

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* **9(4)**:169-175 (Nov 2003).

ENERGY MEDICINE UNITED

Cyril W. Smith, Ph.D.

Retired from University of Salford

Dr. Cyril W. Smith, 36 Westminster Road, Ellesmere Park, Eccles,
Manchester, M30 9EA, England.

cyril.smith@which.net

ENERGY MEDICINE UNITED

Help!

What can a scientific-fly-on-the-clinical-wall do for a patient who pleads, “I am electrically sensitive, please do something to help me!” This was the situation in which I found myself twenty years ago when in response to a letter from an environmental clinician asking whether I could help with her electrically sensitive patients I was confronted with the reality of such a clinical situation.

Since then, I have learned much both clinically and scientifically. In 1997, I wrote about “Nursing the electrically sensitive patient” (Smith, 1997). In this Editorial, I will try to unite various aspects of “Energy Medicine” to show how homoeopathy, acupuncture, healing and environmental medicine are linked through the commonality of frequencies as shown in the diagram below.

Environmental Medicine and Electromagnetic Hypersensitivity

Most if not all electromagnetically hypersensitive patients have on-going multiple chemical sensitivities. They react to laboratory electrical oscillators typical of those used regularly by students and researchers which radiate into the immediate environment electric and magnetic fields comparable to those found near televisions and computers in the home and workplace. It soon became clear that frequency was the relevant parameter. The strength of the fields was of less consequence once a patient’s threshold of sensitivity had been exceeded. I encountered a wide range of

patients' sensitivities ranging from zero to that of the most sensitive patients who were not compatible with anything electrical in their immediate environment whether natural or man-made (Smith 2003). Even the mere presence of a switched-off oscillator was sufficient to "trigger" reactions.

When a reaction was "triggered" by a frequency, that particular frequency was extremely precise and the reaction was usually the same as that "triggered" by chemicals, foods or inhalants to which that individual happened to be sensitive at that time. This meant that any meaningful assessment of patients' reactions to frequency had to be carried out in a chemical and particulate "clean" room and this means "clean" to operating-theatre standards as well as being completely electrically shielded. In the Environmental Health Center (EHC) in Dallas, Texas, this was achieved by the use of porcelainised-steel and glass partitions, shielded lighting or daylight, filtered and slightly pressurised re-cycled air.

It is surprising how one can adapt. Emerging from such a clean environment, ordinary offices, paper and corridor carpets smell terrible. In this clean environment, Dr. W.J. Rea was able to demonstrate by double-blind trials the existence of electrical sensitivities with 100% responses to that frequency to which the subject was most sensitive and 0% response to placebos (Rea et al. 1991).

Acupuncture

Sometimes I am asked to examine various pieces of electrical apparatus intended for therapy purposes and to say how they might work. Eventually it dawned on me that

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

many were using one particular frequency (7.8 Hz) for therapeutic purposes. I concluded that if there was some real effect, it should be possible to find it on myself. A little experimentation led me to the heart chakra and thence to the heart acupuncture meridian. Both had an endogenous frequency of about 7.8Hz but, this could be entrained or synchronised by exogenous frequencies. Depending upon the conditions, exposure to a frequency near an endogenous frequency may result in either hyper-activity or hypo-activity. In general, hyper-activity is therapeutic, it speeds up natural fluctuations making it easier for the body to entrain to its own frequency activity. Hypo-activity is stressful and subjectively most unpleasant giving a strong urge to switch-off or get-out!

I systematically measured the endogenous frequencies for the chakras and then the endogenous frequencies on both the classical Chinese acupuncture meridians and the additional meridians on the fingers and toes as used by Dr. Voll for electroacupuncture (Smith, 2000).

The seeming importance of frequencies on the meridians suggested that they originate during the pre-somite stage of the embryo when the ectoderm, endoderm and mesoderm are in close proximity. If these layers of cells can synchronise their frequencies and this is maintained during the development of the organism, the result is meridians of synchronous frequencies linking target organs which develop from the endoderm and mesoderm to acupuncture points on the skin which develop from the ectoderm.

What happens when an acupuncture point is needled or acupressure is applied is that its endogenous frequency spreads out into the body. For example, if an acupuncture point is pressured ten times with an electroacupuncture probe, the endogenous frequency of that meridian is found on the other side of the body but, this lasts for a few minutes only. For longer stimulation, the acupuncturist uses a needle which may be rotated for further stimulation until adaptation to that frequency has occurred. The choice of acupuncture points for stimulation determines the pattern of frequencies applied and the regions of the body in which they act. This of course was all worked out empirically thousands of years ago.

