Early Implementation of Palliative Care Can Improve Patient Outcomes

Paul A. Glare, MD

Abstract

Patients with cancer experience many complex issues throughout the trajectory of the disease. These range from the physical consequences of cancer and treatment to the psychological, social, and spiritual issues associated with living with the disease. An individualized, comprehensive, and interdisciplinary approach is needed to reduce patient suffering and ensure appropriate symptom management and support from the time of first diagnosis to end of life. Data from randomized clinical trials prove that patients provided with early palliative care can experience relief of symptoms and improvements in quality of life, mood, satisfaction, resource use, and advanced care planning. Professional organizations such as ASCO have begun to develop recommendations that integrate palliative care into standard oncologic care from the time a person is diagnosed with metastatic or advanced cancer. NCCN has a palliative care guideline that recommends early and ongoing assessment of palliative care needs and referral to specialist palliative care services in more complex cases. In turn, oncologists need to consider how best to screen patients and integrate early palliative care with routine oncologic care, within the context of their busy clinics, to ensure that patients, families, and caregivers receive timely support. (JNCCN 2013;11(Suppl 1): S3–S9)

Patients with advanced cancer and their families frequently experience a high burden of suffering regardless of whether the cancer can be cured or controlled.¹ Suffering, in its many forms, is not limited to the last days of life but occurs throughout the course of the disease beginning at diagnosis. Furthermore, patients’ needs may vary across the different stages of the disease trajectory.²,³ Patients typically experience a range of complex issues including physical, psychological, social, and spiritual consequences of the disease and its treatment.⁴–⁸ In particular, pain, depression, and fatigue are among the most frequent and devastating symptoms, and they can have a considerable impact on a patient’s quality of life.⁶–¹² Additionally, issues around disease management, practical activities of daily living with cancer or caring for someone with cancer, end-of-life care, and loss and grief are common.⁴

Many patients with metastatic cancer can live for years after diagnosis,¹³ and patients with newly diagnosed advanced cancer often have a high symptom burden.¹⁴ With the growing incidence and prevalence of cancer and the number of patients who live with the consequences of the disease and treatment, a comprehensive but individualized approach is needed to ensure that all patients receive quality cancer care that includes symptom management and consideration of quality of life throughout the course of illness.⁴,³

A Comprehensive Approach to Relieve Suffering

Palliative care focuses on the relief of suffering in all its forms and on achieving the best possible quality of life for patients and their caregivers.¹,⁵,¹³,¹⁵–¹⁸ The scope of palliative care varies across sites and locations, ranging from only end-of-life care to the management of symptoms and other distress across the full trajectory of disease from first diagnosis.¹,¹³,¹⁸ The most recent definitions of palliative care generally advocate a comprehen-
sive, interdisciplinary approach from an early stage of the disease (Table 1).13,15–19 The focus of palliative care is on the patient and the family, and it emphasizes the coordination of care across settings and providers.20 As noted by ASCO, if the implementation of palliative care is delayed until the end of life, the benefits that a patient could receive from such care will be restricted.13

However, despite recognition of the importance of palliative care and recent improvements in its provision, palliative care is often not discussed or considered until very late in the course of illness.5 All too often, palliative care is thought to be synonymous with hospice or end-of-life care.13 In the United States, this perception can be a barrier to access to palliative care, as patients face insurance coverage decisions between cancer-directed treatments and palliative care provided by hospice. It has been suggested that use of the term “supportive care” rather than “palliative care” could be conducive to earlier referrals to palliative care–type treatment, given that this term is perceived to cause less distress to patients, their caregivers, and clinicians.7,21

Symptom control and, therefore, quality of life are the end points of supportive care, while the main outcome is patient survival.15 Developing an approach whereby all patients can obtain relief from suffering and have the best possible quality of life at all stages of disease is crucial, regardless of the terminology used to describe the care given.

