September 2012 Article of the Month

This month's article selection is by Chaplain John Ehman,
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Flannelly, K. J., Emanuel, L. L., Handzo, G. F., Galek, K., Silton, N. R. and Carlson, M. "**A national study of chaplaincy services and end-of-life outcomes**." *BMC Palliative Care* 11:10 (2012): 1-6 [online journal pagination specific to the article itself].

[*Note: This article is freely available from the journal.*]

SUMMARY and COMMENT: Hospitals understandably have great interest in assessing factors that influence the rate of inpatient deaths, and in recent years a related focus has been on factors that affect hospice referrals. This month's article reports a large, national study that sought to test two hypotheses:

> First, hospitals that provide chaplaincy services will have lower rates of hospital deaths than hospitals that do not provide chaplaincy services. Second, hospitals that provide chaplaincy services will have higher rates of hospice enrollment than hospitals that do not provide chaplaincy services. [p. 2]

The researchers combined two preexisting datasets: one from the Dartmouth Atlas of Health Care that indicated hospital deaths during 2001-2005, and one from the American Hospital Association (AHA) to determine what institutions in 2005 (fiscal year) provided "Chaplaincy/Pastoral Care Services," defined as "A service ministering religious activities and providing pastoral counseling to patients, their families, and staff of a health care organization" [p. 3]. Data were analyzed from a total of 3,585 hospitals, of which 68.5% had chaplaincy services according to the AHA [--see p. 3].

Importantly, because the literature indicates a number of potential influences on hospital death rates and hospice referrals, the study controlled for 1) whether the hospital was in a western state of the US, where there are lower death rates than elsewhere in the country, 2) the population density of a hospital's area, because urban areas tend to have more in-hospital deaths than rural areas, 3) number of hospital beds, as bed availability may affect death rates, and larger hospitals "are more likely to provide palliative and chaplaincy services" [p. 3], 4) the proportion of Medicaid patients, as an indicator of patients' socioeconomic status, since poorer patients have been associated with the greater chance of in-hospital deaths, 5) whether the hospital has a palliative care team, which may encourage hospice use; and 6) whether the institution was a general or specialty hospital, as the sample included 19 hospitals of the latter type. This attention to other factors is based upon a broad, international view of the literature [--see pp. 1-3] and lends weight to the findings.

The results, in short,

> ...support both hypotheses: that chaplaincy services are significantly associated with (1) lower rates of hospital deaths and (2) higher rates of hospice enrollment. Although these associations are relatively small, they can have profound consequences for patients and families. One would not expect appreciably larger net effects of specific services, since many unknown variables also contribute to the outcomes being examined. Nevertheless, the fact that the regression model for rates of hospital deaths replicated the effects of variables known to be related to hospital death rates from previous research lends credence to the generalizability of the findings. [p. 4]

The authors speculate on what may lie behind this association:

> Chaplains often help patients and family members to feel comfortable with their core values and to see how these can be congruent with their health care goals. Since most people prefer to die at home, discussions of values and goals with chaplains might partially account for the observed association of chaplaincy services with decreased hospital deaths and increased hospice enrollment. [p. 4]

And, they review related research [pp. 4-5].

Although this study has some limitations [--see p. 5], it credibly suggests that chaplaincy may affect two of the most valuable concerns for hospitals today. At our annual Network meeting in 2010, this project was discussed with a good deal of excitement, and now that the research has come to fruition, this article warrants the close reading of chaplains everywhere, and it may be useful for dialogue with hospital administrators.

