The risk of suicide in the cancer population is real, and it requires nurses to be able to assess and manage such risk competently. This article supports the idea that oncology nurses need to be comfortable with identifying, assessing, and appropriately triaging depressed and possibly suicidal patients with cancer to appropriate specialists, given the increased risk of suicidal ideation and completion in the cancer population. The goal of this article is to help oncology nurses identify the specific risk factors for suicide in their patients with cancer, feel confident and prepared with an accurate assessment, and provide the necessary interventions.

Suicide is a major public health concern around the world. Every year, about one million people die from suicide, and the rates have increased more than 65% since the late 1960s (World Health Organization [WHO], 2012). The global mortality rate is 16 people per 100,000 (WHO, 2012). In addition, suicides in the United States have increased; in 2009, more than 36,000 people (11.3 per 100,000) committed suicide, making it the 10th leading cause of death in the United States (Centers for Disease Control and Prevention, 2012; Kochanek, Xu, Murphy, Minino, & Kung, 2011). Psychosocial factors that increase the risk of completing suicide include male gender, older age group, history of alcohol and substance abuse, unemployment, change in marital status, history of psychiatric disorders, major depression, family history of suicide, suicidal ideation, medical health problems, physical symptoms such as pain, and current life stressors (Ballard et al., 2008; Fishbain, 1999; Hirschfeld & Russell, 1997; Joiner, 2002; Logan, Hall, & Karch, 2011; Maniglio, 2011; Meyer et al., 2010; Paulozzi, Mercy, Frazier, & Annest, 2004; Spioletti et al., 2011; Tang & Crane, 2006). In addition to being a risk factor for depressive illness, severe medical burden also is a suicide risk factor, so the risk of suicide in the cancer population is a potentially serious clinical issue.

The risk of suicide in the cancer population is almost double the general population rate (Misono, Weiss, Fann, Redman, & Yueh, 2008). Robinson, Renshaw, Okello, Møller, and Davies (2009) conducted a population-based study of patients with cancer in England and found a significantly increased risk in both men and women, with the highest risks found in the first year after diagnosis and in patients with high-fatality cancers. Misono et al. (2008) found that for patients with cancer in the United States, the male gender; Caucasian race; older age at diagnosis; and diagnosis of cancer of the lung and bronchus, stomach, or head and neck all were significant risk factors.

A retrospective chart review of 75 consecutive psychiatric referrals at a large National Cancer Institute–designated cancer center on the West Coast was conducted by the authors. Patients ranged in age from 24–86 years, consisted of various cancer populations, were 61% female, 59% Caucasian, 34% married, and the predominant single reason for referrals was depression (37%). The retrospective review was conducted to identify demographic and treatment characteristics common to those patients who had psychiatric referrals in the outpatient setting. The full demographic and treatment characteristic data were published elsewhere (Lynn, Gotto, Cooke, Mayorga, & Grant, 2012). During this review, the suicidal ideation rate in patients...
was 21%. Because of that unexpected finding, a review of the literature was performed. During that review, the authors discovered that, despite the increasing risk of suicide in the general population combined with the even higher risk in patients with cancer, only 1 in 6 healthcare professionals assessed patients with cancer for suicide (Quill, 2008). Patients with cancer would benefit from better assessment and intervention in the area of suicide.

Risk Factors

When working with patients with cancer, knowing risk factors for suicide is helpful so that nurses can be more vigilant in assessing this high-risk population. Risk factors can be divided into four categories: demographic factors, disease factors, associating factors, and psychosocial factors (see Figure 1).

Demographic factors that place individuals at a greater risk for suicide include age, gender, marital status, and race. Older adult patients with cancer have a higher risk of committing suicide than patients with other medical illness (Miller, Mogun, Azrael, Hempstead, & Solomon, 2008; Walker et al., 2008). Being single is a risk factor for men. In a population of patients with pancreatic cancer, unmarried men had the highest suicide rate (Robson, Scruett, Wilkinson, & MacLeod, 2010; Turaga, Malafa, Jacobsen, Schell, & Sarr, 2011). Ethnicity also may be a factor. In one study, Korean patients with cancer had higher rates of suicide; however, the overall suicide rate in Korea is higher than Western countries, so the definite risk factor of ethnicity is uncertain, but something of which to be mindful (Ahn et al., 2010).