**Integration With Oncologic Care for Early Implementation**

Maintaining a focus on both symptom management and quality-of-life issues in patients with cancer throughout the course of illness is achievable by integrating cancer-directed therapy and palliative or supportive care.6 A paradigm shift has occurred to approaches that integrate disease-directed therapy and palliative care, such that palliative care is given throughout the continuum of disease, with the informed preferences of the patient incorporated into individualized treatment plans.5,13,15–18 ASCO has stated a vision that comprehensive care, with full incorporation of palliative care into standard oncologic care, will be achieved by 2020.4 Towards this goal, ASCO provided a provisional clinical opinion

### Table 1 Current Definitions of Palliative Care

<table>
<thead>
<tr>
<th>Organization</th>
<th>Definition</th>
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<tr>
<td>Italian Association of Medical Oncology (AIOM)15</td>
<td>Palliative care concerns the prevention, identification, assessment and treatment of physical, functional, psychological, social and spiritual needs of cancer patients in the setting of advanced-terminal disease, when the aim can no longer be patient survival but is represented by the quality of life of the patient and his/her family.</td>
</tr>
<tr>
<td>ASCO13</td>
<td>Palliative care is focused on the relief of suffering, in all of its dimensions, throughout the course of a patient’s illness...Palliative management focuses on the care of patients with advanced illness or a significant symptom burden by emphasizing medically appropriate goal setting, honest and open communication with patients and families, and meticulous symptom assessment and control.</td>
</tr>
<tr>
<td>NCCN16,18</td>
<td>Palliative care is a special kind of patient and family-centered health care that focuses upon effective management of pain and other distressing symptoms, while incorporating psychosocial and spiritual care according to patient/family needs, values, beliefs, and cultures.</td>
</tr>
<tr>
<td>Center to Advance Palliative Care19</td>
<td>Palliative care is specialized medical care for people with serious illnesses. This type of care is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness, whatever the diagnosis. The goal is to improve quality of life for both the patient and the family. Palliative care is provided by a team of doctors, nurses, and other specialists who work with a patient’s other doctors to provide an extra layer of support. Palliative care is appropriate at any age and at any stage in a serious illness, and can be provided together with curative treatment.</td>
</tr>
<tr>
<td>World Health Organization17</td>
<td>Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.</td>
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supporting the integration of palliative care services into standard oncologic practice from the time a person is diagnosed with metastatic or advanced cancer. This provisional clinical opinion was largely based on data from a landmark randomized clinical study conducted in patients with newly diagnosed metastatic non-small cell lung cancer.\textsuperscript{13,22}

**Support for Early Integration of Palliative Care Services**

**Randomized Clinical Trial Data**
The landmark study in this area is a randomized clinical trial (N = 151) conducted by Temel et al.\textsuperscript{22} This study showed that ambulatory patients with newly diagnosed metastatic non-small cell lung cancer benefited from receiving palliative care begun soon after diagnosis, during which time they also received standard oncologic care. Palliative care was provided to patients in the intervention group by a member of the palliative care team, which consisted of board-certified palliative care physicians and advanced practice nurses. Importantly, patients in the standard oncologic care group received palliative care if a meeting was requested by the patient, family, or oncologist, but these patients did not cross over to the palliative care group or follow the protocol-specified program of palliative care.\textsuperscript{22}

The initial palliative care visit for the palliative care group took place within 3 weeks of enrollment, and visits were conducted at least monthly thereafter. Visits were based on the recommendations of the National Consensus Project for Quality Palliative Care, and “specific attention was paid to assessing physical and psychosocial symptoms, establishing goals of care, assisting with decision making regarding treatment, and coordinating care on the basis of the individual needs of the patient.”\textsuperscript{22} On average, the initial visit, which was neither scripted nor structured, took a median time of 55 minutes, with a median of 20 minutes spent discussing symptom management, 15 minutes discussing coping, and 10 minutes on understanding the illness.\textsuperscript{23} The length of time spent discussing symptom management was considered reflective of the high symptom burden that patients have soon after diagnosis, when they are relatively early in the course of their disease. Furthermore, patients who were experiencing a lower quality of life were likely to have longer consultations, with more time spent discussing symptom management, than patients with a better quality of life.\textsuperscript{23}

