiting for results after follow-up examinations, blood work, and scans often precipitates high anxiety. Physical and psychological responses to necessary surveillance can cause hyperarousal states related to internal and external cues, causing the patient to re-experience the emotional distress and physical pain that may have occurred during diagnosis and treatments.

Reliving the cancer experience also can appear in the form of flashbacks and nightmares. These feelings can interfere with patients getting adequate treatments or follow-up care caused by fear and avoidance, both major symptoms of PTSD (Sukegawa et al., 2006). States of hyperarousal also contribute to irritabil-

ity, difficulty falling asleep or staying asleep, restlessness and fatigue, and a feeling of being "on guard" and startling easily (American Cancer Society [ACS], 2009). Poignant case studies in the literature demonstrate the variability of subjective responses to the cancer experience (Smith et al., 1999; Sukegawa et al.), and some studies have identified increased risks of PTSD criteria in specific cancer populations such as bone marrow transplantation recipients and patients with breast cancer (Mehnert & Koch, 2007; NCI, 2009). A criterion for PTSD that affects the majority of patients with cancer is the sense of a foreshortened future (e.g., does not expect to have career, marriage, children, normal lifespan) (APA, 2000) that is played out in fear and worry regarding disease recurrence.

My bathroom was beginning to look like a self-serve pharmacy. On hand was an antidepressant with anxiolytic properties, lorazepam for anxiety or restlessness, pregabalin for the persistent neuropathies, ibuprofen for the unforgiving myalgias caused by the daily aromatase inhibitor, and a variety of unsuccessful sleep aids. Quickly I learned that there are no magic potions to relieve long-term side effects from cancer treatments. I had dreams reliving chemotherapy appointments, of being caught in MRI scans, or being burned by the radiation accelerator.

Finally, my hair began to grow in sprouts like those plant seeds you buy to water and watch scattered grass grow! When there was merely an inch, it was evident that the soft blonde hair had been rudely replaced by mousy brown "menopause" hair. I would look in the mirror and not recognize myself. Between the hair loss, weight gain, and dexamethasone-induced puffiness, I felt I had just landed from outer space. I was grieving the loss of my self-image, my energy, and my confidence. Would I ever feel like myself again, or was this what our patients are trying to tell us when they talk about integrating a "new normal" or a "new identity!"

# **Nursing Implications**

A thorough psychosocial assessment is critical to identify the symptoms of PTSD, to identify the impact of symptoms on the patient's functioning, and to plan interventions that are targeted at the most distressing symptoms. In addition, patients who meet all of the criteria for a diagnosis of PTSD are at higher risk than the general population for other psychiatric disorders, including generalized anxiety disorder and major depressive disorder. Comorbid risks also include

alcohol dependence and substance abuse (NCI, 2009). Substance abuse and major depression are viewed as the most frequent comorbid conditions associated with PTSD by the International Society for Traumatic Stress Studies (Foa, Keane, & Friedman, 2000). Figure 2 provides an example of pertinent questions pertaining to PTSD symptoms that the oncology nurse can integrate into the psychosocial assessment. Accurately diagnosing PTSD is complicated by overlapping symptoms of not just other psychiatric disorders but symptoms that may be time-related aspects to normal adjustment during major transition points along the cancer continuum. The specific stress-related event that may trigger an acute PTSD response will differ according to each patient's appraisal of the impact of a cancer

#### **Since You Found Out You Have Cancer**

- Have you been having repeated bad dreams or nightmares about any aspect of your experience with cancer or treatment?
- Have you had the experience of suddenly reliving some event related to having cancer or treatment by flashbacks of it, acting or feeling as if it were re-occurring?
- Have you been intensely emotionally upset when reminded of any aspect of your experience with cancer or treatment?
- Have you been having intense physical reactions (e.g., sweating, heart palpitations) when reminded of any aspect of your experience with cancer or treatment?
- Have you been persistently making efforts to avoid activities, situations, or places that remind you of your experience with cancer or treatment?
- Have you felt that your ability to experience emotions has decreased (e.g., unable to have loving feelings, cannot cry when sad, feeling numb)?

Note. Examples have been revised for use with patients with cancer from the Modified Post-Traumatic Stress Disorder Symptom Scale—Self-Report (Falsetti et al., 1993).

