Palliative Care Experience in the Last 3 Months of Life: A Quantitative Comparison of Care Provided in Residential Hospices, Hospitals, and the Home From the Perspectives of Bereaved Caregivers

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Abstract
Objective: This study captured the end-of-life care experiences across various settings from bereaved caregivers of individuals who died in residential hospice. Methods: A retrospective, observational design using the CaregiverVoice survey with bereaved caregivers of patients in 22 hospices in Ontario, Canada. The survey assessed various dimensions of the patient’s care experiences across multiple care settings in the last 3 months of life. Results: A total of 1153 caregivers responded to the survey (44% response rate). In addition to hospice care, caregivers reported that 74% of patients received home care, 61% had a hospitalization, 42% received care at a cancer center, and 10% lived in a nursing home. Most caregivers (84%-89%) rated the addressing of each support domain (relief of physical pain, relief of other symptoms, spiritual support, and emotional support) by hospice as either “excellent” or “very good.” These proportions were less favorable for home care (40%-47%), cancer center (46%-54%), and hospital (37%-48%). Significantly, better experiences were reported for the last week of life where hospice was considered the main setting of care, opposed to other settings \( (P < .0001 \text{ across domains}) \). Overall, across settings pain management tended to be the highest-rated domain and spiritual support the lowest. Conclusion: This is one of few quantitative examinations of the care experience of patients who accessed multiple care settings in the last months of life and died in a specialized setting such as residential hospice. These findings emphasize the importance of replicating the hospice approach in institutional and home settings, including greater attention to emotional and spiritual dimensions of care.

Keywords
palliative care, quality, in-patient hospice, hospital, home care, transitions

Introduction
Although most individuals prefer to die at home,1 this is not always feasible due to the lack of supports in the community and/or the complexity of care required to adequately manage the patient’s practical and palliative care needs.2-4 Most individuals toward the end of life receive care from multiple settings and providers5 that may include home care nurses, personal support workers, primary care practitioners, as well as hospitals, long-term care facilities (nursing homes), cancer centers, and residential hospices.6,7 The expansion of community palliative care in the United States, United Kingdom, Canada, and other countries has resulted in about a quarter of patients remaining in their home until death8-10; however, many still transition to the hospital in the end when their pain and other symptoms exasperate.11-14 High need end-of-life patients may also be transferred to a residential hospice, in communities with these facilities.15

Residential hospices are free-standing in-patient facilities, dedicated to providing comprehensive palliative care in a home-like setting.15 In comparison, access to specialized palliative care in the other community and institutional settings, where the majority of individuals die, is often more variable. Barriers to adequately addressing the needs of dying patients in the home include a lack of home care provider expertise, limits on service allocation, fragmentation of multidisciplinary services, and resistance of primary care providers to make home visits.16-18 In hospital, although care is offered around-the-clock, the traditionally curative approach taken is contrary to

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the goals of palliative care, the beds afford little privacy, and patients are often cared for by a continually rotating staff of generalist providers.6,19,20

Given the increasing number of deaths and demand for palliative care,21 improving the suitability of settings to support patients who are dying is of paramount importance. Despite this, there has been little research that extensively compares the care experience received by patients in varied settings in the last months of life. The objective of this study was to capture the end-of-life care experiences across a wide range of settings, from the perspective of bereaved caregivers of patients who died in residential hospices. We report on the quantitative analysis of responses to the CaregiverVoice survey by these family caregivers. These population-based findings will advance the understanding of the relative strengths and weakness of key care settings for dying patients and their families.

Methods

Study Design and Population

Bereaved caregivers of decedents who died in one of the 22 participating residential hospices in Ontario (out of a total of 30 hospices) were asked to complete the CaregiverVoice survey. This survey assesses various dimensions of the caregiver’s perceptions of the patient’s care experiences across multiple care settings in the last 3 months of life. Care specifically in the last week of life and the circumstances surrounding death are also assessed.22

Data collection occurred between January 2015 and December 2016. An inclusion criterion for survey participation was the ability of the caregiver to read and write English. This study received approval by the Hamilton Health Sciences/McMaster University research ethics review board, Hamilton, Ontario, Canada.

CaregiverVoice Survey

The CaregiverVoice survey contains 62 items and takes approximately 20 minutes to complete.23 The survey can be completed on paper or online. Both versions contain skip logic so that caregivers only respond to items relevant to the types/places of care the patient received. For each specified setting of care in the last 3 months of life, satisfaction with 4 main domains of support: relief of physical pain, relief of other symptoms, spiritual support, and emotional support, as well as overall care, are assessed on a 5-point scale (1 = very poor, 2 = very good, 3 = good, 4 = fair, and 5 = poor).

