

BIOFIELD THERAPEUTICS

The Sub-Section
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in the United States

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I. OVERVIEW

A. Historical Antecedents

Biofield (see glossary) therapeutics - often called "energy healing", or "laying-on-of-hands", - is one of the oldest forms of healing known to humankind. Discovery, partial characterization, and use of the biofield have risen independently in every sector of the world. (See table 1.)

The earliest Eastern references are in the *Huang Ti Ching Su Wên*, variously dated between twenty-five hundred and five thousand years ago.¹ The earliest Western references are in hieroglyphics and in depictions of biofield healings dating from the Third Egyptian Dynasty.² Hippocrates, the guiding light of Western medicine, referred to the biofield as "*The force which flows from many people's hands*".³ Franz von Mesmer, a physician who investigated and popularized this process in the late eighteenth century, referred to the biofield as "animal magnetism", to differentiate it from "metal magnetism" which he understood to be similar but different mediums.⁴

Table 1 Some Equivalent Terms for Biofield

Historically, beliefs about causation in this type of healing have clustered around two views that remain active today. The first is that the "healing force" comes from a source other than the practitioner; e.g., God, the Cosmos or other supernatural entity. The second is that a human biofield, directed, modified and/or amplified in some fashion by the practitioner, is the operative mechanism.

In either case, the biofield has been identified and named by peoples and cultures all over the world. (See table 1.) Some of these terms are devoid of religious or spiritual overtones while others carry religious aspects common to the culture in which they were and are used.

It is not clear at this time whether the biofield is a form of electromagnetism or is some other force.

The process has been in continual but largely sub-rosa use in the U.S. since pre-colonial times. Use increased

after Mesmer's "magnetic healing" became popular in the 1830's. Among others, both Andrew Still, founder of Osteopathy and Daniel Palmer, founder of Chiropractic, practiced for a time as biofield physicians. ⁵

Ankh	Ancient Egypt
Animal Magnetism	Mesmer
Arunquiltha	Aborigine (Aus.)
Bioenergy	US/England
Biomagnetism	US/England
Gana	South American
Ki	Japan
Life Forc	General Usage
Mana e	Polynesia
Manitou	Algonquian
M'gbe	Hiru Pygmy
Mulungu	Ghana
Mumia	Paracelsus
Ntoro	Ashanti
Ntu	Bantu
Oki	Huron
Orenda	Iroquois
Pneuma	Ancient Greece
Prana	India
Qi (ch'i)	China
Subtle Energy	US/England
Sila	Inuit
Tane	Hawaii
Ton	Dakota
Wakan	Lakota

B. General Description of Biofield Therapeutics

Therapeutic application of the biofield is a process during which the practitioner places his or her hands either directly on, or in close proximity to, the physical body of the person being treated, while engaging the biofield from the practitioner's hands with the recipient's biofield for purposes of either promoting general health or treating a specific dysfunction. The person being treated, who is usually clothed, reclines in some forms of the process but is seated in others.

The process is not instantaneous as in "faith healing". ("Faith" is not a factor in this process.) Treatment sessions may take from twenty minutes to an hour or more; a series of sessions is often needed to complete treatment of some disorders.

Therapeutic Ability The ability to perform biofield healing appears to be universal although most people seem unaware of possessing the talent. As with any innate talent, practice and learning appropriate techniques improves results.

Biofield Parameters There is consensus among practitioners that the biofield, which permeates the physical body, also extends outward from the body for several inches. Therefore, no real difference is seen between placing the hands directly upon the body (either by direct skin contact or through clothing) or in close proximity to the body. In either case the practitioner's biofield comes into confluence with the recipient's biofield. There are, however, advantages and disadvantages between clinical application of the two approaches.*

Extension of the external portion of the biofield is variable, being dependent on the person's emotional state and state of health. The external portion, sometimes called the "aura", is tactilely detectable (see C, this section) and is thought to be less dense than the portion permeating the physical body.

Therapeutic Intentions There is a very clear holistic approach among biofield practitioners as most treatment sessions produce results that encompass all aspects of the being. However, within that focus, there is a range of therapeutic intent:

General, e.g., stress relief, improvement of general health and vitality;

Biologic, e.g., reduction of inflammation, edema, chronic and acute pain; change in hematocrit and T cell levels; acceleration of wound healing and fracture repair;

Vegetative Functions, e.g., improvement of appetite, digestion, sleep patterns;

Emotional States, e.g., changes in anxiety, grief, depression, feelings of self-worth;

Dysfunctions often classified Psychosomatic: e.g., treatment of eating disorders, irritable bowel syndrome, premenstrual syndrome, post-traumatic stress disorder.

Some of these intentions present distinct clinical advantage over present methods.

Mental Healing Some practitioners incorporate mental healing, or *focussed intent-to-heal*, as a part of their biofield treatments. This is also called "psychic healing", "distant healing", "nonlocal healing", "absent healing". Mental healing is also performed, by itself, often at a considerable distance from the recipient.