Notably, patients in the early palliative care group had greater improvements in quality of life and mood than patients assigned to oncologic care alone. They also experienced less aggressive care at the end of life (aggressive care was defined as administration of chemotherapy within the last 14 days of life, no hospice care, or admission to hospice within the last 3 days of life).\textsuperscript{22} In addition, patients assigned to the early palliative care group survived, on average, 2 to 3 months longer than patients assigned to receive standard oncologic care alone (11.6 vs 8.9 months).\textsuperscript{22} Not surprisingly, this survival difference attracted much attention even though it was not the primary outcome of the study, nor was the study adequately powered to test for a difference of this size. The mechanism of the survival effect has been the subject of considerable interest.\textsuperscript{22,24–26} The authors initially speculated that the improvements in quality of life and mood may have driven the survival benefit, given that poor quality of life and a depressed mood tend to correlate with shorter survival times.\textsuperscript{22} Subsequent analyses have shown lower rates of chemotherapy use within the last 60 days of life in the earlier palliative care group.\textsuperscript{27} This finding raises the possibility that patients had less morbidity and mortality from treatment toxicity.

The authors of a secondary analysis based on the study by Temel et al\textsuperscript{22} considered whether improved management of adverse events and complications of treatment addressed with palliative care affected the patterns of use of chemotherapy or hospice care.\textsuperscript{27} Results of the analysis showed no significant differences in the overall number of chemotherapy regimens received in the early palliative care group versus the standard oncologic care group.\textsuperscript{27} However, the earlier palliative care group had a lower rate of chemotherapy use and a lower rate of use of intravenous chemotherapy agents within the last 60 days of life. A potential explanation was that palliative care, in targeting symptoms and influencing treatment decisions, improved quality of care at the end of life, perhaps by reducing the use of chemotherapy close to end of life and facilitating earlier transition and longer access to hospice care.\textsuperscript{27} As the authors noted, a survival benefit for patients enrolled in hospice care has previously been demonstrated.\textsuperscript{28} Patients with incurable lung cancer often receive aggressive treatment with cancer-directed therapy until near
<table>
<thead>
<tr>
<th>Author, year</th>
<th>Patient population/setting</th>
<th>Patients with cancer, %</th>
<th>Patients with palliative care/usual care, N</th>
<th>Palliative care intervention</th>
<th>Symptoms</th>
<th>QoL</th>
<th>Mood</th>
<th>Satisfaction with care</th>
<th>Utilization</th>
<th>ACP</th>
<th>Survival</th>
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<tr>
<td>Bakitas et al, 2009</td>
<td>Newly diagnosed advanced cancer/rural NCI comprehensive center</td>
<td>100%</td>
<td>161/161</td>
<td>Psychosocial education, APNs</td>
<td>NS</td>
<td>P = .02</td>
<td>P = .02</td>
<td>—</td>
<td>NS</td>
<td>—</td>
<td>NS</td>
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<td>Brumley et al, 2007</td>
<td>Homebound, terminally ill (≤1 year to live) and ≥1 hospital/ED visit in previous 12 months</td>
<td>47%</td>
<td>145/152</td>
<td>IDT, in-home healthcare program (based on hospice model)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>P &lt; .05</td>
<td>P &lt; .001</td>
<td>—</td>
<td>NS</td>
</tr>
<tr>
<td>Gade et al, 2008</td>
<td>Life-limiting illness/hospital setting</td>
<td>31%</td>
<td>2752/37</td>
<td>IDT, hospital consults</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>P &lt; .001</td>
<td>P &lt; .001</td>
<td>—</td>
<td>NS</td>
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<tr>
<td>Meyers et al, 2011</td>
<td>Adults enrolled into phase I, II or III trials that compared therapy for advanced cancer; (patient-caregiver dyad)</td>
<td>100%</td>
<td>34/128</td>
<td>The Home Care Guide for Cancer and education</td>
<td>—</td>
<td>NS</td>
<td>P = .02</td>
<td>NS</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Pantilat et al, 2010</td>
<td>Chronically ill, hospitalized elderly patients in academic medical center</td>
<td>22%</td>
<td>54/53</td>
<td>MD, hospital consults</td>
<td>NS</td>
<td>—</td>
<td>NS</td>
<td>—</td>
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<tr>
<td>Rabow et al, 2004</td>
<td>Outpatients with cancer, advanced COPD, or advanced CHF with life expectancy of 1–5 yrs (and not ready for hospice care)</td>
<td>33%</td>
<td>50/40</td>
<td>IDT, OP clinics + home</td>
<td>P = .01</td>
<td>NS</td>
<td>P = .05</td>
<td>NS</td>
<td>P = .03</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Temel et al, 2010</td>
<td>Newly diagnosed ambulatory patients with metastatic NSCLC</td>
<td>100%</td>
<td>77/74</td>
<td>OP care within 3 weeks, then at least monthly</td>
<td>P = .01</td>
<td>P = .04</td>
<td>P = .02</td>
<td>—</td>
<td>P = .05</td>
<td>P = .05</td>
<td>P = .02</td>
</tr>
</tbody>
</table>

