April 2009 Article of the Month

This month's article selection is by Chaplain John Ehman,
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Phelps, A. C., Maciejewski, P. K., Nilsson, M., Balboni, T. A., Wright, A. A., Paulk, E. M., Trice, E., Schrag, D., Peteet, J. R., Block, S. D. and Prigerson, H. G. "**Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer**." *JAMA* 301, no. 11 (March 18, 2009): 1140-1147.

COMMENT and SUMMARY: This month's research article has received a good deal of press attention lately, probably because it relates to the subject of the utilization of health care resources (though it does not address this directly) and because it carries the imprimatur of the *Journal of the American Medical Association*. The study may well endure in discourse about spirituality & health, and chaplains may be asked about it. However, the summaries of the article in the popular press have seemed -- to this reader -- to contain some mischaracterizations of the study's findings. Press accounts tended to assert that the study found that *religiousness* was associated with greater utilization of life-sustaining treatment. This could have been prompted by a particular line in the article commenting that the results "...suggest that relying upon religion to cope with terminal cancer may contribute to receiving aggressive medical care near death" [p. 1145]. Nevertheless, what the study *does* find is an association between "positive religious coping" (as identified through the Brief RCOPE measure) and intensive life-prolonging care near the time of death in a predominantly Christian sample of patients with advanced cancer.

This research analyzed data from 345 participants who were recruited as part of a larger study of patients with advanced lung, colon, breast, pancreatic and other cancers; and who died a median of 122 days after their baseline assessment for this study. Among the characteristics of these patients:

> A total of 272 patients (78.8%) reported that religion helps them cope "to a moderate extent" or more and 109 (31.6%) endorsed the statement that "it is the most important thing that keeps you going." Most patients (n = 193; 55.9%) endorsed engaging in times of prayer, meditation, or religious study at least daily. [p. 1143]

Patients completed the 14-item Brief RCOPE, a measure which seeks to identify "positive" and "negative" types of coping involving religion. [For more on the Brief RCOPE, see Related Items of Interest, below.] It is important to note that "positive and negative religious coping are not mutually exclusive" [p. 1141] -- individuals can exhibit both. The authors chose to focus on positive religious coping, in particular, as the "primary religious coping variable" [p. 1142], and they assessed the level of such coping in terms of whether patients scored above or below the median on the Brief RCOPE's positive religious coping scale.

Among the findings:

> In analyses adjusted for demographic confounders, a high level of positive religious coping at baseline was significantly associated with receipt of mechanical ventilation compared with patients with a low level...and intensive life-prolonging care…in the last week of life. The associations between positive religious coping and cardiopulmonary resuscitation..., death in the intensive care unit..., and hospice care enrollment...were nonsignificant after adjusting for age and ethnicity.... [pp. 1143-1144]
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> A high level of positive religious coping was significantly associated with use of negative religious coping compared with patients with a low level...and active coping..., a greater acknowledgment of terminal illness..., and a greater support of spiritual needs.... A high level of positive religious coping was significantly associated with preferring heroic measures compared with patients with a low level…and was associated with less advance care planning in all forms: do-not-resuscitate..., living will..., and health care proxy/durable power of attorney.... [p. 1144]
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> This study demonstrates that most patients with advanced cancer rely on religion to cope with their illness and that greater use of positive religious coping is associated with the receipt of intensive life-prolonging medical care near death. This association was not attributable to other predictors of aggressive end-of-life care established in the literature, and remained after controlling for advance care planning and other potential psychosocial confounders.... [pp. 1144-1145]
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> The increased rate of intensive life-prolonging care among religious copers was…not mediated by baseline preference for aggressive care, suggesting a more complex relationship between religious coping and end-of-life care outcomes. Religious coping may influence medical decision making rather than directly affecting treatment preferences or orientation toward care. [p. 1145]

The researchers caution, however:

> Our findings should not be misinterpreted as denying the experience of many patients who find peaceful acceptance of death and pursue comfort-centered care because of their religious faith. Although religious coping is a theoretically appealing measure of functional religiousness, we cannot say that positive religious coping rather than other religious factors (e.g., religiously based morals) completely accounts for the associations observed. [p. 1146]

For these authors, their work stands out as "the first study to examine the influence of any religious factor on medical care received near death, and it is novel in demonstrating that positive religious coping is associated with receipt of aggressive end-of-life care" [p. 1145]; and their results "highlight the need for clinicians to recognize and be sensitive to the influence of religious coping on medical decisions and goals of care at the end of life" [p. 1145]. Chaplains should note especially the suggestion: "When appropriate, clinicians might include chaplains or other trained professionals (e.g., liaison psychiatrists) to inquire about religious coping during family meetings while the patient is in an intensive care unit and [about] end-of-life discussions occurring earlier in the disease course" [p. 1145].

