



THE POWER OF THE MIND

Stress—the Missing Piece

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*“Medicine and Sickness cure each other.
The Whole World is Medicine.
Who are you?”*

INTRODUCTION

The Zen koan above provides a perfect introduction to an article on Mind-Body Medicine. According to Webster’s dictionary, a koan is “a paradox to be meditated upon that is used to train Zen Buddhist monks to abandon ultimate dependence on reason and to force them into gaining sudden intuitive enlightenment.” A koan is a riddle but not one to be “figured out” or solved. There is no right or wrong answer to a koan. Working with a koan is a subjective process. It is the subjectivity that makes the exercise interesting and fruitful. I’d like to claim that the same holds true for the practice of Medicine.

A separation of the mind and body is the characteristic that has distinguished Western Medicine from other healing traditions. Ancient Eastern healing traditions such as Chinese Medicine and Ayurveda have recognized the inextricable link between the mind and body for millennia. The first step to embracing *change* is for both physician and patient to acknowledge the awesome connection between the human mind and body.

The U.S. population is 5% of the World population and Americans consume 80% of the World’s narcotic medications. Why is this? It is not because Americans have more disease (and resultant pain) than people of other countries. It is because our society/culture has inhibited us from embracing and harnessing the awesome power of the mind-body connection.

STRESS: CAUSES, EFFECTS, AND MECHANISMS

Time Magazine’s cover story in June of 1983 was “Stress! An Epidemic in the U.S.” The same cover story would be appropriate today (30 years later): “Stress! Its Devastating Effects on the Health of Americans.”

According to The American Psychological Association, the top causes of stress in the U.S. (in descending order) are: job pressure, money, health, relationships, poor nutrition, media overload, and sleep deprivation.¹ The fundamental question is—Does stress cause disease?

“Associations between psychological stress and disease have been established, particularly for depression, cardiovascular disease, and HIV/AIDS.”² Stress clearly *contributes* to development of and progression of disease.* Chronic stress results in prolonged and repeated activation of the hypothalamic-pituitary-adrenocortical (HPA) axis and the sympathetic-adrenal medullary (SAM) system. The SAM system produces adrenaline which increases heart rate, elevates blood pressure, and boosts energy supplies. The HPA axis is responsible for the production of cortisol, the primary stress hormone which increases glucose in the bloodstream, enhances the brain’s use of glucose, increases the availability of substances that repair tissues, and stops functions which are non-essential in a “flight or fight” response. High levels of cortisol change immune system responses and suppress the digestive system, the reproductive system, and growth processes. Cortisol levels also affect mood, motivation, and fear.

Most physicians acknowledge a direct relationship between a patient’s life-stress, diet, and exercise to his or her health and well-being. Historically, however, it is only after the primary care physician has not been able to provide relief of symptoms, and no physical cause of an ailment has been identified, that attention is turned to stress levels, diet, and exercise.

75% to 90% of all visits to primary care providers in the U.S. are for stress-related conditions. This realization has led to growing utilization of Mind-body techniques in Western Medicine.

* Disease: A term referring to an imbalance or disruption of the natural state of “ease.”

MIND-BODY MEDICINE

Mind-Body Medicine is an approach to health-care that uses a wide range of behavioral and lifestyle interventions as a complement to traditional medical treatment. Patients are evaluated as individuals. Patient care in the Mind-body model addresses the *whole person*—mind, body, and spirit. Behavioral and psychosocial therapies are among the first line of interventions in this model. Most importantly, the patient is given an active role in the plan of treatment. Mind-Body Medicine emphasizes patient education and patient responsibility. Mind-body approaches “put high value on, and teach the power of, self-awareness and self-care.”³

Mind-body techniques are too numerous to cover comprehensively in this article. Self-awareness, relaxation, meditation, guided imagery, biofeedback, physical exercise, art, music, and movement are among the best known and widely used M-B techniques.⁴ Herbert Benson, M.D. of Massachusetts General Hospital, and Jon Kabat-Zinn, Ph.D., of the University of Massachusetts Medical Center, were pioneers in the field of Mind-Body Medicine. Benson was the first to discover the “relaxation response;” Jon Kabat-Zinn developed the Mindfulness-Based Stress Reduction (MBSR) Program which is now used in hospitals, medical centers, and clinics around the world.

THE RELAXATION RESPONSE (HERBERT BENSON, M.D.)

Benson began his practice as a cardiologist some 35 years ago. His work in M-B medicine began when he noticed that his patients had elevated blood pressure during routine check-ups. While conducting research at Harvard Medical School that involved developing a model for stress-induced hypertension in squirrel monkeys, he was asked by a group of practitioners of transcendental meditation to study their blood pressure. The group believed that their meditation practice resulted in lower blood pressure. Benson measured metabolism, blood pressure, heart rate, brain waves, and rate of breathing of the TM practitioners. Results showed that by changing their thought patterns through meditation, the subjects decreased their metabolism, respiration, and heart rates, and had slower brain waves. These findings were intriguing and were in fact the opposite of the “fight or flight” stress response. Benson named it the “relaxation response.”