Abbreviations: ACP, advanced care planning; APNs, advanced practice nurses; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; ED, emergency department; FACT-L, Functional Assessment of Cancer Therapy–Lung; HADS, Hospital Anxiety and Depression Scale; IDT, interdisciplinary team; LCS, lung cancer subscale; NCI, National Cancer Institute; NS, not significant; NSCLC, non-small cell lung cancer; OP, outpatient; PCP, primary care physician; PHQ-9, Patient Health Questionnaire 9; QoL, quality of life; TOI, trial outcome index.

*Outcomes favored palliative care vs usual care, unless otherwise stated.

Trend to shorter survival for patients in the palliative care group vs usual care group (196 vs 242 days after study enrollment).

NS: No significant difference in rate of change between the palliative care and usual care groups; the rate of decline in caregiver QoL was significantly slower in the palliative care group than the usual care group.

Patients in the intervention group had significantly less dyspnea than patients in the usual care group, but there were no significant differences in changes in pain between the two groups.

Patients in the intervention group experienced less anxiety than patients in the usual care group, but there were no significant differences in depression between the two groups.

Patients in the intervention group had significantly less PCP visits (P = .03) and urgent care clinic visits (P = .03), but all other measures were not significantly different between the intervention and control groups.

Symptoms specific to lung cancer: P = .01, LCS of FACT-L scale. QoL: P = .04, FACT-L; P = .04, TOI (primary end point).

P = .04: HADS depression subscale; P = .02: PHQ-9.

Patients in the palliative care group required less aggressive care; aggressive care was defined as chemotherapy within 14 days of death, no hospice care, or admission to hospice 3 days or fewer before death.

the end of their life, despite low response rates and the desire for end-of-life care that focuses on effective pain and symptom management, together with preparation for dying.

The secondary analysis by Greer et al.\(^\text{22}\) showed that patients in the palliative care group were approximately half as likely to receive chemotherapy within 60 days of death as patients assigned to standard oncologic care. In fact, a greater proportion of patients who received early palliative care were enrolled in hospice care for longer than 1 week. The authors concluded that administration of palliative care earlier in the course of the disease may facilitate appropriate decision making with respect to the administration of cancer-targeted therapy and the eventual transition to hospice services.\(^\text{37}\) Patients assigned to early palliative care were also shown to be more likely to retain or gain an accurate assessment of their prognosis over time than the patients who received standard oncologic care (82.5% vs 59.6%).\(^\text{29}\)

**Data From Other Randomized Clinical Trials**

Several other randomized clinical trials have investigated the administration of various components of palliative care alongside standard oncologic care. Despite using different types of interventions in a variety of settings, together they provide additional high-level evidence for the benefits of palliative care, including relief of symptoms and improvements in quality of life, mood, satisfaction, resource utilization, and advanced care planning (Table 2).\(^\text{22,30–35}\)

