

Implications for Research, Policy, or Practice. Pain is a subjective and complex symptom. Assessing change in pain using unidimensional tools may not fully capture the patient experience and more detailed measures may be needed.

Health Care Utilization and Intensity at End of Life is High Amongst Adults Who Relapse Following Allogeneic Hematopoietic Cell Transplantation (S845)



Jessica Langston, MD MPH, Stanford University, Palo Alto, CA. Vandana Sundaram, MPH, Stanford University, Palo Alto, CA. Vyjeyanthi Periyakoil, MD, Stanford University School of Medicine, Stanford, CA. Lori Muffly, MD, Stanford University, Stanford, CA.

Objectives

1. Recognize specific challenges for palliative and end-of-life care in the acute leukemia relapse population.
2. Devise novel interventions to improve end-of-life care in this patient population.

Original Research Background. Relapse is the leading cause of death for patients with acute leukemia (AL) and myelodysplastic syndrome (MDS) who undergo allogeneic hematopoietic cell transplantation (HCT).

Research Objectives. We describe survival, intensity of healthcare utilization, and characteristics associated with high resource utilization at EOL.

Methods. Adult patients with AL/MDS who underwent HCT at a large regional referral center with subsequent relapse between 2005 and 2015 were included in this retrospective study. We created a composite score for EOL healthcare utilization intensity summing the presence of any of the following criteria: death in hospital, use of chemotherapy, emergency department (ED), hospitalization, intensive care unit (ICU), intubation, cardiopulmonary resuscitation, or hemodialysis in the last month of life. Higher scores indicate more intense healthcare use at EOL. Multivariable linear regression analysis was used to determine variables associated with EOL healthcare utilization intensity.

Results. 154 patients were included. 140 (91%) died within two years of relapse with median (IQR) survival after relapse for those who died of 5 months (1-9). Overall inpatient healthcare utilization in this cohort was high with 44% visiting the ED at least once, 92% hospitalized (16% \geq 5 times), and 38% using ICU. Utilization was high even among those receiving no additional disease-directed therapy. For those patients who died, the median (range) intensity score for EOL healthcare utilization was 2 (0-8). Most (70%) had a marker

of high-intensity healthcare use at EOL or died in hospital. In multivariable analysis, post-relapse chemotherapy plus cell therapy (donor lymphocyte infusion and/or repeat HCT) (estimate (95% CI): 1.41 (0.45-2.37)) compared to no treatment was associated with more intense EOL healthcare use; no other variables met significance.

Conclusion. Inpatient healthcare utilization following post-HCT relapse is high despite known poor prognosis, including at EOL.

Implications for Research, Policy, or Practice. Interventions are needed to minimize non-beneficial treatments and promote goal-concordant EOL care in this seriously ill patient population.

Development of New Undergraduate Palliative Care Knowledge Measure (S846)



Megan Lippe, PhD RN, University of Alabama, Tuscaloosa, AL. Andra Davis, PhD MN BSN, Washington State University, Vancouver, WA.

Objectives

1. Describe the process for developing a new palliative care knowledge measure.
2. Explore possible ways to utilize the new knowledge measure to evaluate current students' palliative care knowledge.

Original Research Background. Palliative care nursing education has long been guided by the End of Life Nursing Education Consortium (ELNEC) curriculum, originally released in 2001. However, no measure to evaluate student's knowledge exists that appropriately reflects current palliative care best practice.

Research Objectives. The purpose of the presentation is to describe the development and psychometric evaluation of a new knowledge measure to be used for the evaluation of undergraduate nursing student's palliative care knowledge.

Methods. I) Creation of the new knowledge measure was guided by relevant research literature in instrument and scale development. The knowledge measure, titled the Undergraduate Nursing Palliative Care Knowledge Survey (UNPCKS), was developed in four systematic steps: 1) item generation from a team of seven palliative care and nursing education experts; 2) pilot test of UNPCKS; 3) instrument revision with experts; and 4) psychometric testing.

Results. The final version of the UNPCKS is a 27-item, multiple-choice instrument that evaluates undergraduate nursing students' palliative care knowledge. Students at three universities (n=262) completed the UNPCKS for psychometric testing.