Terminal Care: The Last Weeks of Life

WILLIAM M. PLONK, Jr., M.D. 1 and ROBERT M. ARNOLD, M.D. 2

Life is pleasant. Death is peaceful. It’s the transition that’s troublesome.
—Isaac Asimov

ABSTRACT

Background: The care of patients in their last weeks of life is a fundamental palliative care skill, but few evidence-based reviews have focused on this critical period.

Method: A systematic review of published literature and expert opinion related to care in the last weeks of life.

Results: The evidence base informing terminal care is largely descriptive, retrospective, or extrapolated. While home deaths and hospice use are increasing, medical care near death is becoming more aggressive and hospice lengths of stay remain short. Though the prediction of impending death remains imprecise, studies have identified several common terminal signs and symptoms. Decreased communication near death complicates the determination of patient wishes, and advanced directives prior to the terminal stage are recommended. Anorexia and cachexia are common in dying patients but there is no evidence that this process is painful or responsive to intervention. While there is general consensus that artificial nutrition is not beneficial in dying patients, the use of artificial hydration is controversial, especially in the setting of delirium. Breathlessness has been shown to benefit from oral and parenteral opioids but not anxiolytics. Accumulation of respiratory tract secretions (death rattle) is common and usually responds to antimuscarinics. Physical pain typically decreases toward death but its assessment in dying patients is difficult. Terminal delirium may occur in up to one-third of patients, may have a reversible cause, and may respond to antipsychotics or benzodiazepines. Palliative sedation is controversial but widely used, especially internationally. Caregiver stress and bereavement may benefit from improved communication and hospice involvement.

Conclusion: While the terminal care literature is characterized by varying quality, numerous knowledge gaps, and frequent inconsistencies, it supports several common clinical interventions. More research is needed to resolve controversies, define effective therapies, and improve the outcomes of dying patients.

INTRODUCTION

ONE HUNDRED PERCENT of our patients will die. Ten percent will die suddenly, but 90% will at some point need terminal medical care. 1 Modern medical science is poor at predicting how or when they will die, and even worse at explaining why. As physicians, we can be the primary cause of suffering in their last weeks of life, or the primary cause of its relief. 2 Which role we choose depends on both our knowledge of terminal care and our approach to it. Experience suggests that we have at our disposal the tools to make every death better, at least marginally. A comfortable

1 Division of General Medicine, Geriatrics, and Palliative Care, Department of Internal Medicine, University of Virginia Health System, Charlottesville, Virginia.
2 Section of Palliative Care and Medical Ethics, Division of General Internal Medicine, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania.
death is possible for almost all of our patients. It should be one of our primary obligations, and one of our patients’ primary expectations.

As Sherwin Nuland noted in How We Die, there is a vast literature on dying but few reliable accounts of the process. In part because of the ethical and legal issues associated with clinical trials involving dying patients, there is little controlled research on which to base our practice. For example, benzodiazepines have not been shown to be beneficial in palliative care patients, but most of us would find it difficult to do effective end-of-life care without them. Likewise, corticosteroids might or might not be effective for malignant bowel obstruction; the meta-analysis of trials investigating their use lacked statistical significance.3

Useful data does exist, however, although much is retrospective or extrapolated from patients in earlier stages of illness. In general, the same palliative approaches and treatments used in earlier stages of the dying process are felt to be effective in terminal care. Until better research becomes available, we must rely heavily on this incomplete data, personal experience, and expert opinion to guide the care for our patients at the end of life.

Terminal care refers to medical care provided in the last days to weeks of life. For this discussion, an extensive review of systematic research related to death, terminal care, and bereavement published from 1990 through April 2004, and available on MEDLINE was performed. Where reliable data were not available, reference was made to current expert opinion derived from review articles, textbooks, and other published sources. Graded clinical recommendations using SORT taxonomy are made based on the best available evidence and summarized in Table 1.