The relaxation response can be evoked through various meditative practices including diaphragmatic breathing, repetitive prayer, chi gong, tai chi, yoga, progressive muscle relaxation, running, and even activities such as knitting. Two basic steps that Benson identified in practices that elicit the relaxation response are: (1) repetition of a word, prayer, or movement and (2) setting aside intrusive thoughts and returning to the repetition. Dr. Benson sees medicine as a three-legged stool: the first leg being pharmaceuticals, the second leg surgery and procedures, and the third leg mind/body interactions, or “self-care.” The “self-care” leg includes the relaxation response, nutrition, exercise, and spirituality.

Benson’s “relaxation response” is the foundation of most mind-body techniques. He and his colleagues have treated thousands of patients with medical conditions that were not well managed with conventional medical techniques. Scientific research performed by the group has proven “relaxation response” meditation to be effective in the treatment of many stress-related disease processes including immunological, cardiovascular, neurodegenerative, and mental disorders.⁵ Most notable results were demonstrated in the treatment of hypertension.^{6,7,8,9,10} Studies also showed RR meditation to be effective in the treatment of acute and chronic pain,^{11,12,13} anxiety,¹⁴ headaches,^{15,16} insomnia,^{17,18} irritable bowel syndrome,^{19,20} and premenstrual syndrome.²¹

MINDFULNESS-BASED STRESS REDUCTION (JON KABAT-ZINN, PH.D.)

“Mindfulness” is an English translation of the Pali* word “sati.” Sati means awareness, attention, and remembering. Sati, or mindfulness, is one of the eight parts of The Noble Eight-Fold Path to cessation of suffering and achievement of self-awakening taught by Siddhartha Gautama, The Buddha. Although mindfulness is an essential facet of Buddhism, there is nothing inherently religious about the practice. Mindfulness, in the U.S, is most often taught independently from religious or cultural beliefs.

Modern psychology has provided various, yet similar, definitions of mindfulness. It is a psychological state of:

- Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.²²
- Bringing one’s complete attention to the present experience on a moment-to-moment basis.²³
- A kind of non-elaborative, non-judgmental,

* Pali: the language of Buddhist psychology 2500 years ago.

present-centered awareness in which each thought, feeling, or sensation that arises in the field of attention is acknowledged and accepted as it is.²⁴

Thich Nhat Hahn, a Vietnamese Zen Buddhist monk, is responsible for bringing mindfulness to the Western countries. Jon Kabat-Zinn, an American psychologist, attended a retreat led by Thich Nhat Hahn in the 1970's, and came away with the feeling that the practice of mindfulness could be beneficial in the treatment of chronic medical conditions. Following through on his convictions, Kabat-Zinn founded the Mindfulness-based Stress Reduction Program at The University of Massachusetts. The program was initially developed to treat patients with chronic medical conditions, and over the past 28 years, Kabat-Zinn's research group has shown clinically relevant reductions in medical and psychological symptoms of various chronic pain conditions.^{25,26,27}

Drs. Kabat-Zinn and Wheeler also found that patients with moderate to severe psoriasis who received MBSR intervention in addition to their ultraviolet light treatments healed four times as fast as those just receiving light treatments alone.²⁸ It was promising to observe that MBSR was "effective in decreasing mood disturbance and stress symptoms in both male and female patients with a wide variety of cancer diagnoses, stages of illness, and ages."²⁹

But in addition, the group looked at patients with secondary diagnoses of anxiety and/or panic disorders, and found that MBSR had both short and long-term benefit in the treatment of anxiety disorders.^{30,31,32}

The Mindfulness-based Stress Reduction program founded by Jon Kabat-Zinn is now offered in over 200 medical centers, hospitals, and clinics around the world. MBSR programs have been implemented at several of the leading integrative medical centers such as the Scripps Center for Integrative Medicine, the Duke Center for Integrative Medicine, and the Jefferson-Myrna Brind Center for Integrative Medicine.

MINDFULNESS AT LANCASTER GENERAL HEALTH

Lancaster General Health offers various programs in "Mindfulness" for both healthcare providers and patients. Mary Levasseur, the Manager of Community Health and Wellness at Lancaster General Health, says that mind-body classes are a crucial part of cancer care. She says that "cancer patients will oftentimes talk about how out of control their cancer treatments make them feel. And, a class like this can help build resiliency during the journey and help them lead a calmer life." Our Wellness Center offers patients an 8-week Mindfulness-based Stress Reduction

(MBSR) class modeled after Jon Kabat-Zinn's programs. Dr. Ed Purzycki administers an MBSR program to his patients with sleep disorders, which will be described in the next issue. Our "Beyond Cancer" classes provide patients impacted by cancer with instruction in using mindfulness as part of their self-care.

