

## Spirituality and Religion in Mental Health: A Concise Review of the Evidence

by James Lake, MD

**B**iological theories of brain function are widely accepted as adequate explanations of normal mental functioning and of the causes of mental illness by professionals and a growing number of patients. Just as science eliminated “spirit” and “vital energy” from its discourse, the role of spirituality and religion has increasingly been marginalized in biomedicine. In the context of the tension between the orthodox view and non-allopathic explanations of health and healing, it is important to carefully evaluate all efficacy claims. The range of non-allopathic therapies includes natural

products, somatic therapies, and mind-body therapies, as well as treatment approaches that have historically been outside the conceptual framework of modern medicine and psychiatry, such as religious or spiritual beliefs and practices—prayer or other forms of “directed intention” or “energy.”

Physicians are prudent to remain cautious when they are evaluating all claims of beneficial health effects associated with treatment approaches that are widely used but are not substantiated by good science. Examples include several complementary and alternative medicine (CAM) therapies used to treat or self-treat medical and mental health problems in the absence of

evidence from large, well-designed studies. Off-label uses of psychotropic medications that have not been evaluated in large, well-designed, placebo-controlled trials are another example of medical practices that are not supported by research.

This article is offered as a concise review of the literature on the relationships between religion, spirituality, and mental health. Although the evidence thus far has not been compelling, emerging research findings suggest that spirituality and religion are in fact related to well-being at multiple levels and may play important roles in both the prevention and the treatment of mental illness.



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### FACULTY

James Lake, MD, is Chair of the International Network of Integrative Mental Health ([www.INIMH.org](http://www.INIMH.org)) and is in private practice on the California central coast. INIMH is a non-profit organization dedicated to advancing a global agenda for integrative mental health care through education, research, networking, and advocacy.

### DISCLOSURES

Dr Lake has no relationships to disclose relating to the subject matter of this article.

Applicable CME LLC staff have no relationships to disclose relating to the subject matter of this activity.

This activity has been independently reviewed for balance.

### TARGET AUDIENCE

This continuing medical education activity is intended for psychiatrists, psychologists, primary care physicians, physician assistants, nurse practitioners, and other health care professionals who seek to improve their care for patients with mental health disorders.

### GOAL STATEMENT

This activity will provide participants with a better understanding of the role that religion and spirituality play in psychiatric illness, practice, and health outcomes.

### ESTIMATED TIME TO COMPLETE

The activity in its entirety should take approximately 90 minutes to complete.

### LEARNING OBJECTIVES

After completing this activity, participants should be able to:

- Understand the role of religion and spirituality in disease-specific states such as anxiety and depression
- Recognize the uses for “neurophysiology of prayer” and its effects on treatment
- Recognize the effects of religion and spirituality on psychiatric illnesses such as bipolar disorder, schizophrenia, and substance abuse disorders
- Better understand how religion and spirituality affect overall well-being

### COMPLIANCE STATEMENT

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## The relevance of religion and spirituality to mental health

Until historically recent times, priests and other spiritual adepts were regarded as healers, and gifted healers were elevated to the status of priest, or shaman. By the early 20th century, psychoanalysis had pathologized or outright dismissed the psychological dimensions of spiritual experience and the relevance of spirituality in mental health.

While conventional biomedicine does not acknowledge the direct role of spirituality in health, many cultural practices and traditions (eg, Chinese medicine, Ayurveda, Tibetan medicine) assume that spirituality is centrally involved in health. Symptoms are interpreted as indicators of imbalances of postulated fundamental *energetic principles*. In these healing traditions, the causes of symptoms—including those of mental illness—are not reduced to discrete physiological changes in immune function, neurotransmitter function, or other biological indicators of illness.

