



Recognizing and Responding to Post-Traumatic Stress Disorder in People With Cancer

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Purpose/Objectives: To describe post-traumatic stress disorder (PTSD) in patients with cancer and identify nursing assessment and intervention strategies.

Data Sources: Discussion of recent research literature in relation to oncology nursing practice.

Data Synthesis: 4%–19% of patients with cancer experience symptoms of PTSD. When PTSD routinely is considered as a risk for patients with cancer, nurses can reframe intense psychological and physiologic reactions or patient distress as possible trauma reactions and implement appropriate interventions and referral.

Conclusions: Patients with cancer may experience PTSD as a consequence of their cancer diagnosis, treatment, or a past traumatic episode. PTSD may interfere with patients' ability to tolerate treatment and return for crucial follow-up care. To date, no studies have explored interventions for PTSD in adult patients with cancer.

Implications for Nursing: Oncology nurses can help patients with PTSD by interpreting psychological symptoms with the possibility of PTSD in mind, screening for PTSD across the illness trajectory, providing emotional support, teaching coping strategies, and advocating for further assessment, medical treatment, and appropriate referral within the multidisciplinary care team.

Oncology nurses are aware that, for many patients, the experience of cancer and its treatment can be frightening, distressing, painful, and extremely unpleasant. However, cancer care providers may be less aware that for some patients the experience actually causes long-term traumatic stress morbidity. Recent research has shown that 4%–19% of adult patients with cancer have cancer-related post-traumatic stress symptoms that meet diagnostic criteria for post-traumatic stress disorder (PTSD) (Alter et al., 1996; Jacobsen et al., 1998; Wettergren, Langius, Bjorkholm, & Bjorvell, 1999). These symptoms include intrusive reexperiencing of trauma, avoidance and numbing efforts, and hyperarousal (American Psychological Association [APA], 1994). Effective treatments are available for PTSD that may improve the course of the disorder and the patient's well-being (Foa, Keane, & Friedman, 2000a, 2000b). Oncology nurses are in a position to recognize these symptoms and respond. The purpose of this article is to consider the practice

Key Points . . .

- Post-traumatic stress disorder (PTSD) is a chronic disabling response to an overwhelming trauma and is characterized by three symptom clusters: intrusive reexperiencing of the trauma, avoidance and emotional numbing, and hyperarousal.
- Recent research has shown that 4%–19% of adult patients with cancer have cancer-related post-traumatic stress symptoms that meet diagnostic criteria for PTSD.
- Oncology nurses may represent the first line of therapeutic support and intervention for patients with cancer who exhibit symptoms of PTSD. In these cases, the nursing diagnosis “post-trauma response” should be included in the care plan and acuity ratings.
- Oncology nurses can play a significant role in preventing trauma, minimizing reexposure to triggering events, decreasing isolation and stigma for patients who have the intense psychological and physiologic reactions characteristic of PTSD, and facilitating diagnosis and referral for more extensive treatment.

implications of recent research regarding PTSD in adult patients with cancer. Descriptive information about PTSD will be provided, along with a discussion of primary and secondary prevention strategies to use with patients with cancer, suggested options for screening and interventions by oncology nurses, and directions for future research.

Description

Most patients naturally experience some amount of anxiety and emotional upset when diagnosed with cancer. However,

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some patients develop persistent and disruptive anxiety disorders, such as adjustment disorder, panic disorder, generalized anxiety disorder, or PTSD (National Cancer Institute, 2001). PTSD has been well understood in combat veterans, victims of natural disasters, and survivors of rape and abuse. In the 1994 revision of the *Diagnostic and Statistical Manual* (DSM), the definition of trauma was broadened to include events "that involve actual or threatened death or serious injury or other threat to one's physical integrity" to which "the person's response . . . involves intense fear, helplessness, or horror" (APA, 1994, p. 424). For some patients, being diagnosed with cancer and undergoing treatment qualifies as trauma under this criterion.

