

ABSTRACT

Research on Prayer and Healing: Past, Present, and Future Challenges

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As research grows on prayer's effect on healing, conflicts continue to arise about these studies' legitimacy and necessity. Advocates for increased research on this topic claim that prayer is like a medicine that physicians could one day prescribe. Past research studies have indeed suggested that prayer works as a healing mechanism. Those who doubt these studies claim that these projects are not legitimate, in part because they cannot be replicated. Religious persons, too, often shy away from advocating for studying prayer in a scientific setting, because it seems like this is "testing" God's power. This research has implications for the future of healthcare and how patients are treated medicinally. This project is an effort to document these conflicts, as well as to provide a history of research on prayer and healing supplemented by interviews with leading scholars who offer their opinions on this field. While stigmas surrounding this research remain, as do skeptics who disagree with its progression, these studies are gaining ground in the scientific community as a valid topic of investigation.

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RESEARCH ON PRAYER AND HEALING:
PAST PRESENT AND FUTURE CHALLENGES

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PREFACE

I entered Baylor University with the intention of obtaining a degree in journalism. However, I decided to double major in journalism and religion, with a focus in practical studies. When deciding a topic for my Honors Thesis, I wanted to work toward a project that combined both of these areas of study. A project that would examine some aspect of religion, but not necessarily researched or written like a normal research paper. Instead, the thesis would be a series of articles, each heavily researched, but written journalistically. I only had to decide the topic.

This is when the pieces started falling into place for this project. For part of my Honors credit, I needed to attend a lecture and have read *House on Fire: The Fight to Eradicate Smallpox* by William H. Foege. Of all the readings assigned for my Honors courses and credits, this was by far my favorite book. In the author's exploration of how smallpox was eradicated, he mentions how churches and religion played a role in both healing and the administration of medicine. I began to wonder about how religion and health were connected. What kind of impact do our religious beliefs have on our health, if any? The lecture's speaker was a Baylor professor, Dr. Jeff Levin, who happened to be one of the leading names in a budding field called the epidemiology of religion — simply put, how religion affects health.

I approached Dr. Levin about being my faculty advisor for the duration of my project. After he agreed, we decided I needed to narrow down my focus. In researching more into how religion and health interact, my curiosity piqued when I realized how

controversial the research into the interaction actually is. I decided to focus my project on research on religion and healing. This topic lends itself to a variety of articles and sources.

This thesis project examines the history, stigmas, major participants, and major works involved with the research into religion and healing. It condenses a broad field of study into highlights and attempts to determine what the future of the research is. Like any thesis project, the research, writing, and editing for my thesis took countless hours. The writing process was not always smooth, especially as I juggled other classwork, volunteer work, and a work-study job at the campus newspaper.

There are several people who played a tremendous role in helping me complete this project. Dr. Jeff Levin, my advisor, whose patience and knowledge of the subject were great motivators. Drs. Larry Dossey and Harold Koenig, who took the time to speak with me personally about their research. My parents, who patiently listened and supported me as I waded through the project. Julie Freeman, the assistant media adviser to *The Baylor Lariat* newspaper, who gave me her ear as I attempted to carry out my duties as editor-in-chief of the paper and also give attention to this project.

My desire for this project is to generate discussion and understanding of the state of the research into religion and healing. If nothing else, I have gained an immense respect for those who have devoted their lives to researching such a controversial topic—but one that has the ability to change the future of medical practice as we know it.

DEDICATION

This work is dedicated to my family, who always supported me no matter how stressed or crazy I seemed.

CHAPTER ONE

Introduction

Dr. William Osler (1910) said a connection exists between faith and healing. More specifically, he claimed that faith has the power to heal.¹ His argument seems reasonable, considering that religion and medicine were a combined practice even in the fourth century B.C.² Medicine was often practiced by a priest, which was the case across various civilizations such as Egypt, India, Babylonia, and Rome.³ Gods were thought to have healing powers, so people would seek out priests in order to communicate with these healing gods. At some point, however, medicine separated from religion. In 1910, Osler argued that science was ready to accept faith and study its effects in a medical setting.⁴

A century later, Osler's vision for the research on faith and medicine is still not realized. Instead of prayer and healing working together seamlessly, they seem to be functioning in two separate realms of healing practices. Albert Clarke Wyckoff (1918) said many people had come to the conclusion that science and prayer could never work together in the modern world as they had in the past.⁵ Over the past century, many scholars have attempted to study the effects of prayer on healing. Several of these scholars, scientists and religious persons alike, found that prayer is difficult to study scientifically. Even then, the objections to studying prayer and healing have grown

¹ William Osler, "The Faith That Heals," *British Medical Journal* 1, no. 2581 (June 18, 1910): 1470.

² Alice E. Paulsen, "Religious Healing: Preliminary Report," *Journal of the American Medical Association* 86, no. 22 (May 29, 1926): 1519, doi:10.1001/jama.1926.26720480006009a.

³ *The Healing Gods of Ancient Civilization* (New Hyde Park, New York: University Books, Inc., 1962).

⁴ Osler, "The Faith That Heals," 1472.

⁵ Albert Clarke Wyckoff, *The Science of Prayer* (New York: Association Press, 1918), ix.

louder. Some scientists argue that the effects of prayer should not be studied because prayer is for the religious. They are skeptical of prayer as a viable medicine because of its supernatural component. Some religious persons contend prayer should not be studied scientifically because it subjects the power of God to man's experiments.

This was the state of the prayer-healing debate in 1988 when Dr. Randolph Byrd conducted a study on the effects of prayer.⁶ He conducted a double-blind research project that focused on the effects of intercessory prayer on healing. Ultimately, the study found the health of the patients who received prayer improved. These results had the ability to stun both the religious and scientific communities. For religious persons, the results were proof that their belief in the power of prayer wasn't unfounded. For scientists, it was proof that the effects of prayer could be studied. However, Byrd's study did not sway many people away from their original prejudice against the study of prayer and healing.

While people like Byrd have researched and attempted to prove prayer can positively influence health, there are still stigmas against the topic. A result of these stigmas is that several important questions remain unanswered regarding prayer and healing. Studies have shown prayer has an effect on healing, so it could follow that physicians should prescribe prayer to patients just like any other medication. However, physicians who don't believe in the power of prayer or who do not want to offend a patient may not want to prescribe prayer. Should the prescription of prayer be left up to the physician's discretion? In addition, these studies of prayer could lead to a debate about the ethics of a doctor praying for a patient who does not want to be prayed for. Dr.

⁶ Randolph Byrd, "Positive Therapeutic Effects of Intercessory Prayer in Coronary Care Unit Population," *Southern Medical Journal* 81 (1988): 826.

Larry Dossey (1996) contends that questions such as these could lead to legal questions about whether a patient could sue a doctor for praying during a consultation.⁷

This project attempts to explore the stigmas surrounding research into praying and healing, explain where these stigmas originate, and what the future of research on prayer and healing might look like.

Specific Aims

The stigmas surrounding prayer and healing can be stated simply, but the ideas behind the stigmas are complicated. The stigmas are powered by objections from both the scientific and religious communities. The first specific aim of this project is to explore these stigmas and explain the root of the objections to studying prayer and healing. About 200 studies have already been conducted to examine the relationship between prayer and healing, but the objections must be thoroughly understood.⁸ At present, the state of the relationship between healing and prayer remains very controversial. Such controversy continues to stunt the forward progress of prayer and healing research.⁹

Once these objections are identified and discussed, a second aim of this project is to provide a detailed examination of the current state of research on this topic in order to identify questions that still need to be answered. The stigmas may not change, but understanding the stigmas will help those who want to study prayer and healing know

⁷ Larry Dossey, *Prayer Is Good Medicine: How to Reap the Healing Benefits of Prayer*, 1st ed (San Francisco, CA: HarperSanFrancisco, 1996), 66.

⁸ Larry Dossey and David J. Hufford, "Are Prayer Experiments Legitimate? Twenty Criticisms," *EXPLORE: The Journal of Science and Healing* 1, no. 2 (March 2005): 109, doi:10.1016/j.explore.2004.12.004.

⁹ Dossey, *Prayer Is Good Medicine*, 37.

how to better convey their motivations for their research. If they are able to do this, then more people may accept the results of further studies.

If more people accept the results of studies into prayer and healing, then, presumably, there will be more focused research. With more research, there will be more questions. One such question, which Dossey raises in his book *Prayer is Good Medicine*, concerns the ethics of using prayer as medicine. This will be another topic explored in this project. If prayer is a valid medicine, then physicians could start prescribing it along with other medication. However, prayer is currently viewed as a religious activity. For patients who are not religious, could prescribing prayer be taken offensively?¹⁰ If so, could this lead to patients suing their physicians for prescribing prayer? In addition, some physicians offer to pray with their patients. Could this be considered forcing religion on a patient? If so, then lawsuits seem probable.¹¹ The ethics of prayer and healing will expand past the medical sphere into the legal sphere. However, prayer most likely will not be prescribed unless *how* prayer works is clear.

There are some scientists who disagree with how Dossey states “prayer works.” Daniel H. Grosseohme contends that many studies conducted on prayer and healing overemphasize the physical aspects of their results “to the neglect of the emotional and spiritual dimensions of healing prayer.”¹² Grosseohme points out that even the research study conducted by Byrd places a great amount of emphasis on the physical outcomes of prayer and do not examine the emotional or spiritual outcomes.

¹⁰ Ibid., 70.

¹¹ Ibid., 55.

¹² Daniel H. Grosseohme, “Taking Intercessory Prayer and Science Seriously,” *Journal of Health Care Chaplaincy* 9, no. 1–2 (1999): 120, doi:10.1300/J080v09n01_17.

Dossey argues that *how* prayer works cannot be proven in a laboratory. Dossey contends that *why* prayer works and *that* prayer works are all that is necessary for this research to be accepted.¹³ Dr. Jeff Levin also contends that it is difficult, if not impossible, to prove with scientific means how prayer works.¹⁴ This is significant, as many people, especially scientists, disagree with mixing prayer and healing because they do not understand the *how*.¹⁵

Discussing this issue is the third aim of this project. Religious persons have argued prayer works because of faith. Faith that the prayer will work, faith that a higher being will answer, and faith that healing will come are part of how prayer works, according to religious people. In addition, Agnes Sanford contends prayer works through the energy in each of us.¹⁶ Studying faith, however, is difficult. Dr. Dale A. Matthews (1998) said the “faith factor” has been overlooked in various studies.¹⁷ Further study into how prayer works could help build support for studies into prayer and healing. There are a variety of types of spiritual healers, including “energy” healers.¹⁸ Researching these healers and their practices could help shed light on how prayer works.

Another way to ensure research on prayer and healing is understood by a greater number of people is to use a common language in research reports. Levin writes that a lack of common language and terms used during research have made it difficult to

¹³ Dossey, *Prayer Is Good Medicine*, 25.

¹⁴ Jeffrey S. Levin, *God, Faith, and Health: Exploring the Spirituality-healing Connection* (New York: J. Wiley, 2001), 185.

¹⁵ Dossey, *Prayer Is Good Medicine*, 37.

¹⁶ Agnes Sanford, *The Healing Light* (St. Paul, Minnesota: Macalester Park Publishing Co., 1947), 22.

¹⁷ Dale A. Matthews, *The Faith Factor: Proof of the Healing Power of Prayer* (New York, NY: Penguin Group, 1998), 16.

¹⁸ Jeff Levin, “Energy Healers: Who They Are and What They Do,” *EXPLORE: The Journal of Science and Healing* 7, no. 1 (January 2011): 14, doi:10.1016/j.explore.2010.10.005.

synthesize all the research studies on prayer and healing.¹⁹ Scholars and researchers often define the terms they use in their own research. Without a common use of terms across all research in this field, the impact of research results will be lessened. For example, if one scholar conducts research on “spirituality” in medicine and another scholar conducts research on “religion” in medicine, each of their respective studies and their results might not be seen as comparable and might be ignored or overlooked by the other researcher. This actually happens frequently within the community of scholars studying religion and health. It introduces a special hindrance to research specifically on prayer and healing, due to the added controversy involved.

