# Acupuncture And Evidence-Based Medicine: A Philosophical Critique

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### Abstract

The current popularity of evidence-based medicine poses a challenge for acupuncture and other interactive therapies. This article explores the assumption of objectivity involved in gathering evidence, suggests that objectivity is an inappropriate standard for acupuncture, and concludes that where acupuncture and other interactive therapies are concerned, the objective/subjective dichotomy is perhaps transcended.

## Key Words

Acupuncture, Evidence-Based Medicine, Objectivity, Subjectivity, Relational Holism

### Introduction

Evidence-based medicine (EBM) appears to be gathering momentum. Regimens and protocols are becoming the norm, and physicians are encouraged to consult the protocols before initiating treatment. Supporters of this approach argue that given the multiple and sometimes confusing studies available on any particular subject, guidelines based on a review of latest scientific evidence will lead to an improvement in patient outcomes and more cost-effective medical care.<sup>1</sup> However, physicians may not search for evidence even when it is available, remaining privately skeptical.<sup>2</sup> Indeed, authors in the British Medical Journal have reservations, perhaps that EBM is now so familiar a term that it is easy to forget to ask what data provide appropriate evidence for particular decisions.<sup>3</sup>

Whatever the eventual role of EBM in regular medical practice, the application of guidelines to acupuncture is challenging because its philosophical base requires the practitioner to transcend the objective principles inherent in standardized point protocols. Certainly, the same could be said for any medical practice because ultimately, all medicine involves a unique relationship between practitioner and patient. The difficulty is that medicine is an art as much as a science, a subjective experience as much as an objective discipline. Experienced physicians discover they must synergistically combine their scientific knowledge with intuition if they are to discover the secrets of healing. Georg Groddeck, a contemporary of Freud, states it this way:

... it is good, at least once in a lifetime, to stand quietly by, and as far as possible to give oneself up to the consideration of how things happen outside our knowledge or our power. For us physicians in particular, that is essential,... because otherwise we run the danger of being one-sided, of deceiving ourselves and our patients, by saying that just this or that mode of treatment is only the right one...It sounds absurd, but it is nevertheless true, that every kind of treatment is the right one for the sick man, that he is always and in all circumstances rightly treated, whether according to the methods of science or the methods of the old wife.<sup>4</sup>

### The Assumption of Objectivity

The evolution of EBM has been characterized as a medical paradigm shift that establishes the supremacy of the double-blind, randomized controlled clinical trial over studies of lesser objective status such as cohort, observational, descriptive, or the anecdotal.<sup>5</sup> According to conventional wisdom, the most reliable evidence of treatment efficacy arises from gold-standard trials, the least reliable from the anecdote. Yet in some ways EBM looks more like the rear-guard action of an ossified paradigm fiercely resisting change.

First, there is something disturbing about a healing profession that relies solely on objectivity as a gold standard for anything, for the simple reason that modern physics maintains that objectivity simply does not exist. Indeed, through physics, scientists have come to understand that the observer inevitably influences what is observed, tilting the results toward a pre-existing cognitive bias of the observer.<sup>6</sup> Although this principle is well recognized in other scientific disciplines, the implications of observer influence continues to be ignored by modern medicine.

Second, objective research produces information only at the simplest, most superficial level, the material outward appearance. Such evidence is only useful for simple, well-structured problems, such as drug treatment for relatively well-defined and straightforward clinical situations. The more complex and multifactorial a situation, the less such an objective approach is useful. Since many modern stress-related illnesses arise out of complex and multidimensional factors, the rigid adherence to objectivity as a gold standard is difficult to justify.

Third, because illness is a subjective experience, to suggest that subjectivity is not as important as objectivity is to deny the whole illness experience. Yet such denial seems to be accepted without question by some in the medical profession.

