Hospice Care in Nursing Homes: Does It Contribute to Higher Quality Pain Management?

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Purpose: The purpose of this study was to investigate pain management among 42 hospice and 65 non-hospice residents in two proprietary nursing homes. Design and Methods: In this prospective, anthropological, quantitative, and qualitative study, we used participant observation, event analysis, and chart review to obtain data. The Medication Quantification Scale was used in order to account for the prescription and administration of all analgesic medications. Results: Although 72% of residents experienced pain, we found no statistically significant differences in the proportion of hospice versus non-hospice residents (a) who had been prescribed opioids and co-analgesics, and (b) whose medication was administered around the clock or as needed. Limited physician availability, lack of pharmacologic knowledge, and limitations of nursing staff hindered pain management of both groups of residents. Implications: Although hospice care is of some benefit, pain management and high-quality end-of-life care is dependent upon the context in which it is provided. Given that between 1991 and 2001 Medicare expenditures for nursing home-based hospice care increased from $8.6 million to $21.8 million, the effectiveness of hospice-care programs in nursing homes warrants further study.

Key Words: Hospice, Nursing home, Pain management

Despite the availability of a wide array of effective pharmacologic and nonpharmacologic treatments, the undertreatment of pain remains a significant problem in nursing homes (Bernabei et al., 1998; B. A. Ferrell, 1995; Weiner & Hanlon, 2001). Estimates suggest that 45% to 83% (Bernabei et al.; B. A. Ferrell) of nursing home residents have undertreated pain, which contributes to depression, decreased socialization and quality of life, sleep disturbances, impaired ambulation, inadequate nutrition, and increased health care utilization and costs (AGS Panel, 2002; Sengstaken & King, 1993; A. Won et al., 1999).

Previous investigators have examined the scope of the problem (B. R. Ferrell & Ferrell, 1990), assessment and management of pain among cognitively impaired and unimpaired nursing home residents (Cramer, Galer, Mendelson, & Thompson, 2000; B. A. Ferrell, Ferrell, & Rivera, 1995; Fisher et al., 2002; Weiner, Peterson, & Keefe, 1999), and types of pain management as valid and reliable indicators of quality in nursing homes (Casarett, Hirschman, Miller, & Farrar, 2002; Keay, Fredman, Taler, Datta, & Levenson, 1994). They found that pain was inconsistently documented and inadequately assessed, and that the effectiveness of treatments was not reevaluated. Further, nonpharmacologic interventions were used infrequently, analgesic medications were used inappropriately, and pain was often untreated.

According to a study that investigated the treatment of pain in nursing home residents with cancer, 26% of the residents who were in daily pain received no analgesic medications, and minority elders and those older than age 85 were less likely to receive analgesics (Bernabei et al., 1998). When analyzing data from the Minimum Data Set, Teno, Weitzen, Wetle, and Mor (2001) found that the rate of persistent, severe pain among 2.2 million residents was 14.7%; 41.2% of those in pain at the first assessment were in severe pain 60 to 180 days later. A more recent study (A. B. Won et al., 2004) that analyzed Minimum
Hospice has increasingly become an approach to providing care for terminally ill nursing home residents. The percentage of hospice enrollees residing in nursing homes increased from 9.9% in 1990 to 21.5% in 2002 (National Hospice and Palliative Care Organization, 2004). The Medicare expenditure for hospice care in nursing homes increased dramatically from $8.6 million in 1991 to $21.8 million in 2001 (Centers for Medicare and Medicaid Services, 2004a).

Studies suggest that hospice care is associated with higher quality pain management (Miller, Mor, Wu, Gozalo, & Lapane, 2002) and that residents enrolled in hospice are more likely than non-hospice residents to have a record of a pain assessment and to receive regular treatment for pain.

