Psychological aspects of depression in cancer patients: an update

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Depression and disorders of the depressive spectrum frequently remain underdiagnosed and undertreated in the cancer setting, despite their prevalence and the degree of suffering they impose on cancer patients. Initial shock, disbelief and denial are frequent upon confirmation of the cancer diagnosis. Generally, they begin to resolve within a few weeks as the patient receives support from family, friends and beliefs in addition to the support and outline provided by the medical oncologist, of a treatment plan that offers hope and reduces part of the uncertainty that is so difficult to deal with in oncology. However, multiple losses throughout the disease process, beginning with the loss of one’s own health (followed by loss of body image, professional role, family roles, social roles, etc.) result in grief reactions and sadness that often accompany the cancer patient throughout the disease process. It is not uncommon, therefore, for depressed patients to feel depressed or sad at diagnosis, during treatment administration (due to toxicity, physical limitations, loss of body functions, changes in physical appearance, etc.); during remission and survival (e.g. due to fear of not receiving treatment that may keep the disease from reappearing, or due to inability to conduct life activities prior to diagnosis, among others); and during disease progression and palliative care (due to physical deterioration, confrontation with complex life and death issues, etc.). Depressive symptoms may, therefore, persist over time requiring specialized attention.

Depression is among the leading causes of disability worldwide, leading in some cases, to suicide. Reported prevalence rates of depression among cancer patients can be as high as 38% for major depression and 58% for depression spectrum syndromes [1]. Differences in reported prevalence rates are due to differences in assessment methods, as well as differences in stage and tumor site, among others.

Risk factors for developing depressive symptoms or disorders in cancer patients include young age, social isolation and lack of social support, poverty, previous negative experience with the disease in the family or personal experiences of physical illness, recurrence and advanced disease, physical deterioration, tumor location (lung, pancreatic, head and neck), presence of physical symptoms from cancer, such as pain, especially if not well controlled; history of multiple losses; previous psychiatric disorders, especially episodes of depression or suicide attempts; history of substance abuse and others.

Psychological factors that may also influence the appearance of depression or depressive symptoms in the oncology setting include but are not limited to the following: loss of autonomy; confrontation with death and dying; fear of suffering; death of other patients; reaction of family members to the illness; presence of unresolved issues; pre-existing family conflict; personality factors such as pessimism and a tendency to consider life experiences as uncontrollable and inevitable.

Ideally, all cancer patients be screened for depression in the clinic upon their first visit and on a regular basis thereafter by their oncologist, especially when changes occur in their disease status (remission, recurrence, progression of disease etc.). The distress thermometer is a valid and reliable screening tool. Patients are asked about the nature and source of their distress (whether it be physical, social, psychological or spiritual). In addition to detecting distress, the thermometer facilitates referral to the appropriate professional working in the oncology team (mental health, social work, pastoral counselor, etc.) [2].

Diagnosis of depression in physically healthy individuals relies heavily on the presence of somatic symptoms (anorexia, insomnia and weight loss). However, these are of little value in cancer patients since they are common to both cancer and depression. Four different approaches have been described in the assessment of depression in the medically ill [3, 4]:

- Inclusive approach: counts all symptoms of depression, whether or not they may be secondary to the physical illness. This approach offers high sensitivity but low specificity and does not focus on etiology.
- Etiologic approach: This approach counts a depressive symptom only if it is presumed not secondary to physical illness.
- Exclusive approach: Eliminates symptoms such as anorexia and fatigue, which can be secondary to cancer, and employs other depression criteria. This approach increases specificity and lowers sensitivity which may result in lower prevalence and underdiagnosis.
Thoughts of death or wishing for death or suicide

Anhedonia

Loss of self-esteem

Feelings of helplessness and hopelessness

Dysphoric mood

Substitutive approach: Replaces indeterminate symptoms such as fatigue (frequently secondary to physical illness) with cognitive symptoms such as indecisiveness, brooding and hopelessness.

Criteria for the diagnosis of a major depressive disorder based on the Diagnostic and Statistical Manual of Mental Disorders [5] include:

Five or more of the following symptoms have been present during the same 2-week period and represent a change from previous functioning, with at least one of the symptoms being either depressed mood or loss of interest or pleasure:

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report or observations by others
2. Markedly diminished interest or pleasure in all or almost all activities, most of the day, nearly every day
3. Significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day
4. Insomnia or hypersomnia nearly every day
5. Psychomotor agitation or retardation nearly every day
6. Fatigue or loss of energy nearly every day
7. Feelings of worthlessness or excessive or inappropriate guilt nearly every day
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day, and
9. Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

In addition, the symptoms do not meet criteria for a mixed episode; they cause clinically significant distress or impairment in social, occupational or other important areas of functioning; they are not due to the direct physiological effects of a substance; they are not better accounted for by bereavement; they persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms or psychomotor retardation.

