

THE APOLOGETIC VALUE OF RELIGION AND WELLNESS STUDIES

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AN ENDOVASCULAR NEUROSURGEON in San Diego pauses before the bed of a patient being prepped for surgery. “It’s my custom to offer a prayer before our procedure,” he says. “Do you mind if I pray for you?” The patient nods somewhat surprised. The physician places his hand on the patient’s shoulder, expressing a simple prayer, and ends with the words, “In Jesus’ name, Amen.” Looking up, he notices that the patient’s eyes glow with tears of appreciation.¹

In our modern age of science, one would expect this to be a rare scenario. But in recent years prayer in healthcare settings has become increasingly common² as researchers and doctors have discovered

1. David Levy, *Gray Matter* (Carol Stream, IL: Tyndale House Publishers, 2011), 7.

2. Harold Koenig cites emerging trends among doctors and nurses in (1) examining the

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much clinical evidence suggesting that the practice of religion *generally* and the observance of the Christian religion *specifically* have measurable effects on health outcomes.³

Unfortunately, these studies are published mostly in technical medical books and journals; therefore the information is not readily accessible. Moreover, unless one is a scholar in the field, Christians may not know how to evaluate this research because worldview assessments are generally not included in the published findings. Consequently, Christian leaders are often unaware of these studies and do not factor them into their sermons, teachings or writings. This problem should be rectified since religion and wellbeing studies have significant apologetic value,⁴ and they can profitably be used in spiritual discussions with those who do not profess faith in Christ. Moreover, these studies have profound implications for pastoral care.

spiritual needs of patients and (2) in exploring the possibility of including prayer in patient care. See Harold G. Koenig, *Spirituality in Patient Care: Why, How, When, and What*, rev. 2nd ed. (Philadelphia, PA: Templeton Foundation Press, 2007), 4–8. For a case study evaluation of prayer in patient settings, see H. G. Koenig, “An 83–Year–Old Woman with Chronic Illness and Strong Religious Beliefs,” *Journal of the American Medical Association* 288, no. 4 (2002): 491. Likewise, Wendy Cadge’s case study research suggests that private prayer among non–chaplain staff (e.g., doctors and nurses) was increasingly common. See Sarah Sweeney, “Paging God: Religion in the Halls of Medicine,” *Harvard Gazette*, May 7, 2009, <http://news.harvard.edu/gazette/story/2009/05/%E2%80%98paging–god–religion–in–the–halls–of–medicine%E2%80%99/> (accessed June 24, 2012).

3. The various studies on wellness and religion in the medical literature profess to examine the effects of religion in its broader sense. However, because most of these studies are being done in the United States by doctors who either profess faith in Christ (or who are theists), these studies generally concentrate on the Christian religion. When examining these studies, it is important to assess the worldview of the author. Some authors such as Larry Dossey approach religion and wellness studies from an essentially New Age construct. Others such as Jewish epidemiologist Jeff Levin are open to various positions even though they may favor theism. On the other hand, Harold Koenig writes from the vantage point of historic Christian Trinitarian theism. The position of the authors is that the effect of the *Christian* faith on wellness is extensively documented.

4. For an example of a recent peer reviewed medical journal article with apologetic value see Candy Gunther Brown, Stephen C. Mory, Rebecca Williams, and Michael J. McClymond, “Study of the Therapeutic Effects of Proximal Intercessory Prayer (STEPP) on Auditory and Visual Impairments in Rural Mozambique,” *Southern Medical Journal* 3, no. 9 (September 2010), 864–869; also available at http://journals.lww.com/smajournalonline/Fulltext/2010/09000/Study_of_the_Therapeutic_Effects_of_Proximal.5.aspx (assessed June 12, 2012).

This article examines evidence, derived from scientific study, that the Christian faith is associated with human health and wellness. It surveys the historic influence of Christianity on healthcare and explores the relationship of church attendance to wellness.

CHRISTIANITY AND HEALTHCARE: THE HISTORIC SIGNIFICANCE

The Ministry of Jesus

Most religions integrate patterns of faith with procedures for achieving wellness.⁵ However, a comparative study of Christianity with non-Christian faiths highlights the dramatic and superior power of Jesus, (in contrast to other religious figures, to heal and bring wellness in three areas.

First, Jesus engaged in a diverse ministry of healing, displaying a power simply unknown in the ancient world: Jesus could heal those who were distant,⁶ as well as those who were near.⁷ He healed friends as well as enemies.⁸ He healed some instantaneously and others through a process.⁹ Jesus could heal with a word,¹⁰ and he could heal without a word.¹¹ He healed in ways that shocked those who knew the law, because he touched lepers and raised people from the dead, actions that normally would have rendered him unclean.¹²

Second, Jesus performed his healings from within the context of a distinct worldview. Clearly, Jesus' healings could not possibly be

5. Gary B. Ferngren, *Medicine and Healthcare in Early Christianity* (Baltimore, MD: The Johns Hopkins University Press, 2009), 64; Koenig also provides detailed historical overview on how various religions treat healthcare in Harold G. Koenig, Michael E. McCollough, and David B. Larson, *Handbook of Religion and Health* (New York: Oxford University Press, 2001), chap. 2.