About 1 in every 5 deaths occurs in a nursing facility (Keay, 1999), and the pressure to decrease hospital costs is likely to lead to an increase in the use of these facilities as sites for terminal care (Zerzan, Stearns, & Hanson, 2000). Although many people die in nursing homes and pain is a feared and common symptom, the research on pain management in nursing facilities is limited. Therefore, the purpose of this prospective, observational study (which uses quantitative and qualitative methods) was to identify the multiple factors that influence the care of terminally ill nursing home residents. This article reports on the data we obtained on the pain management of 42 hospice and 65 non-hospice nursing home residents the day before their death (henceforth referred to as Day 1).

We used a high quality of end-of-life care within the context of the nursing home environment as the conceptual framework for the data collection and analysis in this study. Keay and colleagues (1994) conducted an extensive review of the literature and identified indicators of quality medical care for terminally ill nursing home residents. They concluded that minimum standards for which 100% performance is expected are (a) attention to relief of pain, (b) attention to relief of dyspnea, and (c) the presence of advance directives. Researchers have developed principles and guidelines for the care of patients at the end of life (Cassel & Foley, 1999; Lynn, 1997). Alleviation of pain is a core principle in these documents.

Several studies and articles have discussed the role of hospice and the challenges inherent in providing high-quality care to dying nursing home residents (Miller & Mor, 2002; Miller, Teno, & Mor, 2004). Although nursing homes have increasingly become the site of death for older people, the high prevalence of unrelieved pain among nursing home residents is a cause for concern (Miller et al., 2004).

A recent review of end-of-life care in nursing homes investigated pain management as described in five studies. In one study, medical directors reported that although pain was one of the most studied issues in palliative care, it was the least improved. The reviewers concluded that there is a dearth of research on end-of-life care in nursing homes and that the empiric research that does exist documents a poor quality of care (Oliver, Porock, & Zweig, 2004).

Pain is a symptom commonly experienced by people who are dying, and pain management is a critical component in the quality of end-of-life care. Thus, in order to better understand the factors that influence end-of-life care in nursing homes, the present study examined the pain management of hospice and non-hospice residents within the context of this environment.

Methods

Settings and Sample

Data were obtained in two proprietary skilled nursing facilities, one with 138 beds and the other with 174 beds. We selected facilities that were representative of nursing homes nationally and that provided variation in resident, provider, and setting characteristics. These facilities were part of a large for-profit chain that operates more than 250 nursing homes in 30 states nationally. The reported total number of nursing staff hours per resident day at these two facilities were 3.21 and 4.39, similar to the national average of 3.9 nursing staff hours per resident day (Centers for Medicare and Medicaid Services, 2004b).

Health care at the facilities was provided by nurse practitioners, medical directors, a health maintenance organization physician, and individual primary care physicians. Although registered nurses, licensed vocational nurses, social workers, and activity directors were responsible for the care of the residents, none were trained or certified in palliative care. The nurse to resident ratios at both facilities were: day shift, 1:15; evenings, 1:22; nights, 1:45. On some days, however, there was only one licensed staff, often a licensed vocational nurse, for 45 residents. The certified nursing assistant to resident ratios were: day shift, 1:8–10; evening shift, 1:15; night shift, 1:23.

Purposive sampling was used to obtain a representative sample of short- and long-stay residents, cancer and non-cancer residents, individuals expected to die (e.g., those on hospice care), and long-stay residents who had become terminally ill. We inducted 117 residents into the study. Ten residents were discharged home or to an acute care hospital prior to death, leaving 107 residents in the final sample.

Data Collection

The Committee on Human Research at the University of California, San Francisco, approved the study, as did all study sites. We collected data from January 1999 through June 2001.

Qualitative Data Collection

We used participant observation; in-depth interviews with residents, family members, nursing staff,
and physicians; event analysis; and chart review in order to obtain data. The research team included a nurse/anthropologist/gerontologist, a gerontological nurse, a geriatrician, a statistician, and an oncology nurse with expertise in pain management. Everyone except the geriatrician was doctorally prepared. The principal investigator, a project director, and six research assistants (doctoral students in nursing and medical sociology) collected the data. This article reports only data from participant observation and event analysis.