### WHERE WE DIE

This year more than 2 million Americans will die. Approximately 50% will die in hospitals, 25% at home, and 25% in nursing homes. Significant geographic variation in these rates exists, however. Even among leading hospitals, the rates of in-hospital Medicare deaths range from 16% to 55%.4 Nationwide, the proportion of patients dying in hospitals is declining, while the proportions dying at home and in nursing homes are increasing (Table 2). Teno5 estimates that by 2040, the proportion dying in nursing homes may approach 50%.

![Table 1. Terminal Care Recommendations and Grades by SORT Taxonomy](image-url)
ing home to hospital care when given that choice.8

Only one third of terminally ill patients with cancer achieve their preferred place of death.9 Those who die at home are disproportionately white, educated, married, female, and enrolled in hospice or PACE programs. They tend to have longer survival after cancer diagnosis and a functional decline over less than 5 months (more prolonged decline predicts nursing home placement).10–12 The strongest predictor of home death is, however, living in a locality with fewer hospital beds per capita.13,14 If hospital beds are available, they will be filled with dying patients.

DYING IN INSTITUTIONS

Approximately 75% of Americans die in institutions, where terminal care is often problematic. Hospitals traditionally are more focused on curative than palliative care, and regulatory, staffing, and privacy issues make effective end-of-life care in nursing facilities difficult.15,16 Patients in these settings commonly have significant unmet care needs. Of the families of patients who died in a nursing home, 32% felt the patient’s pain was not adequately addressed and 56% felt emotional support of the patient was lacking. Of the families of patients who died in a hospital, 50% thought communication was a problem, 51% wanted more physician contact, and 80% thought the patient was not always treated with respect.17 Isolation in institutions is another pervasive problem. Sulmasy and Rahm18 found that seriously ill hospitalized patients with poor prognoses spent on average over 18 hours per day alone. Do-not-resuscitate (DNR) orders did, however, significantly increase the time nurses spent with these patients.19

Predictors of death in a nursing home include prolonged functional decline, poor performance status, and increased age.10 Unfortunately, many dying nursing home residents are transferred unnecessarily to hospitals. Enrollment in hospice or having an advance directive, however, significantly decreases the risk of this “terminal transfer.”20,21 Institutional end-of-life care measures can be improved by hospital-based palliative care programs and nursing home hospice programs.22,23 Likewise, institutional systematic integrated care protocols have been shown to improve symptom control during the last two days of life.24

DEATH AND HOSPICE

Hospice services for terminal care have been available in the United States since 1974 and have been funded by Medicare since 1983. Use is steadily increasing, with approximately 20% of Americans now dying with hospice, but those patients are being referred to hospice at later stages in their illnesses. The median length of stay in U.S. hospices fell from 29 days in 1995 to 20.5 days in 2001, rising slightly to 22 days in 2003. Approximately 37% of hospice patients die within a week of enrollment, and only 7% survive more than 6 months.25

There has been a concurrent trend toward more aggressive medical treatment near death. In 1996, 19% of Medicare cancer patients receiving chemotherapy received it in their last 2 weeks of life, up significantly from 14% in 1993.26 Although in-hospital death rates are declining, intensive care unit (ICU) and intensive procedure use is increasing. Between 1985 and 1999, Medicare patients with at least one ICU admission in their last 6 months of life increased from 31% to 35%, and the proportion having an intensive procedure during their last hospitalization increased from 18% to 30%.27 In 2001, 14.4% of Medicare patients spent more than a week in an ICU during their last 6 months, up from 13.1% in 1999.28 Goodlin et al.29 found that even during the last 2 days of life, 27% of hospitalized patients received ventilatory support, 18% were restrained, and 12% had an attempted resuscitation. A study of hospitalized patients over 80 years of age showed 63% received nonpalliative treatments despite only 30% wanting such care.30