PTSD is a chronic disabling response to an overwhelming trauma and is characterized by three symptom clusters (see Figure 1). **Intrusive reexperiencing of trauma** often takes the form of nightmares, flashbacks, or unwanted memories. These intrusive memories or flashbacks may last from a few brief seconds to as long as hours at a time (Brewin, Watson, McCarthy, Hyman, & Dayson, 1998). **Avoidance** symptoms include efforts to prevent thoughts or evade conversations, activities, places, or people that trigger memories of the traumatic event. **Numbing** refers to having a limited range of emotions, feeling detached, undergoing a loss of interest in activities, experiencing a foreshortened sense of future, and sometimes being unable to recall aspects of the trauma. **Hyperarousal** symptoms include irritability, difficulty concentrating, difficulty sleeping, hypervigilance, and exagger-

ated startle response. A formal diagnosis of PTSD requires that the patient who has been exposed to a traumatic event experiences at least one symptom of intrusive reexperiencing, at least three symptoms of avoidance, and at least two symptoms of increased arousal. These symptoms must occur over at least one month and result in impaired social or occupational functioning (APA, 1994). The diagnosis of PTSD can be categorized as acute (i.e., the duration of symptoms is less than three months) or chronic (i.e., lasting three months or longer) and may occur with delayed onset when symptoms begin more than six months after the traumatic event (APA).

PTSD is associated with increased risk for both physical and behavioral sequelae. Physiologic alterations include changes in stress hormone regulation and possibly immune function (Friedman & Schnurr, 1995; Kimerling et al., 1999; Yehuda, 1997). Associated behaviors include substance abuse, eating disorders, and risk taking. Comorbid conditions include depression, anxiety, panic, phobias, somatization, and dissociation (APA, 1994). Complex PTSD also can disrupt interpersonal relationships and undermine systems of meaning and faith resulting in spiritual distress (Herman, 1992). People with PTSD report decreased physical, mental, and social functioning and diminished quality of life (Jacobsen et al., 1998; Kelly et al., 1995; Meeske, Ruccione, Globe, & Stuber, 2001).

Summary of Research

Two comprehensive reviews of research findings about PTSD symptoms in adults diagnosed with cancer have been published and provide critiques of this research (McGrath, 1999; Smith, Redd, Peyser, & Vogl, 1999). The findings of these studies are summarized here so that what has been learned can be applied to oncology nursing practice.

Past research has shown several psychological consequences of experiencing cancer, including depression, anxiety, grief, fear, helplessness, and loss of control (Newell, Sanson-Fisher, Girgis, & Ackland, 1999; Sellick & Crooks, 1999; Smith et al., 1999; Zabalegui, 1999). Patients may describe fears of recurrence and intense worries about the cancer and unpleasant treatments and experience nightmares about the illness (Green et al., 1998). In some patients, these psychological symptoms may affect role functioning, interfering with a patient's return to work or family relationships (Alter et al., 1996).

Recent research has shown that many patients with psychological morbidity also may have PTSD (McGrath, 1999; Smith et al., 1999). In some cases, patients with cancer who are depressed, anxious, or have other psychosocial difficulties also may have had PTSD, but the diagnosis went unrecognized because the PTSD conceptualization had not yet been applied in this population. That is, these symptoms were not recognized within a PTSD framework.

Reviews conducted by Smith et al. (1999) and McGrath (1999) evaluated a total of 12 studies that examined PTSD symptoms in adults diagnosed with cancer. The majority of these studies involved populations of cancer survivors attending follow-up clinics, primarily women with breast cancer (Andrykowski & Cordova, 1998; Andrykowski, Cordova, McGrath, Sloan, & Kenady, 2000; Andrykowski, Cordova, Studts, & Miller, 1998; Cordova et al., 1995; Cordova, Studts, Hann, Jacobsen, & Andrykowski, 2000; Green et al., 1998;

Intrusive reexperiencing

These symptoms involve nightmares, flashbacks, or other unwanted memories of the trauma and often involve intense psychological and physiologic reactions.

Avoidance and numbing

These symptoms involve efforts to prevent the intrusive reexperiencing by avoiding thoughts, emotions, people, and places that may trigger memories. Numbing of affect may involve shutting down positive emotions, along with trauma-related affect, and can result in detachment from others.

Hyperarousal

These symptoms involve hypervigilance and a sense of vulnerability, difficulty sleeping, irritability, difficulty concentrating, and exaggerated startle response.

