

poor prognostic indicator that is distressing to patients, caregivers, and providers. The pathogenesis of terminal delirium is not well understood.

**Research Objectives.** The purpose of this study was to explore the relationships between hospice admission data and the incidence of hyperactive terminal delirium. Specifically, the study explored whether physical, psychosocial, and/or spiritual data collected at hospice admission was associated with terminal delirium.

**Methods.** This was a retrospective cohort study design utilizing chart review. Admission data were collected from the Hospice Item Set (shortness of breath, pain, scheduled and PRN opioids, bowel regimen); psychosocial assessment (psychiatric diagnosis, significant fears); and spiritual assessment (active spirituality). Chi-squared test of independence, Fisher's exact test, and ANOVA tested for relationships between independent variables and the dependent variable of hyperactive terminal delirium.

**Results.** A sample size of 148 deceased hospice patients was included in this study. The independent variables of psychiatric diagnosis, significant fears, active spirituality, shortness of breath, pain, and scheduled opioid were not found to have significant relationships with hyperactive terminal delirium ( $p > .05$ ). The relationship between PRN opioid and terminal delirium was found to be significant [ $\chi^2 (1, N = 148) = 4.587, p < .05$ ]. Risk ratios indicated that the risk of terminal delirium, within the category of PRN opioid prescription, increased by 58.5% relative to the group of non-PRN opioid prescription. Logistic regression analysis indicated that while PRN opioid prescription ( $B = .806, p = .034$ ) is a significant predictor variable, although when combined with the equation constant, it did not provide a worthwhile predictive model (Nagelkerke R-Square = .041).

**Conclusion.** There were no clear relationships between physical, psychosocial, and spiritual admission data and hyperactive terminal delirium.

**Implications for research.** This study provides preliminary data needed to inform future research about terminal delirium predictors.

### *Impact of Race and Ethnicity on End-of-Life Experiences for Children with Cancer (S838)*



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#### *Objectives*

1. Recognize data regarding racial and ethnic disparities in the provision of end-of-life (EOL) care within the adult oncology literature, and how these data contrast with the limited literature on EOL disparities in the context of pediatric oncology.
2. Examine the impact of race and ethnicity on EOL variables for pediatric palliative oncology patients in this study.
3. Discuss potential hypotheses to explain why the impact of race/ethnicity on EOL variables may differ between the medical and pediatric oncology literature.

**Original Research Background.** Racial and ethnic disparities in the provision of end-of-life (EOL) care are well described in the medical oncology literature. However, the impact of racial and ethnic disparities at EOL in the context of pediatric oncology remains poorly understood.

**Research Objectives.** To investigate associations between race/ethnicity and EOL experiences for children with cancer.

**Methods.** A retrospective cohort study was conducted on 321 children with cancer enrolled on a palliative care service who died between 2011 and 2015 using a comprehensive standardized data extraction tool comprising a broad spectrum of EOL metrics.

**Results.** Black patients were more likely to receive cardiopulmonary resuscitation as compared to White patients (correlation coefficient=1.413, confidence interval=0.359–2.467,  $p=0.009$ ); however, the remainder of variables related to treatment and EOL care did not correlate significantly with race. Hispanic patients were less likely to receive cancer-directed therapy within 28 days prior to death (correlation coefficient = -0.708, confidence interval = -1.398–0.018,  $p=0.044$ ) as compared to White patients, yet they were more likely to report a goal of cure over comfort as compared to Non-Hispanic patients (correlation coefficient = 1.129, confidence interval=0.042–2.216,  $p=0.042$ ). The remainder of EOL variables were not found to be significantly correlated with ethnicity.

**Conclusion.** In contrast with data from the medical oncology literature, neither race nor ethnicity correlated with most EOL variables for pediatric palliative oncology patients treated at a large urban pediatric cancer center. Multicenter investigation is needed to ascertain the impact of racial/ethnic disparities on EOL experiences of children with cancer.

**Implications for Research, Policy, or Practice.** These data suggest that race and ethnicity

have minimal impact on EOL experiences for children with cancer treated at this study site. These findings differ significantly from the medical oncology data, highlighting the critical need for further investigation of associations between race/ethnicity and EOL care for children with cancer across diverse treatment centers.

### **Barriers to Provision of Palliative and Hospice Care to Children and Families in the Community: A Population-Level Survey of Hospice Nurses (S839)**



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#### *Objectives*

1. Discuss the challenges related to access of quality palliative and hospice care to children and families in the community.
2. Describe the self-reported training and experience levels of community-based hospice nurses with provision of care to children and families across the domains of symptom management, end-of-life care, goals of care, family-centered care, and bereavement.
3. Describe the self-reported comfort of community-based hospice nurses with provision of care to children and families across the domains of symptom management, end-of-life care, goals of care, family-centered care, and bereavement.

**Original Research Background.** Approximately 500,000 children in the United States suffer from life-limiting illnesses annually, many of whom are hospice eligible. Unfortunately, most children enrolled in hospice agencies receive services in the absence of specialized pediatric programs.

**Research Objectives.** To determine the levels of expertise and comfort of hospice nurses who provide care to children and families in the community.

**Methods.** A cross-sectional survey was developed, pilot-tested, and widely distributed to hospice nurses across a tristate region. Survey items assessed nurse experience and comfort across the domains of symptom management, end-of-life care, goals of care, family-centered care, and bereavement.

**Results.** A total of 71 hospices that provide services to children participated, from which 551 respondents completed surveys. The majority of nurses reported no training in pediatric palliative or hospice care (89.8%), with approximately half reporting < 5 years

of hospice experience (53.7%) and no experience providing care to pediatric patients (49.4%). Those with pediatric hospice experience reported limited opportunities to maintain or build their skills, with the majority providing care to children several times a year or less (85.7%). Nurses reported feeling somewhat or very uncomfortable providing services to children during the illness trajectory and at the end of life across all domains.

**Conclusion.** Children with serious illness who receive care from local hospices often interface with nurses who lack training, experience, and comfort in the provision of palliative and hospice care to pediatric patients.

**Implications for Research, Policy, or Practice.** These findings should inform future development and investigation of educational resources, training programs, and child- and family-centered policies to improve the delivery of palliative and hospice care to children in the community.

### **Evolution of an Interprofessional Palliative Care Fellowship and Integration of a PGY-2 Pain Management and Palliative Care Pharmacy Resident (S840)**



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#### *Objectives*

1. Describe the results of a survey of interprofessional fellows in regard to their educational experience after completion of a fellowship.
2. Discuss comments from fellows and faculty in regard to their experience participating in an interprofessional education.

**Original Research Background.** Clinical practice in palliative care lends itself to a deeply integrated team dynamic. Early exposure of multiple disciplines in palliative care training may enhance the function of the team in delivering patient care. The Harvard Interprofessional Palliative Care Fellowship (HIPCF) is the umbrella program for several specialty-specific programs, including physician, nursing and social work. In 2016, a Palliative Care Pharmacy Resident was added to the interprofessional fellowship, which was unique nationally.

**Research Objectives.** Describe the interprofessional educational experience of one class of fellows (with a pharmacy fellow) before and after the completion of the fellowship.