SIGNS OF IMPENDING DEATH

The recently published Clinical Practice Guidelines for Quality Palliative Care emphasize that families should be educated regarding the signs and symptoms of approaching death in a devel-
opmentally, age-, and culturally appropriate manner.\textsuperscript{31} Several clinical features have been identified as indicators of death within days, but research investigating the reliability of these signs is scarce. Evidence does show that physicians consistently overestimate patient survival, and those most familiar with the patient are often the least accurate.\textsuperscript{32,33} One observational study in terminally ill patients with cancer noted that patients on average developed respirations with mandibular movement 8 hours, acrocyanosis 5 hours, and radial pulselessness 3 hours before death but there was wide individual variation, with most patients developing these symptoms less than 2.5 hours before they died. Decreased consciousness was identified in 84\% at 24 hours and 92\% at 6 hours prior to death.\textsuperscript{34} Development of a death rattle is predictive of death within 48 hours but typically occurs in less than half of patients.\textsuperscript{35} With the exceptions of drowsiness, fatigue, and confusion, symptoms in patients with cancer followed at home tended to improve in the last days of life.\textsuperscript{36} According to expert opinion, other symptoms of near death include becoming bedbound, irregular breathing, tolerating sips of fluid only, and cool or mottled extremities.\textsuperscript{37,38}

COMMON TERMINAL SYMPTOMS

Distressing physical symptoms are common at the end of life. The SUPPORT study documented that during their last 3 days of life, 80\% of dying hospitalized patients suffered severe fatigue, 50\% severe dyspnea, and 40\% severe pain.\textsuperscript{39} The most common symptoms reported by families in the last week of life were fatigue, dyspnea, and dry mouth, while the most distressing were fatigue, dyspnea, and pain.\textsuperscript{40} In the long-term care setting, dyspnea, pain, and noisy breathing predominated in the last 2 days of life, while in hospice patients the most distressing symptoms in the last 24 hours were thought to be pain, excess respiratory secretions, and agitation.\textsuperscript{41,42} Anorexia, anxiety, constipation, nausea/vomiting, incontinence, pressure sores, and insomnia have also been identified as particularly distressing in certain patients.\textsuperscript{43,44}

DECREASED COMMUNICATION

Morita et al.\textsuperscript{45} found that the capability for complex communication by dying patients declined from 43\% at 5 days to 13\% at 1 day prior to death, and that this capability was significantly impaired by high-dose opioids. Because of decreasing communication, determining a patient’s wishes during the terminal phase is difficult, as is predicting patient preferences regarding resuscitation and other interventions.\textsuperscript{46–48} In the SUPPORT study, 46\% of DNR orders were written in the last 2 days of life and 53\% of physicians did not know their patients preferred withholding resuscitation.\textsuperscript{49} Sulmasy et al.\textsuperscript{48} found that one third of the surrogates of terminally ill patients also could not accurately predict those patients’ resuscitation preferences. The outcome benefit of advance directives in terminal care is unclear. End-of-life clinical decisions are often influenced less by advance care planning than by perceived prognosis, quality-of-life issues, and family preferences.\textsuperscript{50,51} Nevertheless, addressing with patients desired goals of care prior to the terminal phase is recommended on both ethical and clinical grounds.\textsuperscript{46}

ANOREXIA/CACHEXIA AND TERMINAL HYDRATION/NUTRITION

Most dying patients lose their appetite (anorexia) and lose weight (cachexia).\textsuperscript{52} Family members and other caregivers may be concerned the patient is “starving to death” and wish to intervene in the last weeks of life. They can be reassured that there is no evidence that providing nutritional support either enterally or parenterally improves morbidity or mortality in terminally ill patients, including those with advanced dementia.\textsuperscript{53,54} There is little evidence that prolonged anorexia is uncomfortable. McCann and colleagues\textsuperscript{55} found that 97\% of dying patients who stopped eating experienced no hunger or hunger only initially. Anorexia and cachexia (sometimes referred to as wasting syndromes) appear to be due in part to proinflammatory cytokines and other humoral factors which, by inducing catabolism, may help explain the failure of artificial feeding to improve nutritional parameters in chronically ill patients.\textsuperscript{56,57}

It has been proposed that terminal anorexia actually may benefit dying patients by inducing a ketosis that contributes to a sense of well-being and diminished discomfort.\textsuperscript{58} Because of its beneficial effects on cell metabolism, \(\beta\)-hydroxybutyrate, the primary ketone in starvation, has even
been suggested as a therapeutic agent. While an attractive theory, evidence for the clinical benefit of ketosis in dying patients is limited.

