



The osteopathic physician and end-of-life care

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As modern medicine discovers more ways of prolonging life, Americans are indeed living longer, but there is a high price for longevity. In the United States, 41% of people die in hospitals and perhaps as many as 40% of Americans die in pain (though some studies suggest that the number in North America is closer to 50%). Pain often leads to and may contribute to a patient's suffering, especially in those with terminal illnesses. Is modern medical treatment so aggressive, so bent on saving life, that the quality of living (and dying) is compromised? Can medicine offer patients an alternative?

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With the hands-on care that osteopathic physicians provide and the unique benefits that osteopathic manipulative therapy (OMT) offers the patient, the osteopathic brand of medicine holds a unique and vital role in the developing area of end-of-life care (EOL). More emphasis needs to be placed on how osteopathic practices can become standard care for all EOL patients. The American Osteopathic Association (AOA) and other osteopathic organizations must collaborate with peer professional organizations and state governments to research best practices. Once these best practices are determined then the goal is to educate both health professionals and the public on these best practices so that the highest standard of quality care modern medicine can offer is available to the terminally ill.

According to the World Health Organization (WHO), the answer to balancing quality of life and dying is improved palliative care. Over the last 20 years, there has been a significant growth in palliative and hospice care programs.¹ Hospice is a caring concept derived from medieval times that symbolized a place where travelers, pilgrims, and the sick and terminally ill could find rest and comfort. The

modern day hospice offers a comprehensive care program for patients and families facing a life-threatening illness. Hospice is not a specific place, but rather a philosophy of care that interlaces many elements of palliative care.²

Although palliative care serves many purposes, the WHO defines palliative care as a service that:

- Affirms life and regards dying as a normal process
- Neither hastens nor postpones death
- Provides relief from pain and other distressing symptoms
- Integrates the psychological and spiritual aspects of patient care
- Offers a support system to help patients live as actively as possible until death
- Offers a support system to help the family cope during the patient's illness and in their own bereavement³

Palliative care requires treatment of the whole patient. This principle of "treating the whole person" is a founding principle of osteopathic medicine. Therefore, it is natural that the philosophies of osteopathic medicine and palliative care are symbiotic. Not surprisingly, many patients turn to hospice services and osteopathic medicine to provide EOL care. Over the last 10 years, hospice providers have increased by 50% and the number of patients using the services of hospice has increased by approximately 160%.⁴

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What do osteopathic physicians bring to EOL care? Many physicians possess the medical expertise and interpersonal characteristics that often differentiate the “best” from the “average” physician. Regardless of interpersonal skills or holistic training, there is one skill that osteopathic physicians are licensed in that virtually no US-trained allopathic physician currently is—that is osteopathic manipulative treatment (OMT). Current research reports that OMT is an important addition to a quality EOL care program. A 2008 study found that 82% of patients with chronic obstructive pulmonary disease reported “breathing better” after a course of OMT treatment.⁵ In addition, these patients also experienced modest improvements in thoracic mobility.⁶ This is important because decreased thoracic mobility is associated with increased infections (because less air exchange leads to increased atelectasis), increased pain, and overall reduced mobility.

When OMT is not a part of these patients’ treatment, their plans often include additional pharmacological agents that usually cause unwanted side effects.⁷ For example, many opioids used for pain can cause sedation and constipation as well as other undesirable side effects if they are dosed inappropriately. OMT is a helpful alternative to opioids or an adjunct in helping with constipation. Moreover, many antibiotics (which are empirically used in patients susceptible to pneumonia) may result in the elimination of the normal flora, making the patient more susceptible to candidal or *Clostridium difficile* infection. Therefore, the use of OMT is likely to be beneficial because it naturally enhances immune functioning without the compromising effects of many pharmacological treatments. Also in this study more than half of all osteopathic physicians surveyed reported that they use OMT to improve lymphatic function in terminally ill patients.⁵ This is because improved lymphatic function helps to boost immunity and to fight infections, as well as improve a patient’s vitality and sense of well-being.

Research has proven OMT to be effective at improving the quality of life in patients suffering from cancer, disability, heart disease, stroke, neuropathy, vascular dementia, stroke, myopathy, and Parkinson’s disease.^{8,9} OMT techniques are well tolerated and therefore can be used on a regular basis as part of a holistic inpatient or outpatient treatment regime.