This is an active process on the part of the practitioner and involves centered, focussed concentration and may include various imagery (visualization) techniques.

(See Imagery also Prayer and Mental Healing in the Mind-Body Chapter.)

Effort of Will to Increase the Effect A related mind effect, sometimes used within biofield healing, is when the practitioner, by effort of will, extends the biofield (principally from the hands) into the recipient's body with increased force, sometimes from a distance of several feet. Qigong masters are especially adept at this. (see F.) The process appears to be draining, as interviews with practitioners indicate they are limited in the number of treatments they can perform in a day.

* These differences are best shown by analogizing the two methods of illuminating a neon light. The first is to place the neon light into a strong electromagnetic field. This is simpler as it requires no wiring or particular orientation; the light will glow wherever you place it. However, a great deal of power is required for a given light output and the light fluctuates sharply with small fluctuations in the field.

The second method is to connect the neon light into an electric circuit. This requires wires and knowledge of how to connect the bulb correctly; but this produces much more light with far less power, light that is less likely to fluctuate. Similarly, the biofield has both external field and internal circuitry. (See I, this section)

Meditation Some practitioners meditate in preparation to giving a treatment in order to enter a "healing space", some maintain a meditative state during treatment.

C. Biofield Diagnostics

Detailed diagnostic methods have been developed to determine the condition of the patient's general health and presenting disorder by tactilely sensing subtle perturbations in the biofield (clairsentience). Therapeutic Touch (TT) researcher Janet Quinn writes that "assessment" of the external portion "focusses on perceiving the way this energy is flowing and is distributed in the patient."⁶ Patricia Heidt adds that areas of "accumulated tension" or "congested energy" are detected.⁷ Healing Science (HS) developer Barbara Brennan describes the use of "High Sense Perception" that includes other subtle perceptions of the external biofield.⁸

Biofield researcher Richard Pavek writes of similar subtle tactile cues detected when the hands are placed directly on the body during SHEN Therapy (ST) as: "Changes in temperature ... tingles, prickles, 'electricity' (sensation of light static), pressure or 'magnetism' ... sensations are usually different over an area of physical pain, inflammation, tension and/or when release of emotion occurs".⁹

Many practitioners develop their treatment plans entirely by interpreting these various tactile sensations. Others supplement biofield diagnostics to conventional methods, such as nursing diagnostic forms or chronic pain evaluation forms.

D. Present Status of the Discipline in the United States

The process has been treated with a reflexive mixture of awe and disgust, reverence and fear, belief and disbelief but this is changing as more and more people are seriously investigating the process from a critically neutral perspective.

No formal census is available, but reasonable estimates suggest that about 50,000 practitioners in the United States provide upwards of 18,000,000 sessions annually.¹⁰ For some it is a major part of their vocational activity; others use the process on an occasional basis to help family and friends. A large number of practitioners have had no formal training in the process; many having independently discovered the effect. Others learned rudimentary techniques from friends or trained in one of several schools teaching various forms of the process. Reviews of school enrollment records indicate that a large majority of practitioners are women.

Religious Aspects Some practitioners, often those who have independently discovered the process, and some teachers, ascribe a religious or spiritual basis to the process. A few incorporate the process with specific religious activities.

Legal Aspects No state has licensing requirements for biofield practitioners. In many states legal constraints prohibit the use of the terms "patient" and "treatment". Therefore most practitioners use "receiver" and "session" in describing their work.

Some, because of fear of incurring legal charges of practicing medicine without a license have cloaked themselves by incorporating as a "healing church". They often deny attempting to treat biological disorders and describe their process as healing the spirit, from which healing of the physical will follow.

Formal Training Within the last twenty-some years formal training in the process has emerged in considerable strength in this country. At this time there are several teaching establishments with standardized training programs that teach different forms of the process; most grant certificates. There is considerable difference in curricula, focus, length of training, extent of internship and certification requirements among the schools. Some schools are semi-structured associations of instructors trained in a particular method, others are more centrally organized.

Therapy Types The major biofield therapies used in the United States are summarized in Table 2.

Table 2

Brief Features of the Major Biofield Therapy Systems in the United States

(Systems combining physical and biofield healing methods are in the following section)

HEALING SCIENCE

Originated in 1978 Developer: Barbara Brennan
Theoretical Basis: Open system, incorporates chakras and psychic layers
Diagnostic Procedures: High sense perception
Certification: Yes, after completion of advanced study
Placement of Hands: Both on and near the body
Mental Healing at a Distance: Yes
Therapeutic Intent: Treat the whole person and specific disorders

HEALING TOUCH

Originated in 1981 By the American Holistic Nurses Association
Theoretical Basis: Elements of Therapeutic Touch, Healing Science, Brugh Joy
Diagnostic Procedures: Tactile assessment
Certification: Yes
Placement of Hands: Both on and off the body
Mental Healing at a Distance: Yes
Therapeutic Intent: Whole person, specific disorders

