

Authentic Healing: Effects on Recipients and Healers

Kathi J. Kemper, MD, MPH

Types of Healing

Indigenous and traditional healing systems as well as religions have their own versions of healing. For example, traditional Chinese medicine includes the practice of external QiGong; a master healer transmits vital energy (Qi) to patients to help restore vitality, harmony, and balance. Reiki and *Johrei* are similar therapies from Japan. Christian healers practice laying on of hands; these healers typically view themselves as channels of Divine healing power and may use music (hymns, chanting, etc.) and prayer to achieve a healing state.

After closely observing the Christian healer, Kathryn Kuhlman and the Hungarian (later Canadian) lay healer, Colonel Oskar Estebani, Dora Kunz, and Dolores Krieger developed a secular training for nurses called Therapeutic Touch (TT). Other 20th century American healers include Dr. W. Brugh Joy, Rosalyn Bruyere, Janet Mentgen (Healing Touch [HT]), Richard Gordon (Quantum Touch), Michael Bradford, Frank Kinslow, Barbara Brennan, Donna Eden, and others.

Although each practice has its own flavor and some of the personality of each individual who developed it, these diverse healing practices share a common core of compassionate intention, dedication, and the healer's practice of putting self aside to focus on the recipient. Healers extend good will to support the dynamic drive toward order, harmony, vitality, and balance characteristics of health within the recipient. What impact do these different practices have on those who provide them?

Effects on the Healer

In 2010, our research team at Wake Forest Medical Center evaluated the impact of Healing Touch on nurses who began training. The nurses reported significant improvements in their stress, depression, anxiety, relaxation, well-being, and sleep.¹ Similar studies confirm decreased stress levels in nurses who learn and practice Reiki.² These findings confirm earlier

studies showing that those who learn and practice TT and other healing techniques tend to become more calm, relaxed, focused, and accepting over time and experience a relaxation response during healing treatments.^{3,4} They report feeling less stressed at work, more confident in their ability to help others, and more satisfied with their work.^{5,6} Physiologic studies have found significant changes in healers' heart rate patterns (increase in low frequency of the power spectral analysis), EEGs (more fast betas), skin temperatures (warmer), and muscle contractions (more relaxed electromyography, EMG) while other studies have documented increases in spirituality, self-esteem, and job satisfaction.⁷⁻¹²

What Do Healers Feel in Their Hands When They Heal?

Healers engaged in healing work usually have a sense of energy, heat, fullness, or tingling in their hands. Sometimes as the hands are passed over a recipient, a healer gets a sense of heat, coolness, sharpness, waves, pulsing, tingling, pins and needles, pressure, bubbling, rhythmicity, fullness, or emptiness that seems to come from the recipient. At times the healer feels that the hands are being drawn to a place where there is difficulty. Sometimes healers will feel the recipient's pain or other symptoms in their own bodies. Those who are more keenly aware visually or more oriented to sound may not feel much in their hands, but rather notice subtle visual or auditory cues. Some have a sense of knowing or non-verbal awareness rather than a bodily sensation.

Does a Healer's Ability to Perceive Subtle Cues in the Recipient Affect Her Effectiveness?

Although sensing something in the recipient can be helpful for the healer to focus a particular treatment, it is not altogether clear that such sensations are necessary for a healing session to be beneficial. I have not been able to find any research evaluating the relationship between what a healer perceives and the impact of the healing session on the healer or the recipient. It is

Article reprinted with permission from: Kemper, Kathi J. Authentic Healing: A Practical Guide for Caregivers. Minneapolis, MN: Two Harbors Press, 2016.

possible that getting caught up in trying to perceive a particular sensation distracts from the central process. On the other hand, having a clearer sense of where and what kind of treatment is needed may help the healer make more informed, intelligent decisions. Many healers report that their intuitions and perceptions improve over time naturally without being forced. Rather than focus on intensifying a particular perception, it is wise for healers to focus on centering, grounding, and extending peace, good will, and positive intentions.

What Do Recipients Feel?

Just as there are differences in healers' perceptions, recipients may feel nothing at all or static electricity, heat, fullness, waves of energy, tingling, and easing of pain, burning, nausea, or itching. Recipients may also sense sounds, music, or visual effects, such as colors, symbols, or light.¹³

One of the best descriptions I've heard from a recipient came from a 7-year-old boy. He said that it felt like he was lying in a bathtub full of Jell-O, and as my hands moved several inches over him, it felt like I was stroking the top of the Jell-O and he could feel it jiggling on his skin.

