## **Virtual Mentor**

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Journal Discussion Clinical Issues and the Empirical Dimensions of the Religion and Health Connection

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Sloan RP, Bagiella E, VandeCreek L, et al. Should physicians prescribe religious activities? *N Engl J Med.* 2000;342:1913-1916.

Koenig HG, Idler E, Kasl S, et al. Editorial: religion, spirituality, and medicine: a rebuttal to skeptics. *Int J Psychiatry Med.* 1999;29:123-131.

McCullough ME, Larson DB, Hoyt WT, Koenig HG, Thoresen C. Religious involvement and mortality: a meta-analytic review. *Health Psychol.* 2000; 19: 211-222.

Religious beliefs and spirituality are situated often in the most private spheres of our lives. At the same time, religion and spirituality pervade many public dimensions, including that of health. Studies that combine these deeply held beliefs with health capture public attention because of the ramifications that they may hold for the health profession and patients. Not surprisingly then, controversy accompanies these studies. This journal discussion explores some of the clinical, empirical, and religious issues that surround an inquiry into a faith-health connection.

Consider a meta-analysis conducted by Michael McCullough et al [1] that concluded "religious involvement was significantly associated with lower mortality, indicating that people with high religious involvement were more likely to be alive at follow-up than people with lower religious involvement" [2]. Richard Sloan and Emilia Bagiella replied to this conclusion that, controlled for relevant covariates, the data analyzed by McCullough et al suggested a statistically *nonsignificant* relationship between religious involvement and mortality [3]. In response, McCullough et al argued back that one of the most important findings from their research was that a religious involvement—mortality *association* persisted despite the researchers' attempt to eliminate it by controlling for covariates rendering the association statistically nonsignificant [4].

# **Data Interpretation**

As demonstrated by the exchange cited in the preceding paragraph, data from studies that explore religion and health raise questions of interpretation and application. From a statistical perspective, interpretation and study design need acute consideration. For example, the criterion validity of variants of "religiosity" is often a concern for researchers and their critics at the outset of a study. Effect modifiers pose additional complexities for understanding a religion-health connection. Demographic, behavioral, and psychosocial variables such as age, gender, race, physical activity, coping mechanisms, and income status are possible effect modifiers of a religion-health association that can, when included in a multivariate regression model, leave a religion-

health association nonsignificant. To what degree religious involvement and practice are mediating factors between exposure to illness and a particular health outcome represents one of the central questions for more research.

The variable of "religious involvement" includes actions such as prayer and attendance at religious services. Recall bias (survey respondents' selective memory or forgetfulness in answering retrospective questions) and social desirability bias (response given based on respondent's perception of a socially desirable answer) are frequent problems in many types of survey-based studies, and they make it more difficult to draw conclusions from these studies. Difficulties also arise in measuring and explaining how religion and health may be associated, given the diversity of religious experience and variables that shape it. Gordon Allport refers to the distinctions of "extrinsic" and "intrinsic" religiosity [5], the former referring to the personal motivation to practice religious activities as a means to attaining another good, eg, health. Conversely, "intrinsic religiosity" refers to a personal engagement in religious activities out of beliefs and concerns in themselves, rather than as a means for a desirable worldly benefit. Given new studies and media involvement in projecting the issue, it is plausible that a combination of these ideas may be in flux in a religious person's life. Despite pressing concerns for research and data analysis for a statistical association between religion and health, there are many physiological and psychological research studies and experiments that have produced fascinating observations relating them. Emotions associated with, but not limited to, spirituality, religious activity, and belief likely confer health benefits as many scientists have noted [6]. The physiological pathways involved with these activities promote responses that mediate and reduce stress. While their precise causal mechanisms remain unknown, the elucidation of these pathways poses exciting new questions for further research.