The diagnosis of depression in the oncology setting should depend on psychological not somatic symptoms, in cancer patients [6]:

- Dysphoric mood
- Feelings of helplessness and hopelessness
- Loss of self-esteem
- Feelings of worthlessness or guilt
- Anhedonia
- Thoughts of death or wishing for death or suicide

Differential diagnosis should include normal reactions to illness and loss; adjustment disorders with depressed and/or anxious mood, and should determine whether organic factors underlie the depressive syndrome. When physiologic effects of cancer directly cause depressive syndromes, a diagnosis of mood disorder due to a general medical condition should be made.

Demoralization syndrome, described by Kissane et al. [7], should be distinguished from depression and includes affective symptoms of existential distress (hopelessness or loss of meaning in life); pessimism, helplessness, a sense of being trapped, personal failure or lacking a worthwhile future; absence of motivation to cope differently, and associated features of social alienation or isolation and lack of support. Demoralization syndrome is said to occur in at least 20% of patients who do not meet DSM-IV criteria for the diagnosis of a mental disorder [8].

Boredom in people with cancer has received little attention despite clinical observation, suggesting that it has the potential to affect patient’s quality of life significantly. Passik et al. [9] developed a Purposelessness, Understimulation and Boredom Scale to identify boredom and found this construct to be different from depression in the oncology setting.

Multiple psychological measurement instruments have been described as useful in the diagnosis of depression in cancer patients. However, a single-item question: “Have you been depressed, most of the day, nearly every day, for the past two weeks or more?” seems to be able to identify all cancer patients diagnosed as depressed using Research Diagnostic Criteria [10].

Suicide is associated with emotional suffering and, at times, with physical disease. Suicide has been reported to be 1.5–2 times higher in cancer patients than in the general population [11]. Among terminally ill patients with cancer, the request for euthanasia is about four times higher in patients with depression than in those without depression [12]. In addition, desire for death in terminally ill cancer patients is frequent. It has been shown to be associated with depression and is transitory [13]. Suicide risk protocols should include an evaluation of thoughts about death, dying and suicide, as well as an evaluation of the presence of a plan to commit suicide, the patient’s intention to carry out such plan and its viability.

An association between depression and an increase in pro-inflammatory cytokines (e.g. interleukin-1, interleukin-6 and tumor necrosis factor alpha) has been described. Cancer itself and its treatment (medications and surgery) in general can be responsible, together with the individual stress response, for the production of pro-inflammatory cytokines which may contribute to the development of depressive symptoms [14].

Depression and depressive symptoms should always be treated in the cancer setting. Because sadness and depressive symptoms are considered to be ‘normal’ reactions to the disease and its treatment, quite frequently they remain undertreated. They tend to be a manifestation or consequence of emotional suffering. Not treating them will trivialize the patient’s suffering associated with the disease and death.

Adequate treatment of depression in the oncology setting should combine the control or elimination of potential organic causes of depression when possible; pharmacotherapy; psychotherapy and psychological intervention with the patients’ families and staff members. Efficient communication skills between doctor and patient are needed as well.

The choice of the best psychotropic drug for the pharmacological treatment of depression in cancer will depend on various factors [14]:
Monitoring symptoms on a continued basis to watch for depressive symptoms. Cognitive techniques may be helpful in correcting misconceptions and exacerbated fears. Interventions directed to enhance the spiritual aspects in advanced disease and dying are of utmost importance at this stage of the illness, when patients are confronted with life-death issues that generally imply deep existential questioning. Helping patients discover the meaning they assign to their symptoms, to their disease, to life and death, to suffering, etc., and helping them accept suffering as an integral part of life, is of utmost importance. Finding meaning in the context of advanced or serious illness is quite a challenge that not everyone is capable of achieving. In addition, interventions designed to maintain patients’ dignity have been described as well and are very helpful in improving patients’ mood. Multidimensional structured and semi-structured group psychotherapies have proven to be effective in reducing patients’ depressive symptomatology and improving their quality of life.