The provision of artificial hydration and nutrition (AHN) in terminal care remains a heavily debated clinical, ethical, legal, and religious issue. Clinical evidence for the benefit of artificial nutrition in end-of-life care is poor. In a 1999 review, Finucane et al. found no evidence that tube feeding in patients with advanced dementia prevented aspiration pneumonia, prolonged survival, reduced the risk of pressure sores or infections, improved function, or provided comfort. More recent studies have confirmed this lack of benefit in advanced dementia. A meta-analysis of studies of both enteral and parenteral nutrition in patients with metastatic cancer found that neither therapy affected morbidity or mortality. Enteral feeding tubes have, however, been associated with increased complication rates, restraint use, and emergency department utilization. Such evidence has led Winter to argue that unrequested nutritional support of the terminally ill is both medically and ethically indefensible.

Most authorities consider the discontinuation of tube feedings to be ethically and legally indistinguishable from their initiation. Nevertheless, artificial nutritional support is typically the last life-sustaining measure withdrawn, and approximately 25% of demented nursing home patients die while still receiving tube feedings. The data surrounding hydration in dying patients are more controversial. Some studies correlate dehydration with adverse symptoms such as thirst, and some experts argue that parenteral hydration prevents and treats some cases of terminal delirium. Other authorities argue that the data does not support a correlation between dehydration and symptoms and that rehydration does not improve patient comfort.

The data surrounding hydration in dying patients are more controversial. Some studies correlate dehydration with adverse symptoms such as thirst, and some experts argue that parenteral hydration prevents and treats some cases of terminal delirium. Other authorities argue that the data does not support a correlation between dehydration and symptoms and that rehydration does not improve patient comfort.

As with anorexia, some authorities feel that dehydration in fact may improve comfort by inducing uremia, hyperosmolality, and endorphin release. They point out that patients with end-stage renal disease who stop dialysis typically experience less discomfort than patients who die of other causes, with 85% experiencing a “good” death requiring minimal medical intervention. As with ketosis, however, additional evidence for this benefit is scarce.

Finally, some authorities have argued that intravenous hydration may have numerous adverse effects including worsening edema, increasing secretions, and unnecessarily prolonging the dying process. Fewer diuretics (and smaller fluid volumes) were used in patients receiving hypodermoclysis than those with intravenous fluids, but no randomized trials of parenteral hydration methods have been conducted. While there is little objective evidence of harm, the bulk of current evidence and expert opinion supports the conclusion that pararenteral hydration is likely not beneficial in the actively dying patient.

RESPIRATORY CHANGES

Though the true etiology is unknown, changes in breathing are thought to indicate significant neurologic compromise near death. Diminished tidal volume, apneic periods, accessory muscle use, and Cheyne-Stokes respirations often develop, and reflex breaths may immediately precede death. These breathing changes can be very distressing for family and caregivers, who may fear the patient is suffocating. The development of hypercarbia may induce a beneficial narcosis, although again there are few data to support this conjecture. In fact, some studies suggest normocarbia with progressive hypoxia induces the least agitation. Oxygen administration likely provides no benefit in this setting but has not been studied and is widely used to address family and caregiver concerns.

The treatment of breathlessness is, however, one of the few areas of palliative care for which we have solid evidence, and seems reasonable to assume this data can be extrapolated to the terminal phase. A recent Cochrane review confirmed the benefit of oral and pararenteral opioids in improving breathlessness and dyspnea in palliative care patients. Nebulized opioids, although attractive as a means of treating breathlessness while limiting side effects, showed no benefit over nebulized saline in the Cochrane analysis. Three recent reviews by different authors support the use of oral or pararenteral (but not nebulized) opioids in the palliation of dyspnea even in patients with severe underlying lung
disease. Opioids also appear to relieve breathlessness in stable severe congestive heart failure (CHF) but showed no benefit in stable severe chronic obstructive pulmonary disease (COPD) or interstitial lung disease. Although they are widely used, there is limited objective evidence for the benefit of benzodiazepines in the palliation of breathlessness. Oxygen appears to benefit patients with terminal cancer with hypoxemia but was no better than room air in nonhypoxic dyspneic patients. A fan blowing air on the face is thought to improve breathlessness through stimulation of the trigeminal nerve, although the evidence for this effect in humans is unclear.