HUNA

Origin: Traditional Hawaiian
Theoretical Basis: Involves Mana - universal force and Aka - universal substance.
Diagnostic Procedures: Various
Certification: No
Placement of Hands: Both on and near the body
Mental Healing at a Distance: Yes
Therapeutic Intent: Heal mind and body

MARI-EL

Originated in 1983 Developer: Ethel Lombardi
Theoretical Basis: Vibrational energy is transmitted from a higher source through the practitioner to the patient, affecting cellular memory and the endocrine system.
Diagnostic Procedures: Tactile assessment
Certification: No
Placement of Hands: Usually off the body
Mental Healing: Yes
Therapeutic Intent: Heal and harmonize the life of the individual

NATURAL HEALING

Originated in 1974 Developer: Rosalyn Bruyere
Theoretical Basis: Operates on a belief in a universal principle of energy.
Certification: Graduates are ordained
Diagnostic Procedures: Tactile assessment
Therapeutic Intent: Effect symptomatic relief, assists in proper use of energy.

Table 2 Continued

REIKI

Originated: Japan: 1800's Developer: Mikao Usui
 In US: 1936 Introduced by: Hawayo Takata
Theoretical Basis: Spiritual energy with innate intelligence, channelled through the practitioner. The spiritual body is healed which is then heals the physical. Uses rituals, symbols, spirit guides.
Diagnostic Procedures: Varies
Certification: Spiritual initiation, i.e., the power to heal is given following training.
Placement of Hands: A few standard hand placements (usually side-by-side; on the physical body).
Mental Healing at a Distance: Yes

POLARITY THERAPY: See next sub-section, Combined Methods.

QIGONG: (Qigong health/exercise practices are discussed in Combined Methods.)

Origin: Traditional Chinese
Theoretical Basis: Qi flows through the body in meridians and other patterns. Qi is delivered with great force by many practitioners called "qigong masters".
Diagnostic Procedures: Varies with practitioners.
Certification: Not usually
Placement of Hands: At the meridian points or at a short distance from the body.
Mental Healing at a Distance: Yes.
Therapeutic Intent: Healing of biological disorders

SHEN THERAPY

Originated in 1977 Developer: Richard Pavek
Theoretical Basis: biofield conforming to natural laws of physics, with a discernible flux pattern through the body
Diagnostic Procedures: conventional medical and psychotherapy instruments with questions designed to discover repressed emotional states.
Certification: Yes, after internship. Practitioners meet requirements of U.S. Department of Labor Occupational Code: 076.264-640.
Placement of Hands: Sequences of paired-hand placements, directly on the body, arranged according to flux patterns, usually with one on top and one underneath.
Mental Healing at a distance: No
Therapeutic Intent: primarily emotional disorders and somato-psychic dysfunctions.

THERAPEUTIC TOUCH

Originated in 1972 Developers: Dora Kunz and Dolores Kreiger
Theoretical Basis: Practitioner restores correct vibrational component to the patient's universal, unitary field
Diagnostic Procedures: Tactile assessment
Certification: None
Placement of Hands: Generally near the body
Mental Healing at a Distance: Yes
Therapeutic Intent: Non-prescriptive healing of the whole person

At least four forms; HS, Healing Touch (HT), ST and TT, have been taught in a number of medical establishments. Currently, student nurses are trained in one or another system in over 90 colleges and universities around the world. Continuing education credit for training in all four forms is granted by several state bureaus for acupuncturists, massage practitioners and nurses who pass these courses.

Acceptance and Collaboration Most of the practitioners of this process work independently of conventional medical and health practitioners. The conventional practitioner may, on occasion, be aware that his or her patient/client is seeing a biofield practitioner collaterally but most are not.

However, while much of the current activity in this discipline can be considered separate and alternative, the process is beginning to seep upward into mainstream medical and health practices. It is estimated that several thousand practitioners of conventional therapies currently combine one or another biofield therapy process with their primary modality. Among these are nurses, counselors, psychotherapists, chiropractors and massage practitioners who at least occasionally use a form of biofield therapy adjunctly with their primary modality.

At least three forms are currently in use in hospitals. HT and TT are used for a variety of reasons in several hospitals¹¹ and ST is used in the alcohol/drug abuse and co-dependent recovery programs in a few hospitals.¹²

E. Present Status of the Discipline in Europe

The United States falls far behind other countries in legal recognition of this process. Currently there are more than 8500 registered healers in the United Kingdom¹³ "who are permitted to 'give healing' (term for the process in common useage in the U.K. -ed.) at the request of patients". Approval has been obtained for the process at the 1,500 government hospitals. In some situations biofield healers are paid under the U.K. National Health Service.¹⁴ Physicians receive postgraduate education credits for attending courses in the process and healers are able to purchase liability insurance policies similar to those covering physicians.¹⁵

In Poland and Russia biofield healing is being incorporated into conventional medical practice; some medical schools include instruction in the process in their curricula. In Bulgaria a government-appointed scientific body assesses abilities and recommends licensing for those who pass rigorous examinations.¹⁶

There is considerable interchange of technique between Europe and the US.