Another vivid description came from a colleague who suffered from painful sinus congestion. As my fingers slowly swept over her sinuses, she said it felt like a large knot that had been there was gradually untangled and the strands smoothed. Her face relaxed into a smile as the pain subsided and she freely took in several deep breaths through her previously congested nose.

Are There Side Effects?

Yes, but rarely. Actually, side effects may help us appreciate the power of healing. Here are two confessions from my own practice.

When I was a beginning student, I was given the opportunity to practice with a gentleman suffering from Parkinson's disease. He was sitting quite still as I began. Unaccustomed to the practice, I tried very hard to feel his energy field and then to send him energy. Within a few minutes, he began to tremble; the tremble quickly became a pronounced tremor. The harder I tried, the more he shook. Fortunately, Dr. Susan Wager, a physician who was helping teach the class, saw what was happening and came over to help.* Although it looked to me like she was doing the exact same thing I was doing (sweeping hands over his arms and legs), his tremor soon subsided. He didn't want to make me feel bad, but confessed that as I treated him, he felt more uncomfortable and ill at ease. Troubled at this failure, I asked Dr. Wager what I had done "wrong." She told me, "You didn't do anything wrong. You were just trying too hard. Remember to stay centered and relaxed during the process."

*Dr. Wager is the author of *Doctor's Guide to Therapeutic Touch: Enhancing the Body's Energy to Promote Healing*. New York: Perigee Books, 1996.

This is a terribly important lesson. When we try too hard to feel something or forcefully send energy or try to achieve a very specific result, the recipient can feel worse. Too much energy focused on the head can make a recipient feel "spacy" or disoriented. Too much energy over the throat can lead to sore throat or difficulty speaking. Trying too hard can backfire.

Here's another humbling example from my own experience. One day, I was in Boston Children's Hospital seeing a very sick infant who was hooked up to a ventilator (breathing machine) and numerous intravenous drips delivering life-saving medicine and nutrition. Her parents had requested TT, and I was proud to offer it to her. The first couple of days were unremarkable. Then another healer asked to watch me treat her. Wanting to impress a watching colleague, I tried very hard to "do it right." Within a minute, the baby's oxygen level fell, triggering an alarm. Startled, I pulled away. Her oxygen level rebounded. I took a deep breath, reassured myself that it was a coincidence, and tried harder. Again, her oxygen level dipped as I treated her and improved when I stopped. A few days later I went back to see her without the distraction of trying to impress anyone else, and the session went off without a hitch. As she improved, and I continued to treat her, she relaxed more and more, falling asleep with higher oxygen levels within seconds of starting a session, even if she had been crying vigorously when we started.

Of all the hundreds of patients I have treated over the years, these two impressed me the most. Why? Because they showed that healing can have adverse effects when it is done improperly by someone who is trying too hard or trying to be impressive. Powerful treatments can have serious side effects. Power is a two-edged sword. Seeing the side effects when done incorrectly (not centered, not unattached) helped me see its potential for helping as well.[†]

Healing Effects on Recipients

Scientific studies show that the primary benefit of healing is to promote relaxation, calm, ease, and comfort, while reducing stress, with greater improvements for patients treated by more experienced healers.¹⁴⁻²³ There are no studies comparing one type of healing treatment with another (spiritual vs. TT vs. Reiki vs. QiGong). The following includes some of the main types of healing practiced in the United States today.

Therapeutic Touch

TT was developed in 1972 by Dolores Krieger, PhD, RN, and Dora Kunz. It has been described by its founders as a mode of "transpersonal healing" that involves "the knowledgeable

[†]Dr. Shafica Karagulla also notes that "when healers are overenthusiastic and do not pay attention to their inner cues, they may pour too much energy into a patient with distressing and even harmful effects." In: Karagulla S, van Gelder Kunz D. *The Chakras and the Human Energy Fields*. Wheaton, IL: Quest Books, 1989:180.

use of innate therapeutic functions of the body to alleviate pain and combat illness.^{29,30} The practitioner consciously directs vital energy to the recipient and assists the recipient in modulating his energy field to correct imbalances that manifest as illness.