# Figure 2. Examples of Questions That May Be Used in Screening for Post-Traumatic Stress Disorder

Note. From "Recognizing and Responding to Post-Traumatic Stress Disorder in People With Cancer," by K.L. Kwekkeboom and J.S. Seng, 2002, Oncology Nursing Forum, 29(4), p. 646. Copyright 2002 by the Oncology Nursing Society. Reprinted with permission.

diagnosis on his or her current life situation. The combination of multiple stressors across the cancer trajectory also will be appraised differently by each patient but can increase the risk of chronic PTSD symptoms. Most poignant is the often inherent fear of cancer recurrence which makes it difficult to identify the point at which the cancer survivor becomes truly "post-trauma" (Smith et al., 1999). Psychosocial assessments must evaluate self-destructive and impulsive behavior in all patients, although these criteria are not included in PTSD diagnosis. Careful assessment should always include evaluation of suicide ideation or a history of previous suicide attempts (Foa et al.).

A multimodal approach is needed to diagnose PTSD. This includes data that address social, cognitive, emotional, family, and occupational functioning. Input from different sources also is valuable and includes self-report, medical and nursing assessments, and family consultation. Different methods are necessary for evaluation, including patient interviews, behavioral observation, and physiologic and psychological tests specific to PTSD (NCI, 2009; Smith et al., 1999). Oncology nurses should refer the patient to the appropriate experienced professional for in-depth psychiatric assessment and intervention (Knobf, 2007). Nursing assessment of all psychiatric symptoms, including PTSD, is a vital component of holistic patient care. Psychiatric symptoms ranging from anxiety and depression to PTSD can interfere with patient functioning, including compliance with oncologic treatments and follow-up examinations, family and social relationships, and occupational roles. A major role of the oncology nurse is to educate the patient, family, and caregivers regarding normal and expected symptoms related to diagnosis and treatment, including emotional responses. The oncology nurse also must advocate for the patient by ensuring safe and competent care that includes a comprehensive psychosocial assessment, individualized interventions, and referral when appropriate (ACS, 2009; Kwekkeboom & Seng, 2002). The simplest interventions can make all the difference between instilling anxiety or providing comfort and safety. Educating the patient and family regarding diagnosis and treatment is invaluable. Being attentive to patient and family cues regarding knowledge barriers and cultural, religious, and spiritual beliefs conveys respect. Providing competent care within a safe and stable environment allows both the patient and family to feel comfortable asking questions and talking

about concerns ranging from existential issues to sexuality and intimacy. Rosedale (2009) described how a breast cancer survivor showed a photograph of a woman wearing a sizeable backpack climbing a mountain to demonstrate how she felt lonely in her cancer journey. The woman expressed, "That is how people see me, as a hero climbing a mountain, but they don't understand that I am also somebody lugging a heavy load" (p. 177).

# **Therapeutic Interventions for Post-Traumatic Stress Disorder**

The goals of treatment are focused on functional improvement or reduction of core PTSD symptoms (Foa et al., 2000). For patients with cancer, the oncology nurse is responsible for identifying patients at risk for PTSD by carrying out a thorough and comprehensive psychosocial assessment of all patients at diagnosis, and repeating assessments throughout the cancer trajectory. Indications for referral and hospitalization may include the danger of harming self or others, the inability to function in life activities, or the need for a patient struggling with major psychological stressors to be evaluated in a secure environment. Treatment should be multidisciplinary with a commitment by all team members to collaborate regarding follow-up and outpatient services, a mandatory requirement for treatment success (Foa et al.; Kwekkeboom & Seng, 2002). Treatments for PTSD range from psychotherapy, cognitive-behavioral therapy, and selective serotonin reuptake inhibitors. Some research has shown success with the use of psychodynamic therapy, hypnotherapy, and eye movement desensitization and reprocessing (Foa et al.). Group therapy and self-help strategies also are effective (Foa et al.). As with other psychiatric disorders, a combination of treatments individualized toward targeting the patient's most pressing symptoms may prove the most promising.

