Depression Management in Cancer Patients

October 01, 2006 | Depression [1], Cultural Psychiatry [2], Major Depressive Disorder [3], Addiction [4], Dysthymia [5]
By Brenda Quon, MD [6]

Depressive disorders and symptoms are common in cancer patients (up to 58% have depressive symptoms and up to 38% have major depression), worsen over the course of cancer treatment, persist long after cancer therapy, recur with the recurrence of cancer, and significantly impact quality of life.

Depressive disorders and symptoms are common in cancer patients (up to 58% have depressive symptoms and up to 38% have major depression), worsen over the course of cancer treatment, persist long after cancer therapy, recur with the recurrence of cancer, and significantly impact quality of life.\(^{1-3}\) Depressive symptom prevalence varies by cancer site, stage, and treatment, as well as by the methods and criteria used in assessing depression.

Unfortunately, clinicians and patients often perceive depression as an expected and reasonable reaction to cancer; as a result, depression is frequently underrecognized and undertreated in oncology practice.\(^{10-15}\) Failure to effectively manage depressive symptoms results from patient, provider, and health system barriers to care. Patients may be reluctant to report symptoms or to see a mental health professional and if treatment is prescribed, they may be nonadherent, citing concerns about side effects and/or preoccupation with active cancer treatment. Providers may be reluctant to raise the issue, be less aware of effective treatment, and/or lack access to mental health professionals.

It is not surprising that low-income patients are particularly unlikely to receive mental health treatment.\(^{16,17}\) In addition, culturally based preferences for depression care can become a barrier if the preferred mode of care is not available.\(^{18}\) Personal culturally based explanations for depressive symptoms may influence symptom expression and patient-provider communication.\(^{19-21}\) Finally, patient perceptions of bias and cultural competence in health care, family perceptions, and practical barriers, such as cost and transportation to therapy, may impede receipt of care.\(^{22,23}\)

ASSESSING DEPRESSION AND RELATED SYMPTOMS

Establishing a diagnosis of clinical depression among cancer patients is confounded by biologic and physical symptoms as well as psychological stress attributable to the disease or its treatment.\(^{24-27}\) Cancer and its treatment-related symptoms (fatigue, anorexia, sleep disturbance, and pain) can mask a depression or contribute to its development and persistence.

Difficulty in differentiating the symptoms of depression from those of the medical illness makes the identification and treatment of patients with depression challenging. Indeed, there has been discussion that the presence of depression in medical illnesses such as cancer represents a broader pathophysiologic syndrome known as "sickness syndrome," a behavior or group of symptoms occurring under chronic immune stimulation.\(^{28}\)

Assessment of depression should include discussion about common symptoms experienced by patients as well as general distress management,\(^{29}\) and these discussions should continue over the duration of the illness. In fact, a clinical perspective of comorbid cancer and depression is best understood in relation to a staged trajectory of illness from diagnosis to treatment to chronic illness management or "cancer survivorship." Cancer survivorship is a term that has come to represent the state or process of living, following a diagnosis of cancer, regardless of how long a person lives. Thus, treating the patient for depression may be indicated at any stage in the illness trajectory.

The National Cancer Institute (NCI) Web site advises clinicians that "evaluation of depression in people with cancer should also include a careful assessment of the person's perception of the illness, medical history, personal or family history of depression or thoughts of suicide, current mental status, and physical status, as well as treatment and disease effects, concurrent life stressors, and availability of social supports. . . . Suicidal statements may range from an offhand comment resulting from frustration or disgust with a treatment course: 'If I have to have one more bone marrow aspiration this year, I'll jump out the window,' to a reflection of significant despair and an emergent situation: 'I can no longer bear what this disease is doing to all of us, and I am going to kill myself.'"
Exploring the seriousness of the thoughts is imperative.\textsuperscript{30} Based on our experience, we would add that it is important to assess potential cultural differences in the patient's personal conceptions of both depression and cancer. For example, many of our Hispanic patients attribute the etiology of depression to life stresses and to cancer-related stress in particular. They also prefer psychotherapy to medication and express the belief that stress can make the cancer worse.\textbf{BIOLe\textsuperscript{IC} CONSIDERATIONS}