6. John 4:46–52; Matt. 8:5–13.

7. Most of Jesus' healings are proximal. John 9:1–7 is a representative example.

8. Peter's mother-in-law would be considered a friend (Mark 1:30). The high priest's servant would be considered an "enemy" (Luke 22:50; John 18:10).

9. Jesus touches the blind man a second time to "complete" his healing (Mark 8:24).

10. Jesus commands a deceased girl to rise with the words, "Talith cumi" (Mark 5:41 ESV).

11. Matt. 14:34–36.

12. Mark 1:40–41 (See also Num. 14:1–9, 19:11).

construed as polytheistic magic,¹³ nor could they be misunderstood as the psychological exuberances of first century Jewish nationalism. Rather Jesus performed healings in light of the nearness of the promised Messianic kingdom: a kingdom wholly theistic and Trinitarian in nature, and a kingdom that came more sharply into focus through progressive revelation of the Old Testament.¹⁴ Moreover, Jesus' healings pointed the way to an ultimate form of healing that would take place through his physical resurrection from the dead and the resurrection that he pledged to his followers. No other religious leader, Jew or Gentile, before or since, was so purposeful, powerful, or consistent in his healing work.¹⁵

Third, Jesus not only engaged in physical healing, but he taught principles that would become foundational for modern healthcare. For instance, Jesus' admonition about giving a cup of water to those in need¹⁶ and his parable of the Good Samaritan gave rise to values that would move Christians toward selfless compassion in the years to

13. Jesus' healing work extended to the Gentile regions of Decapolis (Mark 5:1–20), but his work was clearly rooted in a different worldview than what prevailed in the Decapolis.

14. Jesus connected his healings to the coming of the Messianic King in Luke 7:21–22. (See also Isa. 29:18, 35:5, 6.)

15. Jesus' healing work seems to have a three-fold function in the gospels: (1) it confirms his identity as Messiah (Matt. 8:17), through (2) fulfilled prophecy (Luke 7:21–23), and (3) it demonstrates the goodness of his grace. For instance, Jesus heals ten lepers, but only one returns to express thanks (Luke 17:11). Clearly, Jesus' healing grace during his earthly ministry was extended even to those who would not respond in faith.

16. Jesus' teaching on giving a cup of water to those in need is recorded in Matt. 10:42 (cold water) and Mark 9:41 (water). The point of this figure of speech within first century Palestinian culture was that the merest expression of hospitality (represented by a small cup) given with thoughtful kindness (represented by cold water) was a significant display of Christ's love. Followers of Christ in the centuries following would apply this idea to a form of hospitality in which sick were lovingly nursed back to health, often *beginning* with the provision of water. The expectation of Matt. 10:42 is that more than just one cup would be given, but at least that was the place to begin. Moreover, this verse would appear to also have implications for modern scientific healthcare. Water is an essential first step to aid in healing and wellness. For instance, the Mayo Clinic recommends the 8x8 rule. Drink at least eight 8-oz glasses of [water] per day." See "Water: How Much Should You Drink Per Day?" Mayo Clinic, <http://www.mayoclinic.com/health/water/NU00283> (accessed February 25, 2013). Additionally, there are millions of people in the majority world who have no access to clean water. To provide water, or better, to provide a well to a group in need is a meaningful act of love.

come.¹⁷ Armed with Jesus' example of healing and stories of his compassion, Christians over the next 2,000 years would create a culture of proactive and loving healthcare. This would become particularly noticeable when a series of plagues ravaged the Roman Empire.¹⁸ Still later, Jesus-inspired biblical compassion would spawn a system of hospitals in the middle ages and lay the foundation for modern nursing care in the nineteenth century.

In his study on *Medicine and Healthcare in Early Christianity*, Gary Ferngren captures the uniqueness of the Christian faith as a healing force in culture when he asserts the following: t need not surprise us, therefore, to find that Christianity is from the start a healing religion. That this view has gained something of the status of an orthodoxy is evidenced by a statement made by Vivian Nutton, who referred to Christianity as “a healing religion par excellence” and suggested that “this was one of the features that secured for Christianity the primacy among competing religions.”¹⁹

Late Antique and Medieval Period

After the close of the first century, a discernible shift takes place in the healing ministries of Christians. Whereas the apostles heal instantaneously and dramatically, post-biblical healings seem less predictable. Christians certainly prayed for healing, following examples in the gospels and the admonition in James,²⁰ but since they could not control outcomes of healing prayer, a second biblical principle became operative: Good Samaritan-style care toward those who continued to suffer. This service was not only extended to the sufferer but also to his or her children.²¹ This selfless care became the hallmark of the Christian faith in the ancient world and for good reason.

17. Mark 9:41; Matt. 10:42; Luke 10:29–37.

18. Rodney Stark, *The Triumph of Christianity: How the Jesus Movement Became the World's Largest Religion* (New York: HarperOne, 2011), 113–114.

19. Ferngren, *Medicine and Health Care*, 64.

20. James 5:13–17.

21. In contrast to the pagan world, children were highly valued by Christians in the early church. Christian adults not only enjoyed higher rates of fertility, but they condemned abortion; this created a “contrast community” to the surrounding world, providing an environment in which all children, even abandoned children, were highly valued. See Stark, *The Triumph of Christianity*, 128–131.