*Elderly depressed patients who participated in an organized religious activity were found to have fewer and less severe symptoms and were less likely to commit suicide.*

Examining the relationships between religion, spirituality, and health does not require endorsing any philosophical assumptions about the ontological reality of God or the spiritual realm. Rather, investigators use established research methods to determine whether measures of religious or spiritual beliefs or behaviors are associated with beneficial changes in health.<sup>1</sup>

Definitions of religiosity and spirituality have been debated for decades. Harold Koenig,<sup>2</sup> a leading contemporary researcher on religion and health, has offered the following definitions:

Religion is an organized system of beliefs, practices, rituals, and symbols designed to facilitate closeness to the sacred or transcendent (God, higher power, or ultimate truth/reality).

Spirituality is the personal quest for understanding answers to the ultimate questions about life, about meaning, and about relationship with the sacred or transcendent, which may (or may not) lead to or arise from the development of religious rituals and the formation of a community.

Almost 90% of Americans describe themselves as religious or spiritual, and only 7% said that spirituality is not important at all in their daily lives.<sup>3</sup> Physicians are not a homogeneous group with respect to religious and spiritual be-

liefs. Psychiatrists are more likely than other physicians to endorse positive influences of religious involvement or spirituality on health in general; however, they are also more likely to acknowledge possible negative consequences of religious involvement and spirituality on mental health (82% vs 44%).<sup>4</sup>

The majority of physicians believe that religious involvement and spirituality often help patients cope with illness and give patients a hopeful state of mind. Most psychiatrists (3 of 4) believe that religious involvement and spirituality have positive influences on health. This is consistent with the finding that psychiatrists are more likely to encounter religious or spiritual issues in the context of patient care and are comfortable addressing these issues when they arise in clinical encounters.<sup>5</sup>

Approximately half of psychiatrists and non-psychiatrists surveyed believe it is sometimes appropriate to talk about their religious beliefs or experiences with patients; however, very few

physicians disclose their religious or spiritual beliefs and experiences to patients. Finally, while a third of all physicians believe it is acceptable for physicians to pray with their patients, psychiatrists are significantly less likely than other physicians to pray with patients (6% vs 20%).<sup>5</sup>

The gap between psychiatry and religion may at least partly be a response to psychiatry's progress in elucidating the biological and psychological causes of mental illness, rendering religious explanations irrelevant.<sup>6</sup> Until recently, psychiatry has viewed religion in a negative light—it was associated with undesirable attributes, such as dependence and guilt. Psychiatrists and psychologists tend to be less religious or spiritual than their patients. A search of PubMed and other medical databases found that patients mention religion as an important factor in their lives roughly twice as often as psychiatrists.<sup>7</sup>

In contrast to psychiatry's long-standing neglect of religious and spiritual issues, recent research findings support beneficial effects of religious affiliation and spiritual beliefs on mental health. These findings provide legitimate reasons for psychiatry to reassess its traditionally negative or skeptical regard for this important dimension of human experience. Omitting considerations of patients' religious and spiritual beliefs from mental health care may have detrimental effects on coping and support systems that are important to emotional well-being and recovery from mental illness.<sup>8</sup>

A consensus panel of the American College of Physicians has recommended that physicians should know how to take an adequate spiritual history and should avoid imposing their religious or spiritual beliefs on patients. Patient requests for in-depth religious counseling should always be referred to trained clergy.

When asking about religious and spiritual beliefs, the psychiatrist is telling the patient that he or she is concerned with the whole person, not just a psychiatric diagnosis. Regarding the patient as a whole person will strengthen the patient-physician relationship and may have beneficial effects on treatment adherence and outcomes.

Survey findings suggest that patients and physicians have similar beliefs about the roles of religion and prayer in illness and health, but they express their beliefs differently. A *USA Today* poll of more than a thousand respondents found that almost 80% of patients believe that prayer can help people recover from illness.<sup>9</sup> About three-quarters of cancer patients who use CAM therapies believe in the efficacy of prayer for treatment of cancer.<sup>10</sup>

Only 11% of persons who pray in an effort to improve their health disclose this fact to their physicians. According to large patient surveys, over 75% of individuals who seek medical care for any reason feel that their religious or spiritual beliefs are directly related to their health concerns, while only 16% of physicians or nurses ever inquire about these important matters.<sup>11,12</sup>