We conducted participant observation, an active and intensive participation on the part of the investigator in the social-cultural-clinical context being studied, during the first 4 months of the study. Data were gathered on a broad range of activities. We focused our observations, for example, on the types of residents being admitted (e.g., diagnoses), staffing patterns, and the culture of the nursing home.

Event analysis, a detailed description and analysis of a specific event (in this study a terminal illness), is a strategy that we used to obtain data on terminally ill residents. In order to investigate the factors that influenced the quality of end-of-life care in nursing homes, we observed residents from the time they were identified as being terminally ill until death occurred. Our goal was to obtain sufficient data to characterize and explain the unique features of the terminal-illness event, with an aim of bringing together diverse information from many cases into a clear and unified interpretation (Pelto & Pelto, 1978).

We observed residents’ care from the time they were identified as being terminally ill until they died; this time period ranged from 1 day to 15 months (M = 45 days). We observed their care several times a week from early morning until late evening, 7 days a week. When death was imminent, we made observations several times a day. Our observations focused on the dynamics of providing care during the process of dying. For example, we obtained data on how physicians and staff communicated with residents and their families; how nursing and medical care were provided; and how symptoms, especially pain, were managed.

A semistructured guide was used to record observations systematically. We took field notes and entered them into a computer immediately after leaving the setting. These research strategies enabled us to observe the residents’ care prospectively and to examine the process of dying contextually with the aim of identifying and analyzing the multiple factors that influenced the quality of care.

Quantitative Data Collection: Medication and Pain Data

We obtained data on prescribed analgesic regimens from the medication administration record. Data included dose, frequency, route, duration of use, and how administered (i.e., around the clock [ATC] or as needed [PRN]) for each 24-hr period from the date residents were inducted into the study through Day 1. We provided research assistants with a list of nonopioids, opioids, and co-analgesics (i.e., medications whose primary indication is not for pain but that do decrease pain [e.g., antidepressants, anticonvulsants]) that included analgesic dose ranges to use in data abstraction. We did not include in the analgesics those analgesic medications that had been prescribed for other purposes (e.g., low-dose aspirin). We converted all opioids to morphine equivalents. In order to account for the prescription and administration of all opioids, nonopioids, and co-analgesics, a Medication Quantification Scale score was calculated (Steedman et al., 1992). We calculated these scores for each pain medication based on weights assigned by the medication class and dosage level. The scores were summed in order to provide a quantitative index of analgesics prescribed and administered that was suitable for statistical analysis (Miaskowski et al., 2002). Using double data entry, we entered data into a Statistical Package for the Social Sciences (SPSS, Chicago, IL) database.

Pain Measurement

Most residents were moderately to severely cognitively impaired (Table 1) and were unable to respond to a numeric rating scale. Therefore, we asked residents during each study visit to describe their pain qualitatively as none, mild, moderate, or severe, a method recently found to be most successful for use with cognitively impaired nursing home residents (Closs, Barr, Briggs, Cash, & Seers, 2004). When residents were unable to respond, we observed them for indicators of pain such as moaning, crying, grimacing, or restlessness. These signs have been shown to correlate well with self-report measures (Weiner, Pieper, McConnell, Martinez, & Keefe, 1996). We reviewed medical records and asked family members and nursing staff for their perception of the residents’ level of pain. By using this method, we made an overall, ongoing qualitative evaluation of residents’ usual level of pain from induction into the study until death.

Data Analysis: Pain Medication

We analyzed the amount of pain experienced and the amount of pain medication prescribed and administered. Chi-square or Kruskal–Wallis tests were performed on categorical or ordinal variables. Analyses of variance or analyses of covariance were performed on continuous data. Because of unequal variances among groups and a lack of normality, we performed a log transformation on the continuous outcome variables (amount of ATC opioids prescribed and administered, amount of PRN opioids...
prescribed and administered, and the total amount of analgesic medication prescribed and administered based on the Medication Quantification Scale score. We performed analyses in order to determine the influence of possible covariates, including age, length of stay, ethnicity, source of payment for care, presence of a cancer diagnosis, and activity of daily living (ADL) score. We controlled for the contributions of statistically significant covariates by utilizing regression or analyses of covariance.