Staff play an important role in the improvement of depressive symptoms in the cancer patient. Staff should be trained to provide basic emotional support effectively as well as to communicate efficiently with the patient and his/her family. Some simple interventions staff may easily implement are related to increasing the patient’s perception of control. Cancer influences the patient in such a way that it substantially reduces the perception of control that the patient has over his own life. In order to help patients regain their sense of control staff members may:

- Which is the safest drug or which has the fewest side-effects for the cancer patient
- What are the characteristics of the depressive episode are, and
- Which is the best way of administration for a particular patient (pills versus liquid versus parenteral).

General guidelines for the use of antidepressants in the cancer setting have been described and include:

- Starting the dose according to patients’ condition (usually half dose for a few days, then titrate)
- Waiting for the effects of the drugs (latency: usually 4 weeks)
- Providing continued treatment for 6–9 months (more if depression or depressive episode are recurrent)
- Discontinuing antidepressant treatment gradually by tapering the dose and providing adequate follow-up
- Monitoring symptoms on a continued basis to watch for potential drug interactions that may occur between antidepressants and certain chemotherapeutic agents

Psychotherapy may be an excellent alternative for those who refuse taking antidepressants. In addition, it has no side effects! As with antidepressants, it is necessary to adjust the psychotherapeutic modality to patient’s needs and disease stage. Psycho-educational interventions such as clarifying information, among others, are effective usually throughout the disease continuum, although may be more needed at diagnosis, when passing from one stage of the illness to another, for example, initiation and end of treatment; upon starting palliative care, etc. Couple and Family Therapies may be appropriate when conflicting relationships within the couple or the family contribute substantially or are the main cause of the patients’ depressive symptoms. Cognitive techniques may be useful in correcting misconceptions and exacerbated fears. Interventions directed to enhance the spiritual aspects in advanced disease and dying are of utmost importance at this stage of the illness, when patients are confronted with life-death issues that generally imply deep existential questioning. Helping patients discover the meaning they assign to their symptoms, to their disease, to life and death, to suffering, etc., and helping them accept suffering as an integral part of life, is of utmost importance. Finding meaning in the context of advanced or serious illness is quite a challenge that not everyone is capable of achieving. In addition, interventions designed to maintain patients’ dignity have been described as well and are very helpful in improving patients’ mood. Multidimensional structured and semi-structured group psychotherapies have proven to be effective in reducing patients’ depressive symptomatology and improving their quality of life.

A six-step protocol to deliver bad news and improve doctor–patient communication (SPIKES) has been described and includes the following:

- **provide options to patient.** For example, giving him the possibility of choosing whether he wants to have his medication with water, milk or juice helps the patient believe he still has the power to decide over what is happening to him, especially at times when the patient is hospitalized and his hospital days revolve around medication intake, doctor and nurses’ visits, medical tests, etc.
- **anticipate patients’ needs.** This will help him feel more in control of what may happen to him and will reduce fear and distress upon the development of new symptoms or changes in the patient’s body, functions, etc.
- **facilitate adaptive coping mechanisms,** for example, by identifying with the patient effective ways in which he/she has confronted and resolved difficulties encountered in the past
- **respect defense mechanisms** as long as they do not interfere with treatment administration
- **normalize patient’s feelings**
- **help maintain realistic hope:** Even in the context of palliative care can hope be maintained. For example, a non-depressed dying patient may hope to die without suffering, or after having solved certain issues, or he may hope that his family will not suffer in excess after his death.
- **remain available** to listen to patient’s worries and fears
- **explain** to patient and family that depressive symptoms can be treated
- **provide continuity in patient care**
- **monitor patient’s sense of wellbeing and needs** in a continued manner along the disease continuum, since they change over time
- **work with the family:** provide basic caretaking guidelines and support for family members. Facilitate their understanding of what depression is and why the patient may be depressed. It may be difficult for family members to comprehend, for example, why the patient develops depressive symptomatology upon finishing his treatment.
- **explore one’s own attitudes towards illness, suffering, death and dying**
- **inform adequately:** staff members should have efficient training in communication skills as to be able to handle difficult interactions with patients at complex moments of the disease process. Adequate doctor–patient communication will:
  - reduce patient’s fears and anxiety,
  - help patient understand and elaborate relevant medical information,
  - increase patient’s perception of control,
  - allow the patient to discuss relevant worries that may interfere with treatment administration, with the oncologist,
  - enhance treatment adherence,
  - facilitate patient’s global psychological adjustment.

After finishing his treatment.

**S Setting:** prepare an adequate environment. This may be achieved by providing privacy, involving significant others, establishing rapport with patient, etc.