The pressure exists to submit interactive therapies such as acupuncture to double-blinding, a process that cannot be done without destroying the therapy's essential essence. Such pressure is usually justified by the erroneous idea that all good medicine should be open to objective scientific scrutiny, and that resistance to such scrutiny implies that the practice is based in charlatanism. The following is a typical example of conventional opinion on complementary and alternative medical (CAM) therapies:

...Let those who endorse CAM practices produce valid evidence as to the efficacy and safety sufficient to satisfy these groups (peers and regulatory bodies). If and when that happens, those practices will be integrated without difficulty as part of good mainstream medicine; for then they will no longer be alternative.<sup>7</sup>

But because objective study destroys the essence of interaction, conclusions arising from objective research into interactive therapies are meaningless. Yet negative "objective" conclusions can find their way into evidence-based guidelines, have been used by insurance companies to deny payment for physician services, and can be manipulated by regulatory

authorities to control physicians' practice style. For example, a trial concluding that acupuncture was ineffective for rheumatoid arthritis was reported in the Acupuncture Foundation of Canada newsletter as "research we don't need."<sup>8</sup> The study was detailed except that the acupuncture regimen consisted of a single needle at point LV 3. The researchers falsely concluded that this was acupuncture. Similar inappropriate research has been used to compare different interactive techniques. For example, a study comparing massage with acupuncture concluded that massage was superior without considering the crucial factors of context, relationship, intention, or the fact that most of the acupuncturists felt constrained by the parameters of the study.<sup>9</sup> The study troubled participants on the AAMA chat lines (perhaps because people realized that the conclusions were erroneous without being able to pinpoint why). All of this is unacceptable, yet the profession as a whole has been unable to resist the effects of illogical studies, in part because it pays homage to the principle of objectivity on which such research rests.

While few people would argue against the value of performing double-blind trials on new drugs before releasing them for public use, it is a different matter to try to double-blind interactive therapies. Even if blinding were possible, without the potential of an investment payback such as there might be with a new drug, there is little incentive for anyone to do it. Thus, since it is only drugs that fit the testing method, EBM has become unjustifiably biased toward drugs.

The salient point is that inability to be double-blinded does not mean interactive therapies do not work. It simply means they cannot be studied objectively. Nor do they need to be, since they pose less potential harm to the consumer compared with the effects of an untested chemical. It is not prudent to dismiss them because they do not fit a drug-research model. There are other valid ways of perceiving, gathering evidence, and deciding if a treatment is valuable. Perhaps the fact that these other ways are not given equal place in our thinking and in our journals is without justification and irrational. Maybe objective measurement is currently in vogue not because it is more valid, but because it carries the force of collective popularity.

### Methods of Knowledge Acquisition

How knowledge is acquired is a topic rarely mentioned in medical journals, possibly because the theory of the double-blind trial as gold standard is so widely accepted. But it is enlightening to consider what different philosophers have to say about it. Oschman points out that all systems of acquiring data are highly subjective:

What we determine to be true depends on the qualitative decisions and on the context in which they are made. It is now agreed by the leading philosophers and historians of science (Bateson, Feyerabend, Kuhn, Lakatos, Popper, Toulmin) that all data are theory, method, and measurement dependent. All facts are inescapably predetermined by the theories and methods that generate their collection.<sup>10</sup>

Oschman speaks of several forms of data collection which he classifies as Leibnizian (deductive), Lockean (inductive), Kantian (synthetic), Hegelian (antagonistic), and Singerian (relational). It has been said that Western medicine is deductive while Oriental medicine is inductive, which is why the 2 systems can complement each other.<sup>11</sup> In summary, synthetic or deductive/inductive approaches form the basis of modern scientific inquiry, antagonistic models form the basis of politics, law, and medical research interpretation, while relational enquiry

probably forms the best model for understanding complex multifactorial problems such as illness and the clinical encounter (Table 1).

Inquiry	Process	Guarantee Of	Application	Strengths	Weaknesses
System		Validity			
Leibnizian Deductive	Truth is arrived at through analytical deduction	Validity is achieved through precise agreement on the proof	Useful for mental problems – maths, physics etc.	Good for well structured problems which are analyzable	Increasingly inaccurate as problems become more complex
Lockean Inductive	Truth is arrived at through experience.	Validity is established through consensus of 'experts'	Useful for well structured controllable situations in which there is widespread agreement as to the nature and definition of the problem	Rich experiential data base	Experiential data can be misleading. Experts can be wrong
Kantian Synthetic	Truth is arrived at through combination of theory and data	Validity is achieved through a match between theory and data	Useful for problems which are complex enough that a variety of explanations can be tested	Ability to consider alternative perspectives	Inherently difficult, imprecise, and time- consuming
Hegelian Dialectical	Truth is arrived at through conflict and interpretation	Validity achieved through conflict which exposes underlying assumptions	Useful for complex or poorly structured problems where there is no agreement	Shows that the same data can support opposing perspectives	Expensive if applied inappropriatel y to simple problems
Singerian Relational	Truth arises out of relationship	Validity tends to change with context and perspective	Recognizes that truth is generally an approximation	Includes an ethical dimension	Complexity and potential expense