Disease factors include type of cancer, stage, and the survival trajectory. Suicide rates vary by types of cancer. Turaga et al. (2011) reported pancreatic cancer suicide rates as 135.4 per 100,000 person-years. Another source reported gynecologic cancer suicide rates per 100,000 person-years: ovarian (16.1), vaginal (15.7), cervical (7.3), and uterine (5.7) (Mahdi et al., 2011). In addition, evidence suggests patients with gastric, lung, and head and neck cancers have higher rates of suicide than other cancer populations (Ahn et al., 2010; Misono et al., 2008).

The stage of the cancer also is important. The more advanced the cancer or greater stage, the greater the risk of suicide. For example, patients with advanced or metastatic disease are at a higher risk for committing suicide (Bill-Axelson et al., 2010). The survival trajectory in cancer treatment is important, as well. One study showed that patients are at a higher risk the first month after diagnosis; a time, unfortunately, when nurses’ professional relationship with patients and their families may not be well established (Johnson, Garlow, Brawley, & Master, 2012). After a cancer diagnosis, the suicide rate increases (Ahn et al., 2010). The time of cancer recurrence or progression is another moment that may bring much distress for patients and family because they may realize that the cancer may be incurable. Güth, Myrick, Reisch, Bosshard, and Schmid (2011) found in their cohort of six patients who committed suicide that four of the patients had metastatic disease with a short survival expectation. Although some patients are cured of their disease, even adult survivors of childhood cancer have an increased rate of suicide when compared to a matched control group (Recklitis et al., 2010).

Interventions

Risk factors for suicide are known to include depression, family history, end-of-life trajectory, or change in diagnosis and treatment course. To address those risks in patients, nurses must realize the suicide potential of a particular patient and just ask. Quill (2008) articulated it very well, saying, “There is a need to unbundle and study the range of suicidal thoughts, intentions, and actions that many patients with cancer and other serious medical illnesses experience” (p. 4706).

Healthcare providers can use many possible interventions to decrease the risk of suicide (see Table 1). The interventions listed in this article involve using the National Comprehensive Cancer Network’s (NCCN) Distress Thermometer as a screening tool.

FIGURE 1. Suicide Risk Factors in Patients With Cancer
Note: Based on information from Ahn et al., 2010; Akechi et al., 2002; Bill-Axelson et al., 2010; Emanuel et al., 2000; Filiberti & Ripamonti, 2002; Güth et al., 2011; Johansen et al., 2005; Johnson et al., 2012; Mahdi et al., 2011; Miller et al., 2008; Misono et al., 2008; Robson et al., 2010; Shim & Hahm, 2011; Suarez-Almazor et al., 2002; Turaga et al., 2011; Walker et al., 2008.

- **Demographic Factors**
  - Older age, male gender, unmarried, and race

- **Disease Factors**
  - High-fatality cancer, higher cancer stage, and point in disease trajectory

- **Associating Factors**
  - Physical symptoms (e.g., pain) and decreased performance status

- **Psychosocial Factors**
  - Preexisting psychopathology, depression, anxiety, hopelessness, substance abuse, family history of suicide, and isolation
and to stimulate discussion, suicidal questioning and crisis management, symptom management, referral to mental health and depression treatment, death preparation and palliative care support, referral to spiritual care, and patient and family education.

**Distress Thermometer as a Screening Tool**

The Distress Thermometer was developed by the NCCN and has been used as a screening tool for psychological distress in several cancer populations (Dabrowski et al., 2007; Jacobsen et al., 2005; NCCN, 2005; Ransom, Jacobsen, & Booth-Jones, 2006). Its validity has been tested (Gessler et al., 2008). It also has been shown to be effective for screening for adjustment disorders, mood disorders, and anxiety disorders (Akizuki, Yamawaki, Akechi, Nakano, & Uchitomi, 2005; Gessler et al., 2008; Mitchell, 2007). The Distress Thermometer is an attractive tool because it can be used to begin a conversation about patient distress and assessment of potential risk factors for suicide.

