Neural Buddhism and Christian mindfulness in medicine

Jonathan Kopel, BS^a and Gary R. Habermas, PhD^b

^aFoster School of Medicine, Texas Tech University Health Sciences Center, Lubbock, Texas; ^bDepartment of Philosophy, Liberty University, Lynchburg, Virginia

ABSTRACT

In recent years, interest in mindfulness practices has swept through the medical community as mounting regulations increase burnout and challenge physicians' roles, responsibilities, and work-life balance. Despite its modern resurgence, several mindfulness practices have their roots in Buddhist tradition and manuscripts dating hundreds of years after Buddha's death. In the West, another variant of mindfulness proceeds from the Christian tradition emphasizing spiritual reflection on biblical teachings and God's interactions. With scientific advancements unearthing the neurological mechanisms involved in meditation and mindfulness, the medical profession has attempted to bridge the intersection between science and religion. Within this overlap, faith and spiritual practices may become an essential component for the physician-patient relationship and treatment plan. Overall, the crossing lanes between science and religion may represent a paradigm shift that merges empirical studies in medical practice with faith along with patient experience with illness towards a new understanding of the relationship between spirituality and medicine.

KEYWORDS Christianity; medical practice; mindfulness; neural Buddhism

In recent years, interest in mindfulness practices has swept through the medical community as mounting regulations increase burnout and challenge physicians' roles, responsibilities, and work-life balance. As Dr. Ronald Epstein explained, "Physicians and patients are disillusioned, frustrated by the fragmentation of the health care system. Patients cannot help but notice that I spend more and more time looking at computer screens and less time face-to-face. They experience the consequences of the commodification of medicine that has forced clinicians' focus from healing of patients to the mechanics of health care."¹ Previous studies showed that patients who practiced mindfulness concepts reduced several psychiatric conditions, such as stress, anxiety, chronic pain, and substance abuse.^{2–4} Furthermore, several neurological studies have suggested that mindfulness practices increase neuronal activity in brain regions associated with emotional responses.^{5–8} In general, "mindfulness functions to decouple pleasant and unpleasant experience from habitual reactions of craving and aversion, by removing the affective bias that fuels such emotional reactivity. It is the absence of emotional distortions ... that allows mindfulness practitioners to 'see things as they are.'"⁹ Although originally applied to pain and stress management, mindfulness practices have become an integral component of the physician-patient relationship and modern medical education programs.^{10,11}

Despite its modern resurgence, several mindfulness practices have their roots in Buddhist tradition and manuscripts dating hundreds of years after Buddha's death.^{12,13} Many Buddhist meditation traditions emphasize self-awareness, detachment, and emotional balance.¹⁰ Specifically, "meditation teaches us how to relate to life directly, so we can truly experience the present moment, free from conceptual overlay. ... Meditation is about compassionate openness and the ability to be with the oneself and one's situation through all kinds of experiences."¹⁴ Furthermore, Pema Chodron, a well-known Buddhist teacher, argued that Buddhist meditation provides the practitioner greater steadfastness, clarity, courage, attention, and resilience.¹⁴ In this context, mindfulness comes through dispassionately analyzing each experience and thought while maintaining an openness to additional possibilities and perspectives. The specific thrust is on confronting suffering by transcending it and viewing its existence as fleeting and phenomenal.¹⁵

In the West, another variant of mindfulness proceeds from the Christian tradition emphasizing spiritual reflection on biblical teachings and God's interactions.^{16,17} Specifically, Christian meditation focuses individuals on their personal salvation through Jesus Christ and the loving works of God.^{16,17} As Edmund P. Clowney explained, "The meditator centers his

Corresponding author: Jonathan Kopel, BS, Texas Tech University Health Sciences Center, Foster School of Medicine, 3601 4th St., Lubbock, TX 79403 (e-mail: jonathan.kopel@ttuhsc.edu)

Received November 1, 2018; Revised February 6, 2019; Accepted February 8, 2019.

mind on one subject; he reflects on many relationships and aspects of the subject but keeps coming back to the central thought. The pattern of his thought keeps looping back to the center ... and [is] directed and informed in his own reflections on the Word of God.”¹⁸ Furthermore, Christian meditation deepens the union between the individual and the divine to “create the emotional and spiritual space which allows Christ to construct an inner sanctuary in the heart.”¹⁹