Table 1 – Forms of enquiry

## **Category Errors**

A category error arises when an inappropriate enquiry system is used to address a particular situation. For example, Hegelian/antagonistic thought would be an inappropriate method to study a mathematical problem. Similarly, interactive therapies such as acupuncture, massage, and manipulation are interactive relational systems and are best approached by exploring the nature of relationship. To apply an objective enquiry system to acupuncture constitutes a category error. At best, it wrongly reduces acupuncture to a technical procedure while ignoring its philosophical spirit. Such reductionism is generally acknowledged by researchers as being unfortunate but necessary. Few seem to appreciate that it is incorrect.

Category errors lead to irrelevancies such as:

*Finding solutions to the wrong problems*. For example, spending copious amounts of money on disease prevention interventions such as hormone replacement therapy (HRT) studies, mammography, and cholesterol-lowering, when the root issue may be existential anxiety or

concerns about the future. Such anxiety is an energetic imbalance and should be addressed as such.

*Solving irrelevant and unimportant problems* simply because they fit the mode of enquiry. For example, treating mild hypertension because it is measurable, while overlooking the fact that labelling people unnecessarily with hypertension perhaps encourages illness behaviour.<sup>12</sup> Or trying to find a drug to treat the common cold when there are more important issues.<sup>13</sup>

*Hypotheses are rejected when they are correct.* For example, many acupuncture practitioners realize that acupuncture works increasingly well the more their approach uses theories based in energetic or meridian analysis. Yet respectable journals continue to publish research studies that conclude acupuncture does not work, based on studies that reject the theories that generate successful outcomes. Such studies are rooted in category errors.<sup>14,15</sup>

*Hypotheses are accepted when they are incorrect.* For example, the infectious model of disease causation becomes suspect when viewed from an acupuncture perspective, which may convincingly demonstrate that even obvious infections are a material reflection of a predisposing energetic configuration. In other words, infections are actually second-order phenomena, the primary phenomenon being the patient's constitutional state. While no one would deny the existence of bacteria and viruses, most physicians would agree that the infectious model is overemphasized. As a culture, perhaps we embrace the germ theory not because it is necessarily true, but because it is convenient. The theory simultaneously provides (1) a simple explanation for symptoms that patients generally accept without lengthy, time-consuming explanations, (2) absolves patients of personal responsibility for their illness, and (3) absolves the physician from confronting the patient concerning personal responsibility.

### Hidden Subjectivity

It is generally assumed that there is no subjectivity in objectivity. Conceivably, the objective perspective is actually a subjective stance, a point of view that leads to certain ways of interpreting experience. Such a stance in no way removes the subjective but denies it, driving it into the unconscious where its impact is actually magnified by the fact that it lies unacknowledged. Many psychologists believe that this is the same process underlying many illnesses. Subjective influences in purported objective research are then realized.

#### The Placebo Effect

Objective research usually includes a placebo arm to demonstrate that the tested therapy is superior to no intervention. Implicit in such studies is the idea that the placebo effect does not constitute real medicine, and that only medicine that is better than placebo is "real." Yet the placebo group often demonstrates a 30%-35% positive response (indeed, sometimes as high as 70%),<sup>16</sup> which implies that many people somehow heal themselves without medicine. That they might have been deceived into healing themselves is irrelevant. An irrational dismissal of the potential of self-healing occurs when such healing is rejected because no overt outer action was taken. Such a position is not only subjective, but also ethically questionable because it robs patients of their personal power.