Taught in more than 90 countries in addition to the United States, TT is provided in more than 80 medical centers by more than 100,000 trained nurses. Dr. Dolores Krieger notes that the sympathetic and parasympathetic nervous systems (which balance fight/flight with the rest/digest activity) comprise the most sensitive body system to healing; this is followed in sensitivity by the lymphatic and circulatory systems, followed by the muscles, connective tissue, joints, and bones, and the central nervous system.²⁴

The numerous documented benefits of TT for health include relaxation, reduction of pain and stress, alleviation of stress-related illnesses, and ramping up recovery from injuries and surgery.²⁵⁻²⁷ For example, TT has proven effective in lowering anxiety and fatigue in patients with cancer and other serious illnesses^{28,29}; it can also improve mood and anxiety, and it can reduce restlessness among patients with Alzheimer's.^{30,31} Even patients in intensive care are able to relax, feeling more comfortable and peaceful with TT treatment.³² Patients with osteoarthritis have also had significant reductions in pain and distress with TT treatment.^{33,34} TT has helped addicts become sober, patients who are manic stabilize, and catatonic patients respond again.^{27,35,36} For example, a study from the United Kingdom showed significant improvements in stress, anxiety, depression, relaxation, and ability to cope among 147 clients who had self-identified mental health problems.³⁷ Another study showed less tension, confusion, and anxiety along with improved vigor among women who received TT.³⁸

Healing Touch

HT was developed in the 1990s by Janet Mengten, RN, BSN, as an outgrowth of TT and other biofield techniques, such as those developed by Dr. Brugh Joy, Barbara Brennan, and Rosalyn Bruyere. HT includes several non-invasive techniques to clear, energize, restore, and balance human energy fields. There are five courses within the HT curriculum that lead to certification. A HT practitioner has completed the 120 contact-hour preparation coursework within Levels 1 through 5, received a Certificate of Completion by the Healing Touch Program Director, and been approved by the Healing Touch International Certification Board. More than 150,000 people worldwide have studied HT, and there are more than 2500 certified HT practitioners.

As with TT, studies on HT suggest it can help reduce pain for patients suffering from several conditions including: severe recurrent headaches; post-surgical pain in children; veterans with chronic pain; and patients with cancer.³⁹⁻⁴² It is also helpful in reducing anxiety and improving physiologic mea-

asures of stress (heart rate, blood pressure, skin conductance, and skin temperature in healthy adults).¹⁹

Hospitalized patients, and adults and children with cancer have improved quality of life with HT treatments.⁴³ For example, patients undergoing heart surgery had much less anxiety and shorter hospital stays when they received HT.¹⁸ In a 2010 study, HT treatments were superior to simple relaxation training or usual care for women with cervical cancer in terms of preserving immune function and preventing depression during chemotherapy and radiation, confirming earlier studies showing that HT treatment, especially from experienced clinicians, improves pain, relaxation, stress, and immune function.^{44,45} Our study at Wake Forest showed that HT treatments helped pediatric oncology clinic patients, reducing anxiety levels.⁴⁶ Another Wake Forest study showed decreased nausea and improved fatigue among adult oncology patients who received HT.⁴⁷

Reiki and Johrei

Reiki treatments also reduce anxiety and stress hormones, even in healthy people who are not particularly stressed, as well as in patients undergoing surgery (who also experience less pain and use fewer pain medications when they receive Reiki).^{48,49} For example, Reiki treatment improved physiologic measures of anxiety among adults who underwent screening colonoscopy.⁵⁰ Similarly, among older adults with pain, anxiety, or depression, Reiki treatment improved relaxation, comfort, mood, and anxiety.⁵¹ Four weekly Reiki treatments significantly improved mental functioning and memory in a small study of older adults.⁵² As with TT and HT, Reiki treatments can also help reduce pain and fatigue, improving the quality of life of patients with cancer.^{53,54} As with TT, the autonomic (sympathetic and parasympathetic) nervous system appears to be among the most sensitive of the body's systems in response to Reiki.^{49,55}