Particularly important for traumatized patients is the ability to form and maintain a therapeutic alliance with their caregivers, particularly in regard to trust and safety concerns (Foa et al., 2000). Perceived social support, including positive relationships between the patient and medical staff, has shown to be a protective factor against psychiatric symptoms (NCI, 2009). Oncology nurses are present for their patients at points of time that can foster communication and psychosocial assessment (e.g., chemotherapy administration, follow-up clinic

appointments). Oncology nurses provide ongoing education regarding diagnosis and treatment, reassure patients, and can be an ally for their fears and anxieties about the unknown. Providing quiet and relaxing environments and incorporating relaxation techniques, guided imagery, art, and music therapy into treatments and procedures can decrease negative cues that later can be associated through flashbacks or nightmares.

# **Resilience and Hope**

The human spirit is resilient. Many research studies have investigated positive life changes that individuals claim are a result of their cancer experiences. In a descriptive study investigating women's transitions from "patient" to "survivor" (Allen, Savadatti, & Levy, 2009), many women described feelings that have been expressed by many cancer survivors, including an enhanced appreciation for life and loved ones, a desire to "give back" or help others out of a sense of gratitude for the support they received during their journey, and an increased sense of emotional strength. Positive psychological responses to the cancer experience have been termed "post-traumatic growth," and a new focus on "positive psychology" may provide future research that investigates clinical strategies to prevent psychiatric trauma such as depression, anxiety, and PTSD. The list of interpersonal resources that promote positive coping and adaptation includes resilience, hopefulness, optimism, self-efficacy, emotional intelligence, and spirituality (Andrykowksi et al., 2008). Understanding and promoting these sources of posttraumatic growth will help all healthcare professionals foster the strength of the people they care for.

I wrote this article one year after treatment. I share my journey not just as a cancer survivor but as a cancer survivor who is also an oncology nurse—one amongst you. Treating an oncology colleague who is embarking on the cancer experience can be a daunting challenge for the oncology caregiver (Consalvo et al., 2007). I have traveled many miles, and my physical and emotional work is ongoing. I continue to struggle with sleepless nights, fatigue, and cognitive dysfunction. Whether related to chemotherapy, chemical menopause, or post-treatment hormonal therapy, I struggle with tasks that I once took for granted. Multitasking, time organization, and the endless intellectual input and politics of an academic environment in which I am now working can often be overwhelming. I

remain on medication, see a therapist regularly, and I am learning to practice what I have taught: self-care (what Chodron [1997] calls "loving kindness"), wobbling on the exercise equipment, and venturing out more socially. I had withdrawn by changing grocery stores, dry cleaners, and spinning around if I saw an unexpected familiar face. I didn't want anyone to ask, "How are you feeling?" and I feared that with my new, thick, curly hair and weight gain, I would go unrecognized. I am trying to integrate a new sense of self by holding onto those aspects that have served me well, including kindness, compassion, optimism, humor, and love of others, and letting go of the aspects that may have contributed to the drain on my emotional reserves, such as fear, guilt, inability to set boundaries, and ignoring my own self-care to care for others.

I do fear a shortened lifespan, but I am learning to tuck those fears in the back of my mind so that I can live each day fully as a gift and a promise. Just recently I had a dream that I could fly across the ocean and back to safe ground without a frightening landing. I am beginning to regain confidence and to integrate my cancer experiences into my "new" but more blessed self. The journey continues.

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#### References

- Allen, J.D., Savadatti, S., & Levy, A.G. (2009). The transition from breast cancer "patient" to "survivor." *Psycho-Oncology*, *18*(1), 71–78.
- American Cancer Society. (2009). Post-traumatic stress disorder seen in some cancer patients: Nurses can step in to help ease symptoms. Retrieved April 15, 2009, from www.cancer.org/docroot/NWS/content/NWS\_1\_1x\_Post-trauma
- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington, DC: Author.
- Andrykowski, M.A., Lykins, E., & Floyd, A. (2008). Psychological health in cancer survivors. Seminars in Oncology Nursing, 24(3), 193–201.
- Bush, N.J. (2008). Depression and anxiety. In C. Chernecky & K. Ende (Eds.), *Acute care oncology nursing* (pp. 97–110). Philadelphia: Saunders.
- Chodron, P. (1997). When things fall apart: Heart advice for difficult times. Boston: Shambhala.