Associated features can include, among others

- Survival guilt
- Phobic avoidance
- Dissociative symptoms
- Somatic complaints
- Hopelessness
- Social withdrawal
- Hostility.

People with post-traumatic stress disorder are at increased risk for

- Panic disorder
- Phobia
- Major depressive disorder
- Somatization disorder
- Substance-related disorders
- Other anxiety disorders.

Figure 1. Characteristics of Post-Traumatic Stress Disorder

Note. Based on information from the American Psychological Association (1994).

Malt & Tjemsland, 1999; Tjemsland, Soreide, & Malt, 1998) and patients who had undergone bone marrow transplant (BMT) (Jacobsen et al., 1998; Wettergren et al., 1999). In these studies, prevalence rates of current PTSD ranged from 4% (patients with cancer three years after diagnosis) to 19% (patients with breast cancer who had undergone BMT). These estimates, in fact, may be low because people with the most severe PTSD would have been the least likely to volunteer to participate in the study or attend the follow-up clinic where participants were recruited (Andrykowski et al., 2000; Parslow, Jorm, O'Toole, Marshall, & Grayson, 2000). In addition, many patients may experience some of the symptoms or have partial PTSD but not have the full-blown disorder (Malt & Tjemsland).

Prevalence estimates of PTSD in patients with cancer are higher than those of the general population measured in epidemiologic studies (Foa et al., 2000a, 2000b; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Most of the studies of PTSD in patients with cancer that evaluated prevalence of PTSD did not specify whether the disorder was present before the diagnosis of cancer; therefore, it is unknown what proportion of patients with PTSD during or after cancer also had PTSD from prior traumas. Interviews conducted by Alter et al. (1996), however, demonstrated that people with trauma predating cancer endorsed PTSD symptoms that were only relevant to the cancer, not to previous trauma.

Limitations of this research should be noted. As Smith et al. (1999) pointed out, not all of the studies used clinical diagnostic tools to assess PTSD. In addition, the sample sizes often were small, populations were heterogeneous with regard to stressor type, and some studies included patients who still were undergoing treatment and those who had completed treatment, whereas others included only those patients who were off treatment and had no current indications of cancer. McGrath (1999) noted that the research base is sparse. The majority of studies have examined survivors of breast cancer, BMT, and pediatric cancers. Little is known about the incidence of PTSD in adults with other common cancer diagnoses.

The research of patients with PTSD does not address several important questions well. For example, very little is known about which aspects of having cancer are associated with development of PTSD. However, several researchers agree that female gender, younger age, less education, lower income, and less social support (particularly emotional support) are associated with an increased risk of PTSD (Andrykowski et al., 2000; Breslau, Davis, Andreski, & Peterson, 1991; Cordova et al., 1995; Green et al., 1998). Personal or family history of depression or anxiety disorders and emotional personality type also increase vulnerability (Brewin et al., 1998; Malt & Tjemsland, 1999; Smith et al., 1999). The number of stressors predating cancer is associated strongly with development of PTSD (Andrykowski & Cordova, 1998; Tjemsland et al., 1998), and this may be a proxy for preexisting PTSD.

Factors specific to cancer that are associated less clearly with PTSD but may play a role include stage of disease and physical comorbidity (Andrykowski & Cordova, 1998; Kelly et al., 1995), treatment strategies, and time since diagnosis (Green et al., 1998; Smith et al., 1999; Tjemsland et al., 1998). Alter et al. (1996) found that patients with cancer who were taking tamoxifen experienced less PTSD than patients not

receiving the drug. The authors hypothesized that taking the medication may have been perceived as a beneficial control strategy in a largely uncontrollable situation. A proportion of subjects in some studies had fewer PTSD symptoms over time; however, other subjects still were symptomatic years after cancer diagnosis. This parallels findings from research on other traumas where PTSD is chronic or recurs across the lifespan (Kessler et al., 1995; Ronis et al., 1996).