Another Japanese healing practice is *Johrei*. Although less research has been done on this practice than with Reiki, similar benefits have been noted for the practitioner and the recipient: more emotional well-being and decreased pain and stress.^{17,56-58} *Johrei* treatments also helped substance abusers in 12-step programs experience less distress and better mood than other inpatients who did not receive *Johrei*.⁵⁹

QiGong

The ancient Chinese practice of QiGong has developed into numerous schools and techniques.⁸ The two main types of practice are internal QiGong, which is a moving meditation to promote healing similar to Tai Chi, and external QiGong, in which a healer emits Qi toward a patient to promote healing. Although QiGong is an ancient practice, it was suppressed during the Cultural Revolution of the 1960s, and modern scientific research about it did not get underway until the later 1970s and 1980s. Since then, hundreds of studies have

[‡]Kunz D, Krieger D. *The Spiritual Dimension of Therapeutic Touch*. Rochester, VT: Bear & Company, 2004.

[§]Beijing alone has nearly 2 dozen schools of QiGong. Millions of Chinese people practice QiGong outdoors in parks daily.

documented the benefits of external QiGong for treating patients with a variety of painful conditions.^{60–64}

Much of the early research tried to understand the physical force(s) emitted by QiGong healers—patterns of low frequency amplitude modulated infrared radiation, electromagnetic radiation, infrasonic radiation, etc., emitted from master healer's hands. Studies support each of these mechanisms, but a unifying theory remains elusive, particularly for distant (non-local) QiGong healing. Some clinicians believe that QiGong's effects are due to psychological factors (placebo effect), but this does not explain the well-documented impact that QiGong master healers can have on biophysical systems, such as liquid crystal arrays, cell membranes, water, saline, atomic nuclear radioactive decay rates, RNA, DNA, collagen, hemoglobin, and albumin.^{60¶}

One of the challenges in research on external QiGong is that, unlike other traditions in which healers draw upon universal healing energy, QiGong masters typically draw upon their own personal Qi to heal. This means that, when an experiment is repeated several times in one day,[¶] the healer tires, and effects diminish. This makes it difficult to achieve the large sample sizes and consistent outcomes that characterize compelling biomedical research.

Despite this limitation, studies show that QiGong healers can improve pain and anxiety for patients with severe chronic pain, including premenstrual pain and osteoarthritis.^{61,62,65–69}

Spiritual Healing, Gentle Touch with Intention, and Healing Prayer

There is a huge body of human experience with many varieties of spiritual healing, laying on of hands, gentle touch, and healing prayer. Results of the scientific studies on these practices have been somewhat mixed, but are generally similar to the results from TT, HT, Reiki, and QiGong in terms of improvements in pain, anxiety, and overall well-being.^{37,70–76}

Are Benefits Just the Placebo Effect?

Although skeptics might claim that benefits are only due to a placebo effect, this minimalist stance is refuted by studies in test tubes, cell cultures, and animals, which, as far as we know, are not susceptible to placebo effects.^{9,77–87} For example, studies at the University of Connecticut have shown that TT had a dramatic impact on the growth and metabolism of bone, fibroblast, and tendon cells growing in laboratory cultures; it increased DNA synthesis, differentiation and mineralization, and decreased differentiation and mineralization in osteosarcoma cells.^{88,89} Similarly, preliminary studies in tissue cultures and in mice have shown decreases in tumors for mice treated by

QiGong masters.^{87,90,91} A study on premature infants (who are also unlikely to be affected by placebos), showed improved balance in the autonomic nervous system governing heart rate and breathing among those who received TT.⁹²

In summary, there are many different kinds of healing practices from the world's many different cultures. Despite their obvious differences, these practices have similar benefits for healers and recipients: increased relaxation and well-being, and decreased stress and pain. ■

