

Commentary: Multifaceted Health Benefits of Medical *Qigong*

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INTRODUCTION

It is a challenge for the Western mind to understand the function of *qi* in the context of bodily functions as defined by science. According to Chinese medicine and *qigong* theory, *qi* has an infinite number of functions in the body.

The foundation of *qigong* and Traditional Chinese Medicine (TCM) theory dictates that intention (*yi*) directs the movement of *qi*, which, in turn, directs the flow of blood in the body. Increased or decreased electrical activity in specific areas of the body determines blood flow and fluid balance, accumulation and dispersal of substances. The practice of *qigong* is the act of bringing awareness and skill to direct the function and movement of *qi*. The correct movement of *qi* is a force that engages the body's natural tendency toward homeostasis. Continued practice provides reinforcement of the body's inclination toward homeostasis and therefore toward optimal use of all its functions and potential. What are called "special abilities" or "psychic powers" that sometimes develop in *qigong* practice are simply the product of our natural capacity in the refined human state.

For health maintenance, the *qigong* practitioner does not have to be an expert. Almost anyone can learn to practice *qigong* to maintain and improve his or her own health. The objective of the exercises is to strengthen the *qi* in the body and remove obstructions to *qi* flow that may have developed as a result of injury, emotional states, diet, disease, or other factors. Conversely, obstruction of *qi* flow can also produce disease.

Of all the energy medical practices, *qigong* has the most developed theoretical basis and has been subjected to the most extensive research. In China, the collected knowledge about the therapeutic benefits of *qigong* was developed over thousands of years. Medical *qigong* is now practiced in clinics and some hospitals that integrate TCM and conventional Western medicine. In Western hospitals *qigong* is among several complementary practices used including Therapeutic Touch,TM Mindful Meditation, and *Reiki*.

CLINICAL RESEARCH DEMONSTRATES THE MULTIFACETED EFFECTS OF *QIGONG*

In the early 1980s Chinese scientists initiated research on the health and healing claims of *qigong*. Of the hundreds of research studies that were performed, few were published because suitable journals were unavailable. However, approximately 1400 reports were published as abstracts in the proceedings of conferences. English abstracts of these reports as well as those from scientific journals are collected in the *Qigong* DatabaseTM that presently contains more than 2000 records of *qigong* studies and is available from the *Qigong* Institute (Sancier, 2000). One of the authors has discussed the medical benefits of *Qigong* (Sancier, 1994, 1996a, 1996b, 1999; Sancier and Hole, 2001).

Wang and Xu, two Western-trained doctors in China explored some of the multiple health benefits of self-practice *qigong* as summarized in Table 1 (Wang and Xu 1991, 1993; Wang et al., 1995).

One of the prime benefits of *qigong* is stress reduction, and a main ingredient of practice is intention (i.e., *yi*) that uses the mind to guide the *qi*. While *qi* itself has not been measured, multiple types of measurements demonstrate the effects of *qi* on the body. For example, simultaneous measurements of the interaction between a *qigong* master and receiver included respiration, electroencephalogram (EEG), vibrations, blood pressure, skin conductivity, and heart rate variability (Yamamoto et al., 1997). Different physiologic measurements have sought information about the effects of *qigong* on the brain and emotions. These include measurements by high-resolution EEG, functional magnetic resonance imaging (fMRI), neurometer measurements, and applied kinesiology. Neuroimaging methods were used to study regional brain functions, emotions and disorders of emotions. Differences were found on the effects on the brain during meditation by *qigong* and by Zen meditation (Kawano and Kushita, 1996). The effects of emitted *qi* (*waiqi*) has also been extended to cell cultures, growth of

TABLE 1. ACTIVITIES OF TWO MESSENGER CYCLIC NUCLEOTIDES

Antiaging
Antithrombin III
Asthma
Blood pressure
Blood viscosity
Bone density
Cerebral functions impaired by senility
Endocrine gland functions
Erythrocyte deformation index
Factor VIII-related antigen
Hypertension
Immune system
Longevity, 50% greater; after <i>qigong</i> 30 minutes, twice daily, 20 years
Plasminogen activator inhibitor
Serum estradiol levels in hypertensive men and women
Serum lipid levels
Sexual function
Strokes, 50% fewer after <i>qigong</i> 30 minutes, twice daily, 20 years

plants, seed germination, and reduction of tumor size in animals. (Sancier and Hu, 1991) Spiritual healing, which involves the mind, has been the subject of two volumes by Benor (Benor, 2001, 2002). His discussions also include scientific studies describing the beneficial effects of prayer on subjects' health.

The work of Richard Davidson and Paul Ekman (cited in Dalai Lama and Goleman, 2003), researchers of the Mind and Life Institute, may go a long way to illustrate the role of intention alone on the brain and body (Davidson et al., 1999). In current studies underway at University of California at San Francisco Medical School and the University of Wisconsin, they are observing the electrical mechanisms in the brains of highly trained Buddhist lamas during various states of focused intention. Using fMRI, high-resolution EEG and state-of-the-art reflex monitoring, early results illustrate that electrical activity and blood flow in the brain can be directed by conscious intention. Through systematic and repeated practice of intention, well-practiced lamas have succeeded in training the brain to direct electrical activity away from areas associated with the biochemistry of stress, tension, and disturbing emotional or physical states (i.e., the amygdala and right prefrontal cortex) and increase activity in the area associated with the biochemistry of healthful emotional and physical states (i.e., the left prefrontal cortex). Moreover, they have observed that the state of conscious intention on compassion engages a state of relaxation and well-being that surpasses even that achieved during a state of rest. The early results of this research suggests that parts of the brain thought previously to be fixed in function, such as the stress reflexes of the reptilian brain, may in fact be plastic in nature, able to be changed, shaped and developed through ongoing practice of conscious intention (Dalai Lama and Goleman, 2003).