In the studies that reviewed the content of intrusive symptoms, results suggest that for any individual patient, getting the diagnosis or undergoing invasive treatment or both may be the traumatic element (Andrykowski & Cordova, 1998; Green et al., 1998; Smith et al., 1999). For some patients, the diagnosis itself, being informed by a physician of a life-threatening illness at a time when one otherwise is feeling healthy, may be the traumatic event (Kelly et al., 1995). For other patients, the traumatic event may be undergoing noxious procedures repeatedly, such as needlesticks or biopsies. Once a patient develops PTSD, repeated clinic visits, ongoing procedures, or even anniversaries may act as "triggers," causing the intrusive reexperiencing symptoms. This, in turn, can activate the autonomic hyperarousal, avoidance, and numbing symptoms.

The 12 studies reviewed represent an early stage of research. They employed psychosocial measures and correlational designs to understand prevalence and risk factors for PTSD in patients with cancer. To date, no intervention studies have been reported in adults with cancer, and no studies have reported the biologic impact of PTSD on cancer treatment and outcomes. The influence of PTSD on adherence to cancer treatment and follow-up recommendations has not been investigated specifically, although previous research has demonstrated that anxiety may have a negative impact on care seeking for symptoms of cancer (Lauver & Ho, 1993). The effect of PTSD on outcome variables, such as immune status, disease progression, and survival of cancer, has not been studied yet. Kimerling et al. (1999), however, studied the impact of PTSD on immune status in women with HIV. These investigators reported that women who were HIV positive and also had PTSD demonstrated a lower CD4 to CD8 T cell ratio than women who were HIV positive and did not have PTSD.

Intervention Strategies

Nurses can respond to this new knowledge of the prevalence of PTSD among patients with cancer by assessments and interventions. Briefly, assessment strategies for PTSD range from a single screening question about nightmares, a hallmark of PTSD (Spitzer, Kroenke, & Williams, 1999), to detailed questionnaires (Foa, Cashman, Jaycox, & Perry, 1997) and full clinical interviews (Foa et al., 2000a, 2000b). Observing intense psychological and physiologic reactions or avoidance (e.g., not keeping appointments) may be additional clues to clinicians. Treatment options for PTSD include medications, individual psychotherapy, group therapy, and self-help strategies (Foa et al., 2000a, 2000b; Schiraldi, 2000). Treatment guidelines have been developed by the International Society for Traumatic Stress Studies, and evidence-based recommendations are available across modalities (Foa et al., 2000a, 2000b). Oncology nurses can play a significant role in preventing trauma, recognizing symptomatic patients, minimizing reexposure to triggering events,

decreasing isolation and stigma for patients who have intense psychological and physiologic reactions, and facilitating referral for comprehensive assessment and treatment.

Awareness of Post-Traumatic Stress Disorder in Patients With Cancer

Oncology nurses must be aware of the possibility of PTSD in patients with psychological symptoms, such as insomnia, difficulty concentrating, or irritability. PTSD also may offer an explanation for the behaviors of patients who appear to be “noncompliant” (Jacobsen et al., 1998). Not keeping treatment appointments or adhering to follow-up recommendations may be a manifestation of the avoidance symptoms of PTSD. These responses are understandable if the encounters are triggers to traumatic stress reactions. With this understanding, healthcare professionals should adapt routines or provide support to enable patients to comply.

Assessment

PTSD can be assessed in several ways, including formal and informal methods. Nurses most likely already see trauma reactions without recognizing them as such. When PTSD routinely is considered a risk for patients with cancer, nurses can reframe intense physiologic and psychological reactions or patient distress as possible trauma reactions. They then can investigate further by asking specific questions about what they have observed via routine therapeutic communication. If a patient confirms the nurse’s suspicions about a traumatic reaction, more formal assessment by mental health specialists is warranted.

The gold standard for diagnosis of PTSD is a clinical interview in which a skilled mental health professional takes into account the patient’s psychiatric history and current life problems. Within the oncology setting, brief screening that focuses on cardinal symptoms, such as nightmares, flashbacks, unwanted remembering, startle reflex, and irritability, can occur in conversation. Figure 2 lists some sample questions from the Modified PTSD Symptom Scale—Self-Report (MPSS-SR) (Falsetti, Resnick, Resnick, & Kilpatrick, 1993) that have been reframed for use with patients with cancer. Assessment checklists are available that reflect the DSM-IV criteria, such as the MPSS-SR or the PTSD Checklist—Civilian Version (Weathers, Huska, & Keane, 1991). These instruments take less than 10 minutes to complete. Use of these formal questionnaires would allow determination of whether the client’s distress likely meets the diagnostic threshold. They also could provide information about symptoms that are not easily observable by the nurse (e.g., emotional numbing).