**Qualitative Data Analysis**

Qualitative analysis as described by Bernard (1988), Spradley (1979), and Strauss and Corbin (1990) was used to analyze the qualitative data. Using content analysis, we systematically read and analyzed field notes and event analysis data by searching for meaningful categories. The data were examined to determine the parts, the relationship among the parts, and their relationship to the whole. We coded and categorized data and reduced the number of categories.
through the process of selection, ordering, and clustering (Spradley).

The research team wrote theoretical memos (i.e., notes containing the results of inductive thinking). These memos helped to identify emerging themes and their relationships to one another. Our goal was to identify patterns or recurrent themes that explained behavior. To discover a theme, we carefully analyzed the data, compared data from various sources (e.g., field notes, event analysis data, and medical records), and linked these data to specific concepts (in this study, pain management, hospice care, and quality of end-of-life care).

A geriatrician, who was employed by an academic health care center and who had clinical and teaching experience in nursing home and palliative medicine, reviewed all of the event analysis data. This geriatrician subsequently wrote an analysis of each case, comparing the care provided to the research participant to that which would be expected from best practices in geriatrics and palliative care.

Results

Quantitative Data

Statistically significant a priori differences were found in age, length of stay, ethnicity, source of payment for care, presence of cancer diagnosis, and ADL score between the hospice and the non-hospice groups. Residents who received hospice care were younger ($p = .005$) and had shorter lengths of stay ($p = .022$) than the non-hospice residents. Hospice residents had lower ADL scores ($p = .002$) and were more likely to have had a diagnosis of cancer ($p < .001$) than the non-hospice residents (Table 1). Therefore, we performed analyses in order to determine the influence of these variables (i.e., age, length of stay, ethnicity, source of payment for care, ADL score, and cancer status) on the outcomes of interest (i.e., the proportion of residents with opioids prescribed and administered ATC and PRN, and the amount of opioids prescribed and administered ATC and PRN). Of these differences, only age and cancer diagnosis were consistently related to the analgesic dosage and the likelihood of having an analgesic prescribed. As participants increased in age, they tended to be prescribed and administered lower doses of analgesics ($r = -0.13$ to $-0.26$, $p = .18$ to .008). Residents with a diagnosis of cancer were prescribed and received higher doses of analgesics ($r = 0.24$ to $0.47$, $p = .01$ to $<.001$). Therefore, we constructed binary logistic regression models in order to account for the influence of age and the diagnosis of cancer on dichotomous outcomes, and we used analysis of covariance in order to control for the influence of differences on continuous outcomes. We based all tests of statistical significance on these covariant adjusted differences.

Opioids and Co-Analgesics Prescribed and Administered ATC and PRN on Day 1.—No statistically significant differences were found in the proportion of hospice and non-hospice residents who had opioids and co-analgesics prescribed and administered ATC or PRN on Day 1. Overall, on Day 1, 58.5% (58/106) of residents had a prescription for opioids: 48.1% (51/106) of the hospice and 45.3% (22/49) of the non-hospice residents ($p = .937$). Of the residents who received pain, 64.7% (24/37) of the hospice and 68.4% (26/38) of the non-hospice residents experienced moderate to severe pain (Table 2). A binary logistic regression that controlled for age and cancer status was performed in order to determine if the proportion of hospice and non-hospice residents with pain differed on reports of moderate to severe pain. We found no significant differences in pain severity between the hospice and non-hospice residents ($p = .57$).