- Consalvo, K.E., Piscitella, L.D., Williamson, L., Policarpo, G.D., Englander, M., Lyons, K., et al. (2007). Treating one of our own. Clinical Journal of Oncology Nursing, 11(2), 227–231.
- Falsetti, S.A., Resnick, H.S., Resnick, P.A., & Kilpatrick, D.G. (1993). The modified post-traumatic stress scale: A brief self-report measure of post-traumatic stress disorder. *Behavioral Therapist*, 16, 161–162.
- Foa, E.B., Keane, T.M., & Friedman, M.J. (2000). Guidelines for treatment of PTSD. *Journal of Traumatic Stress*, 13(4), 539–555.
- Knobf, M.T. (2007). Psychosocial responses in breast cancer survivors. *Seminars in Oncology Nursing*, 23(1), 71–83.
- Kornblith, A.B., Anderson, J., Cella, D.F., Tross, S., Zuckerman, E., Cherin, E., et al. (1992). Hodgkin disease survivors at increased risk for problems in psychosocial adaptation. *Cancer*, 70(8), 2214–2224.
- Kwekkeboom, K.L., & Seng, J.S. (2002). Recognizing and responding to posttraumatic stress disorder in people with cancer. *Oncology Nursing Forum*, 29(4), 643–650.
- McGrath, P. (1999). Post-traumatic stress and the experience of cancer: A literature review. *Journal of Rehabilitation*, 65(3), 17–23.
- Mehnert, A., & Koch, U. (2007). Prevalence of acute and post-traumatic stress disorder and comorbid mental disorders in breast cancer patients during primary cancer care: A prospective study. *Psycho-Oncology*, 16(3), 181–188.
- National Cancer Institute. (2009). Posttraumatic stress disorder. Retrieved March 30, 2009, from www.cancer.gov/ cancertopics/pdq/supportivecare/posttraumatic-stress/patient
- Palmer, S.C., Kagee, A., Coyne, J.C., DeMichele, A. (2004). Experience of trauma, distress, and post-traumatic stress disorder among breast cancer patients. *Psychosomatic Medicine*, 66(2), 258–264.
- Rosedale, M. (2009). Survivor loneliness of women following breast cancer. Oncology Nursing Forum, 36(2), 175–183.
- Shelby, R.A., Golden-Kreutz, D.M., & Andersen, B.L. (2008). PTSD diagnoses, subsyndromal symptoms, and comorbidities contribute to impairments for breast cancer survivors. *Journal of Traumatic Stress*, 21(2), 165–172.
- Smith, M.Y., Redd, W.H., Peyser, C., & Vogl, D. (1999). Post-traumatic stress disorder in cancer: A review. *Psycho-Oncology*, 8(6), 521–537.
- Sukegawa, A., Miyagi, E., Suzuki, R., Ogasawara, T., Asai-Sato, M., Yoshida, H., et al. (2006). Post-traumatic stress disorder in patients with gynecologic cancers. *Journal of Obstetrics and Gynaecology Research*, 32(3), 349–353.

# Clinical Highlights: Post-Traumatic Stress Disorder Related to the Cancer Experience

#### **Definition**

The essential feature of post-traumatic stress disorder (PTSD) is the development of characteristic symptoms following exposure to an extreme traumatic stressor. Events range from experiencing direct military combat to personal assault; observing severe acts of violence, disasters, or accidents; learning that a close friend or family member has unexpectedly died; or being diagnosed with a life-threatening illness such as cancer (American Psychiatric Association [APA], 2000).

#### **Risk Factors**

A personal or family history of psychiatric disorders, including depression, anxiety disorders, PTSD, selfdestructive or risky behaviors, and suicidal ideation or suicide attempts are red flags to alert the oncology nurse to closely monitor the patient for psychiatric symptoms. Past exposure to traumatic life events and current stressors facing the patient at diagnosis or during treatment increase the risk for PTSD. Alcohol dependence and substance abuse also can be present. Specific questions can assist the oncology nurse in identifying patients experiencing nightmares, flashbacks, avoidant behaviors, or hyperarousal.