F. Present Status of the Discipline in Asia

China leads the rest of the world in therapeutic application, methods of increasing biofield effect and research. Biofield healing is called *Wei Qi Liao Fa*, or "medical qigong" (ch'i kung) in China, where proficient practitioners are called "qigong masters". Qigong masters have developed their qi (biofield) to a high degree through qigong "longevity exercises"*. (A few qigong masters are able to anesthetize patients for surgery solely with this method.)¹⁷ Reduction of secondary cancers by medical qigong masters is common, there are clinics for that purpose alone.

There are departments of medical qigong research within every college of traditional Chinese medicine in China. Both national and regional governments sponser periodic international conferences on medical qigong. American researchers are frequently invited to present papers at these conferences.

G. Explanatory Models

There is no generally accepted theory that accounts for the phenomena. As one might expect for a discipline that is leaving the area of superstition and random process and entering the realm of science and technique, there are profound differences, both from inside the discipline between practitioners and researchers, and from outside

* Qigong longevity exercises are repetitive physical motions coordinated with breath and mental efforts to move the qi through meridians and other "channels". They are gaining popularity in the US. (see Combined Methods, this section.)

between theoreticians, as to the exact nature of the phenomena. In many cases, the view of the biofield is not a clearly defined one; often mixing concepts of physics and metaphysics or ancient and modern wisdoms.

The current major hypotheses are that the biofield is: 1) *metaphysical* (outside the four dimensions of space and time, and untestable), 2) an *electromagnetic field effect*, 3) a *presently undefined but potentially quantifiable field effect* in physics.

H. Metaphysical Approaches

Spiritual Energy Some forms of the process teach that they are channelling a "*spiritual energy*"; which has innate intelligence or "*logic' and knows where and to what extent it is required*".¹⁸ Reiki (also Radiance, a form of Reiki) are examples of this view.¹⁹ Reiki teaches that the practitioner is merely a conduit for the spiritual energy. Following training the practitioner is initiated and given the power to heal; "sacred symbols" are often used to give added power to the process.²⁰ Other systems with similar approaches, such as Mary-El, incorporate the use of angels or "spiritual guides" in their healing practice.

Interacting Human and Universal Energy Fields Heidt and others have postulated that both healer and "healee" are "vibrating fields of energy"²¹ that send and receive this energy from the environmental energy field around them for healing purposes. Brennan describes a similar process as one of "harmonic induction".²²

Repatterning of Resonant Vibratory Fields Quinn and nurse theorist Rogers go further, stating that: "*current assumptions, (about TT) which remain 'untested' and 'untestable' (are that) people are energy fields. We are not saying that people have energy fields in addition to what they are. . . . (they are) open systems engaged in continuous interaction with the environmental energy field. . . . when a person is 'sick' there is an imbalance in the person's energy field, . . . when a person uses his or her intent to help or heal a person the energy field of the person may repattern towards greater wellness. . . . The TT practitioner, knowingly participates in . . . 'a healing meditation,' facilitates repatterning of the recipient's energy field through a process of resonance, rather than 'energy exchange or transfer'*".²³ The healing intervention is seen as a "*purposive patterning of energy fields, a mutual process in which the nurse uses his or her hands as a mediating focus in the continuing patterning of the mutual patient-environment energy field process*".²⁴

I. Emerging Paradigms in Physics

Quantum physics (currently proposed to explain the effects of a related phenomena, mental healing at a distance, see Mind-Body chapter) has not proven useful in explaining effects such as biofield healing. As Brennan puts it, "*I am quite unable to explain these experiences without using the old (classical physics) frameworks*".²⁵

Classical Physics is a model that is applied with high precision to large-scale phenomena involving relatively slow motion; e.g., the flow of fluids, electromagnetic currents and waves, hydraulics, aerodynamics, atmospheric physics and appears to be the best model to study the phenomena involved in the biofield.

Much of the terminology used by biofield practitioners to describe their work, while somewhat imprecise and variable, clearly describes quantitative and qualitative factors similar to those in other fields described in classical physics. For example, "qi" is equivalent to "flux" in electromagnetic fields as it describes direction and quantity of field. "Polarity" between the hands and between different bodily regions is equivalent to "polar difference" in electromagnetic fields and to "pressure differential" in hydrodynamics. Pavek describes the biofield as having "*circulating (flux) patterns ... similar in formation and function to magnetic fields or electrostatic fields*".²⁶

(See table 3 for other analogs.)