The practice of osteopathic medicine in EOL care helps develop the highest standard of quality care that modern medicine can offer to the terminally ill. However, once the best practices are determined, the question then becomes “Who is going to implement these best practices?” In the years to come, Baby Boomers are going to strain the health care system, especially EOL services. Osteopathic family physicians are uniquely positioned to help in the geriatrician shortage. The average US-trained osteopathic physician is more than twice as likely as the average US-trained allopathic physician to enter into a Geriatrics Fellowship program.¹⁰ The disparity between osteopathic and allopathic geriatric training is best illustrated by the results of a recent

osteopathic specialist survey. Among respondents, 90% rank the four core tenets of osteopathic medicine as “important” to EOL care, 89% said that the osteopathic principles helped them provide better EOL care, and 79% agree that their “osteopathic diagnostic and treatment skills” enhance their ability to provide quality care for “terminally ill patients.”¹¹

Because of the ever-present combination of the tenets of osteopathic medicine and EOL care, the AOA has taken an active role in further ensuring quality EOL care. One of the steps the AOA has taken to ensure better quality EOL care was to endorse the principles developed by the Milbank Memorial Fund. These principles call for compassionate physical treatment as well as attention to the patient’s psychological, social, spiritual, and religious well-being.¹² Also, the AOA provides free of charge to the public the critically acclaimed Education in Palliative and End of Life Care (EPEC) modules (supported by the Robert Wood Johnson Foundation).¹³

State governments throughout the United States are also investing in future osteopathic physician training in the areas of geriatric medicine and palliative care. A recent example is the Health Resources and Services Administration’s geriatrics education grant (funded at more than \$1.3 million dispensed over 4 years), which was awarded to Nova Southeastern University College of Osteopathic Medicine (NSU-COM) in Fort Lauderdale-Davie, Florida. The grant was awarded to create and maintain a Geriatrics Education Center devoted to education of the osteopathic medical students of NSU-COM, other health professionals, and students and members of the surrounding South Florida communities.¹⁴

Although progress has been made, a large number of Americans still fail to receive the compassionate interdisciplinary care they deserve during their last days. Even with recent improvements, the median hospice stay is still less than one month,³ and physicians practicing in geriatrics are in short supply. The *Washington Post* reported in March of 2008 that the nation’s teaching hospitals are producing “one or two geriatricians for every nine cardiologists or orthopedic surgeons.”¹⁵ Therefore, a major health care challenge over the next 10 years will be to increase the number of licensed osteopathic physicians educated in EOL.

References

1. [Medscape.com](http://www.medscape.com/viewarticle/549702_2): The modern hospice movement. (2007). Available at: http://www.medscape.com/viewarticle/549702_2. Accessed March 8, 2009.
2. [Hospicenet.org](http://hospicenet.org/html/concept.html): The hospice concept. Available at: <http://hospicenet.org/html/concept.html>. Accessed March 8, 2009.
3. World Health Organization: World Health Organization definition of palliative care. (1990). Available at: <http://www.who.int/cancer/palliative/definition/en/>. Accessed July 25, 2008.
4. National Hospice and Palliative Care Organization: NHPCO Facts and figures: hospice care in America. (2007, November). Available at:

- <http://www.nhpco.org/i4a/pages/index.cfm?pageid=5994>. Accessed October 08, 2009.
5. Noll DR, Degenhardt BF, Johnson JC, et al: Immediate effects of osteopathic manipulative treatment in elderly patients with chronic obstructive pulmonary disease. *J Am Osteopath Assoc* 108:251-259, 2008
 6. Howell RK, Allen TW, Kappler RE: The influence of osteopathic manipulative therapy in the management of patients with chronic obstructive lung disease. *J Am Osteopath Assoc* 74:757-760, 1975
 7. Sutherland ER, Cherniack RM: Management of chronic obstructive pulmonary disease. *N Engl J Med* 350:2689-2697, 2004
 8. Do-Online.org: OMT applications at end of life. Available at: https://www.do-online.org/pdf/phm_elcepecmod13.pdf. Accessed July 26, 2008
 9. Channel MK: Modified Muncie technique: osteopathic manipulation for Eustachian tube dysfunction and illustrative report of a case. *J Am Osteopath Assoc* 108:260-263, 2008
 10. ADGAP: Frequently asked questions. Available at: <http://www.adgap-study.uc.edu/FAQ.cfm>. Accessed July 26, 2008
 11. Mason DC, McElrath S, Penn-Erskine C, et al: Practice patterns of osteopathic physicians providing end-of-life care: a survey based study. *J Am Osteopath Assoc* 108:240-250, 2008
 12. Nichols KJ: Approach to optimal care at end of life. *J Am Osteopath Assoc* 101:594-598, 2001
 13. Do-Online.org: Palliative care: EPEC modules. Available at: https://www.do-online.org/index.cfm?PageID=phm_elc. Accessed July 26, 2008.
 14. NOVA Southeastern University: NSU receives \$426,000 federal grant to create geriatric education center. Available at: http://www.nova.edu/cwis/pubaffairs/sharkbytes/2007/oct3/geriatric_edu.html. Accessed July 26, 2008
 15. Kim H: As population grows older, geriatricians grow scarce. (2008, March 11). *The Washington Post*, March 11, 2008, P. HE07