Research Strategy

Significance

Healing and religion have a long history. The blending of religion and medicine has been argued, discussed, and debated for decades. In 1872, Francis Galton dismissed the idea that religion has an effect on health.²⁰ From his observations, the health of those involved with religious activities seemed to be the same as those who were not—priests did not live longer than other people and missionary ships sank as often as merchant ships. Despite Galton’s observations, Dr. William Osler (1910) said there is a connection between faith and healing, specifically that faith can heal.²¹ Osler wrote that science was ready to accept faith and study its effects in a medical setting. Faith, he writes, has

¹⁹ Levin, *God, Faith, and Health*, 187.

²⁰ Richard P. Sloan and Rajasekhar Ramakrishnan, “Science, Medicine, and Intercessory Prayer,” *Perspectives in Biology and Medicine* 49, no. 4 (Fall 2006): 505.

²¹ Osler, “The Faith That Heals,” 1471.

always been a part of medical practice. In fact, up until the fourth century before Christ, medicine and religion were a combined practice, according to Dr. Alice E. Paulsen (1926).²² She said the practice of healing was originally left up to the priesthood. Paul Tillich (1946) said there were three types of healing: religious or spiritual healing, magic or psychic healing, and bodily or natural healing, and each of these attempted to drown out the others.²³ The Persians and Babylonians used sacrifices and prayers to a super-human being for healing as well as physically using drugs and knives. For the ancient world, religious healing was the same as magical and natural healing.²⁴ Tillich contends that the use of the word “magic” is primitive and should be kept separate from religious healing today.²⁵

As science developed, anything that seemed supernatural was considered outside or beneath science, which is focused on rationality. In 1918, Wyckoff explained how prayer was necessary in the past to create a bond between the Creator and the creation. He wrote, “Man’s only resource was, by means of prayer expressed in gift or sacrifice or direct petition, to invoke the help of these controlling deities or Deity.”²⁶ He goes on to state, “But just as soon as modern science made an appearance, the whole situation was instantly changed.”²⁷ Scientists did not dismiss prayer altogether; they allowed for it in the spiritual realm, but nothing more. In 1926, Paulsen wrote, “Nevertheless, the steady increase in the body of medical knowledge has tended to separate medicine further and further from religion, until at the present time we are scarcely able to trace the earlier

²² Paulsen, “RELIGIOUS HEALING,” 1519.

²³ Paul Tillich, “The Relation of Religion and Health: Historical Considerations and Theoretical Questions,” *Review of Religion* 10, no. 4 (May 1, 1946): 41.

²⁴ *Ibid.*, 42.

²⁵ *Ibid.*, 43.

²⁶ Wyckoff, *The Science of Prayer*, 3–4.

²⁷ *Ibid.*, 4.

close connection.”²⁸ Science was becoming more open to studying speculative fields, in which the effects of religion on health would fall. Paulsen was concerned with using both science and religion to build a stronger healing process. Instead, the combination of prayer and healing makes many people—scientists, physicians, and religious people alike—uneasy.

Richard Sloan and Rajasekhar Ramakrishnan contend, “Most of the scientific community has objected to giving serious consideration to such research, but we live in an era of growing irrationalism.”²⁹ Much of what has been published on this topic since Osler’s time has been to prove there is a correlation between prayer and healing and to encourage more research into that relationship. Gordon Allport (1963) said each aspect—religion and science—has a unique wisdom to bring to the healing process.³⁰ He suggested that these areas work together instead of apart. His focus was on clinical pastoral training in psychiatry, but his arguments can be applied to the field as a whole. Similarly, Paulsen, nearly a century ago, wrote, “The problem is of such complexity that it will be fully comprehended only through a most intensive study carried on with mutual understanding, mutual cooperation and mutual desire to solve the questions involved.”³¹

Cyril C. Richardson (1957) said spiritual healing is “extremely rare” and “we must be sober and realize that medicine cures more often and more surely than the charismatic healer or Holy Unction.”³² He also states that spiritual healing is real and can come suddenly, which is why opportunities for spiritual healing should be provided.

²⁸ Paulsen, “RELIGIOUS HEALING,” 1519.

²⁹ Sloan and Ramakrishnan, “Science, Medicine, and Intercessory Prayer,” 505.

³⁰ Gordon W. Allport, “Behavioral Science, Religion, and Mental Health,” *Journal of Religion and Health* 2, no. 3 (April 1, 1963): 118.

³¹ Paulsen, “RELIGIOUS HEALING,” 1519.

³² Simon Doniger, *Healing: Human and Divine* (New York: Association Press, 1957), 212.

Denying spiritual healing completely would eliminate the need for more research, but the fact that numerous research studies have shown a relationship between faith and healing means that spiritual healing cannot be so easily dismissed.

Around the same time as Richardson, Dr. Gotthard Booth said there are two aspects of prayer and healing that make scientists hesitant to study the relationship.³³ The first is that duplicating experiments to study prayer and healing is difficult — the results tend to vary. Apart from this, there is also the fact healing has come to people without them knowing they were being prayed for. Science, Booth argues, cannot easily explain how this is possible. Medical healing is based “on a materialistic and anthropocentric concept of the world,” and a cause and effect relationship between prayer and healing is not easily proven.³⁴ Sloan and Ramakrishnan (2006) argue that the methodology of studies on religion and prayer is riddled with unanswered problems. They wrote, “Intercessory prayer studies must be held to the standards of science: as long as investigators cannot control and measure exposure to prayer and identify specific outcome variables, these studies cannot be conclusive and should not be undertaken.”³⁵ Dr. Larry VandeCreek (1998), in an edited volume on this subject, compiled several papers in response to one of Dossey’s calls to study intercessory prayer. One article by John T. VanderZee argues that the purpose and intentions of the experiment matter; the purpose should not be simply to show science and religion can interact.³⁶ Arthur A. Vogel raises several other questions such as how to prove prayer works when there are so many varied results among those using the same methods. For example, when doctors

³³ Ibid., 221.

³⁴ Ibid., 222.

³⁵ Sloan and Ramakrishnan, “Science, Medicine, and Intercessory Prayer,” 513.

³⁶ Larry VandeCreek, *Scientific and Pastoral Perspectives on Intercessory Prayer: An Exchange Between Larry Dossey, M.D. and Health Care Chaplains* (Binghamton, NY: The Harrington Park Press, 1998), 41.

use the same scientific medicine and resources for different patients and two families pray to the same God for healing, why would one patient be healed and another not improve? While Vogel attempts to answer this question, and people such as Dossey contend God does not heal everyone in order to keep humans humble, there are scientists who continue to raise these questions.³⁷

Through a careful examination of the problems currently surrounding research into prayer and healing, both religious persons and scientists can better understand, and therefore be more willing, to conduct further research on prayer.

The 1970s. A spike in interest in the relationship between religion and health arose in the 1970s. Kenneth Vaux (1976) said it was unfashionable at the time to inquire into the relationship between religion and health.³⁸ The subtlety of beliefs that can lead to good health makes studying the relationship difficult. Vaux writes, “The U.S. Public Health Service, in its extensive and comprehensive analysis of health in its etiological and epidemiological dimensions, has chosen to systematically ignore the variable of religion.”³⁹ At the time, there were some studies on the effects of religion on health, but Vaux said they indicated the need for more studies. The state of the relationship between religion and health does not seem to have changed since Osler and Paulsen wrote on the topic.

In addition to more scientific studies, some scientists attempted to define the depth of the relationship between healing and religion. Dr. Harold Y. Vanderpool (1977)

³⁷ Arthur A. Vogel, *God, Prayer and Healing: Living with God in a World Like Ours* (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 1995), 7–8.

³⁸ Kenneth Vaux, “Religion and Health,” *Preventive Medicine* 5, no. 4 (December 1976): 522, doi:10.1016/0091-7435(76)90029-3.

³⁹ *Ibid.*, 524.

writes, “Religion, that is, often supplies a set of ‘ultimate explanations’ for the existence and meaning of illness and curing.”⁴⁰ Religion has influenced the way humans understand diseases and illnesses. Vanderpool contends what happens in a hospital should be set in a more religious-philosophical framework. This implies that medicine given in a hospital would be prescribed with more than just the knowledge of the physical state of the patient. The spiritual state of the patient would be considered as well. He writes, “The subject of ‘religion and medicine’ thus involves the interpenetration of traditional and modern religion and philosophy with medical concepts and practices.”⁴¹ Understanding the beliefs of a patient during a medical exam serves a practical purpose for prescribing medicine.

Vanderpool goes on to explore the relationship from a religious angle. Within Christianity, which some consider a “healing religion,” there are many terms that are medical. Vanderpool cites words such as wounded, healed, and bruised as examples of this. In New Testament literature, there are several examples of healing traditions started by Jesus. Exorcist, physical healer, faith healer, and healing by forgiveness are images of Jesus in the New Testament gospels.⁴² The church, after Christ’s ascension, wanted to carry on these practices of healing. Like Paulsen and Tillich, Vanderpool examined how ancient religious people worked with healing and faith. In addition to healing, Vanderpool states Christianity is a healing religion because Christians were commissioned to care about the ill, sick, and outcasts. This means more than just the physical needs were a concern for early Christians. The emotional, as well as the

⁴⁰ Harold Y. Vanderpool, “Is Religion Therapeutically Significant?,” *Journal of Religion and Health* 16, no. 4 (October 1, 1977): 255.

⁴¹ *Ibid.*, 256.

⁴² *Ibid.*, 257.

spiritual, were part of the healing process. However, Vanderpool clarifies that no claims of “divine causes” and “religious curses” should be made, because it could lead to a war between religion and science—especially because science is generally skeptical of the divine or supernatural.⁴³

Part of the reason for this skepticism is that prayer has a supernatural component to it, something noted by Booth in 1954 and Wyckoff in 1918. Wyckoff wrote, “It has in it distinctly ultra-human factors.”⁴⁴ Proving the healing power of prayer is difficult in any experiment, especially when there are other explanations for why prayer “worked.” Explanations such as the placebo effect, coincidence, or prayer’s natural side effects often lead to a dismissal in the supposed supernatural healing that takes place.⁴⁵ There have been studies showing that prayer leads to increased hope, which in turn leads to improved health in the patient and a stronger immune system.

Dr. Jerome D. Frank (1975) recognized the patient’s own regenerate powers as important to healing, especially their hope and faith, which can enhance the healing process.⁴⁶ However, Frank’s proposal of faith as a component in healing may seem irrational to many Western physicians and scientists. He acknowledged that Western medicine is rooted in materialism, and illness is a bodily disorder on which a physician uses physical tools to attack. This emphasis on only the body can distract from understanding a patient’s emotional, or in some cases, spiritual state. These things matter. Kenneth Vaux (1976) said, “Religious attitudes and behaviors have always

⁴³ Ibid., 259.

⁴⁴ Wyckoff, *The Science of Prayer*, 39.

⁴⁵ Dossey, *Prayer Is Good Medicine*, 46.

⁴⁶ Jerome D. Frank, “The Faith That Heals,” *The Johns Hopkins Medical Journal* 137 (1975): 127.

affected health.”⁴⁷ Because it is already shown that a patient’s psychological approach to an illness can affect recovery and prayer can offer a positive outlook for the patient, then perhaps prayer should be incorporated into the physician’s interaction with the patient. Frank said the physician is the most powerful single stimulator of the patient’s expectant faith in healing. If prayer can provide that faith, then it perhaps its medical impact should be explored.

Prayer in the Exam Room: Ethics and Legality. Over a century ago, Osler said physicians should be open to the idea of incorporating religion into their medical practices, knowing the history of medicine and religion. This is also the view held by Dossey (1996), who said religion is something that physicians should acknowledge in their everyday interactions with patients.⁴⁸ He said if prayer works, then physicians should advise their patients of this fact. Matthews agrees, writing, “Doctors who want to help other human beings who suffer, doctors who want to be healers of whole persons, have an obligation to address the spiritual lives of their patients.”⁴⁹ Dossey took the relationship between physician and patient a step further by examining whether it is ethical to pray with a patient or to pray for them. He said it’s possible that in the future physicians could risk a lawsuit if they pray for or with their patients. To avoid a malpractice suit, Dossey suggests that physicians use a form for consent to pray that their patients can sign. Dossey writes, “It is not greater legalization, but sacralization, of medicine that we need most.”⁵⁰ Dr. Dana King said 48 percent of inpatients said they

⁴⁷ Vaux, “Religion and Health,” 522.