Table 3 ROUGH ANALOGS IN APPLIED PHYSICS

<i>Atmospheric Physics</i>	Biofield Physics^a	<i>Electro- magnetics</i>	<i>Hvdro- dynamics</i>
air	qi	flux	liquid .
density	denseness	charge	viscosity.
wind	flow	current	stream .
high pressure	sending^b hand	negative terminal	source .
low pressure	receiving^b hand	positive terminal	slump .
friction	resistance	reluctance	friction.
system	biofield	field	flow-field
pressure	force	EMF	pressure.
pressure gradient	polarity	polar difference	pressure differential
a. Proposed category		b. In some systems	

Preliminary Characterization About 1850 Karl von Reichenbach, discoverer of kerosene and paraffin, demonstrated apparent biofield polarities and determined apparent velocity through a copper rod to be about 4 meters per second.*27

In 1947 L. E. Eeman showed a polarity through the arms and hands and another through the spine with his device known as "Eeman screens".28 (Figure 1)

Figure 1

ARM & SPINE POLARITIES

from Subtle Energies, vol 2 no 2

About 1950 Randolph Stone, developer of Polarity Therapy (PT), determined flux density was greatest within the physical body and showed polarities.29

In 1978 Pavek compared paired-hand placements and reversed paired-hand placements on patients by hundreds of trained and untrained practitioners with results, and noted that one arrangement consistently resulted in relaxation and feelings of well-being but that the other set consistently produced agitation and anxiety. From this he deduced normal (healthy) qi polarities in the body.30 (See Figure 2.)

* Flow is much slower through human tissue and varies with the person's health and emotional state.

Figure 2

DETERMINING NORMAL QI PATTERNS IN THE BODY
(Example shown for one peripheral region)

Adding the
practitioner's
flows enhances
relaxation>

Applying the
practitioner's
flows in reverse
causes agitation>

In 1985 he expanded on these findings in demonstrating coherent linkages between qi patterns, emotional holding patterns (EHP) and the auto-contractile pain response (ACPR), while developing biofield treatments for disorders often classified psychosomatic,^{31,32} and in correlating EHP with Chinese five-phase theory.³³

In 1992, Isaacs conducted a double-blind study using Eeman screens which confirmed polarity at the spine and arms.³⁴

Nature of the Biofield It is unclear at this time whether the biofield is electromagnetic or is some other presently unmeasured but potentially quantifiable, medium. It is popularly hypothesized that the biofield is a form of bioelectricity, biomagnetism or bioelectromagnetism.* This may well be the case but has yet to be established. Some researchers discount the possibility.**

Chinese researchers have conducted experiments indicating that when "wei qi", (the external biofield) is used in healing ("fa qi") some electromagnetic radiation in the infrared range is produced; other researchers there have found indications of infrasonic waves.³⁵ However, both phenomena appear to be minor secondary effects.³⁶

II. RESEARCH BASE

A. Obstacles in Research of Biofield Therapeutics

Rigorous research of biofield healing has been hindered by the belief, held by many, that nothing more than placebo is the operative factor. This has affected funding, publishing and status of researchers. Because the funding organizations and the scientific communities believed that any effects obtained have been largely through placebo, research has been considered pointless. Many researchers have been unwilling to study biofield effects they would otherwise be interested in because they fear being ostracized by other researchers. Publication of research by the better journals has been limited for similar reasons.

* A recent, erroneous report, *New Technologies Detect Effects of Healing Hands*, in *Brain/Mind Bulletin*, September 30, 1985, Vol. 10, No.16.) contributed to this supposition when it stated that one researcher, John Zimmerman, had measured electromagnetic effects of healers' hands during healing with a SQUID [superconducting quantum interference device]; actually he made his measurements at the healers' heads, while measuring very low amplitude electromagnetic brain-wave activity.)

** No one has yet been able to detect either current flow or electromagnetic flux emanating from the hands of a practitioner. Dry skin electrical impedance at the hands is quite high; ≥ 10 megohms (ten million ohms). Silver/silver chloride electrodes, as used in biofeedback, measure skin conduction, not flux emanations.

Notwithstanding these daunting obstacles, a number of studies have been implemented, many of these have produced significant results. In the United States there are over seventeen published studies on biofield therapeutics.

B. Studies of Biofield Therapeutics in the United States

Published Studies *Because no comprehensive data base of clinical trials of biofield therapeutics is available, the following must be considered only a sampling:*

In two controlled studies on TT, Krieger found significant change in hemoglobin levels in hospitalized patients.37, 38 In a similar study, Wetzel found significant change in hematocrit and hemoglobin levels with forty-eight subjects receiving Reiki and no significant change with ten controls.39

Wirth found significant change in healing rate of full-thickness skin wounds in a carefully controlled double blind study of TT.40 while Keller and Bzdek found highly significant decreases in pain scores scored on the McGill-Melzak Pain Questionnaire by patients with tension headache in a controlled study of TT.41, 42

Although Meehan found no significant difference on the Visual Analogue Scale and Pain Intensity Descriptor Form with post-operative patients receiving TT vs. controls, secondary analysis showed patients receiving TT waited longer before requesting analgesia.43, 44 Similarly Heidt found significant changes in anxiety levels of hospitalized cardiovascular patients receiving TT vs. controls as measured on the A-State Self Evaluation Questionnaire45, 46,47. Quinn found similar results in a study of TT vs. mimic TT without centering and intention to assist 4849.