A significant percentage of severely depressed or anxious individuals engage in prayer in efforts to address their mental health concerns. Approximately one-third believe that prayer is very helpful in improving symptoms; however, only 1 of 10 persons who use prayer to alleviate a mental health problem consults a psychiatrist or family physician for treatment.<sup>13</sup> In apparent contrast to these findings, over 90% of surveyed family physicians believed they were competent to address religious issues with patients. Furthermore, 37% disclosed that they had prayed with patients and of those, 9 of 10 believed that praying with patients had beneficial effects on a specific health problem.<sup>5</sup>

In response to growing interest in the role of spirituality in health care, medical school curricula now include lectures and courses on a range of issues pertaining to the relationship between religion, spirituality, and health. Koenig and colleagues<sup>14</sup> surveyed the deans of 122 US medical schools to examine their attitudes about the relevance of religion and spirituality to conventional medical education and to determine how these issues are currently addressed in medical school curricula. The results showed that 90% of medical schools offer a range of courses and lectures on various aspects of spirituality and health.

## Influences of religious involvement and spirituality on mental health

Complex social, psychological, and biological factors influence how religious practices or spiritual beliefs affect mental health. Most published studies have examined the effects of participation

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in group religious practices on physical and mental health. More than 3000 studies have examined relationships between religious involvement and health. The majority of these studies concluded that people who are more religiously or spiritually involved are healthier, lead healthier lifestyles, and require fewer health services.<sup>15</sup>

The magnitude of the beneficial effects of religious involvement on physical health and longevity approximates that of abstaining from smoking, with an increase in life expectancy of 7 to 14 years.<sup>16</sup> However, this does not imply that religious or spiritual practices should replace conventional biomedical therapies. The role of spirituality in health is more difficult to study because of the highly subjective and idiosyncratic nature of spiritual beliefs and experiences.<sup>17</sup>

Participation in group religious practices has both protective and health-promoting effects on mental health. Social and psychological benefits of religious involvement are achieved through regular contact with a supportive group in a safe and encouraging environment. Epidemiological studies suggest that religious beliefs have a primary protective effect on mental health.<sup>1</sup> Religious involvement promotes optimism, which increases resilience when coping with stressful situations.<sup>18</sup>

Religious and spiritual values are highly correlated with mental health-promoting lifestyle choices, including exercise, diet, and moderate alcohol use.<sup>19</sup> Regular involvement in religious activities has beneficial effects on general emotional well-being by providing a supportive network of like-minded believers during stressful periods, by offering a sense of coherence or meaning to enhance coping, and by enhancing self-confidence.<sup>20</sup>

In contrast to the positive findings of most studies, some evidence suggests that religious coping methods are sometimes maladaptive, and discouraging experiences can take place in contexts of organized religious activity. In such cases, religious involvement can be associated with an increased risk of mental health problems in at-risk populations.<sup>21,22</sup>

In addition to social, cultural, and psychological advantages of religious involvement and spiritual belief systems, there is emerging evidence that prayer and other forms of spiritual healing may have direct beneficial effects on health. A systematic review of 23 controlled trials of spiritual healing approaches reported beneficial outcomes almost 60% of the time when healing intention alone is used to treat a particular medical or psychiatric disorder.<sup>23</sup>

A significant percentage of severely depressed or anxious individuals engage in regular prayer in efforts to address their mental health problems, and approximately one-third believe that prayer is very helpful in improving their symptoms.<sup>23</sup> Significantly, the same survey findings suggest that only 10% of individuals who self-treat any mental health problem using prayer had approached a psychiatrist or family physician for treatment at any time during the previous year.<sup>11</sup>

## Influences of religious involvement on specific psychiatric disorders

Because most data on the relationship between religious practices and mental health come from epidemiological surveys or retrospective analyses, it is difficult to make strong arguments for direct beneficial effects of religious affiliation or spiritual practice on any particular psychiatric disorder. Furthermore, the prevalence of specific mental health problems is different in disparate religious groups.<sup>24</sup>