Table 2. Level of Pain Severity: Hospice and Nonhospice Residents

<table>
<thead>
<tr>
<th>Level of Pain Severity</th>
<th>Hospice ($n = 40$)</th>
<th>Nonhospice ($n = 64$)</th>
<th>Total ($N = 104$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>6 (15.0)</td>
<td>26 (40.6)</td>
<td>32 (30.8)</td>
</tr>
<tr>
<td>Mild</td>
<td>12 (30.0)</td>
<td>12 (18.8)</td>
<td>24 (23.1)</td>
</tr>
<tr>
<td>Moderate</td>
<td>18 (45.0)</td>
<td>15 (23.4)</td>
<td>32 (30.8)</td>
</tr>
<tr>
<td>Severe</td>
<td>4 (10.0)</td>
<td>11 (17.2)</td>
<td>15 (14.5)</td>
</tr>
</tbody>
</table>

Notes: For the table, $N = 104$. The level of pain severity was unable to be determined for 3 residents. Percentages reflect the proportion of valid responses. There were no significant differences in pain severity between the hospice and non-hospice residents.
Amount of Analgesic Medication Prescribed and Administered.—Although residents who received hospice care tended to have higher doses of analgesics prescribed and administered, we found no significant differences in the amounts of ATC and PRN opioids prescribed and administered on Day 1. In both the hospice and non-hospice groups, residents received less than 15% of the total amount of PRN opioids prescribed (Table 3).

Qualitative Data

Whereas the quantitative data provided information on the amount of analgesics prescribed and administered, the qualitative data disclosed that although a relatively high proportion of residents had had analgesics prescribed ATC and PRN, 55.0% of the hospice and 40.6% of the non-hospice residents experienced ongoing moderate to severe pain. Qualitative data analysis revealed factors that both facilitated and were barriers to effective pain management.

Factors That Facilitated Effective Pain Management

Typically, the hospice nurses visited residents weekly, or, if death was imminent, more often. They reviewed the residents’ records, assessed symptoms, and acted as a resident advocate. When necessary, they phoned the physician to discuss, for example, the dose of an opioid or a change in analgesic from PRN to ATC. If residents were in pain, they asked the skilled nursing facility nurses to medicate them. Sometimes a hospice-certified nursing assistant bathed the resident, and occasionally a volunteer provided companionship.

Barriers to Effective Pain Management

Although the hospice residents (71.4%) were more likely than the non-hospice residents (50.0%) to have had an opioid prescribed ATC, other factors such as limited physician availability, physicians’ lack of knowledge about pain medications, and limitations of the nursing staff contributed to inadequate pain management for both groups.

Limited Physician Availability.—Federal regulations require that physicians or their delegates visit nursing home residents every 30 to 60 days. When residents are discharged from the hospital to the nursing home, they and their families are seldom informed that the doctor will visit much less frequently than he or she did in the hospital. When residents were in pain, they wanted to see their doctors. Some residents phoned their physician, but their calls were not always returned. A 66-year-old man on hospice care, who was dying of lung cancer with metastases to the brain and who had pain on urination, said, “I tried to call my doctor once, but he never got back to me.”

Although physicians tended to return the call of the hospice nurse, they often did not respond promptly when the skilled nursing facility nurse called. A 91-year-old woman on hospice care with colon cancer was receiving morphine sulfate with a continuous infusion device. It became clogged and was discontinued. The nurse called the doctor to prescribe an oral analgesic. He did not return the call promptly, and the resident did not receive pain medication until 4.5 hours later. The elderly woman’s daughter became angry. “Look, she’s in pain. I’m so upset,” she remarked.

Physicians’ Lack of Pain Management Knowledge.—Although some residents received adequate pain management, the geriatrician’s review of the cases documented that pain management was often inadequate. When reviewing the cases, the geriatrician identified several problems. Physicians ordered medications PRN rather than ATC for residents in chronic pain. The frequency of administration of the medication was inappropriate (e.g., hydrocodone and acetaminophen were ordered every 6 hours rather