References

1. Tang R, Tegeler C, Larrimore D, et al. Improving the well-being of nursing leaders through healing touch training. *J Altern Complement Med* 2010;16:837–841.
2. Cuneo CL, Cooper MR, Drew CS, et al. The effect of Reiki on work-related stress of the registered nurse. *J Holist Nurs* 2010;29:33–43.
3. Lewis D. A survey of therapeutic touch practitioners. *Nurs Stand* 1999;13:33–37.
4. Quinn JF, Strelkauskas AJ. Psychoimmunologic effects of therapeutic touch on practitioners and recently bereaved recipients: A pilot study. *ANS Adv Nurs Sci* 1993;15:13–26.
5. McElligott D, Holz MB, Carollo L, et al. A pilot feasibility study of the effects of touch therapy on nurses. *J N Y State Nurses Assoc* 2003;34:16–24.
6. Whelan KM, Wishnia GS. Reiki therapy: The benefits to a nurse/Reiki practitioner. *Holist Nurs Pract* 2003;17:209–217.
7. Peper E, Ancoli S. The two endpoints of an EEG continuum of meditation alpha/theta and fast beta, in mind/body integration: In: Peper E, Ancoli S, Quinn M, eds. *Essential Readings in Biofeedback*. New York: Plenum, 1979: 141–148.
8. Forbes MA, Rust R, Becker GJ. Surface electromyography apparatus as a measurement device for biofield research: Results from a single case study. *J Altern Complement Med* 2004;10:617–626.
9. Burselton KO, Schwartz GE. Energy healing training and heart rate variability. *J Altern Complement Med* 2005;11:391–393.
10. Mentgen JL. Healing touch. *Nurs Clin North Am* 2001;36:143–158.
11. Taylor B, Lo R. The effects of Healing Touch on the coping ability, self esteem and general health of undergraduate nursing students. *Complement Ther Nurs Midwifery* 2001;7:34–42.
12. Wardell DW, Engebretson J. Biological correlates of Reiki Touch^(sm) healing. *J Adv Nurs* 2001;33:439–445.
13. Warber S, Cornelio D, Straughn J, et al. Biofield energy therapy: A qualitative study of the client's perspective. *Altern Ther* 2009;15:S159.
14. Jackson E, Kelley M, McNeil P, et al. Does therapeutic touch help reduce pain and anxiety in patients with cancer? *Clin J Oncol Nurs* 2008;12:113–120.
15. Kemper KJ, Kelly EA. Treating children with therapeutic and healing touch. *Pediatr Ann* 2004;33:248–252.
16. Kemper KJ, Larrimore D, Dozier J, et al. Electives in complementary medicine: Are we preaching to the choir? *Explore (NY)* 2005;1:453–458.
17. Laidlaw TM, Naito A, Dwivedi P, et al. The influence of 10 min of the *Johrei* healing method on laboratory stress. *Complement Ther Med* 2006;14:127–132.
18. MacIntyre B, Hamilton J, Fricke T, et al. The efficacy of healing touch in coronary artery bypass surgery recovery: a randomized clinical trial. *Altern Ther Health Med* 2008;14:24–32.
19. Maville JA, Bowen JE, Benham G. Effect of Healing Touch on stress perception and biological correlates. *Holist Nurs Pract* 2008;22:103–110.

¶Lu Z. *Scientific QiGong Exploration: The Wonders and Mysteries of Qi*. Amber Leaf Publishing, 1997.

¶Replicability is key to scientific certainty.