⁴⁸ Dossey, *Prayer Is Good Medicine*, 65.

⁴⁹ Matthews, *The Faith Factor: Proof of the Healing Power of Prayer*, 18.

⁵⁰ Dossey, *Prayer Is Good Medicine*, 70.

want their physician to pray with them.⁵¹ King said a patient-initiated request for prayer or spirituality in an examination or conversation with the physician should be free from ethical burden. For a physician to offer to pray with their patients, she said they need to do so in a non-coercive way.

However, the arguments against physicians praying with patients argue that this action crosses professional and social boundaries.⁵² Clifford J. Haley argues that prayer cannot be separated from religious beliefs, and forcing these beliefs on patients by even offering to pray for them is ethically wrong. Sameer P. Sakar contends, “Boundaries are set in professional practice to protect both the patient and the doctor.”⁵³ Other arguments are that praying with patients gives them false hope. As Dossey puts it, false hope is a term most often heard from physicians, not patients. Hope has been proven to help health, so he reasoned false hope isn’t harmful unless it leads to a patient avoiding treatment. Bringing prayer into medical settings opens the door for discussions about church and state relationships, as well as breaching ethical boundaries.

How Prayer Works. Part of the reason incorporating prayer into medicine seems difficult is because there is not one study that can prove how prayer works. Dossey said scientific experiments can prove *that* prayer works but not how or why. He agrees with Levin that science is limited when it comes to studying prayer’s effects on healing.

⁵¹ Dana E. King, *Faith, Spirituality, and Medicine: Toward the Making of the Healing Practitioner* (New York: Haworth Pastoral Press, 2000), 68.

⁵² Clifford J. Haley, “Praying with Patients: Belief, Faith and Boundary Conditions,” *The British Journal of Psychiatry* 199, no. 6 (December 1, 2011): 517–517, doi:10.1192/bjp.199.6.517.

⁵³ Sameer P. Sarkar, “Praying with Patients: Belief, Faith and Boundary Conditions,” *The British Journal of Psychiatry* 199, no. 6 (December 1, 2011): 516–17, doi:10.1192/bjp.199.6.516a.

There are at least two broad categories of ways in which prayer can be classified as an agent of healing. The first involves the possibility that praying brings positive emotions, hope, expectation, and self suggestion to the pray-er. These emotions can in turn help boost the immune system, which helps build health in general. Many studies have been done that examine how religion, and specifically prayer, benefit health.

The second category is more difficult to study and explain. This entails the possibility of healing resulting when a pray-er asks for healing from a divine being or spirit and believes that this being will respond positively. In other words, this side of prayer involves something “supernatural,” and thus invokes the power of faith. Accordingly, Agnes Sanford (1947) said prayer is a driving force behind healing. She explained in her book *The Healing Light* that spiritual healing involves a three-step process with prayer. Sanford said the first step is to contact the power, turn it on, and to believe the power is coming and to accept it by faith. Power for her was a higher being’s energy. This higher being could be God. Her viewpoint is similar to that of Barbara Leahy Shlemon (1976) who said prayer can only work if faith is involved. Whether that faith is in the prayer itself or the being to which the prayer is addressed was not clear. Shlemon said the pray-er has to believe that what they’re praying for will happen as well.

Because this aspect of the prayer and healing discussion brings faith into the picture, little wonder why many scientists disregard prayer and healing research. However, there are some researchers who have worked to overcome this barrier.

Spindrift. One of the most prominent examples of experiments into the healing power of prayer is the work of a group known as Spindrift. Bill Sweet documented

Spindrift's experiments as well as the reactions to them. Some people saw the experimenters as heretics and others saw them as pioneers in prayer research. Spindrift was founded in 1977 by John and Bruce Klingbeil.⁵⁴ Before this, Bruce Klingbeil was involved in the Christian Science Church.⁵⁵ He believed he was born with the ability to heal, which was opposed to the beliefs of the church's elders who believed healing was a learned trade. Bruce steadily grew frustrated with the church because they would not provide scientific evidence that their methods of prayer were effective for healing. Out of this frustration grew Bruce's want to prove with scientific evidence that prayers were good medicine.⁵⁶

The Klingbeils wanted to do scientific experiments with prayer because many of the effects of prayer could be explained away with reasons like the placebo effect or coincidence. If prayer was more than just the placebo effect, they wanted to prove it.⁵⁷ In order to do this, the experiments needed to be conducted like any other scientific experiment, which include having repeatable results and using standard research techniques. To get started, however, the Klingbeils needed to determine what subjects to use for the tests. Skeptics of the experiments — and there would be many — might claim human subjects were sympathetic to the results Bruce wanted to see. To avoid this, animals could be used; Bruce had seen prayers work with animals previously. After an experience in praying for an African violet, however, Bruce decided plants were an objective subject and could be used to prove prayer's medical qualities. Though it cost him his wife and brought criticism from the Christian Scientist community, Bruce, who

⁵⁴ Bill Sweet, *A Journey into Prayer: Pioneers of Prayer in the Laboratory— Agents of Science or Satan?* (Xlibris.com, 2004), 17.

⁵⁵ *Ibid.*, 22.

⁵⁶ *Ibid.*, 23.

⁵⁷ *Ibid.*, 46.

was later joined by his son John, continued to research the effects of prayer. They created Spindrift as a non-profit organization and began conducting systematic studies.

Many religious persons claimed they were perverting prayer by bringing it into the laboratory. Christian Scientists were shocked that the Klingbeils would attempt to prove in physical terms God's power and spirituality.⁵⁸ The Klingbeils were undeterred by the backlash they received from their religious community. The scientific community was also skeptical of their work. Bruce Klingbeil always responded by saying bringing prayer into the laboratory isn't perversion—it's just a new application.⁵⁹ Over a period of about 20 years, the Klingbeils conducted around 70 experiments. From these experiments, they found prayer can act as an "ordering-mechanism" that changes physical systems. More specifically, these experiments focused on "holy intentions" in praying and what effects the intentions had on the outcome.

Most of the problems the Klingbeils faced in publicizing their work stemmed from the skepticism of other people. Bruce Klingbeil understood where the skepticism was originating, so he targeted this skepticism with his research. Ultimately, however, Bruce and John Klingbeil committed suicide in 1993.

Today. Many people, both medical professionals and laypeople, tend to tense at the mention of mixing prayer with medicine. This isn't a subject that arises only in religious or medical settings. The issue is even explored on modern television shows such as "House, M.D." An episode, which aired in 2006, brings prayer into a hospital and contrasts a self-proclaimed faith healer with the supposed genius of a doctor. Throughout

⁵⁸ Ibid., 61.

⁵⁹ Ibid., 216.

the show, prayer and the medicine were pitted against each other, without resolution. As a statement on current perceptions of the relationship between prayer and healing, it shows that not much has changed since a century ago.

Despite the battle over this topic, there are people who continue to believe that religion, in general, and prayer, specifically, do have an impact on healing. For example, shamans practice healing through religious means. Many of them utilize forms of spiritualized energy medicine in order to heal people.⁶⁰ This energy flow is a concept that other modern scientists have examined. Dr. Daniel J. Benor describes common healing experiences that seem to parallel the experiences of people healed by shamans. Misunderstandings of the source and nature of such “energy” could be part of why many scientists ignore this potential source of healing. Many people approach shamans as mystics or even pretenders. While there are some shamans who do not actually heal, shamanism has been studied intensively and their healing practices validated, even if contemporary scientists are not sure how this healing occurs. That there are any cases where a shaman has been shown to exhibit healing is reason enough for further research to be conducted. If healing prayer works, even in just some cases, then scientists should be willing to examine the relationship between prayer and healing.

Approach and Methodology

This thesis project aims to explore research into the stigmas, current state, and remaining questions involved in the topic of prayer and healing. This includes an

⁶⁰ Joan Halifax, *Shamans, the Wounded Healer* (New York, NY: Crossroad Publishing Company, 1982).

examination into the religious history of prayer and healing, as well as the legal ramifications of prayer in medical settings.

The main text of this report (in Chapter Two) is structured uniquely for an honors thesis. I will approach the main part of my thesis as if I were putting together a special issue or section of a magazine or newspaper. That is, my goal is to develop several articles of different types that thoroughly explore this topic. These will include in-depth stories investigating topics from my project, presented in such forms as the feature story, interview question-and-answer, book review, and sidebar. Eventually, I hope to design a publication to incorporate these stories.

In order to complete my research and as with any journalistic endeavor, I conducted interviews with people involved in the larger prayer and healing discussion. This includes developing a list of questions, based on my research, and posing these questions to living sources. The questions varied for each interviewee, and included:

1. If you would, describe how you became interested in the topic of spirituality and healing.
2. I understand that the interactions between spirituality and health extend back for centuries. How would you describe the development of the investigation between prayer and healing?
3. There are many scientists who view research into spirituality and healing as a fool's errand. Why do you think this is? (A clarifying question might be: Do you think the idea of the "supernatural" affects the way scientists approach research into prayer and healing?)
4. Is spirituality and how it affects health something that should be studied and researched through scientific means? Why or why not?
5. Some religious people disagree with the idea of studying "God in the laboratory." How do you respond to people who claim studying the healing effects of prayer is something next to blasphemy?

6. What would you cite as one of the most important or ground-breaking studies in the field of religion, spirituality, and health?
7. In your opinion, has the research into religion, spirituality, and health accumulated enough for studies into religion and health to be called an actual field?
8. Have you personally experienced opposition to your writing?
9. Where do you hope to see the research on prayer and healing in 20 years?
10. I've noticed in some of my readings that there appears to be a need for a common language among research studies. Do you agree? Why or why not?

The source list included Drs. Larry Dossey, Harold Koenig, and Jeff Levin, who provided insight into the history and state of prayer and healing today. These particular sources offered valuable information into how the medical profession responds to this work.

This topic remains controversial, in that some scholars believe it is impossible to prove prayer heals, and not worth the effort. Other people, both medical and religious professionals, believe that science or medicine should be left out of the faith healing process altogether, for various ideological reasons. Because of the variety of opinions on prayer and healing, interviews with a list of questions posed in a journalistic, objective style will assist in explaining the rationale for studying prayer and healing, the stigmas against bringing the two together, and how prayer and medicine can/should work together in our hospitals or clinics.

In this study, besides the historical material summarized earlier in this chapter, a majority of my information has come from live sources. These sources are not test subjects, as in a research study. They are people who have knowledge and a type of

expertise in the area of prayer, healing, faith and/or medicine. Information was gathered through interviews — through face-to-face, phone, or email question-and-answer sessions, as these individuals are scattered throughout the country.

CHAPTER TWO

The Research: Past and Present

This chapter contains nine articles on topics pertaining to the research on prayer and healing. The first article is a letter from myself in order to establish my background with the material. The articles following this letter are focused on explaining in greater detail the history of contemporary research into prayer and healing, the stigmas surrounding the research, three interviews presented in question-and answer-format with the major names in the contemporary research, and three book reviews of works that have impacted the research on prayer in healing in important ways.

Together, these articles tell the story of the controversies and stigmas surrounding the research on prayer and healing. These stories indicate where this research has the potential to go in the future as well. Clinical studies examining intercessory prayer and distance healing will most likely remain controversial because of their subject matter and the difficulties there are with replicating them. There is currently no model for researching intercessory prayer. This research also depends on how the person being prayed for feels, and this is something difficult to quantify or qualify across multiple studies.

Letter from the Editor

I wanted to be the quiet, unobserved observer.

When I started researching the topic of prayer and healing, I thought I wouldn't be swayed. That I wouldn't change. That my beliefs were unshakable.

My family attended a Methodist church until I was 8 years old. From there, we moved to a Southern Baptist church that I've attended for the past 13 years. It's a friendly church, no doubt, but more conservative when it comes to the way the service is conducted. We stand in the pews during worship. We aren't quite stoic as we sing songs out of a hymnal and occasionally clap to an upbeat gospel song.