**Suicidal Questioning, Crisis Management, and Symptom Management**

Valente (2010) conducted a study evaluating the knowledge of suicide evaluation and prevention among oncology nurses. The results revealed that nurses tend to focus on physical symptoms and, when risk was identified, only 17% assessed for presence of a suicidal plan (Valente, 2010). Assessing risk factors and providing better screening and assessment are important; for example, being aware of target trajectory times such as diagnosis, discharge, and recurrence, which may be times of increased suicide risk. Because psychosocial adaption across the cancer trajectory is ongoing through each crisis and event, patients identified to be at a high risk for committing suicide should be assessed each time the patient is seen (Nicholas & Veach, 2000). Carlson (2010) suggested a screening questionnaire, stating, “Those thinking of it won’t tell unless you ask” (p. 15). Simply asking about despair, depression, sense of hopelessness, thoughts of suicide, or even wish for death may be a trigger for the healthcare professional to address the issues at the root of the symptoms. Is the patient depressed? Is the pain well managed? Is there family conflict regarding the end of life? All these issues can be addressed adequately. One question that may be helpful is, “Do you have serious thoughts of ending your own life?” (Carlson, 2010). Another option is to ask about patients’ perception of their disease, how they are coping, and how they have coped with other stressors in their life (Carlson, 2010). The patient may communicate recognizable coping behaviors that may signal hopelessness, which is a risk factor for suicide. Perhaps nurses focus on the topics of their expertise, such as physical symptoms, and feel uncomfortable in regard to the patient’s emotional suffering. Learning to assess the total patient and recognize the risk of suicide can save a life and family distress (Adler & Page, 2008). A simple question such as, “Some people with cancer have suicidal thoughts; please let me know if that is happening with you. I can help you and you don’t have to suffer alone” may be all that is needed.

If the patient has an imminent suicide plan with an available weapon, there must be a policy in place and methods of management and referral for the crisis at hand (Meyer et al., 2010). The patient may need to be referred for evaluation by a mental health professional and placed on an involuntary 72-hour psychiatric hold per the regulations of specific states.

Much clinical evidence supports the idea that unmanaged physical symptoms increase a patient’s risk for suicide. Uncontrolled pain is a crisis, physically and psychologically. It needs to be managed, and referrals are needed if a patient is suffering. A good resource is a palliative care team. Interventions performed by the palliative care team improve quality of life, decrease depression and physical symptom burden, and improve survival (Temel et al., 2010).

**Referrals for Management**

If a patient expresses a wish for hastened death or suicide, this should trigger the nurse to consider the distress underlying the wish. How do nurses assess for emotional suffering? Only a minority of patients with cancer are appropriately referred to a mental health professional to treat issues such as depression and anxiety (Fallowfield, Ratcliffe, Jenkins, & Saul, 2001; Nicholas & Veach, 2000; Rosenstein, 2010; Valente, 2008). Clinical evidence supports a high correlation between suicide and depression (Spijker, de Graaf, & Ten Have, 2001; Nolen, 2006). A correlation also exists between suicide and hopelessness, suicidal ideation, and wish for hastened death; studies show that 40% of patients with cancer suffering from depression also have suicidal ideation (Akechi et al., 2010; Sciubba, 2009; Shim & Hahn, 2010). Carlson (2010) discussed the fact that healthcare professionals may be missing patients’

<table>
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<th>TABLE 1. Patient Questions by Possible Intervention</th>
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<td><strong>Intervention Area</strong></td>
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<td>Death preparation and palliative care support</td>
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death. In contrast, the patients with cancer did not have a high desire for hastened death. The conclusion was that the depression and hopelessness provide independent contributions to the desire for hastened death (Breitbart et al., 2000). In addition, antidepressant medications have been effective in treating depression, improving quality of life, and maybe even as a prophylaxis for depression (Lydiatt, Denman, McNeilly, Puumula, & Burke, 2008). A simple question such as, “Some patients with cancer feel sadness that lasts over several weeks, and affects quality of life. If you are feeling depressed or hopeless, please let me know. There are medications and support that we can offer you to help you through this difficult time in your life.”