Relationships between religious beliefs or organized religious affiliations and specific psychiatric disorders are complex and difficult to delineate. Findings suggest that organized religious affiliation is generally associated with decreased risk of depressed mood, but private religious activities and some religious beliefs failed to predict lower risk.<sup>25</sup>

Findings from a survey of elderly men (N = 832) with medical problems suggest that cognitive, but not somatic, symptoms of depression are less severe in individuals who use religious coping.<sup>26</sup> Elderly depressed patients who participated in an organized religious activity were found to have fewer and less severe symptoms and were less likely to commit suicide.<sup>27</sup> Depressed medically hospitalized elderly patients who had strong religious beliefs were significantly more likely to have complete remission of mood symptoms than were those who did not hold strong religious or spiritual beliefs.<sup>28</sup> This effect was not related to frequency of participation in organized or private religious practices.

People who have strong religious or spiritual beliefs generally experience better mental health and adapt more successfully to stress.<sup>2</sup> A meta-analysis of 89 studies on religion and mental health showed that regular involvement in organized religious activity is associated with a relatively reduced risk of depressed mood.<sup>26</sup>

Recent studies have used factor analysis to deconstruct religiosity into discrete dimensions. In a survey of more than 3000 adolescent girls, 2 dimensions of religiosity—personal devotion and participation in a religious community—were correlated with moderately reduced risk of depression in non-mature adolescent girls and highly reduced risk (up to 43%) in more mature girls.<sup>29</sup>

Another study deconstructed religiosity into 7 specific factors: general religiosity, social religiosity, involved God, forgiveness, God as judge, unvengefulness, and thankfulness.<sup>30</sup> Social religiosity and thankfulness were associated with reduced risk of alcohol and substance abuse, antisocial behavior, MDD, generalized anxiety disorder, panic disorder, and bulimia. Four factors—general religiosity, involved God, forgiveness, and God as judge—predicted reduced risk of substance abuse and antisocial behavior, but not other major psychiatric disorders.

These findings are limited by the cross-sectional design of the study; thus, it is not possible to infer causal relationships between discrete factors of religiosity and specific psychiatric disorders. In a similar fashion, the results from MacLean and colleagues<sup>31</sup> showed that there is a relationship between spiritual well-being and alleviation of end-of-life despair.

Religious beliefs have been found to be associated with improved self-management of symptoms in patients with bipolar disorder.<sup>32</sup> Findings from the NIMH Epidemiologic Catchment Area survey (N = 2969) support the view that regular weekly attendance at religious services is associated with significantly lower incidences of most anxiety disorders, including agoraphobia, generalized anxiety disorder, and social phobia, in general, and a relatively higher incidence of obsessive-compulsive disorder in younger individuals with strong religious beliefs.<sup>33</sup>

Support groups built around shared spiritual themes have beneficial effects on self-esteem, quality of life, and community involvement in persons with schizophrenia.<sup>34</sup> Religious beliefs and practices are an important source of encouragement, social support, and insights into individuals who suffer from chronic severe mental illness, including schizophrenia.<sup>35</sup> However, while religious and spiritual beliefs or practices do not cause schizophrenia or other psychotic disorders, deeply held religious beliefs can potentially exacerbate delusions.<sup>36</sup>

Rates of alcohol and drug abuse are generally lower in groups that follow organized religious practices. Feelings of deep personal devotion and conservative religious values are correlated with a generally reduced risk of alcohol or substance abuse and dependence, and this relationship is somewhat stronger in adolescents than adults.<sup>37</sup> In recovering alcohol and narcotics abusers, 12-step programs that incorporate religious and spiritual values have a strong record of success in prolonging abstinence.<sup>38</sup>

## The role of prayer and other forms of healing intention

Theories have recently been put forward in efforts to explain the indirect and direct effects of prayer or other spiritual practices on mental health, both in individuals who pray and in a prayed-for person or group. Beneficial outcomes are reported almost 60% of the time when healing intention is employed alone to treat a medical or psychiatric disorder.<sup>23</sup> However, many studies are limited by serious methodological problems, including poor or absent blinding, data omitted from analysis, unreliable outcome measures, rare use of power estimations and confidence intervals, and the absence of independent replication.<sup>23</sup>