Quinn, in a replication study on pre-post open heart surgery patients of TT vs. mimic TT and no treatment groups, found no significant differences among the groups. Yet, changes occurred in the expected direction; there was a significant reduction in diastolic blood pressure among the TT group that was not seen in the no treatment group.50 In another study of TT vs. mimic TT on elderly hospitalized patients, Parkes showed no significant differences.51

Collins 52, Fedoruk 53, Ferguson 54, found significant relaxation effects of TT with various subjects in different studies and Quinn 55, in a pilot study of four bereaved people, found significant reduction of suppressor T cells on all four following TT. Moreover, Kramer found significant differences in stress reduction between treatment and control groups in a study of TT with hospitalized children.56

Promising Pilot Studies In addition, a number of pilot and case studies in fruitful areas have shown quite interesting results, all worthy of further investigation. (Because of the near total lack of funding for biofield research it has not been possible to study these effects with proper controls.) Among these:

In four uncontrolled cases, Pavek found that white cell decrease during chemotherapy reversed and rose significantly following single ST treatments at the thymus.57 In a pilot study on ST and premenstrual syndrome, Pavek noted significant long term symptom relief and behavioral change with eleven of thirteen subjects.58

Beal, in an unpublished study of twelve major depressives, found no statistical difference in release from hospital between subjects receiving ST and controls receiving sham ST, however in analyzing both subject and counselor reports, Pavek found significant change in dreaming, emotional expressiveness and interpersonal contact with subjects receiving ST and much lesser change among controls.59

Other TT research with promising indications includes research on rehabilitation 60, helping patients to rest 61, with mental patients 62, symptom control in AIDS 63; and severe burn patients (unpublished observations).

Promising research with ST includes research with occupational therapy clients, third trimester abdominal pain, reduction of pain during birthing without pain medication,

irritable bowel syndrome, post traumatic stress disorder, anorexia, bulimia, phobias and chronic migraine.

C. World-wide Research in Biofield Effects

There has been considerable research effort in other countries. In China, over thirty controlled studies on effects of fa qi on both humans and animals were reported in the proceedings of just one meeting; the First World Conference for the Academic Exchange of Medical Qigong. Additionally, thirty-two studies were presented on effects of qigong "longevity exercises" (qi raising exercises to improve health).⁶⁴

For an overview report, Daniel Benor compiled data on 151 healing studies from around the world. In many of these mental healing efforts were combined with the biofield processes. However 61 of these were controlled, published studies of biofield healing effects without the confounding factors of mental intent.⁶⁵

These studies are shown in Tables 4 and 5.

Table 4. **Controlled Studies of Biofield Therapeutics**

Subject	No. of studies	Significant results*
Humans		
anxiety	9	4 (+2)
hemoglobin	4	4
skin wounds	1	1
asthma/bronchitis	1	0
tension headache	1	1
postoperative pain	1	0
neck/back pain	1	(?+1)
TOTAL	61	36
PERCENT OF TOTAL		59%

From: Benor, Daniel J., 1993. Healing Research: Holistic Energy Medicine and Spiritual Healing.

* Significance $p < .01$ or "()" $p < .02-.05$

(?) Possibly significant results but faulty reporting or design prevented proper evaluation of the studies.

Table 5.

Other Controlled Biofield Studies

Subject	No.of studies	Significant results*
Enzymes	8	3 (+2) (?+3)
Fungus/yeast	6	4 (+1) (?+1)
Bacteria	2	?
Red blood cells	1	1
Cancer cells	3	1 (?+2)
Snail pacemaker cells	4	4
Plants	10	7 (?+2)
Motility		
flagellates	2	0 (?+1)
algae	2	1
moth larvae	1	1
Mice		
skin wounds	2	2
retard goiter growth	2	2

From: Benor, Daniel J., 1993. Healing Research: Holistic Energy Medicine and Spiritual Healing.

* Significance $p < .01$ or "()" $p < .02-.05$

(?) Possibly significant results but faulty reporting or design prevented proper evaluation of the studies

III. RESEARCH RECOMMENDATIONS**A. Promising Clinical Studies**

While there is considerable variance of technique, focus and range of treatments attempted, there are a number of results reported that are common to all forms of the process. These include, but are not limited to:

- 1) acceleration of wound healing
- 2) reduction of pain of thermal burns and acceleration of healing time
- 3) reduction of sunburn pain and coloration
- 4) reduction of acute and chronic pain
- 5) reduction of anxiety
- 6) release of pent up grief

In addition, practitioners of some forms of the process report consistently good results with:

- 7) recurrent panic attacks
- 8) premenstrual syndrome
- 9) post traumatic stress disorders
- 10) irritable bowel syndrome
- 11) non-biologic sexual dysfunction
- 12) drug, alcohol and co-dependence recovery
- 13) migraine
- 14) anorexia and bulimia
- 15) third trimester pregnancy and birthing

B. Characterization of the Biofield

The fact that the biofield has definable form, flux pattern and polarities seems clear from the wealth of empirical evidence available. However, characterization of the biofield is not complete and determination of its nature is paramount to its further development in the healing arts.