The impact of palliative care on physical symptoms was assessed in 5 studies.\(^\text{22,30,32,34,35}\) Of these, an improvement in symptoms versus with usual care was shown in 2 studies, including the study by Temel et al.\(^\text{22}\) discussed previously. In addition, Rabow et al.\(^\text{35}\) conducted a study with outpatients who had cancer, advanced chronic obstructive pulmonary disease, or advanced congestive heart failure and who had a life expectancy of 1 to 5 years. In this study, palliative care intervention administered by an interdisciplinary comprehensive care team resulted in improvements in dyspnea, but not pain. This may have been due in part to the relatively low level of pain experienced by patients at baseline (average of 4.1 on a scale of 0–10). Furthermore, it appears that recommendations made to the primary care physicians regarding pain management may not have been implemented, which would also explain the apparent lack of effect of palliative care.\(^\text{35}\)

A trend toward lower symptom intensity was also noted after intervention with a multicomponent, psychoeducational intervention in the Education, Nurture, Advise, Before Life Ends study (Project ENABLE), which was conducted by Baktas et al.\(^\text{30}\) in patients with advanced cancer in a rural NCI-designated comprehensive cancer center. The authors noted that the patients included in the study had relatively low mean Edmonton Symptom Assessment Scale (ESAS) scores (approximately 285 on a scale of 0–900) compared with patients with advanced cancer included in other studies. Thus, a significant reduction in scores may be unrealistic in the context of progressive disease.\(^\text{30}\)

Similarly, in the other 2 studies in which no significant differences were seen in improvement of symptoms with palliative care intervention versus usual care, the patients had a relatively low symptom burden at baseline. They were not patients who would typically be referred for palliative care as they lacked issues that palliative care would affect.\(^\text{32,34}\) Of note, the patient populations in the 2 studies were varied, and patients with cancer constituted a low proportion in both studies (22%–31%).\(^\text{32,34}\) The randomized clinical trials also provided evidence for improvements in patient mood (in 3 of 6 studies) and quality of life (in 2 of 5 studies) after administration of palliative care interventions focused on educational or interdisciplinary team (IDT) approaches.\(^\text{22,30,35}\) In addition, benefits for caregiver quality of life, but not patient quality of life, were seen following a palliative care intervention consisting of providing “The Home Guide for Cancer” coupled with educational sessions based on the Creativity, Optimism, Planning and Expert Information (COPE) problemsolving model.\(^\text{35}\) Again, where effects with palliative care were not shown, the authors sometimes highlighted the low symptom burden of patients included in the studies.\(^\text{34}\) In general, patients rated their care highly,\(^\text{34}\) with greater satisfaction with care being reported by patients in the palliative care group versus the usual care group in 2 of 3 studies that reported data on this outcome.\(^\text{31,32,35}\)

Although the randomized trials contributed to ASCO’s PCO regarding the integration of palliative care into standard oncologic care,\(^\text{13}\) they also highlighted the need to identify the patients who will most benefit from palliative care and how best to establish a comprehensive approach to palliative
care within various settings in clinical practice. To this end, palliative care clinical practice guidelines promulgated by the NCCN provide a framework for the ongoing assessment of palliative care needs and facilitate decision making as to when referral to palliative care services may be appropriate. In this approach, early symptom management is provided by oncologists, with referral to the palliative care team when needed. Two preliminary studies of the feasibility of implementing the NCCN screening and referral guidelines in gastrointestinal oncology outpatient or inpatient settings showed that, as expected, a substantial proportion of patients had palliative care needs. Although it was possible to rapidly screen patients for palliative care needs (fewer than 5 minutes per patient), screening could add substantially to the nursing workload in a busy clinic. Furthermore, the proportion of patients who meet the NCCN criteria for referral to palliative care consultations could present resourcing challenges if those criteria are routinely implemented in clinical practice.

Next Steps

Data from these randomized studies show that early administration of supportive or palliative care—given in the context of standard oncologic care—to patients with newly diagnosed advanced cancer is effective for improving the quality and cost of care for patients and their families, whatever the treatment outcome.

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References