20. Miles P. Preliminary report on the use of Reiki HIV-related pain and anxiety. *Altern Ther Health Med* 2003;9:36.
21. Robinson J, Biley FC, Dolk H. Therapeutic touch for anxiety disorders. *Cochrane Database Syst Rev* 2007;3:CD006240.
22. Seskevich JE, Crater SW, Lane JD, et al. Beneficial effects of noetic therapies on mood before percutaneous intervention for unstable coronary syndromes. *Nurs Res* 2004;53:116–121.
23. So PS, Jiang Y, Qin Y. Touch therapies for pain relief in adults. *Cochrane Database Syst Rev* 2008;4:CD006535.
24. Krieger D. Healing with therapeutic touch: Interview by Bonnie Horrihan. *Altern Ther Health Med* 1998;4:86–92.
25. Coakley, AB, Duffy ME. The effect of therapeutic touch on postoperative patients. *J Holist Nurs* 2010;28:193–200.
26. Newshan G, Schuller-Civitella D. Large clinical study shows value of therapeutic touch program. *Holist Nurs Pract* 2003;17:189–192.
27. Winstead-Fry P, Kijek J. An integrative review and meta-analysis of therapeutic touch research. *Altern Ther Health Med* 1999;5:58–67.
28. Giasson M, Bouchard L. Effect of therapeutic touch on the well-being of persons with terminal cancer *J Holist Nurs* 1998;16:383–398.
29. Aghabati NE, Mohammadi E, Pour Esmail Z. The effect of therapeutic touch on pain and fatigue of cancer patients undergoing chemotherapy. *Evid Based Complement Alternat Med* 2008;7:375–381.
30. Woods DL, Dimond M. The effect of therapeutic touch on agitated behavior and cortisol in persons with Alzheimer's disease. *Biol Res Nurs* 2002;4:104–114.
31. Woods DL, Beck C, Sinha K. The effect of therapeutic touch on behavioral symptoms and cortisol in persons with dementia. *Forsch Komplementmed* 2009;16:181–189.
32. Cox C, Hayes J. Experiences of administering and receiving therapeutic touch in intensive care. *Complement Ther Nurs Midwifery* 1998;4:128–132.
33. Peck SD. The efficacy of therapeutic touch for improving functional ability in elders with degenerative arthritis. *Nurs Sci Q* 1998;11:123–132.
34. Gordon A, Merenstein JH, D'Amico F, et al. The effects of therapeutic touch on patients with osteoarthritis of the knee. *J Fam Pract* 1998;47:271–277.
35. Hagemaster J. Use of therapeutic touch in treatment of drug addictions. *Holist Nurs Pract* 2000;14:14–20.
36. Larden CN, Palmer ML, Janssen P. Efficacy of therapeutic touch in treating pregnant inpatients who have a chemical dependency. *J Holist Nurs* 2004;22:320–332.
37. Weze C, Leathard H, Grange J, et al. Healing by gentle touch ameliorates stress and other symptoms in people suffering with mental health disorders or psychological stress. *Evid Based Complement Alternat Med* 2007;4:115–123.
38. Lafreniere KD, Mutus B, Cameron S, et al. Effects of therapeutic touch on biochemical and mood indicators in women. *J Altern Complement Med* 1999;5:367–370.
39. Zimmer MM, Meier M, Rolf, W. Effect of healing touch on children's pain and comfort in the postoperative period. *Explore (NY)* 2009;5:157.
40. Sutherland EG, Ritenbaugh C, Kiley SJ, et al. An HMO-based prospective pilot study of energy medicine for chronic headaches: Whole-person outcomes point to the need for new instrumentation. *J Altern Complement Med* 2009;15:819–826.
41. Wardell DW, Rintala D, Tan G. Study descriptions of healing touch with veterans experiencing chronic neuropathic pain from spinal cord injury. *Explore (NY)* 2008;4:187–195.
42. Post-White J, Kinney ME, Savik K, et al. Therapeutic massage and healing touch improve symptoms in cancer. *Integr Cancer Ther* 2003;2:332–344.
43. Cook CA, Guerrero JF, Slater VE. Healing touch and quality of life in women receiving radiation treatment for cancer: A randomized controlled trial. *Altern Ther Health Med* 2004;10:34–41.