ACCUMULATION OF RESPIRATORY TRACT SECRETIONS

The accumulation of respiratory tract secretions (ARTS), presumably caused by a declining gag reflex and decreased reflexive clearing, may occur as death approaches and lead to gurgling respirations. This “death rattle” occurs in one fourth to one half of dying patients, occurs more commonly in men and patients with brain and lung neoplasms, and predicts most (76% in one study) will die within 48 hours. Nonpharmacologic interventions such as discontinuing parenteral fluids, repositioning, and postural drainage are frequently recommended but have not been studied systematically. Oropharyngeal suctioning is considered generally ineffective for this condition and may cause both patient and family discomfort.

A majority (50%–80%) of patients with ARTS respond to treatment with antimuscarinics, though one author contrasts treatment-responsive “real death rattle” resulting from unexpectorated secretions from treatment-resistant “pseudo-death rattle” caused by pulmonary pathology. Subcutaneous hyoscine hydrobromide (scopolamine) was more immediately effective in one trial than subcutaneous glycopyrrolate but glycopyrrolate has a longer duration of action. Although case studies and expert opinion suggest their effectiveness, no controlled studies of intravenous, oral, sublingual, or transdermal antimuscarinics were identified.

TERMINAL PAIN

Dr. Cicely Saunders correctly noted that pain at the end of life may be physical, emotional, social, or spiritual. Terminal physical pain is the most readily quantifiable, but even studies of it are conflicting. In 1990, Ventafridda et al. argued that pain usually escalated near death, requiring palliative sedation in more than half of patients. Numerous systematic studies since then, however, have shown that overall pain tends to decline in the dying phase. Fainsinger et al. noted a decrease in pain on a visual analogue scale over the last week of life. Ellershaw et al. documented a decrease in uncontrolled pain from 18% at 24 hours to 8% at 4 hours prior to death without opioid dose changes. Mercadante et al. found that pain and opioid use in patients dying at home peaked about one month prior to death. The etiology of this overall decline is unknown, although uremia, ketosis, and the build-up of endorphins or exogenous opioid metabolites may contribute.

Expert consensus holds that some dying patients, perhaps 1%–2%, do develop “crescendo” pain in the last hours or days of life, though delirium may be a contributing factor. While this subset of terminal pain has not been studied systematically, opioid rotation, intravenous ketamine, and palliative sedation have shown benefit in various case studies. Each opioid is felt to influence a unique distribution of receptors that become downregulated over time; rotation to a different opioid is thought to improve pain control by altering the receptor set affected. Similarly, ketamine is felt to affect alternate pain receptors. One small randomized trial did show that continuing the use of transdermal fentanyl in the terminal phase improved overall pain control, though this is likely an opioid class effect. Interestingly, the stress of dying (as measured by postmortem cerebrospinal fluid [CSF] cortisol levels) is not suppressed by either high-dose opioids or the presence of dementia. This finding suggests that it may be our ability to assess pain, rather than the pain itself, that declines during the terminal phase. The assessment of cognitively impaired patients has been studied extensively in dementia, but there remains significant debate on whether cognitive status influences pain perception. Similar issues confound the assessment of pain in dying patients with cognitive decline. Half of patients with advanced cancer are unable to use common pain assessment tools. Caregiver perception may not be accurate either, because they tend to overestimate the symptom intensity of dying patients and their assessment of the patient’s pain...
may be influenced substantially by their own experience. Numerous scales to assess discomfort in nonverbal patients have been developed and validated for use in dementia, but the utility of these scales in the objective assessment of dying patients has not been studied.