There is ongoing debate over the most appropriate research methodologies to use when evaluating nonconventional treatments. Some argue that conventional biomedical research standards should be applied to investigations of nonconventional modalities, while others contend that contemporary science cannot adequately elucidate postulated mechanisms of action underlying some nonconventional treatments, such as homeopathy, acupuncture, Reiki, and healing touch.<sup>39</sup>

d'Aquili and Newberg<sup>40,41</sup> have proposed the spiritual continuum model to explain the range of subjective mystical and religious experiences. They argue that the human capacity for spiritual experiences derives from complex neural connections that confer important evolutionary advantages on humans. According to d'Aquili and Newberg, individual or group prayer, meditation, and other forms of ritual contemplation are uni-

tary experiences that share common experiential and neurophysiological features. The kind and intensity of a spiritual experience is determined by the particular brain regions involved and the degree of shared activity between them. Findings of a positron emission tomography study are consistent with the hypothesis that high serotonin receptor binding correlates with a relatively greater capacity for self-transcendence.<sup>42</sup>

Treatment approaches used in Chinese medicine, Ayurveda, homeopathy, qigong, and Reiki (and other forms of “energy healing”) are premised on the pervasive influence of putative non-classic forms of energy or information on both the living and nonliving world. According to Chinese medical theory, “qi” is an elemental energy that cannot be adequately described in the language of contemporary science. Recent research findings suggest that “qi” may have characteristics that are consistent with the predictions of quantum field theory in complex living systems.<sup>43</sup>

Quantum brain dynamics (QBD) is a nonclassical model that invokes quantum field theory to explain observed dynamic characteristics of brain functioning. QBD may eventually help elucidate reports of beneficial effects of postulated “energy healing” on physical and mental health. It has been suggested that prayer and other forms of healing intention may operate through nonlocal “subtle” energetic or informational interactions between the consciousness of the medical practitioner and the physical body or consciousness of the patient.<sup>44</sup>

## Emerging findings suggest that prayer and other forms of healing intention may have beneficial therapeutic effects on specific psychiatric disorders.

Above-chance correlations in electrical brain activity between pairs of individuals separated by electromagnetic shielding who are instructed to “communicate” through intention may be consistent with the predictions of QBD and other emerging nonclassical theories of consciousness.<sup>45,46</sup> Functional MRI techniques showed a positive correlation between healing intention and changes in brain metabolic activity in patients who were empathically bonded with healers.<sup>47</sup> Recently proposed theories of consciousness that invoke quantum-level mechanisms are only beginning to characterize relationships between the quantum level of reality, biological processes, and human consciousness in ways that may permit laboratory studies on these important questions.<sup>48</sup>

Although there is a paucity of evidence for the efficacy of Reiki as a clinical treatment modality, it is an “energy therapy” widely used in Western countries to treat a range of medical and psychi-

atric disorders. A 6-week, double-blind, sham-controlled trial on distant Reiki in depressed patients, some of whom met DSM-IV criteria for MDD, reported significant beneficial effects of regular Reiki treatments using standardized mood rating scales.<sup>49</sup> A sham-controlled study found more beneficial effects for “stress and hopelessness” with Reiki (including distant Reiki) than with sham treatment. However, other studies included in the review found no differences between Reiki and sham treatment for anxiety or depressed mood in women undergoing breast biopsy.

The results from a study included in a Cochrane systematic review showed no significant differences in recovery following ischemic stroke in individuals treated with Reiki compared with sham. Study flaws included small sample size, inadequate study design, and poor reporting. Also, the beneficial effects of Reiki had not been replicated by independent researchers. The reviewers concluded there is insufficient evidence to support Reiki as an effective treatment of any condition, including psychiatric disorders.<sup>50</sup>