#### **Clinical Presentation**

The symptom cluster of PTSD is an intrusive re-experiencing of trauma, avoidance behaviors, numbing of feelings, and hyperarousal symptoms (Kwekkeboom & Seng, 2002). Patients may experience irritability and angry outbursts, difficulty falling asleep and staying asleep, and physical and emotional reactions to internal and external cues that symbolize the traumatic event. The patient may feel detachment from others and lose interest in normal activities. Fears of recurrence with a heightened feeling of a shortened life span is a major criterion for PTSD. Comorbid conditions include depression, anxiety, fear, panic, and dissociation. Patients may lose interest in normal activities and detach from others. Numbing of feelings can negatively affect sexuality and intimacy.

#### **Differential Diagnosis**

Defining symptoms associated with PTSD also are common to cancer and treatment, including sleep disturbances and memory and attention issues (Andrykowski, Lykins, & Floyd, 2008). Depression may occur in many patients with cancer, and anxiety may occur singularly or co-exist with depression (Bush, 2008). Examples of common symptoms of depression that also are included in PTSD criteria are feelings of helplessness, feelings of detachment or estrangement from others, and markedly diminished interest or participation in normal activities (APA, 2000). Common symptoms of anxiety disorders including fear, avoidance, hypervigilance, difficulty concentrating, and phobias also are included in PTSD criteria (APA). Differentiating PTSD from other psychiatric illnesses depends on variables such as the severity of the trauma and the duration of symptoms. For example, for a diagnosis of PTSD in the patient with cancer, the tumor type, diagnosis, treatment modalities, and prognosis, in addition to the patient's appraisal of the event, can differentiate PTSD from adjustment disorder, acute stress disorder, or major depressive disorder. Not all pathology that occurs in a person exposed to an extreme stressor should automatically be attributed to PTSD (APA). If the symptom response pattern to the extreme stressor meets the criteria for another mental disorder, this diagnosis should be given instead of or in addition to PTSD. Psychiatric tests specific to the diagnosis of PTSD also should be a part of the assessment.

#### **Treatment**

PTSD treatment in patients with cancer has not been extensively researched, but application of general PTSD treatment can be applied. This includes psychotherapy, medications such as the serotonin reuptake inhibitors, anxiolytics, and sleep aids. Non-pharmacologic treatments range from psychiatric evaluation and treatment to relaxation techniques and guided imagery. Eye movement desensitization and reprocessing (Foa, Keane,

and Friedman, 2000) have proven successful, as has cognitive-behavioral therapy. Effective treatment must be carried out by a trained professional such as a psychologist or psychiatrist or a mental health nurse practitioner or therapist trained to treat trauma survivors.

# **Implications for Nursing**

Oncology nurses are the "first responders" to patients with cancer and they provide continuity of care across the cancer trajectory. In-depth psychosocial assessment should be carried out on each patient and repeated at significant transition points along the cancer continuum of diagnosis, treatment, surveillance, recurrence, and end of life. Psychosocial assessments can determine whether the patient is suffering from depression, anxiety, PTSD, or another mood disorder. Evaluation for suicide ideation or plan is essential. Nurses also should monitor and evaluate changes in patient mood status or behaviors. A caring and trusting environment is essential for the emotional safety of any patient, particularly for patients who exhibit extreme anxiety, hyperarousal, irritability, or anger. Safety for self and others must be addressed. Referral to an experienced trauma specialist is essential for the patient at risk.

#### References

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington, DC: Author.

Andrykowski, M.A., Lykins, E., & Floyd, A. (2008). Psychological health in cancer survivors. *Seminars in Oncology Nursing*, 24(3), 193–201.

Bush, N.J. (2008). Depression and anxiety. In C. Chernecky & K. Ende (Eds.), *Acute care oncology nursing* (pp. 97–110). Philadelphia: Saunders.

Foa, E.B., Keane, T.M., & Friedman, M.J. (2000). Guidelines for treatment of PTSD. *Journal of Traumatic Stress*, 13(4), 539–555.

Kwekkeboom, K.L., & Seng, J.S. (2002). Recognizing and responding to post-traumatic stress disorder in people with cancer. *Oncology Nursing Forum*, 29(4), 643–650.