Living conditions in the ancient world for the average person were brutal.²² Population densities in the larger cities often approached 200 people per acre.²³ Poor sanitation and dangerous living conditions created a context where injury and disease were common, and lifespans were shortened.²⁴ But networks of house churches, displaying biblical values of selfless care to the hurting, and compassionate social support to all,²⁵ created islands of mercy in a cruel and unforgiving world.

A series of plagues ravaged the Roman Empire beginning in the year 165. As the plagues progressed, the contrast between Christianity and non-Christian religions was dramatic. Pagan priests were generally unavailable for prayer, having quickly vacated the cities. Parents, recognizing symptoms of the plague in their offspring, abandoned their sick children, who while still alive, nevertheless appeared terminal. Cities descended into chaos as whole blocks were forsaken, and the dead were left to decay in the streets.

But it was the Christians who stayed behind, caring for the sick, knowing they could potentially succumb to the disease themselves. Those who did die in service to others were honored as martyrs to the faith,²⁶ but many of the sick survived, perhaps up to two-thirds,²⁷ because of the basic nursing care they received and the love with which it was given. Pagan observers were both mocking and admiring of Christian commitment to basic healthcare.²⁸

22. Stark suggests there were thirty-one cities in the ancient world with populations above 30,000, Rome being the largest. Population density in Antioch was 130 per acre (greater than modern Calcutta). In Rome the population density was closer to 200–300 per acre. See Rodney Stark, *Cities of God: The Real Story of How Christianity Became an Urban Movement and Conquered Rome* (New York: Harper Collins e-books, 2007), 27.

23. *Ibid.*

24. *Ibid.*, 28.

25. The *Didache* for instance instructs Christians to “give to *everyone* who asks thee, and do not refuse” (emphasis added). *The Shepherd of Hermas* instructs Christians to “give simply to *all* without asking doubtfully to whom thou givest but give to *all*” (emphasis added), http://www.christiancadre.org/member_contrib/cp_charity.html (accessed June 8, 2012).

26. Stark, *The Triumph of Christianity*, 117.

27. *Ibid.*

28. In Julian’s famous letter to the high priest of Galatia, he suggested that Christians were better at taking care of pagans than their own (*Ibid.*, 117). Additionally, the pagan satirist Lucian said mockingly, “The earnestness with which the people of this religion

The writings of Augustine had a powerful influence on the direction of early healthcare efforts during the late antique period (roughly AD 250–750). According to Koenig, “Augustine presents a perspective on secular medicine that is positive, and similar to that of many other Christian church leaders. He . . . [is] vigorous in his efforts to encourage caring for the sick. The practice of medicine is seen as material evidence of God’s love.”²⁹

The first real hospitals were established shortly after AD 325, and soon they spread around the Middle East. A hospital for the mentally ill was established in Jerusalem in 490.³⁰ The practice of founding hospitals spread to Europe. By the middle–700s they tended to be attached to monasteries, and many of those who recovered went on to serve the sick in monasteries themselves. By the year 1100 there were over 37,000 Benedictine hospitals dotting Europe.³¹

Renaissance, Reformation, and the Beginnings of the Enlightenment

Profound intellectual changes took place during the Northern European Renaissance that affected the directions of healthcare. Since Martin Luther is seminal to the movement, his approach can be seen as epitomizing the new attitude. Amanda Porterfield points out, “Luther’s emphasis on the family as the proper context of Christian life made care for the sick an essential part of Christian family life. His respect for the home as a health care center coincided with, and helped

help one another in their needs is incredible. They spared themselves nothing for this end. Their first lawgiver put it into their heads that they were brethren.” On the other hand, Julian was also admiring: “The impious Galileans relieve both their own poor and ours. . . . It is shameful that ours should be so destitute of our assistance” (*Epistles of Julian*, 49), as quoted in Christopher Price, “Pagans, Christianity and Charity,” Christian Colligation of Apologetics Debate Research and Evangelism, http://www.christiancadre.org/member_contrib/cp_charity.html (accessed June 8, 2012).

29. Harold Koenig, *Handbook of Religion and Health* (New York: Oxford University Press, 2011), Kindle Edition, location 856.

30. *Ibid.*, Kindle Edition, location 861.

31. *Ibid.* For additional information about early medieval hospitals, see Amanda Porterfield, *Healing in the History of Christianity* (New York, Oxford University Press, 2005), 75–77.

stimulate, a proliferation of manuals of home remedies and herbal medicine that the new printing technology made possible.”³²

Many early scientists such as Isaac Newton, Ambroise Pare, William Harvey, and Anton van Leeuwenhoek were keenly aware of the historic connection between the Christian faith and wellness. Their pioneering work as scientists, performing experiments and gathering data, was seen as a direct outflow of their Christian faith and worldview. Remarks like the following by Johannes Kepler are not uncommon among scientists at this time: “The chief aim of all investigations of the external world should be to discover the rational order and harmony which has been imposed on it by God and which He revealed to us in the language of mathematics.”³³

As Stark points out, “Science arose only in Europe because only medieval Europeans believed that science was possible and desirable. And the basis of their belief was their image of God and his creation.”³⁴ C. S. Lewis also connects the rise of modern science with the worldview of the Christian faith. In *Miracles* Lewis remarks, “Men became scientific because they expected Law in Nature, and they expected Law in Nature because they believed in a Legislator.”³⁵

Renaissance Art and Music and Their Connection to Healthcare

Another example of ingenuity in Christian healthcare practices can be seen in the development of art specifically designed for hospitals.

