Brief Report

Comparing the Palliative Care Needs of Those With Cancer to Those With Common Non-Cancer Serious Illness

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Abstract

Background. Historically, palliative care has been focused on those with cancer. Although these ties persist, palliative care is rapidly integrating into the care of patients with common, non-cancer serious illnesses. Despite this, the bulk of literature informing palliative care practices stems from the care of cancer patients.

Objectives. We compared functionality, advanced care planning, hospital admissions, prognosis, quality of life, pain, dyspnea, fatigue, and depression between patients with cancer and three non-cancer diagnoses—end-stage renal disease (ESRD), heart failure (HF), and chronic obstructive pulmonary disease (COPD).

Methods. We conducted a cross-sectional, retrospective analysis of the characteristics and symptoms of patient's with ESRD, HF, COPD, and cancer at time of first specialty palliative care referral. Using a web-based point of care quality assessment and reporting tool, Quality Data and Collection Tool-Palliative care, this analysis evaluated all eligible patients who received a palliative care consultation between October 1, 2012 and November 25, 2014. Data were obtained from 13 participating sites. The primary outcome for the study was functionality using the palliative performance scale. Hospital admission in the last 30 days, prognosis, patient's understanding of prognosis, advanced care planning including code status and appointed decision maker, pain, fatigue, depression, and dyspnea were also evaluated as secondary outcomes. We tested for an association between our outcomes with disease type (cancer vs. non-cancer) fitting multivariable logistic regression models.

Results. We found that the patients with primary diagnoses other than cancer were less functional at time of referral (odds ratio: 1.6; 95% CI: 1.1, 2.3; $P < 0.05$).

Conclusion. Patients with COPD, ESRD, and HF were less functional and more likely to be hospitalized at time of referral to palliative care than cancer patients. These findings may be reflective of the slower and more varied trajectory of non-cancer serious illness. One aim of palliative care for those with non-cancer severe illness should be directed toward improving and assisting with functionality and decreasing frequency of hospital admissions. These interventions could take place in the palliative care office, but could also be integrated into hospital discharge plans. J Pain Symptom Manage 2017;53:1079—1084.

Key Words

Cancer, serious illness, unmet needs, palliative care delivery

Introduction

Palliative care has strong historical ties to the care of cancer patients. Specialty palliative care grew out of the hospice movement in the U.S., which was originally developed for dying cancer patients. Because of this, a rich evidence base exists describing the palliative care needs of cancer patients alongside several trials evaluating the impact of specialty palliative care for patients with advanced cancer.[1,2] In

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Accepted for publication: February 8, 2017.

0885-3924/$ - see front matter
http://dx.doi.org/10.1016/j.jpainsymman.2017.02.014

addition, the oncology community has dedicated guideline and accreditation efforts to further integrate palliative care into usual oncology care.[3]

Although the emphasis on cancer patients persists, palliative care is rapidly integrating into the care of non-cancer serious illness.[4–6] This stems from early evidence demonstrating these patients have similar symptom burdens.[7–12] We have shown patients with chronic lung diseases have similar degrees of pain and dyspnea to those with lung cancer.[13] Others have observed that patients with end-stage renal disease (ESRD) have high degrees of fatigue, anorexia, pain, dyspnea, and depression.[14] A systematic review demonstrated similar symptom clusters among heart failure (HF), chronic obstructive pulmonary disease (COPD), and ESRD patients.[15] Although symptoms overlap between ESRD, HF, COPD, and cancer, data demonstrating how the symptoms compare are lacking. This study compares functionality, advance care planning, hospital admissions, prognosis, quality of life (QoL), and symptoms between these groups to better understand gaps in treatment, and appropriate services and expertise to the right populations.

Methods

Overall

We conducted a cross-sectional, retrospective analysis of the characteristics and symptoms of patients with ESRD, HF, COPD, and cancer at time of first palliative care referral. The patients analyzed were those referred to palliative care who were entered into the Quality Data Collection Tool for Palliative Care (QDACT-PC), an electronic quality monitoring system and registry.[16] The Duke University Medical Center Institutional Review Board approved this study.

Population

QDACT-PC is a web-based, provider-entered, point-of-care quality assessment and reporting tool designed for data collection during clinical encounters in palliative care. It is currently being used in 13 community and academic settings across the U.S. Using QDACT-PC, this analysis evaluated all patients who received a palliative care consultation between October 1, 2012 and November 25, 2014.[17] At the time of consultation, palliative care providers enter patient-reported and provider-observed information regarding the patient's function, symptoms, quality measures, and prognosis.[16,18,19]

Statistical Analysis

Patients were grouped into two categories; cancer versus non-cancer. Cancer served as our independent variable. Non-cancer included ESRD, COPD, and HF.

The primary outcome was functionality as measured by the palliative performance scale (PPS).[20–23] PPS ranges from 0 to 100, where 0 indicates a patient has died and 100 represents a fully functional patient. PPS was grouped low, moderate, and high for scores 10–30, 40–60, and 70–100, respectively.[24] Secondary outcomes included code status, presence of healthcare proxy, recent hospital admissions, prognosis, patient's prognostic understanding, QoL, pain, fatigue, depression, and dyspnea. At time of consultation, the patient reported preference for cardiopulmonary resuscitation and designated healthcare proxy. Provider prognostic estimates were documented as less than seven days, one to four weeks, one to six months, and more than six months. Patient prognostic understanding was documented (congruent vs. not). Patients reported QoL as poor, fair, or good. The Edmonton Symptom Assessment System was used in evaluation of pain, dyspnea, depression, and fatigue, with 0 indicating none and 10 indicating worst possible. These scores were grouped low, moderate, and high for scores 0–3, 4–6, and 7–10, respectively.[25–28]

We then tested for an association between PPS with disease type (cancer vs. non-cancer) as our primary predictor. We used a Chi-squared test for our unadjusted comparison. For our adjusted comparison, we used a multivariable ordinal logistic regression model and adjusted for age (>65 years vs. less), gender, and race (white vs. other) while treating disease status as our primary predictor. We did not test for an interaction effect assuming there was not a more complex relationship between our confounders and disease status.

For our secondary outcomes, we also performed an unadjusted and adjusted comparison. For our unadjusted comparison, we used a Chi-squared or Fisher exact test where appropriate. For the adjusted comparison of the ordinal outcomes (QoL, prognosis, depression, dyspnea, fatigue, and pain), we fit the same multivariable logistic regression models as our primary outcome. For dichotomous outcomes (discharge from hospital within 30 days, prognostic understanding, code status, and presence of healthcare proxy), we fit multivariable logistic regression models to make an adjusted comparison for each. We adjusted for the same covariates that were used in our primary models (age, gender, and race).

All models used non-cancer patients as the reference group. Thus, an odds ratio greater than one represents cancer patients having higher odds of the outcome occurring. SAS version 9.4 was used for the statistical analyses.

Results

Study Population

Between October 1, 2012 and November 25, 2014, there were 2312 patients referred to palliative care in the QDACT registry. Of these, 879 patients had a