Nonpharmacologic approaches to terminal discomfort such as careful oral and eye care, use of urinary catheters, and bed cushioning are recommended empirically by most authorities. Alternative interventions such as music therapy, aromatherapy, and massage are likewise considered useful by many but also are without clear evidence of benefit. Existential and psychosocial pain have been well described but poorly studied in the terminal care population. Caregiver interviews suggest they can cause or reinforce physical pain, just as physical pain may sometimes present as global suffering.

Some observers have questioned the use of high-dose opioids in terminal care, pointing out the potential for adverse side effects, especially sedation and respiratory depression. While higher opioid dosing is associated with these signs, there is no evidence that they are associated with increased mortality.

TERMINAL DELIRIUM

Delirium, characterized by fluctuating disturbances in consciousness, cognition, and perception, occurs in 28% to 83% of patients near the end of life. Terminal delirium, often associated with signs of decreased perfusion, is commonly divided into three types: hyperactive (with restlessness, agitation, or hallucinations), hypoactive (with somnolence), and mixed (with alternating features of both). It is usually presumed to be multifactorial and often is confused with sedation, dementia, or near-death awareness. When frequent, both the psychomotor and cognitive symptoms of hyperactive delirium are distressing to the majority of families and may become major obstacles to effective end-of-life care. A study in nonactively dying cancer patients found that while hyperactive delirium was more distressing to caregivers, both hyperactive and hypoactive delirium were equally distressing to patients.

One recent observational study found that psychotic symptoms (hallucinations or delusions) occurred in 35% of dying patients. These experiences may be either distressing or comforting, may have significant psychological importance for patients or their families, and, if not distressing, may not require treatment. Hospice nurses have noted that some dying patients use symbolic language or gestures to describe their experiences or request needs, and these messages may be misunderstood and medicalized as delirium.

The moaning, groaning, and grimacing that often accompany delirium may also be misinterpreted as physical pain. Experts feel that poor pain management may precipitate terminal delirium (after hip fracture, delirium is more commonly caused by pain than by pain medications) but that uncontrollable pain rarely develops near death if it has not previously been a problem. Increasing opioid dosing or rotating opioids, therefore, may be reasonable options for the treatment of terminal delirium if pain control is questionable, but the data on these interventions is conflicting. While nonpharmacologic interventions effective for delirium in other settings (including visual and hearing aids, reorientation, therapeutic activities, sleep enhancement, and mobilization) may be useful in terminal delirium, no controlled trials have been conducted.

While reversible factors such as psychoactive medications, metabolic disarray, or infection may be identified in up to half of cases, terminal delirium management typically focuses on symptom control with medications. Lorazepam (oral, buccal, or intravenous) is widely used with good anecdotal success. Haloperidol proved superior to lorazepam in one small randomized controlled trial in hospitalized patients with acquired immune deficiency syndrome (AIDS) with delirium, and other typical and atypical antipsychotics have shown benefit in treating delirium with dementia, but it is unclear how these results translate to the treatment of actively dying patients. Two recent reviews of pharmacologic therapy for terminal delirium found the best evidence for haloperidol and chlorpromazine but concluded that benzodiazepines, antipsychotics (typical and atypical), and phenothiazines appeared to be equally effective.

PALLIATIVE SEDATION

In a small minority of cases, multiple agents are ineffective for severe symptom control and patients require palliative (or “terminal”) sedation. Midazolam, propofol, or barbiturates are commonly
used for this purpose because of their ability to be rapidly titrated to effect but there are no data to support using one over the others.123,135 The ethics of palliative sedation are complex. To what extent it departs from usual palliative care and approaches euthanasia continues to be widely debated.136 Most experts, however, argue it is legally and ethically appropriate in cases of physical or emotional suffering uncontrollable by other means, and it is widely used internationally.137–139 Palliative sedation has not been shown to decrease overall survival, so the commonly evoked ethical doctrine of double effect (life shortening is acceptable if the intent is suffering relief) does not apply in its use.140 Concerns regarding its potential overuse have been raised, however. In one study, some Japanese palliative care units used terminal sedation in more than half of their patients, and it was used more often by those physicians less experienced in end-of-life care.141,142