32. Porterfield, *Healing in the History of Christianity*, 110.

33. Morris Kline, *Mathematical Thought from Ancient to Modern Times* (New York: Oxford University Press, 1972), 231. This quote is originally attributed to Kepler’s work *Astronomia Nova* (1602). Like J. S. Bach who succeeded him, Kepler would make inscriptions in his various works “to the glory of God.” The following appears at the end of *De Fundementis Astrologiae Certioribus*: “Should the professors of physics acknowledge these theses to be worthy of attention, and should they let me know about their objections for the sake of finding out the truth, I will respond to them, should it be God’s will, in prognosis for next year. I invite to this polemic all who use to philosophize in earnest. *For the glory of God and for the benefit of mankind. I pray for happy New Year for all and everyone of you through Christ, our Lord. Johannes Kepler*” (emphasis mine). For an example of how Kepler’s “Chief end” quote is extensively reproduced by both theists and non-theists see, Charles Colson, *How Now Shall We Live* (Carol Stream, IL: Tyndale House, 1999), 51.

34. Stark, *Triumph of Christianity*, 284.

35. C. S. Lewis, *Miracles* (New York: HarperOne, 2001), 168.

Beginning in Siena in the middle–1400s, and in the years following, works of art were commissioned by Renaissance masters specifically to be placed in hospitals, allowing the sick to meditate on specific ministries of Jesus like his mercy, love, and compassion.³⁶

For instance, Rogier van der Weyden's magnificent altarpiece in the Hotel Dieu hospital was designed specifically so that convalescing patients could meditate on the greatness of Christ as a therapeutic exercise. The altarpiece was fully opened on Sundays, revealing the last judgment.³⁷

Likewise, Matthias Gruenewald produced the Isenheim Altarpiece for the hospital attached to the monastery of St. Anthony near Colmar. The Antonine monks cared for those who suffered with ergot of rye syndrome, a common medieval malady sourced in a type of fungus that affected the rye crop. There were two types of ergotism: gangrenous and convulsive. Gruenewald's altarpiece depicts Jesus as experiencing both kinds as he suffers while on the cross.³⁸ Afflicted patients would have been encouraged to meditate on this art, with the knowledge that Jesus understands their suffering and can come to their aid through prayer.

During the baroque era of music history (1600–1750), tremendous advances were made in instrumentation, tuning systems, and musical styles, and musicians were interested in both the science of music as well as its curative properties. Johann Sebastian Bach, working in Leipzig during the high baroque, saw his work as an expression of his vibrant personal faith in Christ. According to Bach biographer, Johann Nikolaus Forkel, Bach composed a set of 30 harpsichord variations (BWV 988) plus introductory and concluding arias: thirty–two varia-

36. Books: "The Healing Presence of Art" by Richard Cork" RA Magazine Spring 2012, available at: <http://www.royalacademy.org.uk/ra-magazine/spring-2012/books,346,RAMA.html> (assessed June 8, 2012).

37. Richard Cork, *The Healing Presence of Art: A History of Western Art in Hospitals* (New Haven, CT: Yale University Press, 2002).

38. In the central section of the altarpiece Gruenewald's Christ displays the gangrenous side of ergotism with the damaged skin of Jesus, and he displays the convulsive side with the contortions in Jesus' hands. While modern scientists understand that the nails through the wrist would have severed the median nerve, Gruenewald would not have known this; clearly, Jesus' clawlike hands are related to Gruenewald's interpretation of ergotism. The cross in the central panel is also slightly bent, indicating the tremendous sympathetic burden Jesus bore for human suffering and sin.

tions in total. The variations, completed in 1741, were commissioned for Count Kaiserling, former ambassador to the electoral court of Saxony, who was often ill and struggled with insomnia. Forkel suggests that Kaiserling frequently requested these variations be played during his sleepless nights. Musically, Bach's variations are a powerful expression of his Christian worldview.³⁹ From a healthcare perspective they are an example of the Christian faith during the rise of science inspiring a proto-music therapy for what physicians today would consider a medical condition.

Summary

In sum, the flourishing of healthcare ministries from the late antique period through the Enlightenment came largely through Christians who esteemed the person and the teaching of Christ as the preeminent healer and caregiver. Consequently Christians were motivated to seek to heal the sick, either through medicine or prayer or both, and they were prepared to offer a wide array of services ranging from basic nursing care, to rudimentary medical care, to art (and music) therapy, to palliative care for the dying.