Death Preparation and Palliative Care Support

A review of the assisted suicide controversy is not within the scope of this article. However, identifying that some individuals want to die and are ready for death is important. One of the challenging issues is determining the difference between suicidal ideation or thoughts of death and a wish for a hastened death. Does a patient who wants to die quickly have suicidal ideations? In the setting of palliative care, what are the interventions? Untangling the concepts involved is difficult; however, if a patient wishes for a quicker death, the nurse needs to assess for suffering, underlying depression, despair, and hopelessness (Breitbart & Alici, 2009). Suicidal ideations predominately are thoughts of the patient committing the suicidal act, whereas the wish for a hastened death involves a hope for death to come quickly. Nissim, Gagliese, and Rodin (2009) discussed that the desire for hastened death in individuals with cancer was related to three main categories: as an exit plan, an expression of despair, and a manifestation of letting go (Nissim et al., 2009). The first involved the idea of suicide, the second something to fix, and the last a healthy process of closure. An example of a question reflecting these possible options would be, “Some patients want to die sooner rather than later, because they want to kill themselves, they are suffering, or they are ready for death. Do any of those concerns fit for you?”

Society does not normally integrate the idea of dying with daily expectations. Being diagnosed with a life-threatening disease can make people think about death or dying more often. It can be challenging to be present with patients who want to discuss their death, their desires to have death come quickly and without suffering, and their needs to process future dying moments. What does “accepting death” look like? The definition of a good death, according to Steinhauser et al. (2000), is management of pain, clear decision making, reduction of the fear by communication with their healthcare provider, preparation for death, completion of spirituality considerations, contributing to others, and affirmation of the whole person. Ganzini et al. (2002) accounted experiences of hospice nurses and social workers in Oregon referring to their patients requesting suicide. Their findings reported that the most important reasons for patients requesting suicide were control of the death circumstances, a desire to remain at home, the belief that continuing living was pointless, and being ready to die (Ganzini et al., 2002).

Referral to Spiritual Care

For some patients, referral to spiritual care can be invaluable. The need to make sense of the journey, to address existential concerns, and to understand the meaning of suffering can be done well with competent spiritual care (Breitbart et al., 2000). The pastor, chaplain, or rabbi often offer comfort when no other team member can. Spiritual care may include assisting in writing a life letter, which involves having the patient leave a letter of legacy for the family such as wisdom learned, blessings for children, forgiveness for offenses, statements of love, and final thoughts. Such a letter may provide a method of processing for the patients and a way of leaving a legacy for the family.

Education

Education for the patient and family is a key component of the nursing role, and the normalization of common psychological responses of loss, anger, fear, and anxiety are a part of the total care of the patient. During this process of teaching, assessment for more serious psychological responses such as depression, suffering, and hopelessness can be included. In addition, education regarding the importance of social support and evidence that it is a strong buffer against patient vulnerability to depression directed at the family is imperative (Rasic, Belik, Bolton, Chochinov, & Sareen, 2008).
Conclusion

This article reviews the risk factors for suicide in patients with cancer and potential interventions for the nurse after discovery of a patient at risk for suicide. The content hopefully has demystified some of the clinical action around these potentially anxiety-provoking patient situations. The first step for the oncology nurse is the action of asking, which connects the nurse to the patients, validates their feelings as normal, and provides a safe place for them to express their emotions. Nurses must understand that the act of asking provides a deep connection that may, even in the absence of any other therapeutic action taken, become a powerful antidote to a patient’s emotional suffering.

References


Joiner, T.E. Jr. (2002). The trajectory of suicidal behavior over time. Suicide and Life-Threatening Behavior, 32, 33–41. doi:10.1521/suli.32.1.33.22187


Lynn, R., Gotto, J., Cooke, L., Mayorga, L., & Grant, M. (2012). Outpatient
psychiatric consultations at an NCI-designated cancer center: A retrospective chart review. Paper presented at the Academy of Psychosomatic Medicine, Atlanta, GA.


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2. Is the purpose of the article described clearly?
3. Is the literature review comprehensive, and are major concepts identified and defined?
4. How do you assess patients for risk factors of suicide? How can you intervene with the patient and who would you refer the patient to for assistance?
5. What additional practice change recommendations, if any, will you make based on the evidence presented in this article?

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