Although generalist oncology nurses usually will not be prepared to diagnose PTSD, they can participate in screening for the disorder and assist with referrals to appropriate mental health specialists. Given the risk of PTSD, nurses routinely should incorporate screening questions at specific times in the course of treatment and follow-up. Intake interviews at diagnosis should assess vulnerability by asking about prior history of depression, anxiety, trauma, and post-traumatic stress. As patients start treatment, giving them anticipatory guidance that they may experience intrusive, avoidant, or hyperarousal responses to their diagnosis or procedures gives clients permission to tell nurses if they become symptomatic during treatment. Continued routine observation of client well-being throughout treatment should include

Since you found out you had 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 reoccurring?
- 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)?

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

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).

asking about the ability to sleep, nightmares, avoidant behaviors, emotional numbing, or feeling anxious and aroused. Follow-up visits after patients’ completed therapy could include assessment of not only the physical status of disease but also the psychological recovery from the experience and could include PTSD screening at these regular visits. Even with treatment, PTSD can become chronic (Kessler et al., 1995; Ronis et al., 1996). Therefore, once a patient is known to be struggling with PTSD, the team should be evaluating its severity throughout treatment and follow-up. Even if the cancer is “cured,” the patient may experience PTSD morbidity that requires mental health attention (Meeske et al., 2001).

Some patients may prefer to avoid mental health treatment and can be helped with psychoeducational or support group interventions. However, patients who are experiencing severe symptoms or who have a history of trauma or PTSD such that their PTSD may be more complex most likely would benefit from referral to mental health professionals (Herman, 1992; Tjemsland et al., 1998). Ideally, liaison psychiatrists, psychiatric mental health advanced practice nurses, or social workers would be part of the oncology treatment team so continuity exists and patients’ fears and experiences are understood by mental health professionals who routinely work with patients with cancer.

Prevention

In addition to identifying active PTSD, oncology nurses may have the opportunity to prevent its development. If the traumatic event is the diagnosis itself, nurses can provide emotional support and opportunities to “work through” that trauma. Being understood and being able to express reactions to the traumatic event are core processes of psychotherapy for PTSD (Herman, 1992). As always, nurses can work for primary prevention so that procedures are not traumatizing. Nurses can ask patients what they need to decrease the stress-provoking nature of procedures. For patients who develop PTSD and then experience subsequent procedures as triggers,

cognitive-behavioral strategies or offers of premedication may prove useful as secondary prevention. When patients have PTSD, nurses may need to be proactive to facilitate expression of emotion because of the numbing, coping efforts. Encouraging patients to express those emotions freely, rather than feeling the need to be stoic, may decrease trauma reactions.

Social support is important to diminishing stress for patients with cancer throughout the treatment process. In some of the PTSD studies, it was affective social support, rather than instrumental support, that was most helpful (Andrykowski & Cordova, 1998; Dunkel-Schetter & Bennett, 1990). Simply acknowledging the traumatic nature of a patient's experience and putting a name to the condition may be therapeutic in itself (Herman, 1992). Nurses who use the term "post-traumatic stress" with clients help their patients by legitimizing and normalizing the experience, reducing stigma, and facilitating appropriate psychological treatment and referral. Making the diagnosis also can provide insurance resources for PTSD-related treatments.

Referral

Oncology nurses may intervene with patients with severe PTSD reactions by explaining options for treatment and providing referrals to mental health professionals for psychotherapy or medication. Some patients with PTSD may choose to avoid confronting the traumatic material and be unwilling to participate in psychotherapy that focuses on the trauma. However, trauma-focused psychotherapy need not be the first line of treatment when a patient is in crisis. Some therapies are more focused on coping with symptoms, gathering social support, and understanding how the symptoms make sense in light of the trauma. Cognitive-behavioral therapies often focus on self-care and soothing strategies without forcing clients to work through the traumatic material. For clients who feel ready to talk about what is traumatizing them, informing them about the process of choosing a psychotherapist can be a very supportive nursing intervention because the relationship is crucial to the success of psychotherapy.