The hypotheses that the biofield is either:

- 1) a field in physics other than an already known field or
- 2) bioelectromagnetism need to be tested.

In the first case development of a device (transducer) which would react with the biofield so as to exclude the possibility of bioelectromagnetism, would constitute scientific validation.

Research projects in China have shown that application of the biofield affects Lithium Fluoride thermoluminescence detectors, polarized light beams, Van de Graff generators and silicone crystal plates.⁶⁶ These preliminary experiments suggest possible approaches towards further characterization.

C. Research Design Considerations. There are problems in planning well designed studies but that does not mean that the task is impossible.

1) Mental Healing Techniques. These have often mixed with biofield techniques in research and have confused the outcomes. Care must be taken in all research designs to separate out the two factors. Unless this is done, unclear results will prevent reasonable analysis of either.

2) Sham Treatments. Biofield healing is not something, like pills, which can be faked. It is not possible to touch subjects in a clinical study in a purely physical way for any length of time without some effect from the practitioner's biofield. Since there is no known way to shield the biofield emitted by one person from another person; this renders the notion of a "sham control" meaningless. This particular confounding factor has adversely affected results in several studies of biofield therapeutics.^{44, 51, 52, 59}

In all of these studies controls were established by effecting a "mimic" or "sham" of the primary method. The practitioners' hands were brought into close proximity with the subject in a "sham treatment". In all cases some positive effect was obtained with the mimic or sham treatments that was greater than could be reasonably expected from no-treatment controls.

3) Double Blind Studies. It is no more possible for a biofield healing practitioner to perform in a strict double blind situation than it would be for a surgeon to operate in a double blind situation. However, it is possible to design studies where the raters are blind to the treatment method and where the subjects are blind to the method and to the specific intended outcome.

4) Science and Metaphysics. Because the metaphysical model, by both definition and practice, lies outside the usual confines of science, research of metaphysical explanatory models will be difficult. However, outcome studies of clinical effect could be designed and executed.

5) It will speed up the process if experienced researchers sympathetic to energy healing were to work together with experienced practitioners in developing appropriate criteria. These criteria:

A) must provide the established medical and health communities with valid, reproducible data and they must,

B) must be constructed so as not to negate the operative treatment mechanism.

IV. KEY ISSUES

A. Hindrances

For a variety of reasons, biofield healing has been hindered from reaching its fullest potential. Principal among these are:

- 1) Until recently, there have been few testable hypotheses
- 2) few theoreticians that are also practitioners;
- 3) disdain from currently established science;
- 4) lack of a solid research base;
- 5) lack of an adequate outcomes data base;
- 6) unsystematic accumulation of empirical evidence.
- 7) extent of efficacy has been obscured by a plethora of conceptual confusions and conflicting claims as to causal factors, best methods and procedures.

B. Placebo and Efficacy Because biofield healing processes have had a number of striking successes, the process has been presumed, by some, to have a high probability of placebo. This has inhibited reviewers and editors from accepting as valid the usual, smaller pilot studies that would be acceptable for other modalities.

However, no studies have been undertaken that indicate placebo factors to be any higher with biofield therapies than with other healing modalities.

There are numbers of healing instances where placebo would have been highly unlikely which cast doubt on the concern. Some are with animals, studies with marked, positive results⁶⁷ and with small children below the age of reason. There are numerous anecdotal reports of children receiving treatments while asleep and awakening with marked change. Fevers have broken during such treatments, panic attacks have ceased, comas broken.⁶⁸ The same degree of effectiveness with other modalities would be cause for immediate investigation, not dismissal.

It appears the reason biofield treatments are effective is other than placebo.

C. Peer Review Committies There are, at this time, no peer review groups that actually include "peers". True peers, those who have both theoretical and hands-on knowledge of the process, must be included on OAM grant review committees or effective studies can not be assured.

V. RECOMMENDATIONS

Because the stigma associated with "faith healing" has been unwarrantedly attached to it, biofield therapeutics have not been seriously considered as viable treatment methods and the discipline languishes in a research doldrum.

1) It is urgent that the biofield be characterized. Reasonable approaches exist for this effort.

2) Simple and appropriate instruments need to be developed to begin the process of systematic clinical data collection. With properly designed forms, individual case studies could be statistically sorted and grouped by disorder, treatment process and results. This will suggest the most productive avenues for future research.

A small study group including those familiar with intake and outcome forms, data collection and representative members of the discipline should be formed under the auspices of OAM to implement this process.