This is clearly an important study, and it uses a valuable measure (the Brief RCOPE), but for this reader, it deserves several cautions be kept in mind. First, the population was predominantly Christian --a caution addressed explicitly by the authors (see esp. p. 1146). Since coping is a multidimensional concept connected to a complex of variables, generalization of the present study's findings, especially beyond a Christian population, appears highly risky. Second, the conceptualizations of "positive" and "negative" religious coping are here functions of a particular instrument, and while the Brief RCOPE has received a good deal of psychometric testing, it is not above challenge. Indeed, from various *theological* perspectives, its implicit evaluation of what is marked as "positive" or "negative" may well be disputed. And third, this study's focus on positive religious coping leaves open questions about the relevance of negative religious coping. The authors describe negative religious coping as "uncommon" [p. 1140 and 1142], but that is not to assert that it is insignificant, and it could even be a phenomenon that is not fully captured by the measure at hand. The findings here about positive religious coping should not be read as a dismissal of the potential effects of negative religious coping, nor understood as a presentation of a simpler view of religious coping than is assumed by the Brief RCOPE. After

all, 43% of the study's population endorsed at least one negative religious coping item on the Brief RCOPE [see p. 1142].

Given the recent press about the article, and the gravity of any study published in *JAMA*, chaplains are encouraged to read this research carefully. For chaplain researchers, the high-profile use of the Brief RCOPE here is another major reason to explore this instrument for use in spirituality studies.

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

Some CPE students may find that, in spite of the article's clear organization, it may be somewhat difficult to read. The authors at points appear to blur differences between the specific concept of "positive religious coping" and the broader one of "religious coping," and while the tables present a great amount of information, it is information that tends to require knowledge of statistics. Also, students may become confused by the differentiation between high and low positive religious coping, which is *not* a differentiation between positive and negative religious coping. However, if students are offered some preparation around the concepts of positive and negative religious coping, the article should be very manageable. This study obviously evokes issues of connections between patients' religious beliefs/views/culture and end-of-life care, and students may want to examine their own assumptions and experiences about this. They may also want to debate the general idea of positive/negative religious coping. Since the authors suggest to clinicians that chaplains may play a role in inquiring about religious coping during family meetings, discussion could delve into just how that sort of pastoral intervention might occur.

Related Items of Interest:

I. The authors of our featured article note that the Brief RCOPE "assesses 14 methods of coping" [p. 1142], addressing the "extent to which patients engage in 7 types of positive religious coping…and 7 types of negative religious coping" [p. 1141]. The items of this measure are taken from a longer RCOPE instrument, which is described in detail by Kenneth I. Pargament, Harold G. Koenig, and Lisa M. Perez in "**The many methods of religious coping: development and initial validation of the RCOPE**" [*Journal of Clinical Psychology* 56, no. 4 (April 2000): 519-543]. For a tabular summary of 12 religious coping methods (*not* 14 methods) and 5 key religious functions upon which the 14 items of the Brief RCOPE are said to be based, click **HERE**.

II. Much of the popularity of the Brief RCOPE in spirituality & health research may be attributable to the following two highly influential articles that report separate analyses of a single project:

> Pargament, K. I., Koenig, H. G., Tarakeshwar, N. and Hahn, J. "**Religious coping methods as predictors of psychological, physical and spiritual outcomes among medically ill elderly patients: a two-year longitudinal study**." *Journal of Health Psychology* 9, no. 6 (November 2004): 713-730. [(Abstract:) A total of 268 medically ill, elderly, hospitalized patients responded to measures of religious coping and spiritual, psychological and physical functioning at baseline and follow-up two years later. After controlling for relevant variables, religious coping was significantly predictive of spiritual outcome, and changes in mental and physical health. Generally, positive methods of religious coping (e.g. seeking spiritual support, benevolent religious reappraisals) were associated with improvements in health. Negative methods of religious coping (e.g. punishing God reappraisal, interpersonal religious discontent) were predictive of declines in health. Patients who continue to struggle with religious issues over time may be particularly at risk for health-related problems.]

Pargament, K. I., Koenig, H. G., Tarakeshwar, N. and Hahn, J. "**Religious struggle as a predictor of mortality among medically ill elderly patients: a two-year longitudinal study**." *Archives of Internal Medicine*161, no. 15 (August 13-17, 2001): 1881-1885. [BACKGROUND: Although church attendance has been associated with a reduced risk of mortality, no study has examined the impact of religious struggle with an illness on mortality. OBJECTIVE: To investigate longitudinally the relationship between religious struggle with an illness and mortality. METHODS: A longitudinal cohort study from 1996 to 1997 was conducted to assess positive religious coping and religious struggle, and demographic, physical health, and mental health measures at baseline as control variables. Mortality during the 2-year period was the main outcome measure. Participants were 596 patients aged 55 years or older on the medical inpatient services of Duke University Medical Center or the Durham Veterans Affairs Medical Center, Durham, NC. RESULTS: After controlling for the demographic, physical health, and mental health variables, higher religious struggle scores at baseline were predictive of greater risk of mortality (risk ratio [RR] for death, 1.06; 95% confidence interval [CI], 1.01-1.11; chi(2) = 5.89; P =.02). Two spiritual discontent items and 1 demonic reappraisal item from the religious coping measure were predictive of increased risk for mortality: "Wondered whether God had abandoned me" (RR for death, 1.28; 95% CI, 1.07-1.50; chi(2) = 5.22; P =.02), "Questioned God's love for me" (RR for death, 1.22; 95% CI, 1.02-1.43; chi(2) = 3.69; P =.05), and "Decided the devil made this happen" (RR for death, 1.19; 95% CI, 1.05-1.33; chi(2) = 5.84; P =.02). CONCLUSIONS: Certain forms of religiousness may increase the risk of death. Elderly ill men and women who experience a religious struggle with their illness appear to be at increased risk of death, even after controlling for baseline health, mental health status, and demographic factors.]

