

COMMENTARY

## How Tapping into “Energy” Can Trigger a Paradigm Shift in Biomedicine

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**T**HE PRACTICE OF medicine has changed dramatically since I started Medical School in 1975. Back then, the prevailing attitude was that exercise was for jocks, yoga and vegetarianism were the domain of hippies, and lifestyle issues were basically irrelevant to health. I was a regular at the brown bag lunches hosted by a junior faculty member who was teaching his colleagues about mindfulness meditation, his counter-culture hobby. But it was a world apart from clinical care, as there was essentially no evidence at that time that patients might also benefit.

In the ensuing 40 years, that young professor—Jon Kabat-Zinn—went on to found the Center for Mindfulness in Medicine, Healthcare and Society, and helped to bring mindfulness squarely into the mainstream of American culture. A concurrent medical paradigm shift has seen behavioral factors—diet, exercise, and stress management—become well ensconced in our society’s view of health. But another challenging shift might be necessary before we can fully understand health and illness: it is my belief that this deeper understanding requires that we come to terms with the widespread belief in invisible healing energies, the additional dimension of our human organism that is hinted at by NCCAM’s adoption of the term “biofield” to refer to electrical and magnetic processes that occur within and around the human body. Without this added element, medicine will be like Newtonian physics in the age of Einstein—useful, but only within a very limited range.

Conventional medical authorities tend to view concepts like “life energy” as metaphorical at best. Biomedicine remains alone among the world’s healing traditions in its rejection of this healing energy, whether it is called prana (in yoga), *qi* (in Traditional Chinese Medicine [TCM]), *élan vital*, or animal magnetism.<sup>1</sup> Our materialist dismissal of these intangibles has hindered our acceptance of many effective alternative and complementary healing modalities<sup>2</sup> and limited our concept of what it means to be human.

As a result, many therapies are considered beyond the pale because they invoke these invisible forces to explain their effects. Yet homeopathy,<sup>3</sup> biofield therapies (including modalities such as Therapeutic Touch and Reiki),<sup>4</sup> and distant prayer<sup>5,6</sup> are supported by a credible, if mixed, peer-reviewed literature, with *JACM* a leading forum for research in these

fields.<sup>4,7</sup> But the lack of an established physiologic mechanism(s) of action makes these practices regular targets for skeptics. Nevertheless, some energy-based techniques are gaining acceptance because researchers are reducing their intangible elements to something more acceptable: in acupuncture, the piezoelectric response of the fascial matrix to mechanical stimulation is being actively researched as a potential mechanism,<sup>8</sup> whereas acupoints and meridians are being reconceptualized, respectively, as intersections of connective tissue planes and as the fascial planes themselves.<sup>9</sup> Such mechanistic reframing makes it easier for mainstream medicine to accept acupuncture, despite its vitalist origins.

Because such a wide range of therapies fall under the biofield umbrella, it may be helpful to focus on one exemplar, which epitomizes these wider paradigm-stretching issues. I will look at an approach that remains obscure in the halls of academic medicine, but is now in wide clinical usage: energy psychology (EP).

EP is so widely used that lack of fast-track consideration by institutional gatekeepers is puzzling. For example, an online training guide has been downloaded over 2 million times, e-mail rosters of two EP-oriented organizations (Innersource, and EFTUniverse) have over 800,000 subscribers, a web-based conference (the World Tapping Summit) has averaged 500,000 viewers annually over the past 10 years, and EP’s professional organization (the Association for Comprehensive Energy Psychology [ACEP]) has 1300 members, primarily graduate-degreed clinicians ([www.energypsych.org](http://www.energypsych.org)). In addition, over 100 published studies—including 48 randomized controlled trials (RCTs), 5 systematic reviews, and 4 meta-analyses—consistently show statistically significant clinical benefits to patients suffering a wide range of ailments, including post-traumatic stress disorder (PTSD) and chronic pain. Yet, the latest government guidelines for PTSD treatment released by SAMHSA (the federal government’s Substance Abuse and Mental Health Services Administration) does not even mention EP, despite its widespread use and increasingly solid research base. So the question must be asked—why not?

By way of background, EP is the umbrella term for a range of therapies whose best-known form (emotional freedom techniques [EFT], or “tapping”) can be described

in conventional psychological terms as an exposure-based desensitization process with a somatic component. But that formalistic phrasing disguises just how odd looking the technique is. The patient repeats aloud a series of affirmations of self-acceptance despite their strong emotional reactions to the trauma, while tapping himself on a series of acupuncture points on the face, upper body, and hands.

According to TCM, these spots are the endpoints of major acupuncture meridians, and they regulate our emotions. However, from allopathic medicine's perspective, they are essentially random points on the surface of our body that have no particular biologic significance. Nevertheless, a growing body of research suggests that something significant happens when these points are stimulated at the same time that up-setting experiences are mentally reviewed.