Taken together, Eastern and biblical meditation methods encompass a broad range of varieties and practices, even within the same religious spectrums. Common to most Eastern expressions is an attempt to quiet or even “empty” one’s mind of typical thought patterns that often occupy us throughout our normal, noisy days. Further, it is often said that meditation quiets one’s fragmented reasoning processes. To achieve these goals, many Eastern practitioners repeat a single word (*mantra*), concentrate on an unsolvable puzzle (*koan*), or engage in a chanting worship style (*puja*), each of which is supposed to help attain new levels of consciousness.²⁰ Maharishi Mahesh Yogi, the founder of transcendental meditation, explained that the goal of practicing meditation is to quiet the mind and make it inactive so that one may interact with spiritual beings or realities in alternative worlds.²¹

In contrast, the pattern discussed in both the Old and New Testaments emphasizes a different approach. Rather than having an empty mind, the mind is occupied by contemplating a truth, such as key Scripture passages, God’s attributes, God’s promises, or even the reality of heaven. This approach emphasizes an active mind, whereas its Eastern counterpart encourages more passivity, including the idea of being acted upon. Christian meditation is directed outward to a personal God, whereas Eastern methods are more person directed, emphasizing inwardness and a more impersonal view of deity.

Another difference is that biblical meditation avoids any use of mantras, koans, chanting, or other helps, though there are a few parallels. Initiating the process of mindfulness by proper posture or breathing techniques is not a requirement, though beginning by being comfortable makes sense. Other differences between the two meditation models depend on the theological views involved. Eastern beliefs often emphasize the ultimate divinity of the individual as she seeks ultimate union with God, the Ultimate, or the universe, depending on the specifics of the belief system. Further, such a goal of union is frequently expressed in terms of losing oneself, especially one’s ego, and recognizing that the material world is *māyā* (at least ultimately unreal), in favor of becoming one with the whole of reality.²² According to the Judeo-Christian outlook, meditators always maintain their distinct, nondivine personhood while pursuing fellowship with God.

Eastern meditation is probably the better-known model, even in the West. Both views promise increased freedom from daily stress, confusion, and care. The meditator in the Buddhist tradition is promised the possibility of reaching a state “of profound peace, satisfaction, joy and freedom.” When the hindrances are eliminated, “then happiness is born, to

happiness joy is added, with his mood joyful his body becomes relaxed.”²³ Speaking of the Judeo-Christian perspective, J. I. Packer stated, “There is no peace like the peace of those whose minds are possessed with full assurance that they have known God, and God has known them, and that this relationship guarantees God’s favour to them in life, through death, and on forever.”²⁴ The distinct emphases between the relative views, Eastern, Middle-Eastern, and Western, are manifest in these quotations. The Eastern religions keep their emphasis chiefly on the personal, psychological areas, asking less about evidence focusing on experience. The Judeo-Christian emphasis could be said to begin first with philosophical and biblical truth, followed by personal application.²⁵

With scientific advancements unearthing the neurological mechanisms involved in meditation and mindfulness, the medical profession has attempted to bridge the intersection between science and religion.^{9,26–29} Despite their different perspectives, science and religion “encourage alternative ways of thinking about reality. ... Buddhism offers a tried and tested way of observing and altering, through careful attention to meditation, whereas neuroscience can show how meditation practices result in physiological changes in the brain.”³⁰ Furthermore, several clinical studies on prayer showed improved health outcomes and, in some cases, miraculous healings among patients who regularly prayed.³¹ For example, Candy G. Brown, a professor of religious studies at Indiana University, examined several well-documented healing cases within a Christian context and argued that miraculous healings encouraged further exploration and interface between science and religion, which she plans to examine further.³² As Jeff Levine summarized, “With all of the healing prayer going on, and with published evidence of inexplicable healings attributed to mysterious phenomena including spontaneous remission, efficacious healing prayer may represent a normative if largely undocumented part of the therapeutic backdrop of American life.”³¹

Within this overlap, faith and spiritual practices may become an essential component for the physician-patient relationship and treatment plan. As Harold Koenig explained,