CAREGIVER STRESS AND BEREAVEMENT

Recognizing and addressing family and caregiver stress during the last weeks of life is a critical role of the palliative care physician.38 Surveys indicate 20% of caregivers provide full-time or constant care, 20% quit work or make major life changes, and 31% lose most or all of their savings. Caregiver stress increases risks in the caregiver of insomnia, depression, cancer, and death.143 Higher stress levels are associated with dying at home, increased patient distress, increased patient dependence, and increased caregiver burden.144,145

Despite all preparation, the time of death is often challenging. Experts recommend reviewing with caregivers in advance the expected dying process, the signs of death, and death notification arrangements.58 The effectiveness of such discussions, however, has not been studied systematically. Respect for personal preferences, religious practices, and cultural traditions is also strongly recommended.146,147

Caregiver stress may not resolve with the loved one’s death.148,149 Bereavement often worsens physical and mental health and increases the risks of depression, insomnia, suicide, substance abuse, and death.150 Complicated bereavement has been associated with the death of a child or spouse, sudden death, high caregiver stress or burden, younger age, female gender, preexisting psychological symptoms, and limited social support.151–153 A decreased risk has been associated with caregiver support before death and death at home.149,154,155 In one retrospective study, hospice length of stay was not associated with improved bereavement at 6 months, but a more recent prospective study showed caregivers enrolled in hospice for 3 days or less had a significantly increased risk of major depression at 6–8 months compared to those with longer hospice stays.156,157 Hospice involvement also has been shown to significantly decrease the mortality at 18 months of bereaved wives.158 While counseling and antidepressants are widely used, reviews of the treatment of complicated bereavement have shown no clear benefit of these interventions.159,160 Communication with family and other caregivers after death is appreciated and may improve bereavement outcomes.161,162 Several recent consensus treatment guidelines for physicians on bereavement have been published.143,151,163 Excellent communication is essential during the dying process. Bereaved families identified improved communication around the time of death as the single most important means of improving end-of-life care.164 One quarter of families across care locations expressed concerns specifically with physician communication during terminal care.17 Physician empathy as death approached has been shown to reduce caregiver depression and psychosocial burden.165

CONCLUSION

Our last days can be either our best or our worst. While knowing the available literature is useful, approaching death not as a medical failure but as an essential component of life is probably more critical to effective terminal care. We cannot keep our patients from dying, but we can strive, through both knowledge and compassion, to make the dying experience as comfortable and meaningful as possible for our patients, their families, and ourselves.

REFERENCES

36. Mercandante S, Casuccio A, Fulfar F: The course of symptom frequency and intensity in advanced can-


Address reprint requests to:
William M. Plonk, Jr., M.D.
Division of General Medicine, Geriatrics and Palliative Care
Department of Internal Medicine
University of Virginia Health System
Charlottesville, VA 22908

E-mail: wmp9xn@virginia.edu
This article has been cited by:


7. Kris Vissers, Jeroen Hasselaar, Constans Verhagen. Sedation in Palliative Care and Its Impact on Nutrition 51-61. [CrossRef]


10. Sasson Menahem, Pesach Shvartzman. 2010. Continuous subcutaneous delivery of medications for home care palliative patients—using an infusion set or a pump?. *Supportive Care in Cancer* **18**:9, 1165-1170. [CrossRef]


25. Annette M Britton, Jonathon Hogan-Doran, Najma Siddiqi, Annette M Britton. Multidisciplinary Team Interventions for the management of delirium in hospitalized patients. [CrossRef]


27. Jean S. Kutner. 2005. Applying the Evidence Base to Terminal Care. *Journal of Palliative Medicine* 8:5, 1040-1041. [Citation] [Full Text PDF] [Full Text PDF with Links]