Ferngren suggests that the motivation among Christians to provide for healing prayer and compassionate care came from the example of Jesus himself: "In contrast to the classical world, which had no religious impulse for charity that took the form of personal concern for those in distress, Christianity regarded charity as motivated by agape [love], a self-giving love of one's fellow human beings that reflected the incarnational and redemptive love of God in Jesus Christ."⁴⁰

39. For instance, the ten "trinities" within the Goldberg variations suggest the tri-unity of God. The constant ground bass suggests God's unchanging nature. The rising canons in the variations that grow more dissonant, and then resolve in the final variation, suggest God bringing order out of chaos. The French overture in the Lully style (1632–1687) at the halfway point (variation 17) suggests new works of grace and second chances. And the introductory and concluding arias suggest purpose: God is leading his people toward a destination with dignity and resolution. For a more general analysis of the variations, see Robert Greenberg, *Bach and the High Baroque: Course Guidebook* (Chantilly, VA: The Teaching Company, 1995), lectures 29–32. For an assessment of how Eastern world-view non-believers interpret Bach theistically, see Nancy Pearcey, *Saving Leonardo: A Call to Resist the Secular Assault on Mind, Morals and Meaning* (Wheaton, IL: Crossway Books, 2010), 267–268.

40. Ferngren, *Medicine and Health Care*, 113–114.

THE SEPARATION OF MEDICINE AND FAITH IN THE NINETEENTH AND TWENTIETH CENTURY

A Shift in the Late Nineteenth Century

While healthcare and Christianity had been strongly connected for nearly two millennia, a progressive movement emerged in the late nineteenth century that attempted to separate science and faith, including medicine and faith. This movement stemmed from the growing acceptance of the worldview of atheism.

This worldview, simmering on the European continent since the middle eighteenth century, especially in France, gained traction among scientists over Europe broadly in the middle nineteenth century. Six notable examples stand out. The works of Charles Darwin suggested one could explain the origin of life apart from a theistic creator. His works, of course, had a profound influence on the worldview of emerging modern science. The works of Karl Marx and Friedrich Engels are breathtakingly comprehensive in their scope and thoroughly atheistic in their orientation. They posit an anthropology and eschatology in which a creator is not only irrelevant but belief in religion is said to actually inhibit social progress.⁴¹

Two late nineteenth century scientists advanced a new hypothesis regarding the relationship between science and religion. Andrew Dixon White's two volume work *A History of the Warfare of Science with Theology in Christendom* (1896),⁴² and John William Draper's work *History of the Conflict between Religion and Science* (1896) both advance the "conflict view" of the relationship between science and religion.

41. Marx expressed this in his oft-quoted phrase: "Religion is the sigh of the oppressed creature, the heart of a heartless world, and the soul of soulless conditions. It is the opium of the people." Karl Marx, *A Contribution to the Critique of Hegel's Philosophy of Right*, <http://www.marxists.org/archive/marx/works/1843/critique-hpr/intro.htm> (accessed June 8, 2012).

42. White's credentials made him a credible authority in the minds of eighteenth century scientists: holding degrees from Yale and Columbia, he served as president and professor of history at Cornell University. He was a member of the American Historical Society and the Royal Academy of Sciences at Berlin. See the introductory pages in Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* (New York: D. Appleton and Company, 1922), i-ii.

They claimed that Christian theologians from the earliest times sought to crush scientific innovation under the weight of Scripture and theology. While most historians of science have come to reject Draper's thesis today,⁴³ this book was widely accepted at the time,⁴⁴ and set a tone for medical writing in the twentieth century.

The most problematic book, however, for Christianity and healthcare came from the pen of Sigmund Freud. Freud wrote *The Future of an Illusion* in 1927 and in the book asserted that religion is not just a false belief system; it is actually harmful to physical and mental health.⁴⁵ Freud claimed, "Religion depresses the value of life, and it distorts the picture of the real world in a delusional manner."⁴⁶

These statements were merely theories at the time and not derived from scientific experimentation. However, they were considered authoritative on the basis of Freud's reputation as a physician and theoretician and the power of his writing.⁴⁷ Moreover, they were readily accepted because of the emergent atheist worldview that was gaining popularity on both sides of the Atlantic. Throughout most of the twentieth century, Freud's position on the relationship between religion and healthcare prevailed among medical professionals.

43. This is the position of Colin Russell in Gary Ferngren, ed., *Science and Religion: An Historical Introduction* (Baltimore, MD: The Johns Hopkins University Press, 2002), 7. This is also the position of Lawrence Principe of Johns Hopkins University. See Lawrence Principe, *Science and Religion* (Chantilly, VA The Great Courses, 1999), lecture 2, http://www.thegreatcourses.com/tgc/courses/course_detail.aspx?cid=4691 (accessed June 8, 2012.) See also John Lennox, *God's Undertaker: Has Science Buried God* (Oxford, U.K.: Lion Hudson plc, 2009), 26–27.

44. *Ibid.*, 27.

45. According to Freud, "Religion is a system of wishful illusions together with a disavowal of reality, such as we find nowhere else but in a state of blissful hallucinatory confusion. Religion's eleventh commandment is "Thou shalt not question." Sigmund Freud, *Future of an Illusion*, in J. Strachey, ed. and trans., *Standard Edition of the Complete Psychological Works of Sigmund Freud* (London: Hogarth Press, 1927), 62.