The topic of healing was occasionally mentioned. Miraculous healings seemed distant, almost like fairytales. We talked in Sunday School about Jesus as the wonderful healer and comforter. He performed miracles and healed people of blindness, lameness, deafness, possession — even death. Of course, to my mind these were mainly just beautiful stories that demonstrated how much Jesus loved people.

The idea of proving God's existence never seemed necessary to me. Beyond that, proving God existed almost seemed to suggest faithlessness. We shouldn't have to prove his existence, I thought. God proves he exists every day to us if we're watching for signs of him. As I grew older, I heard stories about scientists attempting to prove God exists through scientific experiments. My mind changed a little bit on proving God's existence. What if through these experiments more people came to know and follow God? Then these experiments were most certainly a noble cause.

Upon entering college, I hadn't thought about how many different aspects of faith there are to study. I initially declared a journalism major and a year later I added a religion major with a focus in practical studies. I was in the Honors Program, which meant I needed an honors thesis. I wanted to combine both of my majors into a single project. Part of being in honors meant reading for Honors Colloquium, a required extra course sophomores take. One of the books we were required to read was *House on Fire*:

The Fight to Eradicate Smallpox by William H. Foege. Foege described how the religion of the indigenous people affected how receptive they were to medicine. The idea of religious beliefs affecting medicine grew and evolved into this thesis project.

I was interested in researching how religion, specifically prayer, plays a role in medicine, specifically healing. But for my background as a journalist, examining the research and writing more comprehensive articles and examinations of the documents would fit my style a bit more than what a scientist or epidemiologist might do.

Part of my research meant experiencing healing services. I wasn't necessarily nervous about visiting a healing service at local Waco churches, but my heart did beat faster when I thought about what I might see. With a Baptist background, my pastor never performed or even suggested healing services. We prayed for healing, yes, but that was the extent of my experience.

That's why I wanted to be quiet, observe, and come away from the services with greater understanding than when I went in. However, the people at both Christ Life Church and Turning Point Church in Waco are very friendly. The moment I walked in, I realized that everyone knew I was a visitor. Amongst the smiles, handshakes, and introductions, I suddenly understood how out of my comfort zone I was.

I've heard stories about Pentecostals. The speaking in tongues, the eccentric worship, and dancing during the service were all things I thought I understood. I thought I'd done my research on these churches before I went. There's nothing quite like actually experiencing a service to better understand what Pentecostals believe about healing and prayer.

Both services I attended were filled with prayer and worship. During the worship portion at Christian Life Church, people danced in the aisles. A few women even began to shake, flail and shriek as the worship progressed, self-described as consumed by the Holy Spirit. This fascinated me, because I could just imagine the faces of elderly people at my church in Georgia if they witnessed such a demonstration. Fear mixed with confusion and perhaps disapproval. The elderly people in this church, however, were not afraid to dance or be engaged in the service. The story of David dancing in the streets came to my mind as the sweaty pastor did a jig across the stage.

The pastor was tall, and his stature matched his personality. When he felt the mood was lacking in enthusiasm, he would yell into a microphone about how Pentecostals aren't like "those other churches" where people stand quietly in the pews and don't allow the Holy Ghost to show in their worship. I didn't take offense to his statements, because I realized there was something more to what these people were doing than just flinging their arms in the air and singing at the top of their lungs. Their worship, I realized, is their form of prayer. These acts that had always been separated in my mind are one and the same for them.

During every prayer that was spoken into a microphone for everyone to hear, there was an aspect of healing. The pastor told stories of people they'd prayed for who were healed miraculously. A woman with stage 4 cancer. A man with chest pain. A boy with pain in his back. From there, he prayed aloud for healing for another woman who was diagnosed with cancer. I noticed that the stories of those who were healed seemed to put more power behind his current prayers for healing. The congregation affirmed the pastor's prayers with shouts of, "Yes, Lord!" and, "Amen!" They expressed their faith in

God's ability to heal as well as their faith that God would heal their friends and family members.

The next Sunday, I attended Turning Point Church, which recently opened its doors. There were about 50 people in attendance, many of them close to my age. Also a Pentecostal church, I was expecting the same kind of outward signs of the presence of the Holy Ghost: the yelling, moaning, shaking, and dancing. However, none of these were present.

There were prayers for people to be healed. These prayers didn't seem as passionate, but they were spoken instead of shouted. The meaning was still there. I heard people "mmm-hmm" during the prayers, and when I looked around I noticed people nodding at the pastor's words. This pastor was quieter than the other one, and he relied more on his humor than his ability to rally the people into dancing and jumping.

It reminded me of another service I recently attended. Acts Church in Waco is not Pentecostal, but rather charismatic. This church had a time of prayer, but it was not silent prayer like I'm accustomed to. Everyone prayed aloud at the same time, the voices filling up the room in passionate praises, thanks, and requests. There were prayers for physical and spiritual healing.

A common theme in each of these services was the faith behind the prayers. It was evident from the people's faces, voices, and words that they truly believed in God's power to heal and that God would actually supply that power for his people. The experiences I had at each of these churches encouraged me to examine my own beliefs and faith in God's power. I find it interesting how different people express their faith, even among those of the same religion. Methodists, Baptists, Pentecostals and other

denominations all have different styles of worship, prayer and expression. I also wonder if the style of prayer matters when it comes to healing. From what I've observed, if the faith is present in God's power, and the prayers are sincere, healing is possible, especially through intercessory prayer.

Of course, I speak as someone with a background in Christianity. I saw and heard what I expected to see and hear. As hard as I tried to be objective, I still brought my own opinions into those sanctuaries. For an outsider, maybe a scientist who's skeptical of the power of prayer, the fact people were healed after a prayer could still be attributed to a coincidence or the placebo effect. Because of this, I understand how more research into whether and how prayer works would help provide proof to those who are skeptics. All in all, these experiences were enlightening. I suppose my next goal is to actually witness someone healed through prayer. For me, that'd be a sight to see.

History of Modern Research on Religion and Health

The interactions between religion and medicine extend for centuries. It was not until the fourth century B.C. that religion and medicine were fully separated.⁶¹ In the 19th century, there were advocates for the institutions of religion and medicine to begin communicating once more. Before this, individual people may have held beliefs about how their faith could influence their health, but, institutionally, medicine and religion kept their distance from each other. This changed in the 20th century.

Research on religion's effect on healing gained momentum in the 1970s. In 1969, Bruce and John Klingbeil started the Spindrift organization in order to conduct research

⁶¹ Paulsen, "RELIGIOUS HEALING," 1519.

into the healing impact of prayer.⁶² Their studies were met with criticism from scientists, physicians, and religious leaders.

As the 1970s progressed, physicians began to speak out about the necessity of this research.

“Physicians today no longer depend solely on medical and surgical means to restore health,” Dr. Glenn R. Frye writes in his 1974 article, “Faith Healing.”⁶³ “We know that emotional upsets can produce physical symptoms. The physician and the clergyman are now cooperating more closely than ever before to overcome illness, whether it be physical or emotional.”

Frye’s sentiment that we can easily see that our emotions have an effect on our health is reflected in published research studies of faith, health, and healing.

Dr. Jeff Levin, distinguished professor and decorated researcher at Baylor University, said clinical studies of prayer are a phenomenon of the past few decades.

“While empirical research studies on spirituality and health date to the 19th Century — and, thus, we’re in the third century of such research — clinical studies of the effects of prayer are mainly a phenomenon of the past 25 to 30 years,” Levin said.

Articles and studies from researchers such as Drs. Kenneth Vaux, Gordon Allport and Berton H. Kaplan helped spur on the movement in the ’70s. Dr. Larry Dossey, a physician and author of the book *One Mind: How Our Individual Mind Is Part of a Greater Consciousness and Why It Matters*, said publications on this field were mostly anecdotal until this time.

⁶² Sweet, *A Journey into Prayer: Pioneers of Prayer in the Laboratory— Agents of Science or Satan?*.

⁶³ Claude A. Frazier, ed., *Healing and Religious Faith* (Philadelphia: Pilgrim Press, 1974), 12.

“Every wisdom tradition, every major religion is saturated with accounts of healing, but no one ever systematically began to look at this until Jeff Levin opened this door by proving the epidemiological correlations between spiritual practice, prayer, and longevity, but also a lower instance of all of the major diseases in people who followed some sort of spiritual practice,” Dossey said.

Levin published two articles in 1987 that raised the question of whether religion’s effect on health could be studied. “Is There a Religious Factor in Health?”⁶⁴ and, “Is Frequent Religious Attendance Really Conducive to Better Health?”⁶⁵ are the titles of these two articles. The second study found that frequent religious attendance did have a salutary effect on health.

Dossey said Levin’s research also opened the door to many more studies.

“At the time he started talking about these statistical correlations epidemiologically, people wouldn’t even get close to this field,” Dossey said. “This was not the best way to advance your career by talking about the role of religion and spirituality in medicine.”

Dr. Randolph Byrd’s 1988 study on the positive therapeutic effects of intercessory prayer in a coronary care unit also helped bring clinical studies to the forefront of research.

⁶⁴ Jeffrey S. Levin and Preston L. Schiller, “Is There a Religious Factor in Health?,” *Journal of Religion and Health* 26, no. 1 (April 1, 1987): 9–36.

⁶⁵ Jeffrey S. Levin and Harold Y. Vanderpool, “Is Frequent Religious Attendance Really Conducive to Better Health?: Toward an Epidemiology of Religion,” *Social Science and Medicine* 24, no. 7 (1982): 589–600.

Byrd's study was arguably groundbreaking in that it was unlike any experiment seen or heard of before. The results showed that intercessory prayer had some effect on medical conditions.⁶⁶

“The most celebrated—and controversial—and among the earliest of these [studies] was the famous study by Byrd, published in the *Southern Medical Journal* in 1988,” Levin said.

This was one of the first studies to show that intercessory prayer could have a positive effect on a person's health. The study itself was controversial, especially because of the use of prayer, which many people believe should be kept out of research studies.

Since this time, there have been over 200 studies like this. Dr. Daniel J. Benor documents these studies in his 2001 book *Spiritual Healing: Scientific Validation of a Healing Revolution*.

“A wealth of research, some rigorous, some not, and a wide range of anecdotal evidence demonstrates that spiritual healing, biological energy fields, and related phenomena exist,” Benor writes.⁶⁷

This research on religion, spirituality, and health has faced numerous trials. There have been and are skeptics from both scientific and religious standpoints who adamantly disagree with this research taking place at all.

Despite criticism, there are researchers who continue to conduct and study this topic. Levin said he would like to see more studies on the more subjective side of

⁶⁶ Byrd, “Positive Therapeutic Effects of Intercessory Prayer in Coronary Care Unit Population.”

⁶⁷ Daniel J. Benor, *Spiritual Healing: Scientific Validation of a Healing Revolution* (Southfield, MI: Vision Publications, 2001), 4.

religious expression, such as “mystical experiences, meditation, being born again or spirit-filled, attaining higher states of consciousness.”

He said the studies showing that holding religious practices or beliefs can have a salutary effect on health are numbered in the thousands and are rarely controversial today. But deeper forms of religious expression have not received the same attention, nor have studies of more sophisticated biomedical endpoints.

“I’m more interested in the more qualitative, subjective, transcendent aspects of human spirituality ... and how these might impact on more ‘inside the body’ markers of human physiology, psychophysiology or pathophysiology,” Levin said.

Today we can Google religion and health and instantly find thousands of studies and resources. There is even a Wikipedia page dedicated to studies on intercessory prayer.⁶⁸

One of the greatest challenges the research faces is determining a common language and model across research studies.

“In this field, words like religion, spirituality and prayer are used interchangeably, as are health and healing and wellness and others,” Levin said. “For an epidemiologist and researcher, like me, this is a terrible situation and only adds confusion to a topic that is already too contentious.”

Dr. Harold Koenig said he agrees. He said a major problem he sees is the use of the word “spirituality.” The word is used in various ways across studies.

⁶⁸ “Studies on Intercessory Prayer,” Encyclopedia, *Wikipedia*, (n.d.), http://en.wikipedia.org/wiki/Studies_on_intercessory_prayer.

“We have to measure things and to use a term that’s different for everyone is like taking blood pressure when everyone has a different definition of it,” he said. “You couldn’t communicate with your colleagues.”

