

RELIGION AND MEDICINE I: HISTORICAL BACKGROUND AND REASONS FOR SEPARATION

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ABSTRACT

Religion and medicine have a long, intertwined, tumultuous history, going back thousands of years. Only within the past 200–300 years (less than 5 percent of recorded history) have these twin healing traditions been clearly separate. This series on religion and medicine begins with a historical review, proceeding from prehistoric times through ancient Egypt, Greece, and early Christianity through the Middle Ages, the Renaissance, and the Age of Enlightenment, when the split between religion and medicine became final and complete. Among the many reasons for the continued separation is that religion may either be simply irrelevant to health or, worse, that it may have a number of negative health effects. I review here both opinion and research supporting this claim.

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A hot debate exists today over whether religion has positive or negative effects on health, and whether physicians should or should not address religious issues in clinical practice [1, 2]. Understanding the relationship between religion and health is important for clinicians seeking to provide the best possible care for their patients. Whether physicians believe religion is relevant to health or not, it is likely

that their patients do. Gallup polls indicate that 96 percent of Americans believe in God, over 90 percent pray, 69 percent are church members, and 43 percent have attended religious services within the past week [3]. In fact, an index of leading religious indicators suggests that religious interest was higher in 1998 than it had been for the previous 13 years [4]. Religion is particularly important to certain subgroups of the population, such as ethnic minorities (African Americans, Hispanics, etc.), women, the elderly, and those with physical health problems. In 1999, while 95 percent of white Americans believed in God, 100 percent of African Americans did and 86 percent indicated that religion was very important in their lives [5].

It should not be surprising, then, that many patients utilize religious beliefs and practices in some way to help them understand or cope with the frightening experience of illness—illness that threatens who they are, who they will become, and for some, whether they will live or die. In a study of 372 consecutive medical patients admitted to a secular university teaching hospital in North Carolina, subjects were asked what the most important factor was that enabled them to cope with the stress [6]. More than 4 out of 10 (42 percent) spontaneously volunteered that it was religious faith. When asked a more direct question about the extent to which religion was used to cope with stress, nearly 90 percent indicated at least a moderate extent. While these figures may vary in different parts of the country, the differences are not as great as one might imagine. In another national survey conducted by the Gallup organization in the 1980s, Americans were asked whether they received personal comfort and support from religion [7]. The percentage of persons indicating comfort and support from religion varied by area of the country: 83 percent in the South, 83 percent in the Midwest, 72 percent in the East, and 70 percent in the West. Thus, the use of religion to help cope with medical illness—particularly when it is serious and out of the person's control—is probably widespread regardless of geographic location—at least in the United States.

Tremendous gains by medical science have allowed the stabilization or cure of many, many illnesses, and yet there continue to be many diseases for which relatively little can be done. Physicians are not well-prepared to deal with the patient's psychological experience of illness, particularly in situations where medical treatments are not working and both doctor and patient feel helpless against the relentless advance of disease. It is in such situations that religion has provided comfort and hope for millennia.

HISTORICAL REVIEW

Religion and medicine are no strangers. Throughout most of recorded history, the two have been strongly linked, only recently having separated. Until several hundred years ago, physical disease was understood largely in religious or spiritual terms. Artifacts from the prehistoric period in Egypt (6000–5000 BC) indicate that

mental and physical illnesses were not distinguished from one another, and both were believed to be caused by evil spirits, demon possession, or other spiritual forces [8]. Mesopotamian medicine between 3200–1025 BC involved a mixture of supernaturalistic and naturalistic paradigms, with treatments sometimes applied through spiritual practices and at other times through natural methods involving plant leaves, roots, and mixtures of animal parts [9]. In the Indus Valley civilization (2300–1700 BC), the early Hindu priest performed rituals of dancing, recited incantations, and used amulets in order to cure the patient. Herbs, liquid potions, and cow by-products were also administered as healing medicinals [9].