Psychotherapy also may be delivered in a group (Foa et al., 2000a, 2000b; Herman, 1992). Within the cancer treatment context where support groups often are available, nurses or mental health professionals may organize a group for PTSD-symptomatic patients with cancer or incorporate attention to PTSD symptoms within existing groups. Self-help materials specifically for PTSD recently have become available as resources for group therapy or for individuals (Schiraldi, 2000).

Medications

Pharmacologic treatments for PTSD may be feasible adjuncts to cancer treatment. Selective serotonin reuptake inhibitors (SSRIs), such as paroxetine (Paxil® [GlaxoSmithKline, Research Triangle Park, NC]), sertraline (Zoloft® [Pfizer, Inc., Greenville, SC]), and fluoxetine (Prozac® [Eli Lilly and Company, Indianapolis, IN]), have been shown to be effective in reducing PTSD symptoms (Foa et al., 2000a, 2000b). Other medications, including anxiolytics, can be helpful for episodic use (Foa et al., 2000a, 2000b). Because SSRIs have so few toxic side effects and already are used in treating cancer-related depression (Lovejoy, Tabor, & Deloney, 2000), oncologists and oncology nurse practitioners may be able to manage some patients with these medications.

Nursing Interventions

Because so little is known about PTSD in patients with cancer, no evidence base is specific to this clinical situation. However, basic therapeutic communication, pain management, empathy for feelings (e.g., fear, anxiety), education, and advocacy interventions all could be very appropriate.

Oncology nurses may represent the first line of therapeutic support and intervention for patients with cancer who exhibit symptoms of PTSD. In these cases, the nursing diagnoses "risk for post-trauma syndrome" should be included in the care plan and acuity ratings. "Post-trauma syndrome" is defined as a sustained maladaptive response to traumatic, overwhelming events (North American Nursing Diagnosis Association, 2001). Potential nursing interventions that have been identified for this diagnosis include anger control assistance, anxiety reduction, coping enhancement, counseling, mood management, simple relaxation therapy, and support system enhancement (Johnson, Bulechek, McCloskey-Dochterman, Maas, & Moorhead, 2000). Additional nursing interventions for this diagnosis may include education, symptom management, and advocating for the patient's needs with other members of the cancer care team.

For example, a patient receiving chemotherapy who screened positive for some PTSD symptoms a few months ago and who, for no obvious reason, has canceled several appointments on days he or she is scheduled for bone marrow biopsy may be avoiding a procedure that is triggering. The nurse can reassess the patient's present PTSD symptoms and acknowledge that some patients have distressing experiences with procedures, such as bone marrow biopsy, allowing the patient to explain any concerns he or she has. The nurse may educate the patient about how the symptoms make sense in the situation and talk about how they could work together to manage it. The nurse then can advocate with the medical team to provide appropriate medical interventions, such as medication, to diminish the patient's anxiety. The nurse can teach the patient cognitive-behavioral interventions to help cope with his or her feelings. The nurse also may facilitate support by directing the patient to support groups and renewing offers of referral to a mental health specialist.

The oncology nurse is present for periods of time that offer opportunities to facilitate therapeutic communication about the traumatic nature of the cancer experience. For example, nurses administering chemotherapy often need to stay with patients during infusions. This offers an opportunity for private conversations in which sincere negative emotion and strong affect can be expressed and debriefed. Nurses can arrange continuity of care for patients so that therapeutic relationships are established and ongoing conversation about PTSD symptoms and coping can take place on a routine basis. Ideally, these relationships would parallel the frame of a psychotherapy relationship in which the focus is on the client's needs for emotional support and help with self-care.

Oncology nurses can help patients with PTSD by providing education about the condition and treatment options. Anticipatory guidance can be helpful in letting patients know that others have gone through what they are experiencing. Nurses can provide information to patients about what treatments and future encounters will be like, what procedures will take place, and what physical and psychological reactions these procedures may provoke, including the possibility of post-traumatic

reactions. Letting patients know precisely what to expect can help them anticipate needs, judge their experience, and cope more effectively (Johnson, Fiebler, Jones, Wlasowicz, & Mitchell, 1997). Nurses must understand when they provide education that patients may be resistant to discussing their reactions. Traumatic reactions may be so strong that patients will avoid seeking help and resist treatment. They may fear becoming mentally ill or being overwhelmed by emotional concerns at a time when they need to feel strong and capable of managing their cancer illness. These patients can be supportively referred to mental health professionals who are able to provide more intensive assistance.