3) Studies need to be undertaken to determine how much of the process is due to mental healing and how much is due to quantity of and proper directional application of the qi flows.

4) Appropriate review panels with real "peers" need to be established.

5) There are a number of open technical questions in the discipline that need to be resolved. It is recommended that the OAM urge the leaders of the various systems to meet to discuss and compare techniques and methods and to begin discussion towards resolving these questions. Resolution of these differences will enhance the techniques of all biofield healing modalities.

6) A number of clinical studies that have been undertaken in Europe and in Asia could be replicated here. This needs to be done to assure the American research community that the studies are valid and also to point the way for further research here.

7) A wealth of serious study proposals are available. These should be reviewed and the most promising implemented.

VI. SUMMATION

Biofield therapeutics have been struggling to cross the border from metaphysics to physics and gain mainstream acceptance for a long time. The ability to heal with appropriate biofield interventions has received considerable opposition from every quarter. Ministers and priests often resist practitioners in their belief that this form of healing is the domain of organized religion. Physicians often reject the process out of fear; it is impossible for some to believe that methods like this could work better with certain difficult to treat dysfunctions than conventional methods.

In spite of the considerable difficulties, biofield therapeutics are gaining acceptance from both health professionals and the general public in two areas; the medical clinic and hospital and the psychotherapeutic setting. In both, biofield therapeutics are proving to be of benefit for a very large number of people.

Biofield therapeutics are a low cost, non-invasive, non-drug approach with application in a many medical and health situations, both alternatively and complementary. The range of application and numbers of persons who could gain considerable benefit is great. The risk/reward ratio is also great as relatively small amounts of money would be needed to start the necessary process of validation. This needs to be done with dispatch.

Glossary of Terms relating to Biofield Therapeutics

Compiled by the Biofield Research Institute

Biofield:

1) a *fluxive, massless medium* with the distinctive property of being *bioeffective*. In conventionally understood physics, *field* means: "a region of space characterized by a physical property, such as gravitational or electromagnetic force or fluid pressure", while *energy* means: "the capacity of a system to do work". (Definitions of properties are from The American Heritage Dictionary of the English Language, Third Edition, 1992)

2) The operative mechanism in hands-on healing modalities.

Note: The terms "Energy", "Energy Field", and "Energy Body" which are commonly used to describe the field, are an unfortunate and unclear mixture of meanings. This mixing of terms has long caused confusion and brought derision from the other scientific disciplines.

Biofield Healing, Biofield Therapies and Biofield Treatment(s) naturally evolve from the stem above.

Closed System: Refers to a field that does not react with other fields

Classical Physics: The branch of physics that studies fluid flow, electromagnetism, hydraulics, aerodynamics, astrophysics

Energy Body, Energy Field, etc: See **Biofield**

Faith Healing: Healing that occurs because of the patient's belief in God or the healer

Flows: 1) Movement of internal qi through the meridians, 2) movement of qi through the body, 3) movement of qi from one of the practitioner's hands to the other through the patient's body

Flux Density: See qi density

High Sense Perception: Clairsentient and clairvoyant system of diagnosis

Impedance: Resistance in electrical circuits

Ki: Japanese term for qi

Local Healing: Refers to biofield healing with the practitioner's hands on or near the body

Magnetite: 1) A spinel (metal oxide) of iron (Fe_3O_4), 2) a natural magnet, one formed by nature

Mental Healing: A process of healing using effort of will

Meridian Qi: (See Ching Qi, under Qi)

Metaphysical: Outside of physics, cannot be measured or characterized

Nonlocal Contact: Nonlocal healing, healing at a distance

Nonlocal Effects: Effects at a distance from the healer

Open System: A system that reacts with other fields, giving off and/or receiving energy

Polarity: Polar differences as in magnets (North and South poles)

Psychic Healing: Term for biofield and mental healing (esp. England)

Qi: 1) Principle usage: Biofield flux, the *material* of the biofield.

The former phonetic spelling (Pin Yin) was *Ch'i*; both are pronounced the same = *chee*.

2) Originally also used as a root word similar to the way we use "energy", a word with many meanings.

Qi was used with modifiers to describe hormones, nutritional factors, healing factors, etc., e.g.:

Ching Qi: (Meridian qi) The qi that flows through the twelve meridians

Fa Qi: External qi (wei qi) when it is used in healing

Jing Qi: "Essence" i.e., 1) sexual essence - *ancient usage* 2) hormones - *current usage*

Ku Qi: Caloric energy from plants

Qi Density: Relative quantity of qi

Ren Qi: Internal qi, fills the spaces between the meridians in the body.

Wei Qi: External portion of the body's qi (aura)

Quantum Physics: The branch of physics that deals with atomic and sub-atomic particles

Receiving Hand: Hand with a polarity that receives the flow (qi)

Sending Hand: Hand with a polarity that sends the flow (qi)

Spiritual Energy: Energy that comes from God or the cosmos

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