Suggestions for the Use of the Article for Discussion in CPE:

Students might be asked at the outset how they believe their work could affect whether patients die in the hospital or in hospice or at home. What do they make of the authors' speculation about how chaplains could influence inpatient death rates and hospice referrals [--see especially p. 4]? Does knowing that there is evidence suggesting this effect of chaplains make students think differently about their role as pastoral caregivers? The summary of other research related to spiritual care [--see the bottom of p. 4 and top of p. 5] may be of special interest. For those new to CPE and to the research literature, the straightforward organization of this article may lead to discussion of some basics of methodology, for example: hypothesis formation and testing, sampling, and controlling for variables. While there is some technical, statistical language, it should not present an obstacle to understanding the article, as the authors have taken care to be very clear about the meaning of their analysis. The article concludes with an appropriate call for additional study, and students might then be challenged with a question that should be on their minds after any article: "Given what you've learned in reading this, what would you like the research to illuminate or investigate further?" In this way, they might see the reading of research not as a passive exercise but as an invitation to engagement in an open exploration by which their own thought and experience can be in creative tension with the work of researchers.

Related Items of Interest:

I. The references in this month's article are a fine selection for further reading. Of particular interest, however, may be the following two that are noted [--see p. 2] regarding the effectiveness of chaplains in helping patients with anxiety and spiritual distress.

> Bay, P. S., Beckman, D., Trippi, J., Gunderman, R. and Terry, C. "**The effect of pastoral care services on anxiety, depression, hope, religious coping, and religious problem solving styles: a randomized controlled study**." *Journal of Religion and*

Health 47, no. 1 (March 2008): 57-69. [(Abstract:) This randomized controlled study measured the effect of chaplain interventions on coronary artery bypass graft (CABG) patients over time. One hundred sixty-six CABG patients, received pre- and post-surgery testing at 1 month and 6 months with four instruments. Five chaplain visits were made to the intervention group, the control group received none. Comparison scores for anxiety, depression, hope, positive and negative religious coping, and religious coping styles were analyzed. Significant difference was found between groups in positive religious coping (PRC) ($p = .023$) and negative religious coping (NRC) ($p = .046$) scores over time. PRC increased in intervention group, decreased in the control group while NRC decreased in intervention group and increased in the control group. Demographics were comparable between groups. Moderate chaplain visits (average total visits time, 44 min) may be effective in helping CABG patients increase positive religious coping and decrease negative religious coping.] This article was featured as our March 2009 Article of the Month.

Iler, W. L., Obenshain, D. and Camac, M. "**The impact of daily visits from chaplains on patients with Chronic Obstructive Pulmonary Disease (COPD): a pilot study**." *Chaplaincy Today* 17, no. 1 (Summer 2001): 5–11. This study is available online from the Association for Professional Chaplains. [(Abstract:) This study presents empirical data obtained from COPD patients showing the relationship between daily visits from the chaplain and several measured variables: anxiety level at time of discharge, length of stay, overall satisfaction with stay, and willingness to recommend the hospital to others. These data are contrasted to the data obtained from patients who did not receive daily visits from the chaplain as well as those who refused to participate in the study.]

II. Also of special interest among the citations of this month's article are these two, which support an argument that "spiritual care, like that provided by chaplains, may affect end-of-life decision-making". [p. 2]:

Balboni, T., Balboni, M., Paulk, M. E., Phelps, A., Wright, A., Peteet, J., Block, S., Lathan, C., VanderWeele, T., and Prigerson, H. "**Support of cancer patients' spiritual needs and associations with medical care costs at the end of life**." *Cancer* 117, no. 23 (December 1, 2011): 5383-5391. [(Abstract:) BACKGROUND: Although spiritual care is associated with less aggressive medical care at the end of life (EOL), it remains infrequent. It is unclear if the omission of spiritual care impacts EOL costs. METHODS: A prospective, multisite study of 339 advanced cancer patients accrued subjects from September 2002 to August 2007 from an outpatient setting and followed them until death. Spiritual care was measured by patients' reports that the health care team supported their religious/spiritual needs. EOL costs in the last week were compared among patients reporting that their spiritual needs were inadequately supported versus those who reported that their needs were well supported. Analyses were adjusted for confounders (eg, EOL discussions). RESULTS: Patients reporting that their religious/spiritual needs were inadequately supported by clinic staff were less likely to receive a week or more of hospice (54% vs 72.8%; P = .01) and more likely to die in an intensive care unit (ICU) (5.1% vs 1.0%, P = .03). Among minorities and high religious coping patients, those reporting poorly supported religious/spiritual needs received more ICU care (11.3% vs 1.2%, P = .03 and 13.1% vs 1.6%, P = .02, respectively), received less hospice (43.% vs 75.3% >=1 week of hospice, P = .01 and 45.3% vs 73.1%, P = .007, respectively), and had increased ICU deaths (11.2% vs 1.2%, P = .03 and 7.7% vs 0.6%, P = .009, respectively). EOL costs were higher when patients reported that their spiritual needs were inadequately supported ($4947 vs $2833, P = .03), particularly among minorities ($6533 vs $2276, P = .02) and high