The body already contains its own sources of electrical oscillations and if these are functioning correctly there should be no need for an external oscillator. The basis of electroacupuncture is that the required endogenous oscillations can be picked up, amplified or attenuated with electronic amplifiers and filters in the apparatus and fed back to the body for therapy. If the body can use these frequencies, it can perform self-therapy. If not, then frequencies from electrical oscillators, homoeopathic potencies, herbal or Bach remedies or allopathic chemicals are needed.

Chemical toxicity

It eventually became clear to me that the many frequencies over a very wide range to which the electrically hypersensitive patients reacted fitted into the pattern of endogenous frequencies I had found on the acupuncture meridians. However, these frequencies were found throughout the patient's body, they were not confined to the meridians and yet they did not manage self-therapy.

Some persons do not react to their technological frequency environment, neither do they respond to homoeopathy or acupuncture. These must have very strong endogenous oscillators which will not entrain. With chronic exposure, males tend to show no environmental reactions until they suddenly collapse with complete inability to function; females tend to react sooner like the ‘miners’ canary’ but, without complete disability thereby earning them the reputation of being “neurotic”.

Frequency hijacking by chemicals

Since the majority, if not all, electrically hypersensitive patients have multiple chemically hypersensitivities, it seemed possible that chemicals were blocking self-healing.

Experiments in the EHC-Dallas with T-lymphocytes (Smith 2000) had shown that when these cells were cultured in TLV-TWA concentrations of some common environmental chemicals, certain of the cells’ frequencies were entrained by nearby frequencies characteristic of the chemicals. TLV-TWA means the “Threshold Limit Values, Time Weighted Average Concentration” to which workers are allowed to be repeatedly exposed, day after day, without (allegedly) any adverse effects, for a normal 8-hour work-day and 40-hour work-week.

These experiments very clearly demonstrated the entrainment effect whereby certain endogenous frequencies for each culture remained exactly those of the particular

chemical while the other cell frequencies showed their usual degree of limited biological quasi-periodic variability. All the organo-chemicals tested were found to modify the normal cell cycle profile of the T-lymphocytes. These incitants were capable of interrupting the ordered, orderly progression of the cell cycle and furthermore were capable of the destruction of specific proteins and enzymes with the result that wrong translations were made from the DNA and wrong signals were sent for the control of cell progression. These effects could result in the compromise of the immune system leading to multiple manifestations of illness including cancer.

If meridian frequencies have come to be determined by toxic chemicals and not by the body's normal activities, then attempts to use them for therapy would merely reinforce the toxicity.

Healers

Healers have maintained that their greatest healing energy comes from the tip of the middle-finger and this is where the end of the pericardium meridian (Pe9) is located. By mentally concentrating on healing I found that I could move the frequency of this meridian from its endogenous value almost to the often therapeutic 7.8 Hz of the heart meridian. Since the frequency of a meridian can be adjusted in this way, experienced healers can be expected to have acquired a facility for controlling their meridian frequencies according to the needs of the patient (Smith 2001).

Tiller (2001) has reported that the purposeful mental concentration of healers can affect the frequency pattern of a living system even at a distance, imprint water and

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

even imprint electronic devices such as EPROM's which become secondary sources of the healers' intentions and can be used as such. Also, it has been reported recently that healers can affect patterns of ice formation.

Homoeopathy

'Homoeopathic Potencies' start off as a "Mother Tincture" or "Triturate" of a chemical or biological substance. There is then a well-defined procedure of serial dilution and succussion to reach the required potency.

Chemical frequency signatures

Most chemicals have a characteristic pattern of frequencies which can be measured. These frequencies seem to arise from hydrogen bonding between the particular chemical and vicinal water present in at least trace amounts. My personal sensitivity threshold for detecting the chemical frequency signature of sodium chloride as its solution is successively diluted is at a concentration of about 0.3 ppm by weight.

Exceptions seem to be those chemicals which are 100% halogen saturated or otherwise unable to hydrogen bond. The frequency signature of a pharmaceutical chemical will give a homoeopathic dimension to all allopathic medicines. It is possible to generate a potency which will cancel this chemical signature in allopathic medicines to enable hypersensitive patients to tolerate them.

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

Many bio-effects are so-called bi-phasic. For example, the 2.45 GHz microwave cooker frequency causes L- to D- isomerisation of amino acids in milk (Lubec et al., 1989) and in rice (Omura & Losco 1993). This may not matter unless these are a sole source of amino acids. There should be a different frequency to effect the reverse D- to L- transition. Frequency or healers' 'subtle energy' may be able to force chemical or enzymatic effects by changing the tertiary structure through the hydrogen bonding points of contact between a macromolecule and vicinal water.