The survey is based on the VOICES instrument (Views of Informal Carers—Evaluation of Services) used in the National Survey of Bereaved People in England24 and has been modified and further validated for use by palliative care services in Canada.22 The CaregiverVoice survey’s internal consistency for domains-of-support items range from $\alpha = .81$ to $.93$, depending on the care setting assessed. Concurrent validity was evidenced against the gold standard FAMCARE scale ($r_s = 0.66$, $P < .001$), which is one of the most widely used end-of-life satisfaction questionnaires.25 The survey has been shown to be useful for helping to measure and assess quality of palliative care at end of life.22,26

Palliative Care in Ontario

Hospice care in Canada refers to care provided in a residential hospice (ie, a home-like facility), unlike in the United States where “hospice” more loosely denotes specialized palliative care in any setting.15,27 In Ontario, there are approximately 30 residential hospices; most of that have 8 to 10 beds each.28 Care and accommodations in these facilities are provided at no cost to the patient. The average length of stay in hospice is 19 days and 4% of deaths in Ontario occur in this setting.28,29 Similar proportions are reported in the United States (4%) and England (6%), with the percentages of residential hospice-based deaths in these countries and Canada having increased considerably in the recent years.12,28,30

In Ontario, once admitted to a residential hospice, it is rare for the patient to be transferred to or receive care from another setting. These individuals are often facing imminent death, requiring a greater intensity of palliative care then can be provided effectively at home or even hospital. In comparison, in the aforementioned countries, about 20% of deaths occur at home and about 40% to half in hospital.8,9,11 Palliative home care and hospital palliative care units are options in some communities in Ontario, but unlike in the United States, access to these specialized services is not nationally or even regionally standardized.31

Data Collection

Two approaches were used to identify bereaved caregivers. In starting, hospices used a retroactive approach contacting all caregivers of decedents in the past 6 months. Then from that point forward, hospices used a prospective approach to identify caregivers, with a minimum of 6 weeks after a patient’s death before contact was initiated. Hospices approached identified caregivers using a study protocol that stipulated an initial phone contact to introduce the survey and determine if a paper or online version of the survey was preferred. The paper survey or online link was then mailed to the caregiver. This was followed by a reminder letter approximately 2 weeks later.

The platform used for the online survey was LimeSurvey (LimeSurvey Project, Hamburg, Germany), which was hosted on a secure server at McMaster University, Hamilton, Ontario. Responses written on the paper were entered into LimeSurvey by the research team.

Data Analysis

Data were imported into SPSS version 23.0 (IBM Corp, Armonk, New York) for statistical computations. Descriptive statistics were used to summarize caregiver and patient characteristics and perceptions of services used. A Cochran-Armitage
patients were in hospice for less than a month before death, with 39% of the total having a stay of 1 week or less.

**Comparison of Care by Setting in the Last 3 Months of Life**

Figures 1 and 2 present caregiver ratings of the 4 domains of support (ie, relief of physical pain, relief of other symptoms, spiritual support, and emotional support) and overall, for each of the settings of care used by the patient in the last 3 months of life. Nearly, all caregivers (84%-89%) regarded the addressing of each of these domains by hospice as either “excellent” or “very good.” In comparison, support in other settings tended to be less favorable, with home care (40%-47%), MRP (54%-63%), cancer center (46%-54%), and hospital (37%-48%) receiving lower proportions of either “excellent” or “very good” ratings by the domain. Furthermore, for care provided in the home, cancer center, or hospital, about 20% to 30% of caregivers stated this was either “poor” or “fair” across the domains. Regardless of care setting, pain management tended to be the highest-rated domain and spiritual support the lowest.

Overall, the majority (89%) of caregivers rated hospice care as “excellent,” with lower proportions for home care (39%), MRP (52%), cancer center (42%), and hospital (33%). Few rated any of these services as “poor” overall, with the exception of hospital (9%). About 10% of caregivers rated the nonhospice care settings as “fair.”

**Hospice Versus Other Main Setting in the Last Week of Life**

Most of the caregivers (80%) indicated that hospice was the main setting of the patient’s care in the last week of life, that is, where they spent most of this time, whereas 10% reported this to be the home and 8% a hospital. The hospice main setting group reported a significantly better experience compared to the main other setting group on (1) there being enough help available to meet the patient’s personal care needs, (2) there being enough help with nursing care, (3) the bed area and surrounding environment having adequate privacy, and (4) each of the 4 domains of support being addressed ($P < .0001$ for all values; Table 2).