While Hippocratic medicine in early Greece (350 BC and thereafter) focused on achieving a balance of bodily fluids or humors, Platonic medicine mixed science with mystical elements and Asclepian medicine treated illness by means of astrology, magic, and herbs [8]. Private physicians attended the wealthy, while most of the common people sought cures through miraculous healing, relied on folk remedies, or after 400 AD, sought help from clergy with medical skills.

Prior to the Christian era, there were no hospitals for care of the sick in the general population. During Greek and Roman times, persons unable to afford a private physician or treatment in an Asclepian temple, were either cared for by their families or left to die unattended [10]. The first major hospital in western civilization was built in Asia Minor around 370 AD at the insistence of St. Basil, bishop of Caesarea—following the Biblical injunction to clothe the poor and heal the sick [11]. The first permanent hospital in China was founded in 491 AD by Hsiao Tzu-Liang, a Buddhist prince [9].

Most physicians throughout the Middle Ages from 400 AD through 1400 were monks or priests [11] and care of the poor and sick was provided primarily by the church [12]. In the 6th century, mentally ill persons were cared for in monasteries run by the church, and after the 12th century, mental patients were even brought into people's homes and included in family life (Gheel, Belgium) [13]. For almost 1000 years, the church was primarily responsible for operating hospitals and granting licenses to physicians to practice medicine; after 1400 with the beginning of the Renaissance period, however, certification of doctors became a responsibility of the state—heralding a growing separation between medicine and religion [11, 14].

Nevertheless, the church continued to be active in caring for the sick, including the mentally ill. Institutions for treatment of the mentally ill operated by clergy were established in Spain in the early 1400s, providing exemplary care that was unmatched by any state institution for the next several centuries. In 1817, following the example of William Tuke in England, the Quakers established one of the first mental hospitals in the United States in Philadelphia, applying “moral treatment” with remarkable success. In the late 17th century, the Daughters of Charity of St. Vincent de Paul organized Catholic nuns to serve both religious and secular hospitals (the first “nurses”). By 1789 there were 426 hospitals run by the Daughters of Charity in France alone [15]. Nevertheless, erosion of the church's

control over the medical profession escalated during the Enlightenment period with the spectacular scientific discoveries of the 18th century. The separation of medicine from religion was nearly complete by 1802, the end of the French Revolution [16].

Medicine and religion were to remain clearly and distinctly separate for the next 200 years—until the past decade when there have been inklings of change. In 1990, there were fewer than five medical schools in the United States that taught students about the role that religion played in the lives of sick patients. Today, nearly 70 of 126 U.S. medical schools have either required or elective courses on religion, spirituality, and medicine. Are we now seeing a rapprochement in the long-divided healing traditions of medicine and religion, and more important, is there any scientific basis for such reconciliation? Let us first examine some of the negative effects that religion can have on health that support a continued separation of religion from medicine.

RELIGION'S NEGATIVE EFFECTS ON HEALTH

A sizable group of reputable health professionals argue that religious beliefs and practices have little effect, no effect, or even adverse effects on mental health and, in some instances, on physical health as well.

Negative Effects on Mental Health

Among those questioning religion's benefits was Sigmund Freud. Freud—a brilliant thinker and masterful writer—presented his views on religion and mental health clearly and persistently. In one of his first papers, *Obsessive Acts and Religious Practices* [17] Freud compared prayer and religious ritual to the obsessive acts of the neurotic (“I am certainly not the first to be struck by the resemblance between what are called obsessive acts in neurotics and those religious observances by means of which the faithful give expression to their piety”) [17, p. 25]. Freud's greatest and best-known work on religion, however, was *Future of an Illusion* [18]. It is here that he fully unveils his argument against religion and predicts its future demise as human civilization progresses—“Our God, Logos [reason], will fulfill whichever of these wishes nature outside us allows, but will do it very gradually, only in the unforeseeable future, and for a new generation of man . . . On the way to this distant goal your religious doctrines will have to be discarded, no matter whether the first attempts fail, or whether the first substitutes prove untenable” [18, p. 54].