46. As cited in Koenig, *Handbook of Religion and Health*, Kindle, location 1163.

47. Armand Nicolai captures the power of Freud's atheistic arguments when he says, "[Freud] predicted . . . that as the masses of people became more educated, they would 'turn away' from 'the fairy tales of religion.' He reminds us that 'the world is no nursery' and strongly advises us to face the harsh reality that we are alone in the universe. In short, he shouts, 'Grow up!'" Armand Nicolai, *The Question of God: C. S. Lewis and Sigmund Freud Debate God, Love, Sex, and the Meaning of Life* (New York: The Free Press, 2003), 36.

A Continued Connection with the Christian Faith and Healthcare

Nevertheless, despite the assertions by Freud and his sympathizers, Christians had remained on the forefront of healthcare both in the west and around the world. Harold Koenig points out that by the mid-twentieth century, “Church related hospitals, first established around the turn of the twentieth-century, [cared] for more than a quarter of all hospitalized patients in the United States. . . . Almost a thousand Catholic hospitals are handling some 16 million patients a year.”⁴⁸ On the other hand, pioneering medical missionaries are consistently establishing hospitals and new surgical practices all over the global south and Asia.⁴⁹ Thus, even as secular literature critiqued the role of Christianity in healthcare, the universal church excelled in providing it both domestically and internationally. Healthcare pioneers often provided their care at great personal sacrifice to themselves.

Summary

To summarize, from the first century to the early-1970s, the history of the relationship between Christianity and medicine could be divided into three periods.

- 33–325 – The pattern is set. Christians become leaders in the healthcare movement far beyond their pagan counterparts. They pray for the sick and follow up their prayer with care.
- 325–1850 – The pattern grows. Christians pioneer advances in systemic care for the sick, aid in medical inventions, and promote the spread of medicine around the world.
- 1850–1970⁵⁰ – The pattern is invalidated in literature but continues to be validated in practice. While enlightenment

48. Koenig, *Handbook of Religion and Health*, location 1185.

49. Several notable examples include Paul Brand (1914–2003) who did pioneering works with lepers (Hanson’s Disease) in India and Dr. Viggo Olsen who pioneered medical care for Muslims in East Pakistan, now Bangladesh. Much research has been done on innovations in medical care in colonial Africa. See Charles M. Good, “Pioneer Medical Missions in Colonial Africa,” *Social Science and Medicine* 32, no. 1 (1991): 1–10. While initial colonial medical care accounted for 100% of all medical care, Good suggests that a century later, 25 to 50 percent of all health care services are still church-based.

50. While dates for historic epochs are always somewhat arbitrary, the date 1970 is chosen here based on an examination of the footnoting in a landmark article on religious

and post–enlightenment thinkers seek to separate medicine from the Christian faith, Christians established hospitals and advanced medicine through missionary efforts.

The (Not So Quiet) Revolution

However, in the past forty years a quiet revolution has taken place among medical researchers, as typified in the experience of Dr. Jeff Levin.⁵¹ As a first year student in a master’s in public health program in 1982, he was assigned a series of journal articles specifying the relationship of church attendance and faith. He was shocked by what he discovered. Digging through the medical literature, he found abundant studies that connected consistent religious adherence to positive health markers. This would set a course of research for him that would span the better part of his academic career.⁵²

Today the most published physician in the field of religion and wellness is Dr. Harold Koenig of Duke University. He is the founder and former director of *The Center for Spirituality, Theology and Health* at the Duke University Medical School. Board certified in several fields including geriatric medicine and geriatric psychiatry, he is published extensively in the fields of medicine, mental health, and religion.⁵³

As inquiry into the relation of religion and wellness was beginning, medical researchers searched for an objective marker for reli-

attendance and worship. Many studies examining religious attendance began in the 1970s. See W. J. Strawbridge, R. D. Cohen, S. J. Shema, and G. A. Kaplan, “Frequent Attendance at Religious Services and Mortality over 28 Years,” *American Journal of Public Health* 87, no. 6 (June 1997): 957–961. On the other hand 1850 is chosen as the *terminus a quo* because Darwin’s *Origin of Species* sparked a new conversation among scientists about the role of God in the world.

51. Testing took place as far back at the 1800s. See the work of Candy Gunther Brown, *Testing Prayer: Science and Healing* (Cambridge, MA: Harvard University Press, 2012). She devotes an entire chapter to this history of research (both Christian and secular) into testing the efficacy of healing prayer.

52. Levin is a Jewish scholar working at Baylor University who works at “the interface of religion, science and medicine.” Well published in the field, and an epidemiologist by training, his best known book on the topic is Jeff Levin, *God, Faith and Health: Exploring the Spirituality–Healing Connection* (New York: John Wiley and Sons, 2001), i.