Potencies

I measured the frequencies of a set of potencies of thyroxin from chemical signature of the "Mother Tincture" to potency D30. These had been prepared by Dr. Christian Endler in Graz (Smith & Endler 1994). For potencies of 12C/D24 (corresponding to dilution ratios of 10^{-24}) and greater, the degree of dilution exceeds the so-called Avogadro's Number at which no molecules of the original substance should remain. These frequency measurements showed that at each potency two additional frequencies were added to those previously present and that there was no discontinuity or cessation at Avogadro's Number. I was able to synthesise a potency from its pattern of frequencies. When this was diluted and succussed, the original pattern of frequencies ensued in spite of there having been no chemical precursor. Homoeopathy clearly lies within the physics of water and only incidentally is it a consequence of chemistry.

An electrically hypersensitive patient had been prescribed Calc. Carb. 10M by a homoeopath. Independently, the frequencies: 1.5Hz, 5.6Hz and 1.6kHz were found to

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

neutralise electrical hypersensitivity. Subsequent measurement showed that only the 10M potency of Calc. Carb. contained exactly these frequencies.

Where is “water memory”?

Emilio Del Giudice and Giuliano Preparata (Del Giudice & Preparata 1994) have shown through the mathematics of quantum electrodynamics (QED) that radiation exchange between water molecules can lead to domains or regions in the water within which the natural oscillations of all the water molecules become synchronised or coherent. Furthermore, Del Giudice has pointed out that within such a coherent system, the constant parameter for radiation is no longer the velocity of light but the coherence length or size of the domain. This makes the frequency of a wave in a coherent system proportional to its velocity; there may be many velocities and proportionate frequencies all of which may interact. It is this which brings molecular spectra interactions in water down into the range of technological frequencies.

What is being remembered in water (or other potentisable medium) is a pattern of frequencies. Understanding of this came from my frequency measurements on the n-alkane series of straight chain hydrocarbons (the best known is ‘octane’ used for petrol rating). The n-alkanes have their only spectrum in the far infra-red which means that any interaction with water must be in this region too. Their chemical signatures appear when more than about 16 ppm of water is present and these relate to the difference between far infra-red spectral lines of the n-alkanes and the lines of the water-laser.

If there is no n-alkane present, a pair of water-laser lines can behave in the same way. When water is potentised, these natural resonances split to give the sum and difference frequencies of the potency. Water behaves like a blank sheet of paper on which any pattern of frequencies can be written and living systems can read this as bio-information. I have described in detail elsewhere the various methods whereby the copying, erasure and synthesis of potencies can be performed (Smith 1994) as well as arithmetical operations on them (Smith 2002).

It is important to repeat that water memory requires the presence of the geomagnetic field so that even briefly placing a potency inside a closed steel box (e.g. biscuit tin, a steel filing cabinet or cupboard) will erase it. It does not erase the frequency signatures of chemicals.

Potencies may transfer to water by contact between glass vials or, be overwritten or erased with the body frequency pattern of a person handling them. In the majority of homoeopathic trials, there seems to have been no attempt at quality control of the potency or of the placebo which may have become potentised too. Furthermore, double-blinding is meaningless if hypersensitive persons are at all involved because they can immediately distinguish *verum* from *placebo*.

Nurses will be aware that some patients cannot tolerate the body fields (aura) of a particular nurse and, with no offence, they need to have a nurse whom they find tolerable. A similar problem can occur between a mother and child whom she cannot nurse. These effects can be neutralised.

Adaptation

Persons with strong body fields do not readily entrain environmental frequencies.

Persons with weak body fields seem unable to find the bio-information they need from internal sources and look in the environment - getting nonsense or worse.

The most common adaptation is to the 50 Hz power supply frequency. Unfortunately, this frequency has appeared as a stressful frequency in samples of Lorazepam and in homoeopathic *Cuprum met.* 1M. This suggests that these medications could cause 50 Hz sensitisation; this is also a natural frequency in pineal extract and in melatonin which offers further scope for inappropriate reactions. The latter is the body's chemical expression of darkness and a potent anti-cancer agent.

Pischinger's work (Heine 1999) demonstrates the importance of connective tissue in the body's regulatory systems. Measurement of the coherent frequency pattern of *in vitro* cultures of connective tissue showed its pattern of frequencies was akin to brain-waves.