### Intercessory prayer for specific psychiatric disorders

Claims of beneficial effects of prayer on health have been studied from the perspective of the person who is praying and the person who is prayed for. Many religions and spiritual practices claim that prayer and other forms of healing intention affect health in beneficial ways; however, there is

little evidence to support these claims. A review of published randomized trials on all forms of intercessory prayer identified positive effects for some conditions but concluded that the evidence for intercessory prayer is equivocal.<sup>50</sup>

In a large, 12-week, randomized, controlled, double-blind study on intercessory prayer in depressed mood, all subjects knew that they were enrolled in the study but were not told whether they had been randomized to the group receiving prayer. Significant and equivalent improvements in mood were reported in both individuals who were prayed for (N = 496) and individuals who prayed (N = 90). Positive outcomes were highly correlated with subjects’ beliefs in the capacity of prayer to heal and in subjects’ beliefs that they were the recipients of prayer.<sup>51</sup>

These findings are consistent with a strong placebo or positive group effect of prayer in depressed mood but are limited by the fact that standardized rating scales were not used. A controlled

double-blind study on distant healing in depressed patients found no differences in response in patients who received intercessory prayer combined with antidepressants and those who received antidepressants alone.<sup>52</sup>

In a randomized double-blind study, patients who complained of transient anxiety after pituitary surgery were randomly assigned to either a prayer group or a wait list. Patients who were prayed for reported less postoperative anxiety in general and requested fewer pain medications than the wait-list patients.<sup>53</sup> The researchers attributed beneficial effects to suggestion and shared expectations. In a 6-month pilot study on intercessory prayer as a treatment for alcohol abuse (N = 40), no differences were found between patients who were prayed for and patients who were placed on a wait list.<sup>54</sup>

### Final thoughts

Physicians and patients have deeply shared values about religion and spirituality. Some survey results and research findings show that religion and spirituality have beneficial effects on general mental and emotional well-being. The potential therapeutic role of religious involvement and prayer with respect to specific psychiatric disorders is not clearly defined, and the research evidence for putative mechanisms for healing intention remains highly controversial. However, emerging findings suggest that prayer and other forms of healing intention may have beneficial therapeutic effects on specific psychiatric disorders. These findings invite open-minded discussion and debate on both the quality of emerging research evidence and the appropriate role of religion and spirituality in health care and mental health care.

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## CATEGORY 1 POSTTEST

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1. Which of the following largely ignores the role of religion and spirituality in health?
  - A. Chinese medicine
  - B. Tibetan medicine
  - C. Ayurveda
  - D. Biomedicine
2. Compared with psychiatrists, physicians in most other specialties are more likely to endorse positive influences of religious involvement or spirituality on health.
  - A. True
  - B. False
3. In general, psychiatrists are comfortable talking about religion with their patients as well as disclosing their religious affiliations to patients.
  - A. True
  - B. False
4. Human capacity for spirituality may derive from complex neural connections.
  - A. True
  - B. False
5. Which of the following factors influence how religious practices or spiritual beliefs affect mental health?
  - A. Social
  - B. Biological
  - C. Psychological
  - D. All of the above
  - E. None of the above
6. Spiritual healing practices have been found to promote beneficial outcomes almost \_\_\_\_\_ of the time.
  - A. 35%
  - B. 50%
  - C. 60%
  - D. 75%
7. Participation in an organized religious activity was found to promote better health outcomes with fewer symptoms, less severe symptoms, and a decreased risk of suicide in
  - A. Elderly depressed patients
  - B. Youths and adolescents with ADHD
  - C. Middle-aged women with bipolar disorder
  - D. None of the above
8. Which of the following factors predicted reduced risk of substance abuse and antisocial behavior?
  - A. Social religiosity
  - B. Unvengefulness
  - C. Thankfulness
  - D. All of the above
  - E. None of the above
9. In persons who use prayer to alleviate mental health concerns, how many are likely to consult a psychiatrist or family physician?
  - A. 1 of 3
  - B. 1 of 6
  - C. 1 of 10
  - D. 1 of 14
10. The beneficial effects for persons who are being prayed for are attributed to
  - A. The placebo effect
  - B. Suggestion
  - C. Shared expectations
  - D. All of the above
  - E. None of the above