44. Lutgendorf SK, Mullen-Houser E, Russell D, et al. Preservation of immune function in cervical cancer patients during chemoradiation using a novel integrative approach. *Brain Behav Immun* 2010;24:1231–1240.
45. Wilkinson DS, Knox PL, Chatman JE, et al. The clinical effectiveness of healing touch. *J Altern Complement Med* 2002;8:33–47.
46. Kemper KJ, Hamilton CA, McLean CW, et al. Impact of healing touch on pediatric oncology outpatients: Pilot study. *J Soc Integr Oncol* 2009;7:12–18.
47. Danhauer S, Tooze JA, Holder P, et al. Healing Touch as a supportive intervention for adult acute leukemia patients: A pilot investigation of effects on distress and symptoms. *J Soc Integr Oncol* 2008;6:89–97.
48. Vitale AT, O'Connor PC. The effect of Reiki on pain and anxiety in women with abdominal hysterectomies: A quasi-experimental pilot study. *Holist Nurs Pract* 2006;20:263–272.
49. Friedman RS, Burg MM, Miles P, et al. Effects of Reiki on autonomic activity early after acute coronary syndrome. *J Am Coll Cardiol* 2010;56:995–996.
50. Hulse RS, Stuart-Shor EM, Russo J. Endoscopic procedure with a modified Reiki intervention: A pilot study. *Gastroenterol Nurs* 2010;33:20–26.
51. Richeson NE, Spross JA, Lutz K, Peng C. Effects of Reiki on anxiety, depression, pain, and physiological factors in community-dwelling older adults. *Res Gerontol Nurs* 2010;3:187–199.
52. Crawford SE, Leaver VW, Mahoney SD. Using Reiki to decrease memory and behavior problems in mild cognitive impairment and mild Alzheimer's disease. *J Altern Complement Med* 2006;12:911–913.
53. Olson K, Hanson J, Michaud M. A phase II trial of Reiki for the management of pain in advanced cancer patients. *J Pain Symptom Manage* 2003;26:990–997.
54. Tsang KL, Carlson LE, Olson K. Pilot crossover trial of Reiki versus rest for treating cancer-related fatigue. *Integr Cancer Ther* 2007;6:25–35.
55. Mackay N, Hansen S, McFarlane O. Autonomic nervous system changes during Reiki treatment: A preliminary study. *J Altern Complement Med* 2004;10:1077–1081.
56. Naito A, Laidlaw TM, Henderson DC, et al. The impact of self-hypnosis and *Johrei* on lymphocyte subpopulations at exam time: A controlled study. *Brain Res Bull* 2003;62:241–253.
57. Reece K, Schwartz GE, Brooks AJ, Nangle G. Positive well-being changes associated with giving and receiving *Johrei* healing. *J Altern Complement Med* 2005;11:455–457.
58. Gasiorowska A, Navarro-Rodriguez T, Dickman R, et al. Clinical trial: The effect of *Johrei* on symptoms of patients with functional chest pain (FCP)—a pilot study. *Aliment Pharmacol Ther* 2008;29:126–134.
59. Brooks AJ, Schwartz GE, Reece K, Nangle G. The effect of *Johrei* healing on substance abuse recovery: A pilot study. *J Altern Complement Med* 2006;12:625–631.
60. Chen KW. An analytic review of studies on measuring effects of external Qi in China. *Altern Ther Health Med* 2004;10:38–50.
61. Chen KW, Hassett AL, Hou F, et al. A pilot study of external qigong therapy for patients with fibromyalgia. *J Altern Complement Med* 2006;12:851–856.
62. Chen KW, Perlman A, Liao JG, et al. Effects of external qigong therapy on osteoarthritis of the knee: A randomized controlled trial. *Clin Rheumatol* 2008;27:1497–1505.
63. Lee MS, Woo WH, Lim HJ, et al. External Qi therapy to treat symptoms of Agent Orange sequelae in Korean combat veterans of the Vietnam war. *Am J Chin Med* 2004;32:461–466.
64. Lee MS, Jang JW, Jang HS, Moon SR. Effects of Qi-therapy on blood pressure, pain and psychological symptoms in the elderly: A randomized controlled pilot trial. *Complement Ther Med* 2003;11:159–164.
65. Wu WH, Bandilla E, Ciccone DS, et al. Effects of qigong on late-stage complex regional pain syndrome. *Altern Ther Health Med* 1999;5:45–54.