The precise physiologic links between depression and cancer are unknown, although various hypotheses have been discussed in the literature. One of those is dysfunction of the hypothalamic-pituitary-adrenal (HPA) axis. Hyperactivity of the HPA axis is manifested in increased urinary free cortisol levels, dexamethasone nonsuppression, blunted corticotropin response to corticotropin-releasing factor (CRF), increased cerebrospinal fluid CRF concentrations, and adrenal and pituitary hypertrophy.\textsuperscript{28} Diagnostic findings such as these have been reported in depressed patients with and without cancer. A few studies have demonstrated that many cancer patients have dysregulation of the HPA axis similar to that of depressed patients without cancer. Evans and colleagues\textsuperscript{31} found that 40\% of their female patients with depression exhibited dexamethasone nonsuppression. However, the small number of studies as well as the limited number of patients studied precludes final determination of the clinical usefulness of dexamethasone suppression testing for all cancer patients with depression. Several investigators have examined the relationship between HPA axis hyperactivity and immune dysfunction in medically ill cancer patients. Cytokines--hormones that are secreted by cells of the immune system and that act as inflammatory mediators--have been shown to affect neurotransmitter function, neuroendocrine function, and behavior.\textsuperscript{19} Stress-induced cytokine release or HPA hyperactivity in patients with cancer may cause changes in immunologic function. Proinflammatory cytokines such as interleukin-1, interleukin-6, and tumor necrosis factor can activate the HPA axis, as well as change the metabolism of neurotransmitters such as norepinephrine, serotonin, and dopamine.\textsuperscript{32} These neuroendocrine and immunologic effects can contribute to the presentation of depressed mood, fatigue, anorexia, pain, or sickness syndrome. Future research in this field has implications not only for diagnosis but more important, for therapy.\textbf{MANAGING DEPRESSION}

A broad range of psychosocial and psychological interventions have been reported to aid in reducing depression and accompanying anxiety, enhancing coping skills, and improving quality of life in patients with cancer.\textsuperscript{33-37} In general, more convincing effects are found for patients screened at baseline\textsuperscript{36,38}; however, few studies have targeted patients with depressive disorders,\textsuperscript{39} and because the majority of studies have been of white women,\textsuperscript{40} the evidence is relatively weak for other populations.\textbf{Pharmacotherapy}

A systematic review by Williams and Dale\textsuperscript{41} of 24 randomized controlled trials of either pharmacologic or psychotherapeutic interventions for cancer patients with depression or depressive symptoms recently concluded that depression in cancer patients is responsive to antidepressant medication treatment, although some studies reported high dropout rates and some failed to report adverse events or tolerability. For example, paroxetine was useful in reducing major depression in patients with malignant melanoma who were receiving high-dose interferon alpha treatment\textsuperscript{42} and in reducing depressive symptoms in patients with breast cancer who were undergoing chemotherapy.\textsuperscript{43} In a trial by Fisch and colleagues,\textsuperscript{44} fluoxetine was effective in reducing depressive symptoms in patients with solid tumors. Other studies not analyzed by Williams and Dale report that the tetracyclic antidepressant mianserin reduced depressive symptoms in patients with breast cancer and that tricyclic antidepressants such as amitriptyline and desipramine are also useful in the treatment of depression in cancer.\textsuperscript{45,46} An open-label study of mirtazapine in cancer patients with depression showed improved functionality and reduced depressive and anorexic symptoms.\textsuperscript{47} The tolerability of the above antidepressants appears to be generally good in patients with cancer. Patients may experience adverse effects, but such effects may be complicated by treatment of the cancer itself. As already suggested, it is important to consider the treatment implications of simultaneously managing depression and pain and fatigue in patients with cancer using a variety of evidence-based interventions.\textsuperscript{7,44,48,49} In addition to alleviating symptoms of depression, antidepressant medications may provide relief of related cancer symptoms. For example, fluoxetine, paroxetine, and venlafaxine have been effective in reducing hot flashes in patients with cancer.\textsuperscript{50-52} Patients may have neuropathic pain from the cancer or the treatments, and bupropion, the tricyclic antidepressants, and venlafaxine have demonstrated the ability to reduce neuropathic pain.\textsuperscript{53-55} Avoiding significant drug interactions in patients on complex chemotherapeutic and pain management regimens requires...
careful monitoring.\textsuperscript{26,56} The NCI Web site provides detailed pharmacologic treatment algorithms that are consistent with current knowledge.\textbf{Psychotherapy}

There is growing consensus that structured psychotherapy, alone or combined with antidepressant treatment, is effective in treating depression.\textsuperscript{57} Under some circumstances, it is the treatment of choice (i.e., when preferred by individual patients, when pharmacologic treatments are contraindicated, and for patients coping with low social support or environmental stressors; or for maintenance after discontinuation of antidepressant medication). Clinical benefits from psychotherapy should be evident within 6 to 8 weeks. Medications should be considered for patients who fail to improve by that time and for those who do not have full remission after 12 weeks of psychotherapy. Structured psychosocial therapies are as effective as antidepressants for moderate depression and may be more effective in reducing recurrence.\textsuperscript{58}