Research on religion and health continues to grow, despite the lack of a common language. As this research evolves, a common language is a goal.

Stigmas Surrounding Modern-Day Research

While studies on the interactions between religion and health grow exponentially, year by year, there are still many people — including scientific, medical, and pastoral professionals — who do not approve.

The reasons why these people disagree with the direction of this research include concerns over how studies are conducted to why studies are conducted. Oftentimes, people cannot understand how science and religion can or do intersect or overlap. For some, these seemingly separate approaches to making sense of the world must stay separate. There are, however, researchers who disagree.

“The boundary line between medicine and religion can be regarded either as the place where the two touch and influence each other or as a line of demarcation between two jealously guarded territories,” Thomas A. Droege writes in his book *The Faith Factor in Healing*.⁶⁹

For some, especially scientists and physicians, the field of religion and health is too broad and ill-defined to be taken seriously. One reason some people reject research into religion and health completely is because of smaller facets of this research that they

⁶⁹ Thomas A. Droege, *The Faith Factor in Healing* (Philadelphia, PA: Trinity Press International, 1991), 12.

misunderstand or dislike. For example, many physicians and scientists disapprove of studies of the healing effects of intercessory prayer, a controversial topic even within the larger field of religion and health research.

Dr. Larry Dossey, a physician and author of the book *One Mind: How Our Individual Mind Is Part of a Greater Consciousness and Why It Matters*, is an advocate for research on health, spirituality, and religion. Dossey is also a proponent of research on intercessory prayer.

Many people hesitate to use the word “prayer,” because of its religious connotations. Dossey said they are welcome to call it whatever they wish—loving compassion is an alternative, for example. There are some people, however, who dislike intercessory prayer research entirely, not just the phrase.

Dr. Harold Koenig, a decorated professor, physician and author, also advocates for research on religion’s effect on health. However, he said he disagrees with research that would study intercessory prayer, and understands why some religious persons claim research on religion and health is blasphemous.

“I would agree with them if they are talking about studying things like intercessory prayer or trying to prove there is some divine force responsible for the help,” Koenig said. “I would totally agree with them. I would say you’re right. Absolutely correct.”

Koenig said his research does not examine intercessory prayer, although he has been involved in such studies in the past. Today Koenig said he focuses his attention on researching how beliefs in the divine and the consequences of devout religious commitment have an effect on a person’s health.

“It’s not whether God exists—it makes no difference to this research,” he said. “We are just studying about belief and practice and attitudes and commitments. Do those make a difference in a person’s health?”

Dossey, however, said intercessory prayer research, or whatever people prefer to call it, has the potential to reinforce and promote religious belief. He said he has received messages from people saying their faith was reinforced because of the results of intercessory prayer studies.

Dr. Jeff Levin, distinguished professor and decorated researcher at Baylor University, said the reason many people refuse to acknowledge intercessory prayer as a valid topic of research stems from their dislike of the religion and health topic altogether.

“Many who have no use for faith or God or religion are thus hostile to anything that involves their study,” Levin said.

With a previous dislike for research on religion, in general, folding in a more controversial topic of study like intercessory prayer creates a greater disdain for the research as a whole.

“Then substitute the study of healing—not just study of one’s health status, but study of the possibility that faith or prayer or spirituality can actually serve a therapeutic function in sick people—and otherwise presumably sane scientists can begin to act like agents of the Inquisition,” Levin said.

There are still those who disagree with the field as a whole. Religious persons often disagree with the religion and health research because they view studies on religion and health as an attempt to test God, something Levin refers to as a misunderstanding.

“Sure, maybe one or another misconceived studies wish to do that, but on the whole this research has been done by folks with a very simple objective: to identify whether (and, perhaps, if possible, how) positive spiritual intentions for another can have a measurable impact on one’s state of well-being,” Levin said.

Dossey said he has had ongoing debates with fundamentalist Christians over the years about the sinfulness of the research.

“One thing is that they think this is a sin against God,” Dossey said. “I know there is a biblical injunction against testing God, but my response is that I doubt in biblical times when that was written that it referred to double-blind studies, which I don’t think existed back then.”

Dossey said for many people the issue of agreeing with the research is really a problem with open-mindedness. He said some Christians have argued that other religions should not be included in the research.

“There is no real reason for any particular religion to get bent out of shape and take offense at these studies like they’re proving or disproving their particular religion,” Dossey said.

The stigmas surrounding research on religion and health still exist, but no longer hinder the research as much as in the past.

Dossey said he no longer evangelizes the research or attempts to convince people to take it seriously.

“It’s not up to me to dictate to other doctors and scientists on what to believe,” Dossey said. “They’re on their own. All we can do is point to the data. You’ll always be able to find somebody who thinks this whole field is just absolutely nuts.”

He said he hopes that people will continue working toward de-stigmatizing the conversation around the research, especially when it comes to misunderstandings or misconceptions about the purposes of the research.

A potential solution for resolving these stigmas rests in the addition of coursework on spirituality to the medical school curricula. Indeed, this is already occurring—over 100 U.S. medical schools include lecture series or electives on the role of religion, spirituality, or faith in health, healing, and the delivery of healthcare.

Major Players

While there are many people who have dedicated their lives to researching religion's affect on health, there are three particular individuals who stand out as leaders. Drs. Larry Dossey and Harold Koenig are two of these individuals. Their stances on the extent of religion's affect on healing and health differ. Through the following interviews, their varying opinions and focuses on this research come to light. Their interviews are followed by a question-and-answer article with Dr. Jeff Levin, whose own views place him as a sort of moderator between these competing viewpoints.

Dr. Larry Dossey

One Mind: How Our Individual Mind Is Part of a Greater Consciousness and Why It Matters; Executive Editor: Explore: The Journal of Science and Healing

Internationally known as an advocate for spirituality in healthcare, Dr. Larry Dossey graduated with honors from the University of Texas at Austin. In 1967, he earned his Doctor of Medicine degree from UT Southwestern Medical School in Dallas.

Dossey worked as a pharmacist during his time at Southwestern and was a battalion surgeon in Vietnam.

Through his work as a doctor, Dossey came to the realization that medical science cannot explain every instance of cures, especially those called miracle cures by some. He began lecturing on legitimate scientific research, which can only be proven legitimate through data gathered over several experiments. In 1993, his bestselling book *Healing Words* was published. The book examines how religious practices and prayer affect health. While his ideas are often called radical by other physicians and scientists, Dossey continues to research and advocate for further research into the interaction between prayer and healing.⁷⁰

Q: Describe how you became interested in the topic of spirituality and healing.

A: I grew up in Central Texas—we called it the buckle of the Bible Belt—and religion was a very major part of my growing up. Consequently, I can't remember not being interested in the possible connection between religious practice, spirituality, prayer, and healing. It was part of my religious tradition. There were some events in my life that also contributed to my interest. I had a major medical problem from mid-teens, which was classic migraine headache. This is associated not just with headache but with nausea, vomiting, and the worst thing was partial blindness. This was stress-related. During medical school it got so bad that I decided I had to drop out because I thought it would be a better time until I had an episode of partial blindness. I thought I might even hurt or kill a patient during a critical situation. But my faculty advisor reassured me this would get better at the time and I was overly too concerned about it. But in fact it got a

⁷⁰ "Biography," *Larry Dossey MD*, n.d., <http://www.dosseydossey.com/larry/default.html>.

lot worse. It persisted through all my medical training and during the early '70s when biofeedback was developed and began to be used critically in the United States. I chased all over the country finding out how to do that because studies show it had a good effect on migraines. It was amazing because after about six sessions or so the whole problem of migraines almost went away completely. This is a technique where you're using imagery, visualization, and profound states of relaxation. We use electronic gadgets to measure these type of things. I was hooked on the role of consciousness and getting well because of this very personal experience.

I began to meditate—during those days this was a very crazy thing to do—not like now. I began to develop a few things together and began to wonder about the connections between contemplation and prayer and meditation and so on. About this time, I bumped into Dr. Jeff Levin's work and that, also, of Dr. David Larson. Levin and Larson really influenced my views on how you could research epidemiologically the connections between health and longevity and spirituality and religious practices. Dr. Levin was a giant in putting this entire question to scientific analysis—the epidemiology of looking at these connections between spiritual and religious practice and health and longevity. I also encountered the work of Daniel Benor. I came across 140 studies that he had rounded up looking at clinical experiments, not just in people, but also in mice and bacteria even. These studies showed statistical effects of prayer and intentionality on these biological systems. I was hooked on this field by that time, and then in 1988 Dr. Randolph Byrd's classic study on coronary care unit patients came out from San Francisco General Hospital showing statistical data among people who had received intercessory prayer. At this time, I began to feel uncomfortable because I had patients in

the hospital and in critical care units all the time and I was not praying for them. The question became very personal: If this stuff works, shouldn't you be doing it? I wanted to know if there was any other work out there that I might be missing by virtue of just not having been exposed to it. I spent a couple years looking at the world's literature and experimenting with prayer and healing intentions and biological systems. The result of that was my book *Healing Words*, which was published in 1993 and actually became a *New York Times* bestseller. By that time, I had become convinced that prayer had a salutary effect on people who were sick and I had incorporated it into my practice of internal medicine and my own meditation every morning before doing my hospital rounds.

This is a long-winded way of saying that this was a long process for me getting comfortable with this and actually winding up doing a major book, which helped change the field really.

Q: I understand that the interactions between spirituality and health extend back for centuries. How would you describe the development of the investigation between prayer and healing?

Until the 1970s, the field really consisted of anecdotes. Every wisdom tradition, every major religion is saturated with accounts of healing, but no one ever systematically began to look at this until Jeff Levin opened this door by proving the epidemiological correlations between spiritual practice, prayer, and longevity, but also a lower instance of all of the major diseases in people who followed some sort of spiritual practice. I credit Levin with the huge contribution to the evolution of this field. At the time he started talking about these statistical correlations epidemiologically, people wouldn't even get

close to this field. This was not the best way to advance your career by talking about the role of religion and spirituality in medicine. This stuff was all relegated to ministers, rabbis, priests, and so on. What Jeff did was really courageous at the time, and I mentioned other people followed, including Dave Larson, Harold Koenig, and people in the field of epidemiology. But that aspect of the evolution of this field is quite different from the experimental work that people like Randolph Byrd began to do. There is a huge difference between epidemiology and doing controlled studies. But if you want to chart the evolution of this field, you have to recognize that there are these two main vectors that are involved. One is epidemiology, and that does not involve clinical experimental outcomes. The other vector is clinical trials, which began to pop up in the late 1980s, spearheaded as I said by Dr. Byrd. That's the great modern landmark point in the whole field. If you fast forward to the present moment, you can get a sense of the incredible impact of these events on medicine. Now around 90 percent of the United States' medical schools have courses looking at the correlation between spiritual religious practice and health and longevity. In about four decades, this has evolved from an outlawed subject that was highly controversial to one that has been accepted as a legitimate concern in most medical schools in the United States. We've come a long way.

Q: In your opinion, has the research into religion, spirituality, and health accumulated enough for studies into religion and health to be called an actual field?

A: I think that there is no question we are talking about an actual field. If you just do a web search on spirituality and health, you will get thousands of hits. I think the verdict is in that this is a legitimate field for epidemiological as well as experimental

research. Go back to the decisions of the medical schools to include this in their curriculum. This makes the case that this an actual, legitimate field.

Q: There are many scientists who view research into spirituality and healing as a fool's errand. Why do you think this is?

A: I think people vary tremendously in this area about their open-mindedness. There are still critics who think this is a fool's errand. I think those people are not the most open-minded people you'll ever meet. Scientists talk a good game — if you show me the data, I'll look at it, and if it's good, I'll go with it. That's just not the way it often works. Jeff Levin and I have kicked this around, this idea of open-mindedness. He wrote to me in an email in 2007 that says, "There are thousands of religion, spirituality, health studies. Here is a great truth. The war is over and has been won. Only the true cranks are left to flail away and almost every single one is a clinician or non-scientist who doesn't have any idea what he's talking about." That was eight years ago and the strength of this field has done nothing since then except increase. There are cranks and disbelievers on everything from global warming to you name it these days. Some are right and some are wrong. It's not up to me to dictate to other doctors and scientists on what to believe. They're on their own. All we can do is point to the data. You'll always be able to find somebody who thinks this whole field is just absolutely nuts.