In one RCT,<sup>10</sup> combat veterans meeting DSM-5 criteria for PTSD were given 6 weekly hour-long EFT treatments. By study's end, 86% of them no longer met the diagnostic criteria, compared with only 4% in the wait-list control group ( $p < 0.001$ ); at 6-month follow-up, 80% still did not meet criteria.

I propose the following reasons for this translational lag: institutional inertia, intellectual gatekeeping, and paradigm loyalty. Here are three examples of those sociocultural processes at work.

- (1) Resistance by professional organizations—The American Psychological Association (APA) has well-delineated guidelines according to which newly proposed therapies can earn acceptance as an “empirically supported therapy.” In 2012, after 5 years of concerted effort by ACEP, the APA overturned their 1998 policy and allowed programs in EP to be granted CE credit for psychologists. But the next step—endorsement—has still not happened, despite ongoing efforts in this direction.<sup>11</sup>
- (2) Resistance by professional journals—In 2012, *The Journal of Clinical Social Work* published an article concluding that EFT practitioners were generally “uncritical thinkers” who believed in “pseudoscience” and “intuition.”<sup>12</sup> ACEP formally requested the right to respond, and the journal's editorial board initially agreed to publish a counterpoint. But the board rescinded this offer at the last minute, so ACEP's detailed point-by-point rebuttal was published elsewhere.<sup>13</sup>
- (3) Resistance in popular media—Wikipedia is a widely consulted source for medical information, yet it has been credibly accused of bias against holistic therapies.<sup>14</sup> The Wikipedia article on EFT uses emotionally loaded terms (“pseudoscience,” “highly bizarre”) and omits mention of most research after 2005. However, ACEP's attempts to update and edit the entry were regularly scrubbed within days, and sometimes even hours.<sup>15,16</sup> ACEP initiated a Change.org petition asking Wikipedia for a reconsideration, and was surprised to receive a personal response from Jimmy Wales, the founder. He described his site's commitment to solid scientific research, and responded<sup>16</sup> to the systematic review of the evidence presented by ACEP with this evaluation: “What we won't do is pretend that the work of lunatic charlatans is the equivalent of ‘true scientific discourse’. It isn't.”

It is human nature, of course, to hold on to cherished beliefs, especially if one's identity (professional or personal) depends on maintaining a certain worldview. Although biomedicine has significantly shifted its institutional identity with its recent embrace of behavioral and lifestyle factors, I believe it will remain an incomplete healing system if intangible factors like “energy” and consciousness are excluded from consideration. Many effective therapies such as EFT will continue to be marginalized because their mechanism of action does not mesh with the standard model.

But does it actually matter if we cannot explain a treatment's mechanism of action? Surgeons continue to use general anesthesia, even though they cannot explain why it works. Energy-based therapies should be held to a similar standard: as long as they are proven effective, they should be endorsed while we work to outline a plausible mechanism of action.

As long as intangibles such as energy and consciousness are not part of medicine's explanatory mix (at least in the expanded sense of those terms used in this essay—i.e., “energy” meaning more than just biochemical metabolism, “consciousness” meaning more than just being noncomatose), I predict that we will continue to miss opportunities to construct a more complete and effective model of health and illness. That is because we will be excluding from consideration effective therapies that appear implausible, if not downright impossible. As scientists who stick to familiar territory, we will resemble the drunk who keeps looking for his missing key under the street light because that is the only spot where it is bright enough to see.

But there are some positive notes. Several academically based and research-oriented organizations now actively explore the reality of energy and consciousness. A recent special issue of *Global Advances in Health and Medicine* devoted solely to Biofield Science<sup>17</sup> resulted from scientific meetings and discussions fostered by a recently established nonprofit collaborative called The Consciousness and Healing Initiative (CHI).<sup>19</sup> Academic researchers at major universities and medical centers (including the University of California at San Diego and the MD Anderson Cancer Center) have partnered with CHI, as has The Institute of Noetic Sciences, with its 40-year record of conducting this sort of research.<sup>18</sup> The movement toward worldview expansion in medicine goes beyond the United States: an international panel of researchers produced the recent consensus document “Manifesto for a Post-Materialist Science.”<sup>20</sup> These groups, and others, are actively educating clinicians, conducting research, and collaborating across disciplines to generate a new and more powerful multidimensional conceptual framework for medicine.

One hundred years ago, the discoveries of quantum physicist Max Planck triggered a paradigm shift, one that was met with great resistance by the scientific establishment of his era. He responded: “Science advances one funeral at a time.” The current expansion and shift of scientific paradigms could potentially run a smoother course, if medicine finally comes to terms with the intangibles in its closet.

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