Cost containment of health care is a subject of vital con-

temporary interest. For example, in the treatment of asthma, self-applied *qigong* led to significant cost decreases, such as reduction in days unfit for work, hospitalization days, emergency consultation, respiratory-tract infections, and number of drugs and drug costs (Reuther and Aldridge, 1998).

RECOMMENDATIONS

The vast research of medical benefits of *qigong* offers a rich source of information for benefiting mankind. Medical cost containment is an attractive benefit of *qigong* practice and should be further explored to provide healing potential without side-effects.

The science and art of *qigong* may open a window into new thinking about health, medicine, psychology, and spirituality. It is a physical, mental, and spiritual practice that continuously supports our natural tendency toward homeostasis. If that tendency is supported with regularity, allowing one to hover more closely to that point of balance, then the entire being can experience a tremendous evolutionary advantage. Innate abilities have an opportunity to develop; the senses become more keen, organ function more consistent and strong, the sympathetic nervous system relaxed, parasympathetic nervous system efficient, the mind relaxed, alert, clear, freely channeling messages in a multitude of new and diverse directions.

From a scientific point of view, the promise of *qigong* practices provides new avenues for understanding some of the subtle aspects of human life and its natural inclination to strive for balance. For clinicians it shifts our focus from a battle with disease to a cultivation of health. For practitioners of *qigong*, it gives us an experiential understanding of greater balance within ourselves and of the cultivation our individual physical, mental, and spiritual potential.

REFERENCES

- Benor DJ. *Spiritual Healing: Scientific Validation of a Healing Revolution*, Vol. 1. Southfield, MI: Visions Publications, 2001.
- Benor DJ. *Spiritual Healing: Scientific Validation of a Healing Revolution*, Professional Supplement, Vol. 2. Southfield, MI: Vision Publications, 2002.
- Davidson JD, Abercrombie H, Nitschke JB, Putnam K. Regional brain function, emotion and disorders of emotion. *Curr Opin Neurobiol* 1999;9:228-234.
- Kawano Kimiko 1, Kushita Kouhei N 2. The Function of the Brain using EEGs during Induced Meditation. *J Intl Soc Life Info Science* 1996;14:91-93.
- Dalai Lama, Goleman D. *Destructive Emotions: How Can We Overcome Them?* New York: Bantam Books, 2003.
- Reuther I, Aldridge D. Treatment of bronchial asthma with *qigong* yangsheng—A pilot study. *J Altern Complement Med* 1998;4:173-183.
- Sancier KM. The effect of *qigong* on therapeutic balancing mea-

- sured by electroacupuncture according to Voll (EAV): A preliminary study. *Acupunct Electrother Res* 1994;19:119-127.
- Sancier KM. Anti-aging benefits of qigong. *J Intl Soc Life Info Science* 1996a;14:12-21.
- Sancier KM. Medical applications of qigong. *Altern Ther Health Med* 1996b;2:40-46.
- Sancier KM. Therapeutic benefits of *qigong* exercises in combination with drugs. *J Altern Complement Med* 1999;5:383-389.
- Sancier KM, and Hole LC. *Qigong* and neurologic illness: In Weintraub M, ed. *Alternative and Complementary Medicine for Neurologic Illness*. St. Louis, MO: Harcourt Health Sciences, 2001: 197-220.
- Sancier KM. *Qigong* database. *Adv Mind Body Med* 2000;16:159.
- Sancier KM, Hu B. Medical applications of qigong and emitted *qi* on humans, animals, cell cultures and plants: Review of selected scientific research. *Am J Acupuncture* 1991;19:367-377.
- Wang CX, Xu DH. The beneficial effect of *qigong* on the ventricular function and microcirculation in deficiency of heart-energy hypertensive patients [in Chinese]. *Chung Hsi I Chieh Ho Tsa Chih* 1991;11:659-660.
- Wang CX, Xu DH. Effect of *qigong* on plasma coagulation fibrinolysis indices of hypertensive patients with blood stasis [in Chinese]. *Chung Kuo Chung Hsi I Chieh Ho Tsa Chih* 1993;13:415-416.
- Wang CX, Xu DH, Qian YC. Effect of *qigong* on heart-qi deficiency and blood stasis type of hypertension and its mechanism [in Chinese]. *Chung Kuo Chung Hsi I Chieh Ho Tsa Chih* 1995;15:454-458.
- Yamamoto M, Hirasawa M, Kokubo H, Sakaida H, Kimiko Kawano K. Study on analyzing methods of human body functions using various simultaneous measurements (VSM)—The second year report of the 5-year-project supported by science and technology agency(STA), Japan. *J Int Soc Life Info Science* 1997;15:2.

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