53. More information on Koenig is available at <http://www.spiritualityandhealth.duke.edu/about/hkoenig/> (accessed June 8, 2012).

religious adherence⁵⁴ that could be tested. Frequency of attendance at worship services was investigated and verified as starting indicator of religious adherence.⁵⁵ As the number of clinical research study results progressively increased, consistent conclusions like the following were reached. “Religious involvement helps people prevent illness, recover from illness, and – most remarkably – live longer. The more religiously committed you are, the more likely you are to benefit.”⁵⁶

Dale A. Matthews and Connie Clark cite the “classic 1972 study of 91,909 individuals living in Washington County, Maryland. . . . Those who attended church once or more a week had significantly lower death rates from the following: coronary–artery disease (50 percent reduction), emphysema (56 percent reduction), cirrhosis of the liver (74 percent reduction), suicide (53 percent reduction).⁵⁷ This study, quite surprising at the time, has been replicated many times with similar results.

One might argue that religious people follow healthier habits, and this leads to healthier outcomes. Indeed, there is research to the effect that this is true.⁵⁸ However, “Religious commitment was effective even in the absence of these healthier practices.” Matthews and Clark suggest that frequent church attenders who did not abstain from cigarettes, alcohol, tobacco and high–fat diets still benefitted from their religious faith. For instance, they found that religious people who persisted in unhealthy habits still had lower blood pressure than non–religious people.⁵⁹

In another study, published by Larson, Levin and Koenig, the authors cited studies claiming that “those who went to church at

54. Matthews and Clark use the term religious adherence in a somewhat technical manner in their work referring to the steady devotion to a set of principles. Dale A. Matthews and Connie Clark, *The Faith Factor: Proof of the Healing Power of Prayer* (New York: Penguin Books, 1998), Kindle, locations 365, 414, 1172.

55. Matthews and Clark, *The Faith Factor*, Kindle, location, 367.

56. *Ibid.*, Kindle, location 377.

57. *Ibid.*, Kindle, location, 384.

58. Levin, *God, Faith and Health*, 23.

59. Matthews and Clark, *The Faith Factor*, Kindle location, 432.

least once a week had the lowest mortality rate and those who never attended church had the highest mortality rate.”⁶⁰

In the largest study to date, Hummer and his colleagues followed 21,204 Americans age 18 to 65 over 9 years to determine the relationship between religious attendance and mortality. Non-attenders lived to an average age of 55.3 years beyond age 20, compared with 61.9 years for those attending services once a week and 62.9 for more than weekly attenders (7 years longer).

Lynda Powell, professor of preventative medicine at Rush University Medical Center in Chicago, expressed great skepticism of those claims at first. She was then asked to lead a three-scientist panel by the National Institute of Health to review the growing expanse of medical literature linking religion to health. When the panel examined the relationship of church attendance to mortality rate, they were impressed. When asked about this Dr. Powell said, “After seeing the data, I think I should go to church.”⁶¹

Stewart and associates in a recent review of spirituality and medicine noted that “religious practices, including prayer, generally provide positive results in the patient’s life and treatment as determined by measurable factors such as: patient knowledge about their disease, adherence to treatment, disease coping, quality of life, and overall of health outcomes.”⁶² Moreover, “one of the best indicators of [the] acceptance [of these studies] is that currently between one-third and one-half of the medical schools in the United States have adopted courses exploring religious and spiritual factors in health.”⁶³

Of course, this is just the tip of the iceberg. Studies on the relationship of religion and wellness abound in the medical literature, but

60. David B. Larson, Jeff Levin, and Harold Koenig, *Faith, Medicine and Science: A Festschrift in Honor of Dr. David B. Larson*, <http://books.google.com/books?id=xvuQHPPMiGkC&printsec=frontcover&dq=faith+medicine+and+science&hl=en&sa=X&ei=753WT7TzOsK82wXesbmgDw&ved=0CDsQ6AEwAA#v=onepage&q=faith%20medicine%20and%20science&f=false>, pg. 195 (accessed March 26, 2012).

61. Kevin Helliker, “Body and Spirit: Why Attending Religious Services May Benefit Health,” www.molokane.org/molokan/Religion/2005_May_WSJ_Healthy_Churchgoers.html (accessed March 27, 2012).

62. W. C. Stewart, M. P. Adams, J. A. Stewart, and L. A. Nelson, “Review of Clinical Medicine and Religious Practice” *Journal of Religion and Health* 52, no. 1 (2013): 91–106.

63. Levin, *God, Faith, and Health*, viii.

reports of these studies are increasingly showing up in popular literature as well.⁶⁴

CONCLUSIONS

Three conclusions can be derived from this study. First, Christians can be confident about the validity of their worldview. Ample confirmations exist in the historic record and in recent studies in the health-care field to show that the Christian faith has tangible benefits. This should lead ministry-minded evangelicals to be careful about critiques of their own movement, lest they lose out on the opportunity to skillfully engage those who are far from Christ.