### Table 3. Mean Amount of ATC and PRN Opioids and Total MQS Prescribed and Administered in Morphine Equivalent Dosages on the Day Prior to Death (Day 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hospice (n = 42)</th>
<th>Nonhospice (n = 64)</th>
<th>Total (N = 106)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of ATC opioid prescribed</td>
<td>178.28 ± 302.66</td>
<td>67.62 ± 137.89</td>
<td>153.79 ± 302.76</td>
</tr>
<tr>
<td>Amount of ATC opioid administered</td>
<td>157.30 ± 300.99</td>
<td>55.02 ± 115.94</td>
<td>140.06 ± 297.11</td>
</tr>
<tr>
<td>Amount of PRN opioid prescribed</td>
<td>143.40 ± 127.71</td>
<td>91.72 ± 102.41</td>
<td>236.29 ± 438.57</td>
</tr>
<tr>
<td>Amount of PRN opioid administered</td>
<td>14.64 ± 21.47</td>
<td>13.27 ± 27.45</td>
<td>17.32 ± 30.02</td>
</tr>
<tr>
<td>Total MQS prescribed</td>
<td>56.26 ± 44.62</td>
<td>33.33 ± 33.75</td>
<td>69.59 ± 93.77</td>
</tr>
<tr>
<td>Total MQS administered</td>
<td>30.52 ± 38.23</td>
<td>14.33 ± 19.41</td>
<td>27.79 ± 41.60</td>
</tr>
</tbody>
</table>

Notes: ATC = around the clock; PRN = as needed; MQS = Kahn and Goldfarb Mental Status Questionnaire Score (Range 0–10). Differences based on log of estimated marginal means.

*Pain medication data were missing for one resident on Day 1.
that it was minimal: “We had an in-service on hospice care, but that was a long time ago; I don’t remember very much,” and “To tell you the truth, I don’t attend in-services.”

Many of the nurses either lacked pain-assessment skills or did not have time to perform assessments. Family and research team members often observed that residents were in pain. When we saw residents in pain, we notified the staff immediately. Some of the staff did not understand the difference between long- and short-acting analgesics. Consequently, they did not always give short-acting medications for breakthrough pain.

A physician prescribed a fentanyl patch every 3 days and morphine sulfate sublingually PRN every 3 hours for a hospice care resident with metastatic bone cancer. The resident’s daughter said, “The problem is that you always have to ask for pain medication; they don’t come to give it to her. Sometimes she has gone 8 hours between doses of morphine. If they don’t hear her moaning, they don’t give her any pain medication, but you can see the grimace on her face, her wrinkled eyebrows, and she gets agitated.” Although the medication was prescribed for every 3 hours PRN, during the 7 days we followed this resident, she received only 7 doses of oral morphine.

Inadequate staffing was a major problem. Many of the staff often worked a double shift. In addition to long hours, the patient load was burdensome. Mrs. F., an 82-year-old, non-hospice care resident, had developed a Stage IV pressure ulcer; she was crying with pain. When we asked the nurse about her plan to address Mrs. F’s pain, the nurse replied, “I don’t have a plan. I have 40 patients, and I don’t have time to make a plan.”

Calling physicians for a pain medication order was time consuming and sometimes unsuccessful. Some physicians responded immediately; others had to be paged repeatedly. Some did not respond for hours; others did not respond at all. Mr. K., a 95-year-old man with prostate cancer, had not been complaining of pain. The day before he died, however, he had severe pain in his abdomen. He cried out repeatedly, asking for medication. “I’m not normally in pain,” he said. “But I’m in pain now. I can’t wait any longer; I just want some relief. I’m really suffering.” The nurse had given him a hydrocodone and acetaminophen tablet and said that she could not give him anything more for 2 hours. “I want you to be comfortable,” she told him, “but I can’t give you any more medication for a few hours.” She had called the doctor and said that if he called back and gave her the “okay,” she would give him more medication. The doctor did not return her call. Mr. K. received hydrocodone and acetaminophen, 1 tablet, at 11:30 p.m. on the 14th of the month. He did not receive any other analgesic medication before he died at 11:50 p.m. on the 15th.