Freud's view has been supported in recent years by psychologist Albert Ellis [19-21] (founder and president of the Rational Emotive Therapy Institute in New York City), by psychiatrist Wendell Watters [22] (professor at McMaster University in Hamilton, Ontario), and others. These health professionals believe

that religious involvement lies at the root of emotional disturbance, low self-esteem, depression, and possibly even schizophrenia.

There are many reasons why mental health professionals connect religion with mental illness. One is that mental disorders like schizophrenia, acute mania, or psychotic depression often present with bizarre religious beliefs. The person with acute mania believes that he or she is God or some other divine being with unusual powers. The person with schizophrenia hears voices from divine or demonic sources telling him or her to perform tasks or behave in a certain matter. The psychotic depressive, overcome by religious guilt, is convinced that he or she has committed the unpardonable sin and is doomed for all eternity. The obsessive-compulsive repeatedly performs detailed, time-consuming religious rituals to obtain absolution from real or imagined transgressions. Even the textbook of psychiatric nomenclature and categorization—the Diagnostic and Statistical Manual of Mental Disorders—used religious examples for years to illustrate cases of serious mental illness [23].

Sensing a hostile attitude from mental health professionals, some religious groups have distanced themselves from psychology and psychiatry. These groups see religious belief and activity as necessary and possibly sufficient for mental healing. Some may advocate complete avoidance of contact with the mental health profession. Perhaps best known for their aggressive stance toward psychiatry is the Church of Scientology, which has a *Citizen's Commission on Human Rights* [24] “dedicated to exposing and eradicating criminal acts and human rights abuses by psychiatry.” This group has spoken out against the use of psychiatric drugs such as Prozac and is often seen picketing at the American Psychiatric Association's annual meetings.

Popular Christian writers Martin and Diedre Bobgan and Jay Adams advocate the avoidance of all forms of secular psychotherapy, although are less opposed to the use of psychotropic medication for severe mental disorders. Books such as *Prophets of Psychoheresy I and II* [25-27] make their case, encouraging people to choose either “the psychological way” or “the spiritual way,” but not combine the two. Such negative attitudes toward the mental health profession can delay or prevent necessary psychiatric care. Systematic research, however, has yet to document how often religious beliefs delay psychiatric care or the negative consequences that result.

Negative Effects on Physical Health

Religious beliefs can also adversely affect physical health. As with mental health, there is concern that religious practices may be used to replace medical care. For example, the religious zealot may stop life-saving medications in order to prove their faith. There are cases of diabetics discontinuing their insulin, hypothyroid patients stopping their thyroid hormone, asthmatics throwing away their bronchodilators, and epileptics discarding anti-seizure medications—all in

order to prove their faith—and often with dire consequences [28-29]. Seeking miraculous faith cures instead of timely medical care can delay accurate diagnosis and enable treatable diseases to advance out of control.

Lannin and colleagues [30] examining differences in breast cancer mortality between African-American and Caucasian women, studied 540 patients with newly diagnosed breast cancer and 414 matched controls. Outcome was breast cancer stage at diagnosis. “Cultural beliefs” were a significant predictor of *late* stage (III or IV) at diagnosis. These included religious beliefs such as “The devil can cause a person to get cancer” and “If a person prays about cancer, God will heal it without medical treatments.” Investigators concluded that both socioeconomic and cultural beliefs accounted for the delay in diagnosis among African-American women. Investigators did not, however, report the independent effects of religious beliefs on stage of diagnosis *after* race, education, and socioeconomic factors were taken into account. Religious beliefs are much more common among African Americans, the uneducated, and the poor—all potent risk factors for late stage at diagnosis. At least one qualitative study of breast cancer diagnosis did not find that religious beliefs of African-American women “constrained or prohibited the evaluation and treatment of breast symptoms” [31].