Q: Is spirituality and how it affects health something that should be studied and researched through scientific means? Why or why not?

A: It's a complicated question. I didn't start this field. When I jumped in it, there was already a substantial database. It was almost a mute question because people were already investigating it. I'm happy that decision was made the way it was. Looking at

the field, we can say religious believers don't require any of this stuff to believe that prayer works. Since the study shows this apparently does, I think this can help validate the belief system of dedicated Christians. I don't see a downside to this.

Q: Some religious people disagree with the idea of studying “God in the laboratory.” How do you respond to people who claim studying the healing effects of prayer is something next to blasphemy?

A: I can tell you I have been harassed quite a bit by fundamentalists who think this field is just heresy and blasphemous. I tried to understand why they say this. One thing is that they think this is a sin against God. I know there is a biblical injunction against testing God, but my response is that I doubt in biblical times when that was written that it referred to double-blind studies, which I don't think existed back then. I think there is a lot of leeway in how one interprets this injunction that one should not test God. I had a lengthy correspondence with fundamentalist Christians who think I have debased their religion. One thing that comes out is that most fundamentalist Christians seem to be very annoyed that any of these prayer studies feature non-Christians as people doing the praying for the healing. I've actually had letters from Christians saying God would never answer Muslim prayers. The idea of non-Christians praying for healing is just an enigma. There is a lot of embedded religious intolerance in some of these objections to these studies. I've even had fundamentalist Christian doctors get in my face about recruiting Muslims, Hindus, and Buddhists to be involved in these prayer studies.

Actually, if you look at the statistics, there isn't any evidence that any particular religion has cornered the market the healing effects of prayer in these experiments. The data just doesn't show that. I think that some people are very offended by the idea that

these other religions could perform effectively in these prayer experiments. When people object to these experiments, I think you have to search for what is the agenda here. One of the reasons I strongly favor these experiments on prayer and healing is that I think they point like an arrow toward religious tolerance. It's in pretty short supply in the world right now, and I think we need more of it. I think this is one of the contributions of this prayer and healing experimental research.

Q: There are some people who approve of studying the effects of religion on health, but they dislike studies into intercessory prayer. What is your response to those who think intercessory prayer should not be studied?

A: I have had a lot of conversations with colleagues in medicine who expressed the same reservations. Some of these people are really interested in the field, but they say, "Dossey, as long as you call this intercessory prayer, you're going to hold the field back in medicine and medical schools where people are really nervous about endorsing religion, so why don't you just stop using the term prayer?" I don't care what we call it. The people who really don't like prayer, I just say why don't you use "loving compassion" or "compassion intentionality?" If prayer offends you, call it something else. I feel OK saying that because there is such a diversity in the techniques that people use in these studies. I think we're just being extremely flexible in our language. If people get bent out of shape by the term prayer, they can call it something else.

Q: Are there any limitations to the studies on prayer and healing?

A: I think that these studies show that when you have people who with compassion and love pray for people to get better—not just people, but also mice who have tumors or bacteria to grow quicker—you can clearly show statistically that there are

positive outcomes when people do this. The big question, which these studies cannot answer, is why this happened. Are we measuring the effects of what we call people's healing intentions, which we could call willing, wanting, wishing? Or are the studies demonstrating the intervention of divine will? Is God at work in what happens in these experiments? These studies are helpless to answer that question. Scientists don't have any God meters. They can't tell whether these effects are direct effects of people's intention or whether there is divine intervention here. This is often forgotten when people scrutinize these studies. I think these studies have to stop at a certain point and say, look, here's what happens and why this happens we are helpless to say. In this respect, the field is helpless to affirm or denigrate anybody's religion.

Q: How does this research affect how doctors and patients interact?

A: Now we're getting into something that's really important. I think this changes everything. The model of healing I grew up with in medical school, which a lot of kids are still ingrained with from pre-med onward, is that it is all biological, materialistic, and physicalistic. The intentions and thoughts and actions of a doctor are limited to prescribing medications and doing surgery and so on. We need to get over that. These studies show that the thoughts and emotions, in terms of compassion and love, can make a difference from one person to the next. I think this is one of the major contributions in this field. It says that healing is real, and by healing I mean the loving compassion and intentions of one person to another. Doctors have not wanted to go there. It's been easier to say this is all physical. Human beings are much more complicated than that. These studies imply strongly that healing can come from non-professionals as well. You don't have to have a white coat and a stethoscope to be involved in healing. I think that this

has a lot to do with what we consider the placebo response. This makes healing interesting because it restores love and healing compassion, caring, and empathy. These studies humanize medicine in ways we would never have predicted a hundred years ago.

Q: Have you personally experienced opposition to your writing?

A: Oh, yes. There are a lot of professional skeptics out there who are really offended this field exists and that people are even talking about this field. They're in a very vocal minority who are offended not just by this but also parapsychology, which studies things like clairvoyance, telepathy, and precognition. They want all of this to go away. There is an increasing number of militant atheists who would like to banish religion period. People like Richard Dawkins and so on. They're going to lose this war because of one major reason — the data. This is a data-driven field, and I think the reason they are so vocal is because they know they're in a bad position. Having said that, I hardly get criticism anymore. I get a lot of feedback from physicians and scientists from all over the western world, supporting what I'm doing. Thirty years ago, I used to be crucified with regularity. That just doesn't happen anymore. We still have a lot of work cut out for us. This is a very complex and difficult field. I think that we are under the wire, and this field has a very bright future.

Q: Do you feel like there does need to be a common language among these studies?

A: I think the results ought to stand on their own. I think we need to be very, very clear about what these studies can and cannot show. We give the results of these studies too much influence. They cannot and do not affirm any mode of action, whether divine intervention or secular intentionality. What we have here is the opportunity for people to

invest their own interpretations in these studies. I don't think we should go to war on this issue, but a lot of people do. We can't go beyond the data.

Q: Where do you hope to see this research in 20 years?

A: I think we need to continue to de-stigmatize talking about spirituality. A lot of people in my profession are still uncomfortable about doing that. We are going in the right direction. This field will continue to become more sophisticated. I think we will be able to do fine experimental models that are standardized and we need to do that. Right now, researchers are ball-parking how they do prayer experiments. For example, some studies use professional healers who've been doing healing for decades. Some studies just recruit people from various congregations. Some of the studies use prayer for five minutes a day, others for one hour a day. Some studies use formula prayers, others ask people to pray the way they feel best. We need to do better. It's hard to compare studies that use such different methods.

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Dr. Harold Koenig is currently the Director of the Center for Spirituality, Theology, and Health at Duke University Medical Center. He has published over 450 scientific peer-reviewed articles on religion, mental health, and geriatrics, as well as more

than 40 books. Koenig's work with religion and health has been featured on several national and international TV programs, radio stations, newspapers, and magazines.⁷¹

The benefits of religion and spirituality on health is a popular topic with Koenig. He spoke before the U.S. Senate in 1998 and the U.S. House of Representatives in 2008. Koenig emphasizes the fact that an individual's commitment to religion and spirituality matters for a person's health.⁷²

Q: If you would, describe how you became interested in the topic of spirituality and healing.

A: I got interested in studying the topic in 1984 when I was training to be a family physician. I did a survey of older adults in the Midwest and asked them about prayer and asked them about the role that religious faith plays in their life. As I was taking care of patients as a young resident I noticed religion was very important to patients, especially when they were sick and disabled and were having a really hard time in the hospital. They would tell me about praying and about how much the Bible meant to them and what it meant for them to know their church was praying for them and having their pastor visit—all those kinds of things. They told me this provided them a comfort and peace, so I decided at that point to start doing more research.

Q: I understand that the interactions between spirituality and health extend back for centuries. How would you describe the development of the investigation between prayer and healing?

⁷¹ Duke University, "Harold G. Koenig, M.D.," *Center for Spirituality, Theology and Health*, n.d., <http://www.spiritualityandhealth.duke.edu/index.php/harold-g-koenig-m-d>.

⁷² "Religion, Spirituality and Health" – An Interview with Dr. Harold Koenig," *The Religious Studies Project*, March 24, 2014, <http://www.religiousstudiesproject.com/podcast/religion-spirituality-and-health-an-interview-with-dr-harold-koenig/>.

A: It really didn't start getting examined from a scientific standpoint until the late 1940s, and it still wasn't getting examined much. It wasn't really until the 1990s that this really began to take off. Part of this had to do with the Templeton Foundation that provided monetary support to conduct research of this kind, because the NIH had never funded anything like this before. But over the years it's taken off. Even people who don't have research funding—graduate students and postdoctoral students have actually decided to do their dissertations on it and have found little pots of money to do surveys and conduct research. There has been an enormous surge of papers, peer reviews, science journals for the past 15 years, and especially the last five years, and really the last month. A lot of papers have been published. Just since Jan. 1st, there have been a lot of publications in this area. It just seems to be taking off. It's amazing.

Q: There are many scientists who view research into spirituality and healing as a fool's errand. Why do you think this is?

A: I guess it depends on what you mean by healing. Some people are trying to prove that God exists and that God answers prayer. That's kind of ridiculous. It's ridiculous to try to use the methods of science to prove something that is above and beyond science — the supernatural. Science is only able to really study the natural. It's a natural method for studying relationships, observations. The kind of research that I've done and the kind of research that I teach has to do not with trying to prove supernatural thinking but with trying to understand how a person's beliefs, attitudes, and practices influence their health and their well being. I administer surveys and then we follow people over time, assess how religious they are, and see whether their health improves or gets worse compared to those who are not religious. Or, I do randomized clinical trials,

where I'll randomize patients either for religious intervention or the control group and whether or not those who get randomized to the religious intervention do better. That's the kind of work I do, which is right within the mainstream of the social and behavioral sciences.

Q: Is spirituality and how it affects health something that should be studied and researched through scientific means? Why or why not?

A: I think it's because it is important to patients. Many, many patients are religious, particularly when they are sick, and they have spiritual needs related to that. Thus far, in medicine, those needs have been ignored — avoided. In some cases, ridiculed. I think that needs to change. What this research, I think, will do is it will ultimately not only show that religious involvement is good for your health but it will show the biological mechanisms by which this occurs. This is what we are trying to study and discover—how these religious effects help. Once that's known, it's like anything else. Why study social support? Why study marital relationships? Why study really anything regarding race and age? You're not going to change that, but people need to know. They need to know factors related to their health and take care of their health. It's important from a public health standpoint. People who are religious are healthier and use fewer health services. That's important for people to know about. Just for people to know about. It's like knowing whether exercise will help you or whether smoking will help you. If they can extend their longevity and increase their quality of life by being part of a safe community, then they ought to know about it. The public ought to know about it and it could influence public health.

Q: Some religious people disagree with the idea of studying “God in the laboratory.” How do you respond to people who claim studying the healing effects of prayer is something next to blasphemy?

A: I would agree with them if they are talking about studying things like intercessory prayer or trying to prove there is some divine force responsible for the help. I would totally agree with them. I would say you’re right. Absolutely correct. But that’s not what we are doing. We are not studying the divine. We are studying whether belief in the divine and the consequences of devout religious commitment have any effect on a person’s health. It’s not whether God exists — it makes no difference to this research. We are just studying about belief and practice and attitudes and commitments. Do those make a difference in a person’s health?

Q: There are some scientists or researchers who have attempted to study intercessory prayer and its effects on health. Is that research you would be interested in participating with? What are your thoughts on that research?

A: Unfortunately, I have been involved in those studies before. But like I said, I don’t think that research is credible at all. That is what is blasphemy—to try to prove that you can control God’s actions in the world and condemn God somehow. That is blasphemous. I would not like to be involved in that, and, in fact, it’s probably not going to be done anymore. No one is going to fund it anymore because it’s a dead end. I’ve been saying that for probably 20 years now. It really gives the whole field of religion and health a bad name. Now, does praying for other people make a difference? From a personal standpoint—I am a person of faith—and I would say absolutely it does make a difference, a real difference in what happens and how that person’s life that you’re

praying for is going to change or whatever. But can you prove that scientifically, no you can't. Not everything important in the world can be proven or studied by science. There are other sources of knowledge just as valid and when you look at eternity, beyond this life, even more valid sources than science can provide.