Oncology nurses can help their patients with PTSD by planning and providing coping strategies. Some patients may benefit from being taught cognitive-behavioral coping strategies, such as distraction or relaxation, to diminish responses to triggers (Baider & De-Nour, 1997). Some patients with PTSD have strong needs for control, whereas others, especially those with histories of severe or early childhood trauma, may use dissociation, a form of hypnotic splitting off from traumatic events (van der Kolk et al., 1996). The skills and strengths of these preferred strategies can be capitalized on to help patients handle the acute stress of procedures. Patients with a strong need to have control and gain mastery may benefit from mental simulation strategies (Rivkin & Taylor, 1999; Taylor & Pham, 1999). For example, a patient with intense fear or avoidance reactions to needlesticks can rehearse mentally ahead of time, visualizing themselves using humor to lower their anxious feelings; imagining their pulse, respirations, and blood pressure remaining steady; and imagining their arm muscles and veins staying limp, therefore managing the needlesticks without the jerking startle response. Patients who dissociate or "space out" in moments of stress may feel that this is pathologic and undesirable, but if the nurse reframes it as an ability to self-hypnotize, the patient then may be able to call on this unconscious process more deliberately.

The oncology nurse can help a patient with PTSD by informing other members of the care team and planning ahead to meet the patient's needs. The nurse may need to advocate with the healthcare team to provide premedications for a patient with PTSD who has intense physiologic reactions to treatment or healthcare encounters. Nurses may need to encourage the rest of the oncology care team to alter routines of care that trigger traumatic reactions in patients. Creative solutions may involve holding physician appointments in locations other than the setting where noxious treatments are delivered or providing private waiting areas for patients. The most challenging task may be finding solutions to help those patients who experience clinic visits as a trigger and who are unable to return for follow-up care.

Impact of Nursing Care on Patients

Nurses are on the front line of treatment and spend more time with patients with cancer than other members of the care team; they are in an excellent position to recognize potential symptoms of PTSD and assess them within the comfort of the therapeutic relationship. Oncology nurses are capable of assisting patients in coping with many triggers by using skills they already have, encouraging physicians to recognize the disorder, facilitating pharmacologic treatment, and advocat-

ing for referral when patients need more assistance than can be delivered competently by the oncology care team.

Nurses are the ideal professionals to explore this human response to a health threat because they focus on psychosocial issues that medicine does not. Nurses also have knowledge of physiologic processes that psychologists and social workers may not possess. By attending to patients' individual needs, nurses can help patients with PTSD to tolerate treatment better and minimize the number of treatment interruptions. Research eventually may demonstrate that interventions used with patients who have cancer-related PTSD, in addition to improving psychological status, also may improve physical outcomes, such as immune function, disease progression, recurrence, and other treatment-related complications (Kimerling et al., 1999). Finally, nursing interventions may enhance quality of life through better physical, social, and role functioning in patients with PTSD.

Implications for Future Research

Because the concept of PTSD in patients with cancer is a relatively new idea, a significant amount of research needs to be conducted. Broadly speaking, research is needed on two fronts: (a) understanding the phenomenon of cancer-related PTSD itself and (b) understanding the effects of PTSD and relevant interventions on cancer course and survivorship. Future research can build on previous studies to better understand what it is about the experience of cancer that is traumatizing for diverse patients. Studies to assess acceptability and effectiveness of screening, referral, and intervention strategies will be needed to develop an evidence base. Outcomes included in intervention studies should be both psychological and physiologic in nature. Variables that could be influenced by PTSD treatment include the number of psychological symptoms, overall distress, functional status, number of treatment interruptions, adverse events, hospitalizations, immune parameters, disease progression, and quality of life.

Another interesting avenue to explore would be the experiences of family members and close others who also are affected by patients' diagnosis and treatment. Literature exploring survivors of childhood cancer indicate increased prevalence of PTSD in parents of children with cancer (Barakat et al., 1996). People close to adult patients with cancer may have similar experiences.