The following is feedback we have received from patients/participants of these programs.

- An LG Health employee who had bilateral breast cancer at age 40 said,
*"It has changed my lifestyle and whole demeanor."
 "It affected all my relationships in a positive way."
 "Co-workers noticed a significant change in me, I'm not reactive."
 "It helped me learn to 'be in the moment.'
 "I highly recommend it to anybody. Even if they think they are 'coping.'
 "It has made a significant change in the way I perceive life!"*
- A brain cancer survivor shared,
*That the mindfulness class helped her to reduce her fear when getting follow-up scans.
 Her mindfulness practice has helped her to sleep better and stay more positive.
 "Life just got better."*
- A patient undergoing therapy for Hodgkin's Lymphoma enrolled in MBSR class when his body became weak from treatments. Frustratingly, he was unable to carry his young son up a flight of stairs. He shared,
*I learned what my body was going through and that it's ok to have feelings of frustration.
 I was able to tell myself "No need to push through this. If you can make it up with a two-minute breather, that's OK."*
- After attending mindfulness classes, an oncology patient of Dr. Oyer's shared,
"This is the first time in 20 years that I've had any self-esteem."

Mind-Body offerings are not only offered to patients but also to employees and physicians. Mary LeVasseur developed "Mindful Moments," a time for employees to gather during the work day and refocus in a mindful way. Pete Jupin of Chaplain Services led "Sacred Ground" for healthcare providers. This group discussed challenges of patient care and the role of the healthcare provider on a deeper level. Dr. Tony Castle organized a mindfulness

offering for physicians facilitated by Dr. Chris Peterson of Anesthesiology. Chris is an ordained Buddhist Minister. He has a gift for sharing his knowledge and wisdom to anyone who is interested. I had the opportunity to interview three of our physicians who attended the above offerings. Here's what they had to say,

TONY CASTLE, M.D.

- “I was really naïve to the whole program but after a few minutes of listening to Chris, and trying it, I found it amazing. I was able to transport myself to a state of altered consciousness . . . something rather alien to most physicians.”
- “Mindfulness allows you to achieve a level of peace and calm that’s difficult to achieve in any other way...and there is a lasting effect that carries over to your life activities.”
- “As we as physicians get more comfortable using mindfulness, it will have great potential in helping patients wrestling with stressful life events—medical conditions, family situations, addictions.”
- A practice of mindfulness “may make patients more accepting of their circumstances.”

RANDY OYER, M.D.

- My daily meditation practice makes me a better listener. This is significant because I’m able to hear what patients are actually saying.
- By attending “Beyond Cancer” I gained a greater understanding of what patients undergoing treatment for cancer (and cancer survivors) need and want.
- Through attending Chris’ classes, I realized that mindfulness “is not just for sick people/patients.”
- I gained insight into how many of my colleagues have a (mindfulness and/or meditation) practice. I believe that we as physicians need to be supporting each other as a “care team” to our patients.

Dr. Oyer routinely recommends mind-body techniques to his patients. He refers patients to counselors when necessary and recommends Jon Kabat-Zinn’s

book, “Wherever You Go There You Are” to his patients.

CYNTHIA KILBOURN, M.D.

- As a family practitioner, yogi, and learned teacher of meditation, Dr. Kilbourn brings to us a slightly different perspective; she is currently pursuing a fellowship in Integrative Medicine through The Arizona Center for Integrative Medicine.
- Dr. Kilbourn stresses the need to tailor mind-body techniques, and integrative services in general, to the patient. In her practice she sees many low income patients who could not afford to attend classes at a yoga studio or buy only organic food. She has developed a library of yoga DVDs which she can recommend to patients.
- Her meditation workshops and “40 Days” Program** are open to both patients and LG family practice residents.
- Though it’s all about patient education (on nutrition, physical activity, and self-care), she still says, “Physicians have to change themselves. We need physicians who want to talk about nutrition and stress reduction.”
- More and more “patients are willing to pay out-of-pocket for Integrative and Mind-Body Services because they are dissatisfied with medical care and have become skeptical of medication and intervention.”

CONCLUSION

Primary care providers will lead in adopting these integrative practices, which foster a holistic, patient-centered approach that complement and enhance the effectiveness of Western Medicine’s methods.

“Keep in mind the distinction between healing and treatment; treatment originates from outside, whereas healing comes from within.”

-Andrew Weil, M.D.

To keep the body in good health is a duty ... otherwise we shall not be able to keep our mind strong and clear.

-Buddha

**A program developed by Power Yoga guru, Baron Baptiste, the full name of which is “40 Days to Personal Revolution: A Breakthrough Program to Radically Change Your Body and Awaken the Sacred within Your Soul.”

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