#### Incompleteness

Objective trials are not inclusive. Consequently, the decisions regarding subject matter, study design, and outcome criteria are limited to researcher interests, necessarily subjective and defined by organizational needs. Conclusions from such research are provisional and many times wrong. Weak conclusions would not be problematic if not translated into clinical guidelines, often the end result, however. Sometimes, this constraint only comes to light many years later, after a regimen has become standard and widely used. For example, several current randomized trials on postmenopausal HRT supplementation reveal an increased incidence of heart disease in treatment groups.<sup>17</sup> Apparently, the earlier HRT trials that purported to show a decrease in heart disease did not surmise that women in the treatment groups were healthier and more motivated than those who took placebo. Commenting on these ongoing trials and their implications. Deborah Grady (University of California) states: "Even the best observational studies can give the wrong answer if there are unmeasured differences between groups of women being compared."<sup>18</sup> It was many years before someone pointed out this limitation, and in the meantime, millions of women have taken HRT in the mistaken belief that it would benefit their heart. Moreover, this issue will not abscond with more trials since it is an inherent weakness of this method of collecting data.

#### **Motivation**

The reality of economics dictates that drug trials may be performed more for financial reasons than for altruism or compassion, depending on the researcher/funding agency's motives. For example, the motivation behind studying such conditions as the common cold is the desire to market a profitable antiviral, lipid research for the marketing of lipid regulators, and peptic ulcer research for the marketing of proton-pump inhibitors, etc. Unless profitable, research is often not considered.

Funding is a factor. Researchers are often aware of the double bind of commercially sponsored trials, where there is the conflict between pleasing funding sources vs the desire for good research. Since this seems to be an unsolvable paradox, researchers often ignore this difficulty and hope for optimum results. Awareness of the double bind situation does not prevent the subjective tilt. Dependence on funding may subliminally influence researchers to bias their results and interpretations, leading to the release of apparently promising drugs that can be less useful once in general circulation,<sup>19</sup> e.g., the furor associated with some of the calcium channel blockers.<sup>20</sup> External pressure can be unpleasant. One well-publicized case involved a researcher who faced a lawsuit from the sponsoring drug company when she attempted to publish unfavourable results on an experimental drug for thalassaemia.<sup>21</sup>

#### Interpretation

Regarding interpretation, the same subjective bias continues. Since objective studies frequently generate equivocal results, they often generate more questions than answers, and lead to repeated studies in a never-ending attempt to prove something acceptable to various interest groups. This leads to increasing complexity, which leads to the need for interpretation, which then leads to differing opinions from different interpreters. For example, many researchers have wondered whether the pressure for mammography screening was motivated by political and economic interests rather than science.<sup>22</sup> In this way, Hegelian analysis appears as different authorities argue over details of the interpretation. Since hermeneutics is usually based on personal opinion,

it is by necessity highly subjective. Thus, subjectivity becomes the final arbiter of what is supposedly objective.

#### **Double Standards**

Objective studies only appear to be objective within a widely accepted context. When a program or therapy impinges from outside the familiar contextual base, it is often not accorded the same respect, resulting in a double standard of acceptability to medical practice. Many of the difficulties encountered in trying to integrate acupuncture and herbal remedies into mainstream medicine arise from this kind of double standard. Because alternative approaches have a different philosophical foundation, they are often automatically viewed with suspicion. Double standards are highly subjective since they arise out of prejudice and not from objective science. Yet a pretence of objectivity is often used to justify the imposition of rules and regulations arising out of such prejudice. A case in point is the recent ban on formulas containing Trichosanthes kirilowii seed (gua lou zi), Magnolia officinalis root bark (hou po), and Fritillaria thunbergii bulb (zhe bei mu) by Health Canada despite the fact that compared with most drugs and in the doses commonly used, these herbs are harmless.<sup>23</sup> Apparently, no one involved in the decision-making process was aware of the most basic principles of herbology, and the decision was made in the absence of a single complaint or report of an adverse effect. Such regulatory forcefulness seems illogical when one considers the massive impact of iatrogenic sequelae from drugs.<sup>24</sup> Meanwhile. dangerous drugs continue to slip through the screening process, sometimes approved too hastily by FDA scientists under pressure from pharmaceutical companies that many times provide much of the FDA's funding, e.g., the FDA's speedy approval of the irritable bowel syndrome drug, alosetron (Lotronex), in February 2000. The drug was hastily withdrawn in November 2000 after the deaths of 5 people and hospitalization of another 34 people.<sup>25</sup> Maybe when objective studies are motivated by economics, interpretation is biased in favour of self-interest groups, and double standards are applied to innovative treatment options, it could be surmised that subjectivity is alive and well.