**Continuity of Care**

Among the caregivers of patients who received home care in the last 3 months of life, 57% said that these providers definitely worked well together, 36% “to some extent,” and 7% “not at all.” In terms of transitions between all settings of care 54% of caregivers stated that these “always” went smoothly, 32% “most of the time,” and 14% “sometimes” or “rarely.” Most (74%) of the worst transitions reported involved those either to or from the hospital.
Advance Care Planning and Bereavement Support

Just over half (56%) of the caregivers reported that the patient definitely had the opportunity to discuss advance care planning with health-care providers, with 31% stating that this opportunity was provided “to some extent,” and 10% “not at all.” Caregivers were slightly less inclined to indicate that the health-care providers helped them in knowing what to expect/how to prepare for the patient’s death, in affirming “definitely” (49%), “to some extent” (39%), or “not at all” (12%). In regard to bereavement support, most caregivers reported that either they received these services (41%) or that they were aware of them but not interested (43%); 7% would have liked to use these services but were not aware they existed.

Discussion

Our survey of bereaved caregivers of deceased patients is the first to explore the care experience in a population-based sample of patients from residential hospices in Canada. Our findings demonstrate the feasibility of collecting caregiver-reported experiences across multiple end-of-life care settings using one survey.

We found substantial differences in the perceived quality of care provided in hospice, compared to other care settings experienced. Specifically, whereas about 85% of caregivers indicated a highly favorable experience in hospice, this proportion dropped dramatically to around 50% for the MRP and lower for...
care in the home, cancer center, and hospital. The most positively regarded attribute of care across the settings tended to be relief of physical pain, with the caregivers being less satisfied with the attention given to spiritual and emotional needs, particularly in hospital.

Perceptions of support in the last week of life were also significantly better for caregivers who indicated hospice to be the main setting of care during that time, compared to other settings. Furthermore, although many caregivers reported good continuity of care between settings, the biggest issue was seen as the transition to and from hospital. This is perhaps reflective of a perceived lack of timely response from health professionals to the patient’s changing care needs. Similarly, our previous qualitative study of the residential hospice experience found the greatest point of dissatisfaction with this care was that the admission to the service was felt to have occurred too late.15

Table 2. Caregiver Ratings of Professional Help Received and Domains of Support Addressed in the Last Week of Life by Main Setting of Care Identified.

| Aspect of Care | Hospice Main Setting of Care in the Last Week of Life n | Excellent | Very Good | Good | Fair | Poor | Cochran-Armitage Test Value
|---------------|--------------------------------------------------------|-----------|----------|------|------|------|---------------------|
| Professional Help Received | | | | | | | |
| Enough help available to meet his/her personal care needs
| No | 219 | 109 | 49.8 | 69 | 31.5 | 8 | 3.7 | 25 | 11.4 | 8 | 3.7 | 121.3
| Yes | 881 | 692 | 78.5 | 169 | 19.2 | 7 | 0.8 | 12 | 1.4 | 1 | 0.1
| Enough help with nursing care
| No | 218 | 113 | 51.8 | 71 | 32.6 | 8 | 3.7 | 20 | 9.2 | 6 | 2.8 | 129.1
| Yes | 886 | 725 | 81.8 | 151 | 17.0 | 2 | 0.2 | 7 | 0.8 | 1 | 0.1
| Bed area and surrounding environment had adequate privacy
| No | 215 | 134 | 62.3 | 65 | 30.2 | 3 | 1.4 | 7 | 3.3 | 6 | 2.8 | 128.3
| Yes | 891 | 808 | 90.7 | 81 | 9.1 | 1 | 0.1 | 1 | 0.1 | 0 | 0.0
| Domains of Support |
| Relief of physical pain
| No | 215 | 122 | 56.7 | 24 | 11.2 | 46 | 21.4 | 16 | 7.4 | 7 | 3.3 | 64.0
| Yes | 868 | 681 | 78.5 | 91 | 10.5 | 77 | 8.9 | 13 | 1.5 | 6 | 0.7
| Relief of other symptoms
| No | 206 | 105 | 51.0 | 26 | 12.6 | 47 | 22.8 | 19 | 9.2 | 9 | 4.4 | 64.4
| Yes | 840 | 620 | 73.8 | 98 | 11.7 | 102 | 12.1 | 12 | 1.4 | 8 | 1.0
| Spiritual support
| No | 117 | 65 | 55.6 | 10 | 8.5 | 20 | 17.1 | 11 | 9.4 | 11 | 9.4 | 31.2
| Yes | 614 | 453 | 73.8 | 56 | 9.1 | 75 | 12.2 | 21 | 3.4 | 9 | 1.5
| Emotional support
| No | 187 | 106 | 56.7 | 20 | 10.7 | 34 | 18.2 | 18 | 9.6 | 9 | 4.8 | 64.7
| Yes | 808 | 637 | 78.8 | 70 | 8.7 | 86 | 10.6 | 11 | 1.4 | 4 | 0.5

*P < .0001 for all values.