In fact, involvement in certain religious groups appears to *increase* the likelihood of early breast cancer diagnosis. Zollinger and colleagues [32] followed 282 Seventh-Day Adventist and 1675 non-Adventist breast cancer patients for 10 years. Investigators found that the probability of not dying during the study period was 60.8 percent for Seventh-Day Adventists and 48.3 percent for non-Adventists. The difference in survival disappeared, however, when stage at diagnosis was taken into account, since Adventist women had their breast cancers diagnosed at a much earlier stage.

Religious groups vary widely in how strongly they encourage religious healing practices over traditional medical care. Christian Scientists advocate treating even serious conditions like leukemia, club feet, spinal meningitis, bone fracture, or diphtheria with prayer alone, claiming successes with this method. To evaluate such claims more carefully, Simpson [33] examined the longevity of 2,630 male and 2,938 female Christian Scientist graduates of Principia College in Illinois between 1934 and 1982. This group was compared with 17,743 male and 12,105 female graduates from the College of Liberal Arts and Sciences at the University of Kansas during the same period. Higher death rates were found in male Christian Scientists ($p = .042$) and female Christian Scientists ($p = .003$), supporting the earlier findings of Wilson who reported the death rate from cancer among Christian Scientists was double the national average [34].

Refusing blood transfusions is common among Jehovah’s Witnesses and may lead to premature death. According to their religious teachings, God (Jehovah) will turn his back on anyone who accepts blood transfusions. It is not surprising, then, that devout Jehovah’s Witnesses avoid blood transfusions for themselves and

their children, fearing that allowing such procedures will risk eternal salvation. For adults, such refusals are accepted on the grounds that transfusions represent an invasion of privacy and violation of the freedom of religious practice. Refusal of blood transfusions for children, on the other hand, has been more controversial. While Jehovah Witnesses have appeared before the U.S. Supreme Court more than 50 times to establish religious freedoms, they typically lose cases involving children [35].

Failure to vaccinate children on religious grounds may also have serious consequences. Rodgers and colleagues [36] reported high case fatality rates during a measles outbreak among children of religious groups refusing vaccination. Etkind and colleague [37] and Novotny and colleagues [38] reported pertussis (whooping cough) outbreaks in children of groups claiming exemptions to vaccination based on religious grounds. Outbreaks of rubella have also been reported among the Old Order Amish in Pennsylvania and elsewhere in the United States [39]. More recently, Conyn-van Spaendonck and colleagues [40] surveyed 2,400 children ages 5–14 and 3,000 adults ages 40–64 as part of a population-based study of a poliovirus epidemic in the Netherlands. Crude excretion rate for wild poliovirus type 3 was much higher among members of the Reformed church and the Orthodox Reformed church compared to members of the traditional Dutch Reformed church. Investigators concluded that the poliomyelitis outbreak was due to rejection of vaccination by religious subgroups.

Refusal of prenatal care may also lead to high mortality for both infants and mothers. Kaunitz and colleagues [41] studied perinatal and maternal mortality in members of the religious sect Faith Assembly in Indiana. Women in this religious group practice out-of-hospital birthing without medical assistance or prenatal care. Investigators found that perinatal mortality was three times higher and maternal mortality nearly 100 times higher among Faith Assembly members compared to women in the general population. After this study was published, the Indiana General Assembly passed a law requiring health professionals to report acts involving the withholding of medical care for religious reasons. After this law passed, perinatal mortality declined by nearly one-half and maternal mortality was nearly eliminated [42].

More recently, Asser and Swan [43] reported 172 child deaths between 1975 and 1995 from what they believed was parental withholding of medical care on religious grounds. Investigators reported graphic examples of children dying from food aspiration, childhood cancer, pneumonia, meningitis, diabetes, asthma, and other childhood illnesses. Over 80 percent of all fatalities came from five religious groups: Faith Assembly in Indiana, Faith Tabernacle in Pennsylvania, Church of the First Born in Oklahoma and Colorado, End Time Ministries in South Dakota, and Christian Scientists nationwide. Most cases, however, were collected over a 20-year period from newspaper articles, public documents, trial records, and personal communications, obtained primarily from the files of CHILD, an advocacy group directed by one of the study's authors.