Discussion

This study is the first to use both quantitative and qualitative approaches in order to compare pain management among hospice and non-hospice nursing home residents. Similar to elders in other studies (Bernabei et al., 1998; B. A. Ferrell, 1995), older residents in this study were more likely than younger residents to receive less analgesic; residents with cancer were more likely than noncancer residents to receive a higher dose of analgesic.

More of the hospice (85.0%) than the non-hospice (59.4%) residents experienced pain. This finding may be explained by the fact that although 83.3% of the hospice residents had a diagnosis of cancer, only 24.6% of the non-hospice residents had a cancer diagnosis. Some studies have suggested that enrollment in hospice improves pain management in nursing homes (Miller, Mor, & Teno, 2003; Miller et al., 2002; Parker-Oliver & Bickel, 2002). Although the hospice residents in this study tended to have greater amounts of pain medication prescribed and administered ATC and PRN than did the non-hospice residents, these differences were not statistically significant. It is noteworthy that more than half (55.0%) of the hospice residents experienced ongoing moderate to severe pain.

Neither the hospice nor the non-hospice residents received adequate pain management. This is not to say that hospice care was not beneficial. While the hospice nurses were in the facility, they assessed their residents’ analgesic needs, and, when necessary, encouraged facility nurses to provide medications. Our observations disclosed, however, that once the hospice nurses left the facility, pain management became the responsibility of the overburdened, inadequately educated nursing home staff.

Our data suggest that neither the physicians nor the nurses had adequate expertise in pain management. Other researchers have noted that health care professionals believe that they have not received adequate training in pain management (Cleeland, 1998), and that physicians have traditionally paid
little attention to pain management in nursing homes (B. A. Ferrell, 1995). These factors may have contributed to our inability to find statistically significant differences among the hospice and non-hospice residents.

Nursing homes are increasingly the site for death (Flory et al., 2004), and pain management is essential to the provision of quality end-of-life care (Cleeland, 1998). This goal cannot be achieved given the deterrents to care within the current organizational structure of nursing homes. The barriers identified in this article must be addressed. When people are dying, they want to see their physician. One study has noted that among the recommendations family members made in order to improve end-of-life care was “greater access to physicians’ time” (Hanson, Danis, & Garrett, 1997). In order to provide adequate pain management and high-quality care in nursing homes, physicians must visit more frequently, be an integral part of an interdisciplinary team (B. A. Ferrell, 1995), and be adequately reimbursed for their visits without being burdened by excessive documentation.

Inadequate staffing has been a problem in nursing homes for decades. It is tragic and unacceptable for people to die in pain because there are not enough nurses to care for them. Given the increasing acuity level of nursing home residents, it is impossible for one nurse to administer medications, supervise the paraprofessional staff, and assess and monitor the pain status of 22 to 45 residents.

Strengths and Limitations

A strength of this study is that it was a prospective, quantitative, and qualitative investigation that systematically documented the pain medications prescribed and given. Furthermore, we observed and recorded the dynamics of pain management during the process of dying. Limitations include the small sample size and the fact that we collected data in only two facilities from the same chain, which may limit generalizability. However, we selected facilities that were representative of proprietary nursing homes nationally. Furthermore, the two groups (hospice and non-hospice) under investigation differed at the outset on several measures, such as age, length of stay, and diagnosis. These were not randomly assigned groups. We could not control who received hospice care and who did not. However, we controlled for the pre-existing differences in the analyses.

Conclusion

Hospice organizations can, and some do, provide a valuable service to nursing home residents. However, given that between 1991 and 2001 Medicare expenditures for nursing home-based hospice care increased from $8.6 million to $21.8 million (Centers for Medicare, 2004a), the effectiveness of hospice-care programs in nursing homes warrants further study. We believe that the quality of hospice care is dependent on the context in which it is provided. The barriers described in this article contributed to an environment that was not conducive to pain management and to the optimal delivery of hospice care.

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Received May 24, 2005
Accepted February 6, 2006
Decision Editor: Linda S. Noelker, PhD