While religion, medicine, and nursing have in modern times become largely separate, there are inklings of change. In 1990, fewer than five medical schools in the United States taught students about the role that spirituality played in the lives of sick patients. Today, over 90% of the 122 U.S. medical schools now have either content in required courses or elective courses on religion, spirituality, and medicine.³³

Beyond the physical and emotional challenges, patients experience several existential struggles concerning their identity, worldview, and mortality, which often produce fear and anxiety in confronting the lack of control and certainty. Specifically,

most people walk through life mistakenly believing they can control most things. ... Loss of control, lack of certainty, constant change: many people describe illness as an emotional roller-coaster ride. ... Realizing that in fact they can slow down and see things as they are, without blinders, and learn ways to hold the strong emotions and sensations

that arise can be transformative. ... Hence change occurs not only through training the mind in formal meditation practice, but via a shift in attitude and perspective that allows people to see their illness in a new light, without allowing fear to consume them and drive behavior.³⁴

Overall, the crossing lanes between science and religion may represent a paradigm shift that merges empirical studies in medical practice with faith along with patient experience with illness toward a new understanding of the relationship between spirituality and medicine. Increasingly, empirical studies examining prayer and healing have brought the two domains closer together. For example, two double-blind prayer experiments showed a statistically significant difference in clinical outcomes for patients admitted to a coronary care unit.^{35,36} In both cases, the prayers were offered by orthodox Christians and neither they nor the patients knew who was being prayed for. But it is not a question of a dichotomy here between empirical science on one side and religious faith on the other. As David Brooks summarized, “This new wave of research ... [has] science and mysticism joining hands and reinforcing each other.”³⁷

ACKNOWLEDGMENT

The authors thank Dr. Kenneth Nugent at Texas Tech University Health Sciences Center for his advice and support writing this article.