religious copers ($6344 vs $2431, P = .005). CONCLUSIONS: Cancer patients reporting that their spiritual needs are not well supported by the health care team have higher EOL costs, particularly among minorities and high religious coping patients.] This article was featured as our June 2011 Article of the Month.

Balboni, T. A, Paulk, M. E., Balboni, M. J., Phelps, A. C., Loggers, E. T., Wright, A. A., Block, S. D., Lewis, E. F., Peteet, J. R. and Prigerson, H. G. "**Provision of spiritual care to patients with advanced cancer: associations with medical care and quality of life near death**." *Journal of Clinical Oncology*, 28, no. 3 (January 20, 2010): 445-452. [(Abstract:) PURPOSE: To determine whether spiritual care from the medical team impacts medical care received and quality of life (QoL) at the end of life (EoL) and to examine these relationships according to patient religious coping. PATIENTS AND METHODS: Prospective, multisite study of patients with advanced cancer from September 2002 through August 2008. We interviewed 343 patients at baseline and observed them (median, 116 days) until death. Spiritual care was defined by patient-rated support of spiritual needs by the medical team and receipt of pastoral care services. The Brief Religious Coping Scale (RCOPE) assessed positive religious coping. EoL outcomes included patient QoL and receipt of hospice and any aggressive care (eg, resuscitation). Analyses were adjusted for potential confounders and repeated according to median-split religious coping. RESULTS: Patients whose spiritual needs were largely or completely supported by the medical team received more hospice care in comparison with those not supported (adjusted odds ratio [AOR] = 3.53; 95% CI, 1.53 to 8.12, P = .003). High religious coping patients whose spiritual needs were largely or completely supported were more likely to receive hospice (AOR = 4.93; 95% CI, 1.64 to 14.80; P = .004) and less likely to receive aggressive care (AOR = 0.18; 95% CI, 0.04 to 0.79; P = .02) in comparison with those not supported. Spiritual support from the medical team and pastoral care visits were associated with higher QOL scores near death (20.0 [95% CI, 18.9 to 21.1] v 17.3 [95% CI, 15.9 to 18.8], P = .007; and 20.4 [95% CI, 19.2 to 21.1] v 17.7 [95% CI, 16.5 to 18.9], P = .003, respectively). CONCLUSION: Support of terminally ill patients' spiritual needs by the medical team is associated with greater hospice utilization and, among high religious copers, less aggressive care at EoL. Spiritual care is associated with better patient QoL near death.] This article was featured as our January 2010 Article of the Month.

III. The Dartmouth Atlas of Health Care (http://www.dartmouthatlas.org) used in this month's study to ascertain statistics on in-hospital mortality and referral to home hospice, is a product of the Dartmouth Institute for Health Policy and Clinical Practice (http://tdi.dartmouth.edu). The Atlas uses Medicare data and "[f]or more than 20 years...has documented glaring variations in how medical resources are distributed and used in the United States" [Atlas website home page, accessed 9/10/12]. While this resource does not address religious/spiritual issues, it may still appeal to the wider interests of some chaplains.