66. Lee MS, Yang KH, Huh HJ, et al. Qi therapy as an intervention to reduce chronic pain and to enhance mood in elderly subjects: A pilot study. *Am J Chin Med* 2001;29:237–245.
67. Jang HS, Lee MS. Effects of qi therapy (external qigong) on premenstrual syndrome: A randomized placebo-controlled study. *J Altern Complement Med* 2004;10:456–462.
68. Lee MS, Pittler MH, Ernst E. External qigong for pain conditions: A systematic review of randomized clinical trials. *J Pain* 2007;8:827–831.
69. Vincent A, Hill J, Kruk KM, et al. External qigong for chronic pain. *Am J Chin Med* 2010;38:695–703.
70. Jonas WB, Crawford CC. Science and spiritual healing: A critical review of spiritual healing, “energy” medicine, and intentionality. *Altern Ther Health Med* 2003;9:56–61.
71. Weze C, Leathard HL, Grange J, et al. Evaluation of healing by gentle touch in 35 clients with cancer. *Eur J Oncol Nurs* 2004;8:40–49.
72. Moga MM, Zhou D. Distant healing of small-sized tumors. *J Altern Complement Med* 2008;14:453.
73. Radin D, Stone J, Levine E, et al. Compassionate intention as a therapeutic intervention by partners of cancer patients: Effects of distant intention on the patients’ autonomic nervous system. *Explore (NY)* 2008;4:235–243.
74. Levin J, Mead L. Bioenergy healing: A theoretical model and case series. *Explore (NY)* 2008;4:201–209.
75. Tsubono K, Thomlinson P, Shealy CN. The effects of distant healing performed by a spiritual healer on chronic pain: A randomized controlled trial. *Altern Ther Health Med* 2009;15:30–34.
76. Roberts L, Ahmed I, Davison A, et al. Intercessory prayer for the alleviation of ill health. *Cochrane Database Syst Rev* 2009;2:CD000368.
77. Chien CH, Tsuei JJ, Lee SC, et al. Effect of emitted bioenergy on biochemical functions of cells. *Am J Chin Med* 1991;19:285–292.
78. Lei XF, Bi AH, Zhang ZX, et al. The antitumor effects of qigong-emitted external Qi and its influence on the immunologic functions of tumor-bearing mice. *J Tongji Med Univ* 1991;11:253–256.
79. Mo Z, Chen KW, Ou W, Li M. Benefits of external qigong therapy on morphine-abstinent mice and rats. *J Altern Complement Med*, 2003;9:827–835.
80. Saviato RM, da Silva MJ. Therapeutic touch for the healing of skin injuries in guinea pigs. *Rev Bras Enferm* 2004;57:340–343.
81. Taft R, Moore D, Yount G. Time-lapse analysis of potential cellular responsiveness to *Johrei*, a Japanese healing technique. *BMC Complement Altern Med* 2005;5:2.
82. Rubik B, Brooks AJ, Schwartz GE. In vitro effect of Reiki treatment on bacterial cultures: Role of experimental context and practitioner well-being. *J Altern Complement Med* 2006;12:7–13.
83. Baldwin AL, Wagers C, Schwartz GE. Reiki improves heart rate homeostasis in laboratory rats. *J Altern Complement Med* 2008;14:417–422.
84. Yan X, Shen H, Jiang H, et al. External Qi of Yan Xin Qigong induces G2/M arrest and apoptosis of androgen-independent prostate cancer cells by inhibiting Akt and NF-kappa B pathways. *Mol Cell Biochem* 2008;310:227–234.
85. Shao L, Zhang J, Chen L, et al. Effects of external qi of qigong with opposing intentions on proliferation of *Escherichia coli*. *J Altern Complement Med* 2009;15:567–571.
86. Teixeira PC, Rocha H, Coelho Neto JA. *Johrei*, a Japanese healing technique, enhances the growth of sucrose crystals. *Explore (NY)* 2010;6:313–323.
87. Yan X, Shen H, Jiang H, et al. External Qi of Yan Xin Qigong induces apoptosis and inhibits migration and invasion of estrogen-independent breast cancer cells through suppression of Akt/NF-kB signaling. *Cell Physiol Biochem* 2010;25:263–270.
88. Gronowicz GA, Jhaveri A, Clarke LW, et al. Therapeutic touch stimulates the proliferation of human cells in culture. *J Altern Complement Med* 2008;14:233–239.
89. Jhaveri A, Walsh SJ, Wang Y, et al. Therapeutic touch affects DNA synthesis and mineralization of human osteoblasts in culture. *J Orthop Res* 2008;26:1541–1546.
90. Yan X, Shen H, Jiang H, et al. External Qi of Yan Xin Qigong differentially regulates the Akt and extracellular signal-regulated kinase pathways and is cytotoxic to cancer cells but not to normal cells. *Int J Biochem Cell Biol* 2006;38:2102–2113.
91. Chen KW, Shiflett SC, Ponzio NM, et al. A preliminary study of the effect of external qigong on lymphoma growth in mice. *J Altern Complement Med* 2002;8:615–621.
92. Whitley JA, Rich BL. A double-blind randomized controlled pilot trial examining the safety and efficacy of therapeutic touch in premature infants. *Adv Neonatal Care* 2008;8:315–333.

Kathi J. Kemper, MD, MPH, is the director of the Center for Integrative Health and Wellness at Ohio State University in Columbus, Ohio.

Copyright of *Alternative & Complementary Therapies* is the property of Mary Ann Liebert, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.