III. For studies using the Brief RCOPE that were carried out in part by chaplains, see:

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 (2008): 57-69. [For a summary, see the March 2009 Article-of-the-Month.]

Fitchett, G., Murphy, P. E., Kim, J., Gibbons, J. L., Cameron, J. R. and Davis, J. A. "**Religious struggle: prevalence, correlates and mental health risks in diabetic, congestive heart failure, and oncology patients**." *International Journal of Psychiatry in Medicine* 34, no. 2 (2004): 179-196. [For a summary, see the November 2004 Article-of-the-Month.]

Fitchett, G., Rybarczyk, B. D., DeMarco, G. A. and Nicholas, J. J. "**The role of religion in medical rehabilitation outcomes: a longitudinal study**." *Rehabilitation Psychology* 44, no. 4 (November 1999): 333-353. [(Abstract:) Objective: To investigate the protective and consolation models of the relationship between religion and health outcomes in medical rehabilitation patients. Design: Longitudinal study, data collected at admission, discharge, and 4 months postadmission. Measures: Religion measures were public and private religiosity, acceptance, positive and negative religious coping, and spiritual injury. Outcomes were self-report of activities of daily living (ADL), mobility, general health, depression, and life satisfaction. Participants: 96 medical rehabilitation inpatients; diagnoses included joint replacement, amputation, stroke, and other conditions. Results: The protective model of the relationship between religion and health was not supported; only limited support was found for the consolation model. In regression analyses, negative religious coping accounted for significant variance in follow-up ADL (5%) over and above that accounted for by admission ADL, depression, social support, and demographic variables. Subsequent item analysis indicated that anger with God explained more variance (9%) than the full negative religious coping scale. Conclusions: Religion did not promote better recovery or adjustment, although it may have been a source of consolation for some patients who had limited recovery. Negative religious coping compromised ADL recovery. Although anger with God was rare, it may be useful in screening for patients who are spiritually at risk for poor recovery.]

IV. For articles that look at religious coping vis-à-vis non-religious coping, using the *larger* RCOPE measure, see:

Burker, E. J., Evon, D. M., Sedway, J. A. and Egan, T. "**Religious and non-religious coping in lung transplant candidates: Does adding God to the picture tell us more?**" *Journal of Behavioral Medicine* 28, no. 6 (December 2005): 513-526. [For a summary, see the January 2006 Article-of-the-Month.]

Koenig, H G., Pargament, K I. and Nielsen, J. "**Religious coping and health status in medically ill hospitalized older adults**." *Journal of Nervous and Mental Disease* 186, no. 9 (September 1998): 513-521. [(Abstract:) Associations between specific religious coping (RC) behaviors and health status in medically ill hospitalized older patients were examined and compared with associations between nonreligious coping (NRC) behaviors and health status. The sample consisted of 577 patients age 55 or over consecutively admitted to the general medical inpatient services of Duke University Medical Center (78%) or the Durham VA Medical Center (22%). Information was gathered on 21 types of RC, 11 types of NRC, and 3 global indicators of religious activity (GIRA). Health measures included multiple domains of physical health, depressive symptoms, quality of life, stress-related growth, cooperativeness, and spiritual growth. Demographic factors, education, and admitting hospital were control variables. "Negative" and "positive" types of religious coping were identified. Negative RC behaviors related to poorer physical health, worse quality of life, and greater depression were reappraisals of God as punishing, reappraisals involving demonic forces, pleading for direct intercession, and expression of spiritual discontent. Coping that was self-directed (excluding God's help) or involved expressions reflecting negative attitudes toward God, clergy, or church members were also related to greater depression and poorer quality of life. Positive RC behaviors related to better mental health were reappraisal of God as benevolent, collaboration with God, seeking a connection with God, seeking support from clergy/church members, and giving religious help to others. Of 21 RC behaviors, 16 were positively related to stress-related growth, 15 were related to greater cooperativeness, and 16 were related to greater spiritual growth. These relationships were both more frequent and stronger than those found for NRC behaviors. Certain types of RC are more strongly related to better health status than other RC types. Associations between RC behaviors and mental health status are at least as strong, if not stronger, than those observed with NRC behaviors.]

VandeCreek, L., Paget, S., Horton, R., Robbins, L. Oettinger, M. and Tai, K. "**Religious and non-religious coping methods among persons with rheumatoid arthritis**." *Arthritis and Rheumatism* 51, no. 1 (February 15, 2004): 49-55. [For a summary, see the April 2004 Article-of-the-Month.]