Religious beliefs are not only linked to the withholding of medical care, but also to other forms of child abuse as well. Bottoms and colleagues [44] conducted a national survey of 19,272 mental health professionals to gather information about experiences with religion-related abuse. First, a post-card survey was sent to identify child abuse allegations involving ritualistic, ceremonial, supernatural, religious, or mystical practices. A total of 6,939 health professionals returned postcards, with 2,136 indicating an encounter with at least one religion-related abuse at some time in their careers. Detailed surveys were sent to all 2,136 respondents, with 797 returning them. Of these, 720 were deemed valid and provided details on a total of 1,652 self-reported ritualistic or religion-related child abuse cases reported by either adult survivors or child clients. Of those, 417 were religion-related cases (medical neglect, ridding of evil, or clergy abuse). Corroborative evidence of abuse or harm was present in less than 50 percent of the 417 cases, and corroborative evidence of religion-related case elements was present in about two-thirds of that 50 percent. In only 5 percent of medical neglect, 9 percent of ridding of evil, and 9 percent of clergy abuse cases was the evidence strong enough to lead to a conviction (including cases of religious-abuse by psychotic patients). Based on this study, one might conclude that religion-related child abuse is actually quite rare—less than 200 cases identified and corroborated out of 19,272 potential informers looking back over their entire careers.

Probably more common than religion-related child abuse are more subtle forms of social coercion and threat of alienation that occur within religious groups. While membership in such groups enhances social support for those who abide by the group's norms, individuals who deviate from expected behavior may be judged and socially isolated. For example, Sorensen and colleagues [45] found significantly higher rates of depression among more religiously active unmarried adolescent mothers. By withdrawal of community support from those not conforming to social standards, religion can foster feelings of guilt and shame, thereby eroding feelings of competence and self-worth.

Another negative emotion that religion may promote is excessive guilt. If a religious person becomes physically ill, the person's religious group may pray for healing. If the person is healed, this affirms the religious belief system of the group and increases group cohesion. If the person is not healed, however, this creates a problem. Failure to be healed cannot be God's fault, if the group believes that God wishes to heal and has the power to do so. More likely, then, it must be the sick person's fault or lack of faith. Worse still, there may be hidden sin in the person's life. If these issues are raised by well-being church members, the physically ill person may begin to doubt their own faith or feel like God is punishing them. Such thoughts may give rise to discouragement, hopelessness, and alienation, as the sick person becomes victimized by religious peers and is no longer able to draw comfort and support from personal faith or faith community.

A problem with much of the information presented above on the negative effects of religion on health is that it relies heavily on opinion, experience with the

mentally ill, or anecdotal case reports from a population base that is poorly defined. Attitudes within a profession are often reinforced in work and social settings, and may strongly influence views toward and feelings about religion (whether positive or negative). This is particularly true when systematic research is lacking, when there is limited access to research that has been done, or when such research is purposefully ignored.

Research Reporting Negative Health Effects

A number of studies, however, *have* reported negative associations between religion and *mental health*. Rokeach [46] surveyed two samples of college students ($n = 202$ and $n = 207$), finding that non-believers were less anxious than religious students who complained more of working under tension, sleeping fitfully, and experiencing other distressing symptoms. Dunn [47] likewise reported that religious persons were more perfectionistic, withdrawn, insecure, depressed, worried, and inept. Bateman and Jensen [48] discovered that persons with extensive religious training were more likely to turn anger in on themselves rather than express it outward. Wright [49] found students who were less certain about religion tended to be better adjusted. Cowen [50] reported a significant negative association between orthodox religious belief and self-esteem. Research in the 1950s and 1960s, then, was sending a clear and consistent message to mental health professionals.