## **Dualistic Assumptions**

Perhaps there is a paradigm shift under way that has nothing to do with the emergence of EBM. Rather, it is concerned with a transformation/transcendence of the dualistic assumptions on which all objective medicine is based. Western science has been characterized by reductionism, linearity, and causality.<sup>26</sup> Yet these are all manifestations of a deeper dualistic principle in which the mind, separating itself from direct experience, seeks explanations for what it observes. Whatever the ego favours is deemed acceptable. Conversely, experiences that the ego finds objectionable become problems to be solved, and the principle of cause and effect is engaged to elucidate a mechanism that might be amenable to some tampering. In medicine, this manifests itself as "diagnosis and treatment". We imagine that where there is an effect, there must be a cause. A disease is presumed to be an effect of some prior cause, and a cure is sought by interfering with the mechanism of production of the effect. One obvious difficulty with this particular thinking is that there is no end to the cause and effect chain. For whatever chosen present cause, there must always be a prior cause from which the present cause arises.

Cause and effect is a deterministic approximation that provides a shallow understanding of that which is actually a profound mystery. In reality, there is no specific cause for anything because all phenomena are interdependent. As for approximations, the principle works well in many

circumstances, particularly for acute situations; conceivably the reason it has been so widely adopted. But in complex multifactorial situations, such thinking overlooks the fact that all the individual components of complex systems contribute to the behaviour of all the other components. Perhaps one cannot actually say that there is a specific cause for a body manifesting a particular symptom complex.

This leaves rational medicine with a fascinating conundrum. If everything is interconnected, then one can say: an illness is as it is because the individual is as he or she is. While such a statement makes no sense in terms of cause and effect, it is actually a more accurate description of the dilemma. However, it demands that we find a premise other than cause and effect through which we might better understand complex interdependent systems. One possibility borrowed from quantum physics is a concept termed "relational holism", similar to Jung's notion of synchronicity, it attempts to conceptualize the overall effect of instantaneous non-linear interconnections between system components.<sup>27</sup> The end result is that people, similar to subatomic particles, are actually not separate units and can never be considered in isolation from the whole of which they are a part.

#### Diagnosis/Treatment

An acceptance of the inappropriateness of cause and effect demolishes the sanctity of diagnosis in complex multifactorial illness, a cornerstone of conventional medical practice and EBM. Physicians are admonished to make accurate diagnoses before initiating treatment, with the argument that an accurate diagnosis makes for good science and rational treatment. Yet the reality is that in chronic multifactorial illness, an accurate diagnosis is not always possible, an obvious fact to anyone working in primary care. But rather than questioning the model, physicians perhaps disguise ignorance with seemingly erudite phrases that sound like diagnoses to the uninitiated, but which are only statements of syndromes or what might be called "translations of symptoms into medical jargon".

For example, unremitting pain becomes reflex sympathetic dystrophy, aching and fatigue become fibromyalgia, while rigidity and tremor become Parkinson's disease. Patients may believe that we are voicing profound insights into their conditions when often we are not. We are merely putting labels on syndromes, not making definitive diagnoses.<sup>28,29</sup> For instance, if a study is conducted to study fibromyalgia, researchers often fail to remember that fibromyalgia is not actually a diagnosis. Rather, it is a syndrome, a cluster of symptoms for which there is as yet no coherent explanation. To pretend there is a diagnosis is clearly subjective and has no particular justification other than convenience. Yet much research is done from this position. Conclusions arising from such research are often meaningless since the diagnosis itself is meaningless.

### The Loss of Meaning

Conceivably, the main difficulty with all dualistic concepts such as cause and effect, diagnosis and treatment, or problem and solution is that while they can sometimes elucidate mechanism, they can never elucidate the root. The root necessarily lies in a different order of reality and is actually the organizational principle that maintains the configuration and is transcendent to it. When it applies to the human body, this principle might be regarded as soul, or in acupuncture terms, the Tao. Either way, consideration of the root plunges the researcher/clinician into areas habitually shunned by modern medicine, areas normally relegated to philosophy or religion.