In the past several years, Christian pollsters have been notoriously critical of their own faith, in some cases predicting dire scenarios if present ecclesial trends continue.⁶⁵ While some of these studies are skillfully done, many are not.⁶⁶ At least one sociologist has explained psychological reasons for the negative conclusions on the part of evangelical pollsters: bad news sells and bad news motivates evangelicals to action.⁶⁷ Dissenting sociologists, who reject these dire conclusions by evangelical pollsters, suggest that there are some encouraging trends, even in the United States.⁶⁸ However, few if any evangelical pollsters seriously interact with the results of scientific studies on religion and health in their articles or books. Science-based studies on religion and wellness propose that practicing the Christian faith in community has tangible results that can be measured in lower blood pressure numbers, decreased anxiety, increased wound healing properties, and better survival rates from cancers. Because we live

64. These popular reports, however, often negate the uniquely Christian aspect of the studies. See for example, Press Releases, "Science or Miracle? Holiday Season Survey Reveals Physicians' Views of Faith, Prayer and Miracles". Holistic Communications Decisions research, <http://www.hcdi.net/News/PressRelease.cfm?ID=47> (accessed June 25, 2012).

65. David Olsen, *The American Church in Crisis: Groundbreaking Research Based on a National Database of Over 200,000 Churches* (Grand Rapids, MI: Zondervan, 2008), chap. 7.

66. Bradley Wright, *Christians Are Hate Filled Hypocrites: And Other Lies You've Been Told* (Minneapolis, MN: Bethany House, 2010), Kindle Edition, locations 72–88.

67. *Ibid.*, locations, 122–214.

68. Rodney Stark, *What Americans Believe* (Waco, TX: Baylor University Press, 2008), 20, 28.

in a time when health costs are spiraling and insurance is difficult or expensive to obtain, the benefits of worship service attendance should be viewed as a form of complementary and alternative medicine that has been proven helpful.⁶⁹

A second conclusion is that Christian leaders should develop greater confidence in their pastoral leadership. Rather than critiquing trends in local church attendance,⁷⁰ leaders should confidently invite non-Christians into small groups by spelling out the natural health benefits. Koenig reports that consistent participation in religious services and small groups is associated with markers of stronger health, including lower cholesterol levels, lower blood pressure, and lower risk of mortality.⁷¹ When a person's religious affiliation results in service, the benefits are even greater.⁷² Non-Christians struggling with chronic pain, cancer, and heart disease could be invited into Christian community on the basis that it may provide the social support that will positively influence outcomes.

Moreover, pastors and Christian leadership should confidently encourage private Bible reading and prayer. A further study by Harold Koenig found that "frequency of private religious activities (prayer and Bible study) was associated with seeking greater social support."⁷³ The ultimate motive, however, should be to find common ground to express the love of Christ, which is supremely expressed in the gospel. Christ's service and the gospel message are inextricably combined (Mark 10:45).

A third conclusion is that Christian apologists should use the extensive results of religion and wellness studies to engage the arguments of the new atheists.⁷⁴ Sigmund Freud was a product of the

69. Brown, *Testing Prayer*, 277.

70. For instance see the case of Barna and Viola, in their book *Pagan Christianity?* George Barna and Frank Viola, *Pagan Christianity? Exploring the Roots of our Church Practices*, Rev. ed. (Tyndale House Publishers, 2012), chaps. 6–10.

71. Harold G. Koenig, *Medicine, Religion and Health: Where Science and Spirituality Meet* (West Conshohocken, PA: Templeton Foundation Press, 2008), Kindle, location 2032.

72. *Ibid.*, location 792.

73. Harold G. Koenig and Harvey J. Cohen, *The Link between Religion and Health: Psychoneuroimmunology and the Faith Factor* (New York: Oxford University Press, 2002), Kindle, locations 181–182.

74. New atheism is a twenty-first century movement that seeks to actively discredit

old atheist intellectual tradition that coalesced in the mid–nineteenth century and became famous in popular culture with *Time Magazine*'s historic cover, “Is God Dead?”⁷⁵ However, from the mid–1960s to the dismantling of monolithic communism in the late 1990s, the old atheist tradition dissipated so significantly that Alister McGrath could write a book with the title “The Twilight of Atheism?” in 2004.⁷⁶

However, the new atheists, coalescing under the leadership of men like Christopher Hitchens, Richard Dawkins, and Sam Harris, have used arguments now soundly refuted by the new religion and wellness studies in the medical literature. For instance, as recently as 2007, Hitchens was still using Freud's quotes from *Future of an Illusion* as an argument for his new atheism.⁷⁷ Today that argument is anachronistic: the reams of conclusions stemming from (1) a fair assessment of the history of the Christian faith and (2) current religion and wellness studies should serve as the final nail in the coffin for Freud's theory. Religion, rather than being a neutral or negative influence on wellness, has been demonstrated as being richly positive.

religion in general and specifically the Christian religion. Richard Dawkins, (the late) Christopher Hitchens, Daniel Dennett, and Sam Harris are considered “the four horsemen” of the new atheist movement. See Alice Gribbin, “Preview: The Four Horsemen of New Atheism Reunited,” *The New Statesman*, December 12, 2011, www.newstatesman.com/blogs/the-staggers/2011/12/richard-dawkins-Issue-hitchens (accessed June 20, 2012).

75. The issue came out on April 8, 1966.

76. Alister McGrath, *The Twilight of Atheism: The Rise and Fall of Disbelief in the Modern World* (Colorado Springs, CO: WaterBrook Press, 2006). See especially chap. 11, 257–273.

77. Christopher Hitchens, *The Portable Atheist: Essential Readings for the Nonbeliever* (Boston, MA: Da Capo Press, 2007), 147.