More recently, Neeleman and Lewis [51] found a link between greater religiosity and psychotic disorders. Comparing religious beliefs and attitudes of psychiatric patients with those of orthopedic patients in London, England, investigators found that psychotic schizophrenics and depressed patients were more likely to report personal religious experiences than orthopedic controls (48 percent vs. 38 percent vs. 17 percent, respectively, $p = .05$). Schizophrenic patients were also more likely to hold religious beliefs and receive comfort from religion than controls. These differences persisted after taking into account race, age, and other factors. The cross-sectional nature of this study, however, prevented investigators from determining whether religiousness led to the psychotic condition or whether the psychotic condition led to greater religiousness (e.g., religion was turned to in order to cope with the illness).

Religious beliefs and practices may have different health effects depending on the particular population studied and type of stress experienced. Strawbridge and associates [52] reported that religiosity reduces the effects of some life stressors, but worsens the effects of others. In a cross-sectional analysis of data from 2537 adult participants in the Alameda County Study, these investigators found that religiosity buffered the effects of financial and health stressors, but was associated with worse distress among those facing family crises. Religious coping was seen as most helpful for problems resulting from sources *outside* the individual (like poor health or financial problems). For family stressors that might be

attributed to personal or spiritual shortcomings, religious resources were less helpful they concluded.

A number of cross-sectional studies have also found an association between religious or spiritual activity and poorer *physical health*. Anson and colleagues [53] studying 639 retirees in Israel found that those who observed religious rituals had more complaints of pain and physical dysfunction than did those not observing rituals. Likewise, in a survey of 165 adults aged 60 to 100+ years old, Courtenay and associates [54] found that religious activities (attendance at services, prayer, Bible study) were positively related to a number of chronic health conditions. Again, investigators hypothesized that religion was being used to cope with health problems.

Another research group in England has reported two prospective studies that found worse health outcomes six to nine months later among medical patients scoring higher on spiritual beliefs at baseline [55, 56]. These studies, however, used a broad definition of spiritual beliefs (which were distinguished from traditional religious involvement and activity) and excluded subjects with no religious or spiritual beliefs (over 20 percent of subjects in both studies). Finally, earlier studies by Janoff-Bulman and Marshall [57] and by Levin and Markides [58] found greater mortality and higher rates of hypertension, respectively, among older adults who reported being more religious.

In summary, a number of reputable health professionals view religion as having a negative influence on mental health, physical health, or both. There is good evidence that people with mental illness often present with bizarre and distorted religious ideas and use religion in pathological ways. Religious persons may also have high expectations and condemn themselves or others for having family problems or difficulties they think religious people shouldn't have. Religious persons may judge harshly and alienate those who believe or behaved differently than they do.

Religious beliefs can also interfere with timely seeking of medical care, delaying necessary diagnosis and treatment. Likewise, refusing potentially life-saving blood transfusions, prenatal care, childhood vaccinations, or other standard treatments or prevention measures, may lead to worse health outcomes. While many forms of religious abuse have also been reported, these claims tend to come from isolated case reports or highly selected case series—rather than from population-based systematic research. Finally, some cross-sectional and longitudinal studies find a positive relationship between religious activities or spiritual beliefs and worse physical health.

There is little doubt, then, that there is a body of systematic research showing either no relationship between religion and health or a negative one. Many of these reports, however, are older studies of college students and adolescents, involve subjects selected on the basis of convenience, are cross-sectional in design (without the ability to determine if religion leads to worse health, or vice versa), fail to take into account relevant covariates, or have serious methodological

problems. What remains largely unknown from this review is whether traditional religious beliefs and practices—those engaged in by the majority of mature adults in the United States and around the world—impair health or foster illness. If religion is responsible for poorer mental or physical health, it is important to determine how often this actually occurs and whether the health benefits of religious practice outweigh the risks.

More information about the history of the relationship between religion, medicine, and science, as well as about the negative effects of religion on health can be found in the *Handbook of Religion and Health* [59]. In next issue's *Medicine and Religion II*, I will take a closer look at research that has examined the relationships among religion, mental health, and health behaviors.

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