Despite modern medicine's wish to deny such deeper principles, as physician-acupuncturists, we cannot engage in the same kind of denial without compromising the basic principles on which acupuncture rests. I have previously discussed the principle of intent, and how Oriental medicine understands illness as arising from the sense of separation from the Tao, which occurs progressively as the ego develops.<sup>30</sup> The implication of such considerations is that an illness is not a separate entity to be rooted out like an alien invader as the cause and effect model would suggest. Rather, symptoms are pointers to repressed energetic material that, for one reason or another, have not been allowed full expression. In summary, an illness represents a materialization of everything an individual energetically needs to rediscover his/her innate wholeness.

EBM rarely considers concepts of meaning because such considerations are philosophical and contradict the mechanistic paradigm. But, when researchers assume that amelioration of symptoms is an appropriate end point, and medicine uses such evidence in its guidelines, then a confusion of treatment and healing arises. Treatment constitutes interference with the mechanism of production of symptoms, while healing demands that the individual listen to, heed, and somehow integrate the message contained in the symptoms. Thus, EBM confuses "shooting the messenger" with healing, a confusion that has permeated the entire medical system. This is a profound error, and one that Groddeck warned against. Once this point is realized, it becomes clear that any conclusion arising out of objective science, and any EBM guidelines affiliated with such research, are going to be largely irrelevant to energy medicine.

#### The Existential Split

A philosophical consideration of problem-oriented thinking will reveal its origin to lie in a sense of alienation coming from the primary existential split.<sup>31</sup> To briefly summarize, the existential split leads to thinking erroneously that humans are separate and alienated beings, somehow divorced from the whole. Since the primary split is actually a mistaken intellectual perception, the sense of alienation that manifests as problem-oriented thinking is actually an illusion. The difficulty is this: if there is no split, then there can be no problem, and so the question of how to solve a particular problem becomes meaningless.

Thus, beyond the existential split, there can be no objective defence behind which the researcher or clinician can hide. After all, what makes the definer of a problem think he/she lies outside the boundaries of his/her own definition? That might appear a foolish question, but from a holistic point of view, it is impossible for the researcher, practitioner, or patient to lie outside anything because there is no boundary and no outside. The point then is that whoever defines a problem are themselves the problem because the idea of their being a problem is really a product of the their own imagination, which is rooted in an erroneous assumption of dualism. For this reason, researchers should not pretend that they are outside the boundaries of a problem they have defined. Similarly, patients should not pretend they are not responsible for their illnesses, and clinicians should not assume that illnesses are problems and then habitually prescribe medications/modalities designed to interfere with the mechanism of production of symptoms.

## Non-Duality

The actual emerging paradigm reflects a shift toward a non-dual understanding of illness and health in which problem-oriented thinking is transcended. A holistic viewpoint, for example, does not consider illnesses a problem at all but rather a natural and inevitable part of the whole. From this perspective, the job of healing involves experientially integrating the symptom energies into a more optimal configuration, not manipulating or trying to eradicate them. This has massive relevance when it relates to acupuncture, which has a non-dual philosophical base in the Tao. To ignore the implications of non-duality to make acupuncture conform to dualistic research protocols is not acceptable. Since all research is by definition dualistic, its conclusions are only valid within the confines of dualistic thinking. Therefore, such conclusions cannot be applied to acupuncture or any other interactive therapy without committing a category error.

### Context

Relational holism considers the context of illness to have as much, if not more, validity than the specific diagnosis because energetically, diagnosis in any conventional sense does not exist. The energy field has a certain pattern of harmony or disharmony within it. Pattern recognition can be helpful, but it is not the same as a conventional diagnosis. Nor is it ever considered totally accurate; room for subjective uncertainty exists. Contextual analysis dispenses with the illusion that diseases exist as discrete entities that can be studied in isolation, such as breast cancer, depression, or epilepsy. In reality, a disease exists only in the context of the person who has it, who in turn exists in the context of a particular family, society, environment, etc. Indeed, a disease is actually defined by the context in which it arises. Without a context, there is actually no disease because there is no one to whom it is happening.