Q: What would you cite as one of the most important or groundbreaking studies in the field of religion, spirituality, and health?

A: There is one that was published in January of 2014 in *JAMA Psychiatry*. It was by Lisa Miller and her colleagues. She's at Columbia University in New York City. Her study was very important. It looks at the brain and has functional MRI scans of the brains of individuals who are religious and those who are not. There are very distinct differences. It's a very powerful study.

Q: In your opinion, has the research into religion, spirituality, and health accumulated enough for studies into religion and health to be called an actual field?

A: I think it is. I think there is enough research now to call it a field of study. There is some question about that. Some people will say there is not enough yet to call it a field. I think there are probably over 4,000 quantitative studies that have been published in peer-reviewed journals on this topic. They don't all find that religion is good for your health, but many of them do. Many of them talk about how important it is to address the spiritual needs of patients. You can't practice medicine unless you're addressing that part of a person's life. It's like not taking their blood pressure or not checking their heart if you don't take their spiritual history to see if there are any spiritual needs that could affect their health or their medical care.

Q: Have you personally experienced opposition to your writing?

A: Yes, I have. In fact Richard Sloan, who is at Columbia University in the same department as Lisa Miller, has. It is interesting that some of the best research is being done by Lisa Miller and the biggest critic there is in her own department. Otherwise, I've had a lot of receptivity. I think when people disagree with the idea of studying it, they tend to ignore, and not really oppose, because there's really nothing to say about it to oppose it. Some of the best research is very well designed and carried out. You can't argue the findings. You can argue the methods and what the findings mean, but there just hasn't been much of that anymore in the last year or two. It's mainly people ignoring it and not opposing it, especially within the healthcare system.

Q: You mentioned taking a spiritual history from patients. How is that going to change the way doctors interact with their patients?

A: It will open the door for conversation in this area if necessary. These issues come up all the time when people get sick, especially if they have a really serious illness. The patient needs to feel comfortable talking with their physicians, making medical decisions that many would call life or death for them. They need to be able to talk with their physician about their religious or spiritual beliefs. The physician needs to be praying on how to do that in a respectful way that is supportive and honors that person's faith tradition, which may be very important to the patient's health and their response to the treatments.

Q: How would this work for a physician that doesn't share the same beliefs as the patient?

A: This really has nothing to do with the beliefs of the physician. This is just about the beliefs of the patient. Today it's called patient-centered medicine. It doesn't

matter what the physician believes. Everything is focused on the patient and the reason why the physician is even addressing this issue is because it's relevant to the health of the patient. The only thing the physician is concerned about is supposed to be health of the patient—that's why the patient comes to see them. If religion is good for patients' health, then whatever that patient's beliefs are that is what the doctor needs to address. That is current patient-centered medicine. That's something everyone can agree on.

Q: There appears to be a need for a common language among research studies. Do you agree? Why or why not?

A: There does need to be a common language. The problem with common language is the word “spirituality.” That has become so broad that it is now meaningless. Basically anybody can say they're spiritual and it just doesn't mean a thing. The common language I think should be “religion”— religious beliefs, religious practices, religious attitudes. That's what is really distinctive. It's not about a wishy-washy type of spirituality that nobody can define that could be “stare at your navel for 20 minutes”— that could be called spirituality. I don't think from a research standpoint that spirituality, the word or term, is useful. Spirituality is great for addressing issues in talking with patients, but it is a not a good term with regard to research. We have to measure things and to use a term that's different for everyone is like taking blood pressure when everyone has a different definition of it. You couldn't communicate with your colleagues.

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Often credited with pioneering studies of religion, spirituality, and health, Dr. Jeff Levin is both a biomedical scientist and religious scholar. Known internationally as a writer, speaker, and respected researcher, Levin currently holds a distinguished chair at Baylor University. He is a pioneer in the field known as the epidemiology of religion, which, put simply, means the scientific study of how religion affects physical and mental health and well-being. While he does not conduct research studies on prayer and healing, Levin has weighed in on the subject.⁷³

Q: If you would, describe how you became interested in the topic of spirituality and healing.

A: My college degree is in religion. When I got to graduate school, in public health, almost 35 years ago, I took a course on sociocultural factors in epidemiology. A couple of the assigned readings were studies in which the investigators had asked questions about religious practice in their surveys, and then analyzed the data in relation to mortality rates. Pretty standard stuff for epidemiology, except for the part about religion, of course. I was fascinated, and began to look for more studies of the same type. After a few years of searching, I'd identified over 200 such studies. With the help of a professor, I wrote this up into what became the first comprehensive literature review ever published on the topic. I've been pretty much hooked ever since, and my name, along with Harold Koenig's, has come to be identified with the field.

⁷³ Jeff Levin, "Home," *Jeff Levin, Ph.D.*, 2012 2010, <http://religionandhealth.com>.

Q: I understand that the interactions between spirituality and health extend back for centuries. How would you describe the development of the investigation between prayer and healing?

A: While empirical research studies on spirituality and health date to the 19th Century—and, thus, we're in the third century of such research—clinical studies of the effects of prayer are mainly a phenomenon of the past 25 to 30 years. The most celebrated—and controversial—and among the earliest of these was the famous study by Byrd, published in the *Southern Medical Journal* in 1988. Since that time, according to Dan Benor, there have been north of 200 such studies, including research not just in people but in animals, plants, cells, and so on. What makes this stuff so unusual is that many of the human studies were true double-blinded, randomized, controlled trials, and some of them got positive results.

Q: Is spirituality and how it affects health something that should be studied and researched through scientific means? Why or why not?

A: Sure. Why not? I'm all for any variable being studied, so long as there is some prior evidence, or anecdotal suggestion, or even just an interesting hypothesis. If we start excluding things *a priori*, then we're going to miss out of discovering new things. Remember: every new discovery in medicine was once something that was not known about, or was actively believed to be false. In the case of religion, spirituality, and health, there are by now thousands of studies on the topic published in peer-reviewed journal articles, and at least a couple hundred of these are focused on the healing effects of prayer.

Q: There are many scientists who view research into spirituality and healing as a fool's errand. Why do you think this is?

A: I think that scientists who feel this way are letting their own biases about faith or God get in the way of what is otherwise a pretty simple question: can it be shown through controlled clinical research that praying precedes healing. An unusual question, for sure. But nothing intrinsically impossible to do or interpret. I think where resistance arises, it's two-fold.

Among skeptics and debunkers: many who have no use for faith or God or religion are thus hostile to anything that involves their study. Some of these folks have even attacked mainstream social and behavioral studies of religion—e.g., studies correlating religious behaviors or beliefs with this or that sociological or political variable—as impossible or inherently flawed. The sorts of studies sociologists and psychologists or religion have been doing for 60 years, tens of thousands of which have been published in peer-reviewed journals. So substitute study of health- or medical-related outcomes, and some of these folks really lose it. Then substitute study of healing—not just study of one's health status, but study of the possibility that faith or prayer or spirituality can actually serve a therapeutic function in sick people—and otherwise presumably sane scientists can begin to act like agents of the Inquisition.

Q: Some religious people disagree with the idea of studying “God in the laboratory.” How do you respond to people who claim studying the healing effects of prayer is something next to blasphemy?

Among traditional or conservative persons of faith — but not all such folks, by any means—there is resistance to this research because they misunderstand its motives.

Sometimes the presumption is made that studies purport to “test” God, which seems blasphemous. Sure, maybe one or another misconceived studies wish to do that, but on the whole this research has been done by folks with a very simple objective: to identify whether (and, perhaps, if possible, how) positive spiritual intentions for another can have a measurable impact on one’s state of well-being. It’s a medical question, really—about hoping to identify something that can provide a modicum of help to suffering people. Not about proving or disproving some grand, florid proposition about the nature of God or divine theodicy or anything like that. As I’ve noted on a few occasions, if folks are looking to medical research, of all things, to answer such questions about the existence or workings of God, then they’re surely looking in the wrong place. But this research, simply, is not about that: it’s mainly about trying to identify whether prayer is something that could be of some value as a therapeutic agent for those of our fellow human beings that are facing health challenges.

Q: What would you cite as one of the most important or ground-breaking studies in the field of religion, spirituality, and health?

I’ve been saying for many years that in this field the assessment of religion needs to get “softer” and the assessment of health and medical outcomes needs to get “harder.” What do I mean by that? We have hundreds of studies showing that things like public religious behaviors (going to church, reading the Bible, praying) are statistically associated with higher well-being (greater happiness, less depression, less anxiety, better self-esteem). Nothing really surprising here, or controversial. And nothing wrong with doing such studies. But I’m more interested in the more qualitative, subjective, transcendent aspects of human spirituality—mystical experiences, meditation, being born

again or spirit-filled, attaining higher states of consciousness, and so on—and how these might impact on more “inside the body” markers of human physiology, psychophysiology, or pathophysiology. For example, there’ve been some studies from Duke, and elsewhere, looking at the effects of religious beliefs or practices on immune system response. As you might imagine, if this work can be replicated and validated across populations, the implications are major. Harold Koenig and Harvey Cohen, from Duke, edited a book on this topic in 2002, and it was published by Oxford University Press. So this isn’t crankish stuff; it’s being taken very seriously by some very high-powered academic medical scientists. I’m all for this kind of research, and am envious of the folks who get to do it.

Q: In your opinion, has the research into religion, spirituality, and health accumulated enough for studies into religion and health to be called an actual field?

A: Yes, of course. There have been thousands of published studies, dozens of books, including academic handbooks, entries in academic encyclopedias, numerous NIH-funded studies (beginning with one of my own studies in 1990), academic research centers all over the world, people with distinguished chairs, courses in most medical schools, 25 years of mainstream media coverage, and on and on. This is as much a “field” as any other multidisciplinary subject in academic medicine and sociomedical science.

Q: Have you personally experienced opposition to your writing?

A: Oh, sure, more stories than I could recount. I’ve been attacked by the usual debunker groups, lied about by a former *JAMA* associate editor, had my research and my own words distorted by people with an ax to grind, including in book reviews. Of course.

So have most folks who've delved into this topic, and others far worse than what I've experienced. My friend Larry Dossey, for example, has taken most of the assault. For me, as the expression goes, it's water off a duck's back. If you're getting flak, you must be over the target. I don't pay it any mind. Although I would say this: if I go long periods of time *without* any pushback, I start to wonder if what I'm doing is worthwhile. Some of us are just born envelope-pushers, and I guess that I'm one of those.

Q: There appears to be a need for a common language among research studies. Do you agree? Why or why not?

A: How we tend to language things is very important when it comes to research. There have to be common definitions that are mutually agreed upon. In this field, words like religion, spirituality, and prayer are used interchangeably, as are health and healing and wellness and others. For an epidemiologist and researcher like me, this is a terrible situation and only adds confusion to a topic that is already too contentious. Consensus conferences and white papers can be useful here, and early on in this field, in the 1990s, such events took place. But as the field has grown exponentially, new people are unaware of this work and they do their own thing. And anyway, this is something that plagues most every research field. In this particular field, yes, greater conceptual clarification is an ongoing concern and has been called for repeatedly for decades.

Q: Where do you hope to see the research on prayer and healing in 20 years?

A: I'd hope that it's more realistic. By that, I mean that I hope that the types of praying that are studied and assessed more closely resemble the myriad of ways that people actually pray. For some of the studies that have been done, "prayer" is defined and operationalized in ways that maybe conform to some academic doctor's or scientist's

stereotypical image of prayer, such as solely about narrowly focused petitions to God to please Do Something Now. Then when they can't find an effect on the outcome in question (the tumor is still there, the arteries are still occluded), they declare, "See, this proves that God doesn't answer prayers." This kind of stuff is abysmal and deserves whatever criticism can be dished out at it.

There are all sorts of ways that people pray, and for different reasons and with different ends in mind. I'm much more interested in what I'd call prayerfulness, as a trait or characteristic of people in their ongoing lives. How does that impact the course of physical or emotional challenges? That seems like a more fruitful, and interesting, thing to look at. Also, besides this prayerfulness, what about things like compassion, unlimited love, deep empathy, a life devoted to acts of loving kindness? How do these things impact on the healing process, for one's own self and for others?