A sample of connective tissue was placed in a steel box to erase any frequencies which had imprinted by the body but not the chemical signatures. A binary sequence (1,2,4,8,16,32,...) of frequencies was then imprinted into this erased connective tissue as a pattern most unlikely to occur naturally. These frequency re-imprinted cells were cultured at EHC-Dallas. The daughter cells adapted, all the re-imprinted frequencies were incorporated. If one may extrapolate from an *in vitro* tissue culture, this experiment demonstrates that frequency imprinted water or the equivalents in

homoeopathy and acupuncture should be capable of permanently modifying patterns of frequencies into the next generation and that environmental exposures can result in the miasms of homoeopathy.

Therapies

The frequency signatures of chemicals or homoeopathic potencies in contact with the body are effective in producing frequency entrainment. Just holding a glass bottle containing a chemical for just one minute is sufficient to entrain an acupuncture point with a nearby endogenous frequency to that chemical's frequency signature; it takes about 10 minutes to relax back to its endogenous frequency. Failure to relax following chronic exposure would be equivalent to chemical toxicity in a healthy person but, healing for a sick person if that frequency happened to be therapeutic.

In homoeopathy, the "Proving Symptoms" are used to assess the clinical conditions for which that potency will be therapeutic. "Proving Symptoms" are those symptoms which that potency produces in a healthy person and are the same symptoms that the potency will be therapeutic for in a sick person. When the "Proving Symptoms" appear in the tester, the use of the potency is discontinued; chronic exposure to "Proving Symptoms" could result in adaptation to a condition where "Proving Symptoms" become indistinguishable from "Disease State". This is why chronic exposure to environmental electromagnetic frequency patterns can mimic such a wide range of disease states with so much patient discomfort which on investigation by orthodox medicine are found to be non-existent and the patient is eventually told that

it is “all in the mind”. With an electrical oscillator one can give a patient the comfort of experiencing the turning ‘on/off’ of reactions from a distance.

What can be measured and how?

Measurements of frequencies in water presents a very great experimental problem not only because these coherent endogenous frequencies in living systems may be anywhere in the spectrum from below milliHertz to beyond GigaHertz, but because they do not seem to be “classical” electric or magnetic fields but rather magnetic vector potentials or quantum fields (Smith 1998). The presently available measurement techniques include the following:

1. Biological Detectors - homoeopathic “Proving-Symptoms” and clinical tests on electrically hypersensitive patients.
2. Dowsing Techniques – these were developed by myself as a matter of clinical necessity. First, for the detection of resonances and reactions in electrically hypersensitive patients and later, for measuring water, allergen dilutions and homoeopathic potencies. When the sample is excited to a resonance with an alternating magnetic field from a coil or a magnetic vector potential from a toroid as detected by dowsing, this frequency is the measurement. Yoshiaki Omura and co-workers (Omura & Losco 1993) have developed the finger-to-thumb muscular strength as a sensitive single-handed test method (BIDORT - see earlier papers cited). This provides independent verification and some even pre-dates my own dowsing work.

3. Electrodes immersed in frequency imprinted water and connected to the input of a sensitive, low-noise and narrow band amplifier or a signal analyser can be made to detect an imprinted frequency in the kiloHertz region when the water is excited by that frequency (Smith, 1994). This technique is very difficult to implement consistently although imprinted frequencies have been correctly detected. A possible physical mechanism is one whereby electrons entering coherent water domains at resonance must do so as charge-pairs; this reduces the electron density at the water/electrode interface resulting in an increased electrical resistance which is converted to a differential input voltage by the small 'off-set' current in the head amplifier.

4. Gariaev and Tertishny (Prangishvili et al. 2000) have developed a special He-Ne laser (632.8 nm) with two orthogonal beams. Each beam interacts with the other giving 'entangled states' to the photons. These give rise to modulated radio-frequencies that can be picked up on an ordinary (AM) radio when the laser is irradiating a specimen which is optically active. In experiments using this laser system with homoeopathic potencies, their control showed no information, an active potency of platinum D12 gave 2.2 kHz and 4.5 kHz. Subsequently, I prepared a D12 potency of platinum and measured: 2.301 kHz, 4.455 kHz and 2.57 MHz (the radio-frequency).

5. Elia (Elia and Niccoli, 1999) has carried out an extensive thermodynamic microcalorimetric study on aqueous solutions prepared through successive dilutions and succussions. He found that the steady state exothermic heat of

mixing for acids or bases differs when dilute solutions, homoeopathic potencies or frequency imprinted water are compared with a control of the untreated solvent water.

ENERGY MEDICINE

The so-called '*Subtle Energy*' of "Energy Medicine" is that bio-information which makes the expenditure of the joule energy of physics purposeful. If joule energy is not to be wasted as thermal noise fluctuations it must be directed in a purposeful manner. This requires information to be sent and to be received, just as the ubiquitous PIN number requires interaction between the owner and a recipient for its purpose to take effect. All other possible combinations of digits remain useless information although they still require the same energy and bandwidth to transmit.