## **Clinical Application**

If reliable research suggests an association between religion and health, then studying how clinicians approach and use this empirical data in patient care requires the utmost attention. In the clinical area, there is wide disagreement as to the level and type of role, if any, physicians should take in discussing possible health benefits associated with religious involvement with patients based on currently available data. Sloan et al argue, for example, that current physician efforts to integrate religious interests into medical practice are not as well justified or as simple as the literature suggests [7]. To them, religious attendance is the only variable of religious involvement that *may* suggest a significant religion-health association. Other researchers argue, on the contrary, that some studies that incorporate variables such as prayer and denominational affiliation may suggest a strong religion-health association as well. Koenig et al [8] articulate the current fundamental divide among researchers in this area:

We all agree that physicians should "take account of" their patients' religious beliefs, but then so do Sloan et al. We differ among ourselves about whether physicians should or can effectively take the lead in providing spiritual guidance to patients. Nevertheless, we are strongly convinced, as Sloan et al are not, that the evidence regarding religion

and health, while still emerging, is neither weak nor inconsistent, and that religion is a factor that should not be overlooked in the describing influences on the health of populations [9].

At least 2 questions, then, stand out in this ongoing debate on the health benefits of religion. First, does empirical data suggest a relationship between religion and health? Second, if so, should physicians prescribe or engage in a therapeutic discussion about religious practices and beliefs with patients?

Answering either of these questions ultimately lies beyond the scope of this particular journal discussion. However, answering the question of what is at stake for medicine and religion in clinical discussions of religion is not. Studies that suggest greater health benefits of one religion or denomination compared to another are ripe for social critique. Since scientific research does not occur in a vacuum, warranted or not, the idea of "healthy" religions troubles many religious and nonreligious persons alike. Studies that seek to test the efficacy of prayer or meditation may be informative, even useful, on some level, but taken in social context, these "results" pose potentially polemic consequences. This does not necessarily suggest that studies in this field should not be conducted, but rather, that conclusions drawn from them must be interdisciplinary and extremely sensitive in their approach.

Should physicians *prescribe* religion or religious behavior? Should they educate patients on the relationship between them? Joel Shuman and Keith Meador contend, "In spite of what empirical studies show about the correlation between religion and health, it is from the perspective of faithful Christian discipleship fundamentally wrongheaded to suggest—as our colleagues sometimes seem to do—that religious belief or behavior are in some sense the efficient *cause* of better health" [10]. They go on to argue that today's religious medicine is transforming itself more into a product of a North American consumerist ethos yearning for the commodity of individual health rather than a mutual concern for the care of the sick and suffering intrinsic to many religious traditions. This argument suggests that clinical care based on a religion-health association may be theologically suspect in some of its dimensions, if not suspect on clinical grounds already.

The articles referenced here highlight difficulties in the interpretation of data relevant to religion, spirituality, and health. Today's American popular culture shows no dearth of references to connections between faith and health. Religion and medicine can and have complemented one another in important ways in areas such as end-of-life care, coping with illness, and behavior modifications [11]. However, once religion is seen as a *means for achieving* (eg, a prescription for) health rather than as an end in and of itself, all involved parties may have much to be concerned about, as Sloan et al point out [7]. Innovative clinical practice and the unique shaping of religious identity in contemporary society will require reflection, further scrupulous research, and ongoing dialogue over religion and its association with health in order to best understand its applicability to the clinical encounter.

#### **Questions for Discussion**

- 1. Some physicians and patients incorporate religious expression in the clinical encounter. For example, some physicians and patients with concordant beliefs pray together. Is there an ethical difference between *engaging* in religious rituals and activities with patients and *prescribing* religious rituals and activities? If so, what are some of the potential strengths and weaknesses of either in the clinical encounter?
- 2. Some physicians take religious and spirituality histories as part of new patient histories. What may be some appropriate or inappropriate uses of information obtained from these histories?
- 3. Patients and physicians may encounter situations were discordant religious or spiritual beliefs become known. At what points in the clinical encounter can conflict arise between patient and physician beliefs? How might physicians respond in a way that respects patient beliefs when discordance appears to be a problem?

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