It is becoming increasingly clear that researchers cannot disregard context and retain any semblance of the original situation. Similar to taking an egg and scrambling it and then pretending the original structure is still there, the folly of reductionism lies in the pretence that conclusions arising out of approximations have validity. When researchers reduce and approximate, the essential wholeness is lost and the original entity being studied no longer exists. This leaves all clinical protocols arising out of objective research meaningless; in the end, being eliminated by the Tao. Therefore, in silent deference to the Tao, the astute practitioner moves beyond protocol and embraces the subjective reality of an interaction, allowing a solution to present itself out of the relational dynamics. To be sure, he/she brings objective knowledge to the interaction but refuses to give it first place. If that seems unreasonable, notable is that even the gurus of EBM concede the point when pressed. In the words of Sackett et al:

...Good doctors use both individual clinical expertise and the best available external evidence, and neither alone is enough. Without clinical expertise, practice risks becoming tyrannized by evidence, for even excellent external evidence may be inapplicable to or inappropriate for an individual patient.<sup>32</sup>

### Toward a Science of Relationship

Since the non-dual stance is not problem-oriented, a practitioner who acts holistically perhaps encourages the spontaneous emergence of solutions through the transformational dynamics inherent in relationship. Bringing the insights of quantum physics into medicine demands a different set of assumptions from traditional science, including an acceptance of mystery, a transcendence of the objective/subjective dichotomy, and an intent to move toward the symptom complex. These concepts are not new, but are sensible descriptors of a good healing relationship. If medical science understood such principles, the frenetic search for rational treatment programs would give way to a rediscovery of the value of a physician's compassionate presence. Some of the factors involved in such a relationship are addressed in Table 2.

#### Table 2 – Some factors involved in a relational science

- Illness is largely a subjective experience
- Objective knowledge is not the final arbiter
- Healing always involves an element of mystery
- The patient is their own cause and their own cure
- The illness itself contains all the necessary information
- Intention should be to 'move toward' symptoms
- The practitioner's role is to listen and teach, but not interfere
- Confidentiality should be absolute

## Conclusion

Physician-acupuncturists are called to perform the impossible task of paying heed to the guidelines put forward by EBM, while simultaneously trying to engender a healing intent in patients even though those 2 processes are contradictory. Thus, many of us perceive ourselves in a classic double bind. If we follow rational guidelines implicitly, we may be embracing symptom suppression; if we follow the implications of a non-dual worldview, we appear to reject objective evidence-based training.

Such a conundrum could be daunting were it not for the fact that patients with chronic illness face precisely the same conundrum, a double bind from which there is no logical or rational escape. Thus, to help people transcend their rational minds to solve the mystery of chronic illness, we are simultaneously forced to transcend the limits of our own rational approach to illness. Perhaps it would be less complicated if scientific medicine were to recognize its own limitations and not stray into areas where the application of objective principles is inappropriate. The responsibility lies with each practitioner to find his/her own solution to the contradiction.

<sup>4</sup> Groddeck G. *Book of the It.* New York, NY: Vintage Books; 1949:225.

<sup>&</sup>lt;sup>1</sup> Friedland DJ. *Evidence-Based Medicine: A Framework for Medical Practice*. Stamford, Conn: Appleton & Lange; 1998:3.

<sup>&</sup>lt;sup>2</sup> Barton S. Using clinical evidence. BMJ. 2001;322:503-504.

<sup>&</sup>lt;sup>3</sup> Davey Smith G, Ebrahim S, Frankel S. *How policy informs the evidence*. BMJ. 2001;322:184-185.

<sup>&</sup>lt;sup>5</sup> Evidence-Based Medicine Working Group. *Evidence-based medicine: a new approach to teaching the practice of medicine.* JAMA. 1992;268:2420-2425.

<sup>&</sup>lt;sup>6</sup> Zohar D, Marshall IN. *The Quantum Self: Human Nature and Consciousness Defined by the New Physics*. New York, NY: William Morrow & Co Inc; 1990:44-49.

<sup>&</sup>lt;sup>7</sup> Dixon-Warren B. *Alternative therapies and allied health: what's going on*. B C Med J. 2001;43:162-163.

<sup>&</sup>lt;sup>8</sup> David J, Townsend S, Sathanathan R, Kriss S, Dore CJ. *The effect of acupuncture on patients with rheumatoid arthritis: a randomized, placebo-controlled cross-over study.* Rheumatology (Oxford). 1999;38:864-869. Reported in: Just the sort of acupuncture research we don't need. AFC Newsletter. May 2001:10.