Major Works: Book Reviews

*Spiritual Healing: Scientific Validation of a Healing Revolution*⁷⁴

Dr. Daniel J. Benor's *Spiritual Healing: Scientific Validation of a Healing Revolution* explores the research into religion and healing. The book compiles 124 scientific studies examining the relationship and impact that religion and prayer have on healing. Benor does include statements from spiritual healers, who explain their methods. Ultimately, Benor pursues the idea that spiritual healing has a place in healthcare and should be acknowledged as a valid and effective factor in health. The purpose of this book is to persuade the skeptical of spiritual healing's effectiveness as

⁷⁴ Daniel J. Benor, *Spiritual Healing: Scientific Validation of a Healing Revolution* (Southfield, MI: Vision Publications, 2001).

well as to begin compiling the various experiments with spiritual healing into a single publication. Benor uses his own personal experiences, thorough explanations of terms, and in-depth research to bring together healers from across history and disciplines.

Benor does not approach his book without bias. Benor is an advocate for spiritual healing as a medicine. He currently operates Wholistic Healing Research, an organization that provides workshops, articles, books, and other materials for people interested in learning more about spiritual healing.⁷⁵ Benor contends that spiritual healing encompasses both self healing and wholistic healing that are both a part of a “new, integrative medical care model” that helps heal both physical and psychological problems.⁷⁶ Benor begins the book with a thorough introduction to his own experiences with spiritual healing. He then proceeds to explain how his perspective came about—through research. Benor has made an educated decision to support spiritual healing as a valid medical intervention. He makes no assumptions that the reader will agree with him, however. The research base here has been controversial, so when Benor clarifies the questions his work aims to answer, he thus also clarifies that his observations support a particular side in the controversy.⁷⁷ One aim is to ascertain whether spiritual healing works. Instead of approaching the subject as if spiritual healing does work, Benor simply asks the unbiased question of whether it works. He allows the research to speak for itself.

While Benor provides detailed explanations of scientific studies into spiritual healing, he also demonstrates his own knowledge and research into the topic. He writes brief biographies of spiritual healers of the past and present. He includes pictures of the people he describes, as if to give their work a face. The book also provides the reader

⁷⁵ Daniel Benor, “Welcome,” *Wholistic Healing Research*, n.d., <http://www.wholistichealingresearch.com>.

⁷⁶ Ibid.

⁷⁷ Benor, *Spiritual Healing: Scientific Validation of a Healing Revolution*, 4.

with a history of spiritual healing and its present place in research. Benor has compiled an encyclopedic summary of the concept and topic of spiritual healing, including descriptions of every research study.

Understanding that the study of healing is still evolving, Benor provides a definition for each of the terms found throughout the book. It is clear that he knows other researchers who have investigated this subject may use different terms or perhaps similar terms with a different meaning. For example, he defines spiritual healing as “a systematic purposeful intervention by one or more persons aiming to help another living being (person, animal, plant, or other living system) by means of focused intention, hand contact, or passes to improve their condition.”⁷⁸ The book also contains many useful definitions, taxonomies, and explanations of types of healers, types of healing, and scientific studies into these healers and healings.

This a groundbreaking work for students of spiritual healing. Benor’s detailed explanations and thorough research have established this book as a dictionary, and encyclopedia, of sorts. While there are many who would still disagree with spiritual healing as a valid medical intervention, Benor has attempted to bring together what often seems like a scattered discipline into one location. This is just the first volume. As the field of prayer and healing evolves, Benor’s work will remain the textbook for researchers who follow him.

⁷⁸ Ibid.

*Scientific and Pastoral Perspectives on Intercessory Prayer: An Exchange Between Larry Dossey, M.D. and Health Care Chaplains.*⁷⁹

In 1998, Dr. Larry Dossey published “Prayer, Medicine, and Science: The New Dialogue,” an article contending prayer can and should be studied scientifically. His article sparked a debate, which Dr. Larry VandeCreek chronicles in his book *Scientific and Pastoral Perspectives on Intercessory Prayer*. The book documents an exchange between Dossey and a group of healthcare chaplains who wrote articles in response. The exchange is meant to help people in pastoral roles understand the prayer and healing debate, an objective which VandeCreek makes clear in his introduction. He previously worked with healthcare chaplains, and is a Doctor of Ministry, so he appreciates the importance of this issue. On the whole, the book contains a stimulating dialogue between Dossey, who supports further research into prayer and healing, and healthcare chaplains, whose opinions range from vehement disagreement with Dossey to approval. This dialogue is achieved through well-rounded responses and a firm establishment of the book’s purpose.

The book is made up of a collection of articles — each with its own viewpoint and understanding of the research into prayer and healing. Dossey advocates for more research on the effects of prayer on healing. The eight articles that follow are written by healthcare chaplains, whose responses indicate that research pertaining to prayer and healing is controversial for many reasons. There are scientists who believe it’s difficult to substantiate any research having to do with prayer. There are those in the religious community who believe research into prayer is wrong: how can anyone dare to “test”

⁷⁹ Larry VandeCreek, *Scientific and Pastoral Perspectives on Intercessory Prayer: An Exchange Between Larry Dossey, M.D. and Health Care Chaplains* (Binghamton, NY: The Harrington Park Press, 1998).

God? VandeCreek has thoughtfully included a range of perspectives in his book, presenting a variety of opinions. No two articles repeat the same viewpoint. As an editor, VandeCreek did well in selecting and editing articles to present the most relevant discussion.

Ultimately, this book is a conversation. VandeCreek makes sure the material supports a dialogue. He himself only weighs in during the introduction, which reads like a letter from the editor. The purpose of the work is clear: “In summary, this book is devoted to exploring questions and concerns about intercessory prayer.”⁸⁰ This is exactly what the work does. Beyond a dialogue, VandeCreek also hopes the conversation will stimulate people to go deeper into the inner workings of intercessory prayer by asking how God and the universe relate. By focusing on the perspectives of chaplains — professionals with first-hand knowledge of the subject — the questions do just that.

VandeCreek has compiled a collection of articles responding to the claim that intercessory prayer works and should be studied scientifically. He understands the importance of ensuring that every viewpoint in the conversation be heard. Without understanding and addressing the major concerns of Dossey and the chaplain responders, the research of scientists who would study intercessory prayer may continue to fall short. This work is an important one for sustaining and advancing the conversation.

*A Journey into Prayer: Pioneers of Prayer in the Laboratory: Agents of Science or Satan?*⁸¹

⁸⁰ Ibid., 5.

⁸¹ Sweet, *A Journey into Prayer: Pioneers of Prayer in the Laboratory— Agents of Science or Satan?*.

There are many stigmas that plague research into prayer and healing. Some of these stigmas extend from the religious belief that God cannot and should not be studied in a scientific setting. One family of researchers attempted to study prayer's effect on healing in the hopes of dispelling such stigmas and to prove that prayer can and does heal. *A Journey into Prayer* follows the story of the Klingbeils, who faced persecution and an uphill battle for their attempts to study prayer. The Klingbeils started Spindrif, an organization dedicated to producing a repeatable experiment into prayer's effects. Author Bill Sweet, a former president of Spindrif, takes the readers on a chronological journey through the Klingbeils' lives and their research. Sweet tells the Klingbeils' story to show how their work impacted the research into prayer and healing. He does this through entertaining narrative and detailed explanation of the Klingbeils' work and lives.

Sweet has a flair for the dramatic as he tells the Klingbeils' story. The opening lines of his introduction include phrases such as, "Books have been burned," "cult-members," "violent reactions," and "evil heretics."⁸² Sweet knows how to draw a reader in to make a story about science seem intriguing. He had a personal connection with the Klingbeils and was a witness to many of the events he describes in the book. His tone is conversational and even the more complicated scientific jargon of the experiments he describes seems simple to understand. His efforts to be entertaining sacrifice the book's organization and flow. Each of his chapter titles is accurate, but oftentimes the ends of the chapters ramble into another topic. Sweet is clear in his descriptions of experiments and even goes so far as to define various terms the reader may not understand. Sweet strives for clarity, entertainment, and understanding throughout the work.

⁸² Ibid., 17.

The Klingbeils did not have an easy time pursuing their research. As Sweet explains, they were disowned from their church for attempting to study God. They were accused of being heretics and evildoers. They knew at the beginning of their research there would be problems, but not on the scale they actually experienced. Sweet describes various hardships the Klingbeils endured. He also takes the time to highlight Spindrift and the organization's continued work in the wake of the Klingbeils' double suicide. Sweet focuses on the chronology of the Klingbeils' lives in order to explain how their research began and has developed over the years.

Sweet paints a picture of Spindrift and the Klingbeils' research that is positive and influential on today's research on healing prayer. Their research was influential, but Sweet's tendency to reach for excitement may have exaggerated just how influential the research has been. Ultimately, however, Sweet's story raises questions about the personal costs involved in researching prayer and healing.

Bruce and John Klingbeil's story is one of both hope and tragedy. The father-son duo dedicated their lives to providing evidence that prayer has an effect on healing. In their pursuit of this research, they faced difficult reactions from local churches and persecution from other scientists. For almost 20 years, the Klingbeils strove to complete an experiment that could be replicated, which would make the evidence for healing prayer stronger. Ultimately, their journey ended in a tragic double suicide in 1993.⁸³ Their work, however, lives on.

⁸³ "Double Suicide Tied to Prayer Work," *The Day*, May 17, 1993, Vol. 112, No. 320 edition, sec. World/Nation.

CHAPTER THREE

Future Implications

Research on health and religion continues to grow despite stigmas surrounding some segments of the field (e.g, studies of healing prayer).. Religion has always had connections to health, but the rise of the scientific method in medical practice placed some barriers between the two. By the 20th century, there was a call for faith to return to medical practice as well as research into how religion affects health. In the 1970s, research grew exponentially and many studies revealed religion's potentially salutatory affect on health. Despite the collection and variety of studies in this field, many medical and religious professionals still disagree with the idea of researching religion's effects on health. Many of these stigmas stem from a misunderstanding of the purpose of the research, possibly because of researchers who have failed to justify or explain their research or who have hidden agendas.

In order to combat these misunderstandings, researchers should work together across fields, and with pastoral and theological experts, to identify common approaches for their studies. This can help to ensure that research contributes to knowledge of this topic while minimizing existing confusion and controversy. It would also help to the broader impact of respective studies how they might help grow and mature the future of research at the intersection of medicine and religion.

Because religious beliefs have been shown to have an effect on a patient's health, it is important that physicians are aware of these beliefs in order to best serve the patient. This is part of what doctors term patient-centered medical care. Research into how

religion affects health can provide information and insights to improve and broaden the scope of the physician's ability to understand his or her patients' health history and to make sensitive recommendations for care. If taking a spiritual history becomes something a majority of physicians do, the legality and ethics of talking about religion in the exam room will need to be established and discussed. As Koenig said, patient-centered care is about the patient, not the physician. The physician should not be unwilling to inquire about the patient's spiritual history — no matter what the physician personally believes.

The most difficult challenge the research on prayer and healing needs to overcome is replication. If these studies cannot be replicated, then how can we consider them legitimate? They indicate that distance healing and intercessory prayer can have an effect on health, but these results are unlikely to be accepted in the scientific community. Beyond this, some researchers have skewed motivations for this research. They intend to prove religion in a scientific setting. Motivations that are not focused on discovering that prayer works or why it works only make this research more difficult to take seriously.

Until double blind intercessory prayer studies can be replicated and a model for researching this topic is established, studies that measure the effects of intercessory prayer quantitatively should be the priority. For example, studies that measure brain patterns in people being prayed for indicate that prayer has some physical effect. Studies like this are more easily replicated and more readily accepted in the scientific community because they are not based on what the person feels. It is possible that double blind clinical studies on prayer will one day find a place in this field, but they are too undefined for now.

Ultimately, research on prayer and healing should be given consideration in both the scientific and religious communities. It has the potential to change the way medical care is administered. Something with so much potential cannot be dismissed. Scientists and researchers have to be willing to acknowledge the legitimacy of some the studies on prayer and healing, despite the studies conducted with unclear methods or motivations.

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