 Ideally, patients’ wishes to die at home can be actualized when reasonable, understanding that this is not always the best option for effective end-of-life support.

Most studies of palliative care at end-of-life focus on a single intervention or setting of care. Studies that include multiple settings, usually only differentiate by home care and hospital care or do not disaggregate findings by specific setting type. Two multisite-specific surveys that examined satisfaction with care at the end of life from the perspective of bereaved caregivers are the National Survey of Bereaved People (VOICES) in England and the Family Evaluation of Hospice Care (FEHC) survey in the United States.24,32 These surveys found positive differences in ratings of care in hospice compared to other settings, similar to our study. In the 2015 VOICES study (n = 21 300), 76% of caregivers rated hospice care as “excellent” (as opposed to “good”, “fair”, or “poor”) compared to 43% in the home and 41% in hospital.24 This difference was less dramatic in the FEHC data (2008-2013, n = 1611), where 88% of caregivers of patients who died in an in-patient hospice unit rated care as “excellent” (5-point scale) compared to 73% of those who died in home hospice care.33 Higher satisfaction with home care in the FEHC study may be because the patients in the home received hospice-like services. Among both VOICES and FEHC caregivers, one of the main determinants for higher satisfaction with hospice care was the extent and personable nature of communication, including information providing.33,34 Effective communication, along
with expertise, respectful and compassionate care, and trust and confidence in providers, has similarly been identified by reviews to be the care elements that end-of-life patients and their families rank as being most crucial, and hence, instrumental to a quality care experience.35-37

The relative nature of individuals’ ratings of care services, depending on their past and current experiences, is an important consideration when interpreting health-care satisfaction scores. Frankly, people may think that they received good care because of limited experiences with which to compare; therefore possessing low expectations. In a prior study using the CaregiverVoice survey with a home care cohort in Ontario, where only 18% of the patients accessed or died in hospice (58% died at home and 21% in hospital), 6% and 13% of caregivers rated home care and hospital care, respectively, in the last 3 months of life as “fair” or “poor.”22 In comparison, in caregivers to be an adequate proxy for patient reported outcome, comes and such follow-back surveys have the benefit of capturing critical perceptions of care provided near and at death.42 Although we obtained a reasonable response rate for a palliative care study,24,32 the perspectives included may represent more extreme positive and negative experiences, compared to those of the nonrespondents. The survey was only available in English, thus non-English speaking patients are probably underrepresented. We did not control for variability in length of hospice stay or the intensity of care provided in the other settings used, which may have impacted the perception of each care setting used. We also lack clinical data that could explain later hospice initiation and response variance. Furthermore, approximately 8 hospices in Ontario did not participate in the study. Most of these hospices are different from those included in being more newly established, having a specific disease focus, for example, AIDS, or having a Francophone patient population; patients who died in these settings may have had different experiences than we found. Finally, differences in patient experience between care settings would be expected to be less in countries with more consistent access to specialized palliative care in the home or hospital, such as in the United States where 46% of the population die under the care of the Medicare hospice benefit, often in their homes.12,43

In conclusion, based on this multisetting study, it is evident that the perceived quality of palliative care available in the home, hospital, and other key places of care greatly falls below the standard set by the residential hospices examined. Unfortunately, space limitations mean that only a small proportion of the dying population will ever be admitted to a hospice. Rather, these findings point to the importance of emulating the hospice approach to care in other institutional and community settings, including expert pain management and practical care, but also ensuring patient and family psychological/spiritual well-being and partnership in the care process. We believe our findings are applicable to other countries, where patients die in both hospice-like settings that offer specialized palliative care and in settings where these supports are less consistently available.6,44,45 Finally, the findings highlight the importance of relative assessments to identify gaps in care quality across care settings, in capturing a more absolute measure of the patient experience.

Authors’ Note
The study was approved by Hamilton Health Sciences/McMaster University research ethics review board, Ontario, Canada.

Declaration of Conflicting Interests
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