In a report based on their systematic review of the literature on psychotherapeutic interventions for people with cancer, Williams and Dale\textsuperscript{41} concluded that cognitive-behavioral therapy (CBT) appears to be effective, as does social support, in reducing depressive symptoms. CBT challenges pessimistic or self-critical thoughts, emphasizes rewarding activities, and decreases behavior that reinforces depression. Alternative modes of delivery of CBT have been explored, including group CBT and telephone or computer self-help formats.\textsuperscript{59}

Problem-solving therapy (PST) uses behavior activation components of CBT but with less emphasis on changing cognition and greater emphasis on patient assessment of personal contextual problems and skill-building to enhance self-management skills.\textsuperscript{60} PST adapted for primary care in the multicenter IMPACT study\textsuperscript{61} was found to significantly reduce depressive symptoms in older primary care patients, including African American and Hispanic patients, with major depression or dysthymia,\textsuperscript{57} and PST was found effective in reducing depressive symptoms in patients with cancer.\textsuperscript{15,60,62-65} The brief psychoeducational characteristics of PST make it feasible to provide and acceptable to patients with a wide range of educational levels. PST is available in published treatment manuals for depression and for coping with cancer. According to the PST theoretical framework, experiencing negative life events (such as cancer) can lead to the occurrence of a wide range of daily problems that are believed to be sources of stress that trigger depressive symptoms. Increasing problem-solving skills has been shown to reduce depressive symptoms.\textbf{REDUCING BARRIERS AND IMPROVING ADHERENCE}

Quality-improvement strategies have been shown to be effective in reducing barriers to depression care.\textsuperscript{56} Organizational strategies generally include multifaceted quality-improvement disease-management interventions that change the way in which depression care is delivered, such as the implementation of routine depression screening, systematic application of evidence-based practice guidelines, clinical decision-making protocols and algorithms (cancer-specific algorithms available on the NCI and National Comprehensive Cancer Network Web sites\textsuperscript{29,30}), follow-up through remission and maintenance, enhanced roles of nurses or social workers as depression care managers, as well as integration between primary care and mental health specialists or service systems.\textsuperscript{67}

Depression care models that use collaboration between primary care physicians and mental health professionals, in which expertise in psychopharmacology in treating depression is provided by a psychiatrist and PST and supportive care management is provided by depression specialist nurses or social workers, has been found to be effective in primary care.\textsuperscript{57} A model adapted for oncology was found to be effective in a pilot study that included 55 low-income Hispanic patients with breast or cervical cancer, all of whom met criteria for major depression.\textsuperscript{58} The patients were randomized to either intervention or usual care and results suggested that cancer patients in public sector oncology clinics can benefit from depression treatment. A full-scale trial consisting of 425 low-income ethnic minority patients with cancer is currently under way using this model. Collaborative interventions have also been found to improve patient adherence and prevent relapse.\textsuperscript{59}

Persons with cancer are underserved with respect to receipt of current guideline-level care for major depression. We agree with Williams and Dale\textsuperscript{41} that patients should not be denied treatment for depression while the efforts to find further evidence of its effectiveness progress. Psychiatrists, as specialty medical consultants, can play a vital role in advocating optimal mental health care for medically ill cancer patient with depression. For psychiatrists treating patients with depression and cancer, it is imperative that the symptoms of depression are identified and that the goal of treatment is remission of depressive symptoms via the modalities mentioned previously. Psychiatrists with medical understanding of the biologic correlations between depression and cancer are in a good position to advocate effective treatment of the patient's comorbid medical conditions. These can include pain and the adverse effects of medical treatments for cancer that can contribute
to the patient's experience of depression. In doing so, the patient's psychiatric and medical responses to both depression and cancer treatments may be optimized.

Dr Ell is the Ernest P. Larson Professor of Poverty, Ethnicity, and Health at the School of Social Work of the University of Southern California in Los Angeles. Dr Quon is assistant professor of clinical psychiatry at the Keck School of Medicine of the University of Southern California in Los Angeles. They report that they have no conflicts of interest with the subject matter of this article.

References: REFERENCES:


50. Loprinzi CL, Kugler JW, Sloan JA, et al. Venlafaxine in management of hot flashes in survivors of...


**Source URL:** [http://www.psychiatrictimes.com/articles/depression-management-cancer-patients](http://www.psychiatrictimes.com/articles/depression-management-cancer-patients)

**Links:**

[1] [http://www.psychiatrictimes.com/depression](http://www.psychiatrictimes.com/depression)
[6] [http://www.psychiatrictimes.com/authors/brenda-quon-md](http://www.psychiatrictimes.com/authors/brenda-quon-md)