ORCID

Jonathan Kopel <http://orcid.org/0000-0001-5934-2695>

- Epstein R. *Attending: Medicine, Mindfulness, and Humanity*. New York, NY: Scribner; 2017.
- Baer RA. Mindfulness training as a clinical intervention: a conceptual and empirical review. *Clin Psychol Sci Pract*. 2006;10:125–143. doi:10.1093/clipsy.bpg015.
- Chiesa A, Serretti A. Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis. *J Altern Complement Med*. 2009;15:593–600. doi:10.1089/acm.2008.0495.
- Grossman P, Niemann L, Schmidt S, Walach H. Mindfulness-based stress reduction and health benefits: a meta-analysis. *J Psychosom Res*. 2004;57:35–43. doi:10.1016/S0022-3999(03)00573-7.
- Bush G, Luu P, Posner MI. Cognitive and emotional influences in anterior cingulate cortex. *Trends Cogn Sci*. 2000;4:215–222. doi:10.1016/S1364-6613(00)01483-2.
- Hölzel BK, Ott U, Gard T, et al. Investigation of mindfulness meditation practitioners with voxel-based morphometry. *Soc Cogn Affect Neurosci*. 2008;3:55–61. doi:10.1093/scan/nsm038.
- Lazar SW, Kerr CE, Wasserman RH, et al. Meditation experience is associated with increased cortical thickness. *Neuroreport*. 2005;16:1893–1897. doi:10.1097/01.wnr.0000186598.66243.19.
- Tang Y-Y, Posner MI. Attention training and attention state training. *Trends Cogn Sci*. 2009;13:222–227. doi:10.1016/j.tics.2009.01.009.
- Brewer JA, Elwafi HM, Davis JH. Craving to quit: psychological models and neurobiological mechanisms of mindfulness training as treatment for addictions. *Psychol Addict Behav*. 2013;27:366–379. doi:10.1037/a0028490.
- Ludwig DS, Kabat-Zinn J. Mindfulness in medicine. *JAMA*. 2008;300:1350–1352. doi:10.1001/jama.300.11.1350.
- Dobkin PL, Hutchinson TA. Teaching mindfulness in medical school: where are we now and where are we going? *Med Educ*. 2013;47:768–779. doi:10.1111/medu.12200.
- Conze E. *Buddhist Scriptures*. London, UK: Penguin; 1959.
- Gwynne P. *Buddha, Jesus and Muhammad: A Comparative Study*. Oxford, UK: Wiley-Blackwell; 2014.
- Chödron P. 5 Reasons to meditate [blog entry]. Lion's Roar Web site. <https://www.lionsroar.com/5-reasons-to-meditate-september-2013/>. Published April 22, 2018. Accessed February 8, 2019.
- Sauer S, Lynch S, Walach H, Kohls N. Dialectics of mindfulness: implications for Western medicine. *Philos Ethics Humanit Med*. 2011;6:1–7. doi:10.1186/1747-5341-6-10.
- Lawrence B. *The Practice of the Presence of God*. Orleans, MA: Paraclete; 1985.
- McCormick T, Fish S. *Meditation: A Practical Guide to a Spiritual Discipline*. Downers Grove, IL: InterVarsity; 1983.
- Clowney EP. *Christian Meditation*. Vancouver, BC, Canada: University of British Columbia; 1979.
- Foster RJ. *Celebration of Discipline: The Path to Spiritual Growth*. San Francisco, CA: Harper & Row; 1978.
- Prabhupada BS. *Search for Liberation*. Los Angeles, CA: Bhaktivedanta Book Trust; 1981.
- Mahesh M. *Meditations of Maharishi Mahesh Yogi*. New York, NY: Bantam Books; 1973.
- Capra F. *The Tao of Physics*. New York, NY: Bantam Books; 1983.
- Johannson REA. *The Psychology of Nirvana*. Garden City, NY: Doubleday; 1969.
- Packer JI. *Knowing God*. Downers Grove, IL: InterVarsity; 1973.
- Habermas G. Meditation: a forgotten discipline. *NW Evangelical Baptist J*. 1993;3:8–11.
- Tomasino B, Chiesa A, Fabbro F. Disentangling the neural mechanisms involved in Hinduism- and Buddhism-related meditations. *Brain Cogn*. 2014;90:32–40. doi:10.1016/j.bandc.2014.03.013.
- Vago DR. Mapping modalities of self-awareness in mindfulness practice: a potential mechanism for clarifying habits of mind. *Ann NY Acad Sci*. 2014;1307:28–42. doi:10.1111/nyas.12270.
- Grant JA. Meditative analgesia: the current state of the field. *Ann NY Acad Sci*. 2014;1307:55–63. doi:10.1111/nyas.12282.
- Edwards L. Biofeedback, meditation, and mindfulness. *Biofeedback*. 2011;39:67–70. doi:10.5298/1081-5937-39.2.02.
- Wu Y, Wang C, He X, Mao L, Zhang L. Religious beliefs influence neural substrates of self-reflection in Tibetans. *Soc Cogn Affect Neurosci*. 2010;5:324–331. doi:10.1093/scan/nsq016.
- Levin J. Prevalence and religious predictors of healing prayer use in the USA: findings from the Baylor Religion Survey. *J Relig Health*. 2016;55:1136–1158. doi:10.1007/s10943-016-0240-9.
- Brown CG. *Testing Prayer: Science and Healing*. Cambridge, MA: Harvard University Press; 2014.
- Koenig HG. Medicine and religion: twin healing traditions [blog entry]. Catholic Exchange Web site. <https://catholicexchange.com/medicine-and-religion-twin-healing-traditions>. Published January 9, 2012. Accessed February 8, 2019.
- Carlson LE. Mindfulness-based interventions for physical conditions: a narrative review evaluating levels of evidence. *ISRN Psychiatry*. 2012;2012:651583. doi:10.5402/2012/651583.
- Byrd RC. Positive therapeutic effects of intercessory prayer in a coronary care unit population. *South Med J*. 1988;81:826–829. doi:10.1097/00007611-198807000-00005.
- Harris WS, Gowda M, Kolb JW, et al. A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit. *Arch Intern Med*. 1999;159:2273–2278. doi:10.1001/archinte.159.19.2273.
- Brooks D. The neural Buddhists. *New York Times*. May 13, 2008. <https://www.nytimes.com/2008/05/13/opinion/13brooks.html>. Accessed February 8, 2019.