<sup>9</sup> Cherkin DC, Eisenberg D, Sherman KJ, et al. *Randomized trial comparing traditional Chinese medical acupuncture, therapeutic massage, and self-care education for chronic low back pain.* Arch Intern Med. 2001;161:1081-1088.

- <sup>10</sup> Oschman J, NORA. *Readings on the Scientific Basis of Bodywork, Energetic and Movement Therapies*. Dover, NH: NORA; 1997:41-49.
- <sup>11</sup> Porkert M. Chinese Medicine A Science in Its Own Right. Hong Kong: Eastern Horizon; 12-18.

<sup>12</sup> Applegate WB. *The relative importance of focusing on elevations of systolic vs diastolic blood pressure*. Arch Intern Med. 1992;152:169-171.

<sup>13</sup> McNeely D, et al. *Will anything work for the common cold*? Patient Care. 2001;12:94-101.

<sup>14</sup> ter Riet G, Kleijnen J, Knipschild P, et al. *Acupuncture and chronic pain: a criteria-based meta-analysis.* J Clin Epidemiol. 1990;43:1191-1199.

<sup>15</sup> Ezzo J, Berman B, Hadhazy VA, Jadad AR, Lao L, Singh BB. *Is acupuncture effective for the treatment of chronic pain? A systematic review.* Pain. 2000;86:217-225.

<sup>16</sup> Kienle GS, Kiene H. *A Critical Reanalysis of the Concept, Magnitude and Existence of Placebo Effects*. In: Peters D, ed. Understanding the Placebo Effect in Complementary Medicine Theroy, Practice and Research. London, England. Harcourt; 2001:31-50.

<sup>17</sup> Hammell D. Menopause, *HRT, and the heart: a clinical perspective*. B C Med J. 2001;43:447-451.

<sup>18</sup> Grady D, Hulley SB. *Hormones to prevent coronary disease in women: when are observational studies adequate evidence?* Ann Inter Med. 2000;133: 999-1001.

<sup>19</sup> Ioannadis J. Completeness of safety reporting in randomized trials. JAMA. 2001;283:437-441.

<sup>20</sup> Psaty BM, Heckbert SR, Koepsell TD, et al. *The risk of myocardial infarction associated with antihypertensive drug therapies.* JAMA. 1995; 274: 620-625.

<sup>21</sup> Bourette S. U of T tightens rules for medical research. The Toronto Globe and Mail. March 27, 2001.

<sup>22</sup> Baines C. Breast-cancer screening: will the controversy never end? Can J Diagnosis. 1998;15:65-70.

<sup>23</sup> Korngold E, Beinfield H. Letter From Kan Herbs Regarding the Chinese Modular Solution Herbal Product "Chest Relief." Released March 6, 2001.

<sup>24</sup> Lazarou J, Pomeranz BH, Corey PN. *Incidence of adverse drug reactions in hospitalized patients: a meta-analysis of prospective studies*. JAMA. 1998;279:1200-1205.

<sup>25</sup> Horton R. Lotronex and the FDA: a fatal erosion of integrity. Lancet. 2001; 357:1544-1545.

<sup>26</sup> Garbacz ES, Marshall SC. *Classical Chinese Medicine: the science of biological forces*. Medical Acupuncture. 2000/2001;12(2):21-28.

<sup>27</sup> Teller P. Relational holism and quantum mechanics. Br J Philos Sci. 1986;37:71-81.

<sup>28</sup> Woolfrey P. *The keys to figuring out fibromyalgia*. Can J CME. April 2001: 71-85.

<sup>29</sup> Calne DB. *Parkinson's Disease: a syndrome not a disease*. B C Med J. 2001;43:129-132.

<sup>30</sup> Greenwood MT. Acupuncture and intention: needling without needles. Medical Acupuncture. 1999;11(1):17-23.

<sup>31</sup> Greenwood MT. *Splits in Western consciousness: from an acupuncture perspective*. Medical Acupuncture. 1999;11(2):11-16.

<sup>32</sup> Sackett DL, Rosenberg WMW, Graey JA, et al. *Evidence-based medicine: what it is and what it isn't* [editorial]. BMJ. 1996;312:71-72.