Conclusions

Oncology nurses providing care to patients with PTSD may themselves experience vicarious trauma (Pearlman, 1995). Resources should be explored to help caregivers through their feelings about working with traumatized patients. Some of these patients will remain challenging to care for even though a PTSD framework may provide a therapeutic way to understand phobic responses, noncompliance, and emotional detachment. This aspect of oncology nursing requires nurses to know their personal limitations and be willing to call on other team members for assistance when patients' needs are too great.

Print and Web resources and collaborative colleagues provide support for nurses just learning to recognize and respond to PTSD. In addition, many resources are available for nurses who want to learn more about PTSD. These include general

books about trauma and PTSD (Herman, 1992; van der Kolk et al., 1996); self-help books for people with PTSD (Schiraldi, 2000); professional resources, such as the Web site of the National Center for PTSD (www.ncptsd.org); and scholarly journals, such as the *Journal of Traumatic Stress*.

Clearly, much work remains to be done in understanding PTSD in patients with cancer. For practical purposes, nurses can draw from the general literature on PTSD to identify appropriate screening and intervention activities. Nurses also can draw on their strength in providing holistic care by ac-

knowledging the psychosocial, as well as the physical, in diagnosing nursing needs and providing interventions. Oncology nurses work at the intersection of the psychological and physiologic and have the potential to make a significant contribution in preventing and minimizing the overall impact of a traumatic situation on individuals with cancer.

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For more information . . .

- American Association for Marriage and Family Therapy: The Post-Traumatic Stress Disorder Sourcebook: A Guide to Healing
www.aamft.org/families/Consumer_Updates/PTSD.htm
- MEDLINEplus: Post-Traumatic Stress Disorder
www.nlm.nih.gov/medlineplus/posttraumaticstressdisorder.html
- What Is Post-Traumatic Stress Disorder (PTSD)?
www.sidran.org/ptsdbrochure.html

These Web sites are provided for information only. The hosts are responsible for their own content and availability. Links can be found using ONS Online at www.ons.org.

Research Utilization in Cancer Nursing Short Course

Oncology Nursing Society (ONS) Institutes of Learning

Research utilization (RU) in nursing is the **use of** scientifically based knowledge in practice. RU is different from the conduct of research. The RU process is an important part of evidence-based practice and includes planned change. Examples include implementation of pain management guidelines and integrating research knowledge into prevention of opioid-induced constipation. The opioid-induced RU project was published in the *Clinical Journal of Oncology Nursing* (Robinson et al., 2000). In 2002, we are especially interested in projects related to **pain assessment** as evidence-based literature syntheses are available in this area.

Nurses proposing research-based practice changes may apply to participate in a one-day RU Cancer Nursing Short Course sponsored by ONS and the National Cancer Institute (NCI). **The course will be held October 31, 2002**, the day preceding the ONS Institutes of Learning (IOL) in Seattle, WA.

Applicants to the course must be nurses proposing research-based practice changes involving patients with cancer. Nurses may be researchers, administrators, clinicians, staff nurses, advanced practice nurses, or educators in healthcare organizations or schools of nursing.

The five selected participants will receive reimbursement for airfare to ONS IOL, a four-day per diem for lodging/meals, and complimentary registration to IOL.

Purpose

The major purpose of this short course is to provide an opportunity for participants to present their RU projects to a faculty of experienced nurse researchers, following a guided experience initiating/continuing a RU project. In the one-day October course, each participant will present the proposed RU project and participate in a faculty-led summary, critique, and discussion. Applications may be submitted for a proposed RU project or for a project that is already in progress but not completed. Presenters will receive specific feedback to improve the likelihood of project success.

Faculty

Faculty will be announced at a later date.

Course Directors

The course director is Marcia Grant, DNSc, RN, FAAN, and the codirectors are Kathi Mooney, PhD, RN, AOCN®, FAAN, and Dana Rutledge, PhD, RN.

Application and Deadline

To obtain an application, call ONS Customer Service at 866-257-4667 (4ONS) and request application REO5 or download the application from ONS Online (www.ons.org). Applications are due **July 12, 2002**.