If information has any objective existence then, at the time of the death of a living system all the biological and sensory acquired information both in electrical and chemical storage locations must be downloaded into some 'medium' suitable for eternity before body decay sets in.

REFERENCES

Del Giudice, E, Preparata, G 1994 Coherent dynamics in water as a possible explanation of biological membranes formation. *Journal of Biological Physics*, 20: 105-116.

Elia, V, Niccoli, M 1999 Thermodynamics of Extremely Diluted Aqueous Solutions. *Annals of the New York Academy of Sciences* 879: 241-248

Heine, H 1998 Matrix and matrix regulation: Basis for a holistic theory in medicine. *Medicina Biologica*, Haug-Verlag, Heidelberg (German Edn. 1991) ISBN 2-80434-000-7

Lubec, G, Wolf, Chr., Bartosch, B 1989 Aminoacid isomerisation and microwave exposure. *The Lancet* 9 December 1989: 1392-3

Omura, Y, Losco, M 1993 Electro-magnetic fields in the home environment (color TV, computer monitor, microwave oven, cellular phone, etc.) as potential contributing factors for the induction of oncogen C-fos Ab1, oncogen C-fos Ab2, integrin $\alpha_5 \beta_1$ and development of cancer, as well as effects of microwave on amino acid composition of food and living human brain. *Intl. J. Acupuncture & Electro-Therapeutics Research* 18: 33-73

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

Prangishvili, I V, Gariaev, P P, Tertishny, G G, Maximenko, V V, Mologin, A V,
Leonova, E A, Muldashev, E R 2000 Spectroscopy of Radiowave Radiations of the
Localized Photons: the Path to Quantum Nonlocality of Bioinformation. Processes
Sensors and Systems – 2000. Institute of Control Science, Russian Academy of
Science Moscow

Rea, W J, Pan, Y, Fenyves, E J, Sujisawa, I, Suyama, H, Samadi, N, Ross, H 1991
Electromagnetic Field Sensitivity. *Journal of Bioelectricity* 10(1&2): 241-256

Smith, C W 1994 Electromagnetic and Magnetic Vector Potential Bio-Information
and Water. In: Endler PC, Schulte J (Eds.). *Ultra High Dilution: Physiology and
Physics*. Kluwer Academic, Dordrecht. 187-202

Smith, C W 1997 Nursing the Electrically Sensitive Patient, *Complementary
Therapies in Nursing & Midwifery* 3: 111-116

Smith, C W 1998 Is a living system a macroscopic quantum system? *Frontier
Perspectives* 7(1): 9-15

Smith, CW 2000 Notes for Presentations: “The Diagnosis and Therapy of EM
Hypersensitivity” and “EM Fields in Health, in Therapies and Disease”. 18th. Annual
Symposium on Man and His Environment, June 8-11, 2000, Dallas, Texas.

Smith, C W 2001 Comments on “Quantitative Analysis of Reproducible Changes in
High Voltage Electrophotography” by Russo et al. *The Journal of Alternative and*

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

Complementary Medicine 7(6): 629-631

Smith, C W 2002 Learning from Water, a Possible Quantum Computing Medium, 5th. International Conference on “Computing Anticipatory Systems”, HEC Liège, Belgium, 13-18 August 2001. CASYS’01 Abstracts - Symposium 10, p.19. International Journal of Computing Anticipatory Systems 13:406-420

Smith, C W 2003 Effects of Electromagnetic Fields in the Living Environment. Proc. Intl. Conf. “Electromagnetic Environments & Health in Buildings”, 16-17 May 2002. Royal College of Physicians, London. ABACUS Communications. In: Clements-Croome, D (Ed.). Electromagnetic Environments and Health in Buildings. Taylor & Francis, London (To be published ISBN 0-415-316-561)

Smith, C W, Endler, P C 1994 Resonance Phenomena of an UHD. In: Endler, P C, Schulte, J (Eds.). Ultra High Dilution: Physiology and Physics. Kluwer Academic, Dordrecht, 203-208

Tiller, W A, Dibble, W E, Kohane, M J 2001 Conscious acts of creation – The emergence of a new physics. Pavior Publications, Walnut Creek CA

Smith CW. (2003) Guest Editorial - Energy Medicine United. *Complementary Therapies in Nursing and Midwifery* 9(4):169-175 (Nov 2003).

CAPTION FOR DIAGRAM

Frequency - A Unifying Concept for “Energy Medicine”

