

Integrative Approach for Medical Curricula

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In every culture and in every medical tradition before ours, healing was accomplished by moving energy.

Albert Szent-Györgyi, Nobel Laureate in Physiology and Medicine (1937)

ABSTRACT

The paper proposes an integrative program for medical curricula consisting of two components: (1) A program that aims at restoring photonic energy field toward normalcy, and (2) Traditional medical courses. The paper begins with an explanation of photonic energy and its importance for health and wellness. A measurement device based on the principle of gas discharge visualization (GDV) is suggested for the measurement of photonic signature. The links between photonic energy field and stress and diseases are brought out followed by a discussion of how meditation can restore our photonic energy field toward normalcy. The paper proposes that the concepts presented here be considered as the first line of attack for health and wellness and that combining them with modern medicine would be an effective integrative approach to health and wellness.

UNDERSTANDING PHOTONIC ENERGY

Human beings have trillions of cells which have a nucleus, a cytoplasm, and a cell wall. If we breakdown the cells further into smaller parts, we find that they are made up of atoms. Atoms are not solid objects. They have protons and neutrons in their nuclei and electrons orbiting them. So, a question arises: what characteristics of an atom gives the specific character to matter? For example, why is Gold, Gold? Or, why is Iron, Iron? The answer is, vibrational characteristics of the specific atomic configuration (number of protons and neutrons in their nuclei and electrons orbiting them). Similarly, since the cells are made up of atoms, the vibrational characteristics of the specific cellular configuration is what determines the cellular structure, which in turn determines if a cell is normal or not. The specific vibrational characteristics of the cells determine our physiological and psychoemotional state. Vibrations can be thought of as light, not necessarily visible light, with unknown frequencies along the entire electromagnetic spectrum from infrared to ultraviolet, and hence the name, light-energy. Thus, our vibrational characteristics, or light-energy, is our photonic signature and it is unique for every individual.

Now, there are two types of emotions: Positive emotions and negative emotions. Positive emotions include unconditional love, kindness, empathy, and compassion while negative emotions include anger, hatred, hostility, resentment, jealousy, frustration, fear, sorrow, and the like. Elizabeth Blackburn, 2009 Nobel Prize recipient in Physiology and Medicine, showed that high levels of stress dwindle the length of telomeres, which in turn leads to accelerated aging and all kinds of diseases [1, 2]. Medical professionals know that stress is implicated in a vast majority of diseases. Negative emotions lead to stress, positive emotions do not, but, where does stress come from?

In the nucleus of our cells, there are forty-six chromosomes. We inherit these chromosomes from our parents: 23x,x from our mother and 23x,y from our father. They in turn inherit their chromosomes from their parents, who inherit them from their parents, and so on. Thus, there is a clear link of ourselves to our ancestors. Doctors know that we inherit some of our physiological traits from our ancestors but we also inherit some of their psychoemotional traits, meaning that our emotional traits in part are dependent on what we inherit from our ancestors through the chromosomes and in part on our own willful actions to the current age. This explanation links our emotional traits to stress, which in turn links to the vibrational characteristics of our cells and finally, to health and wellness. Finding a way to reduce stress, therefore, is equivalent to the pursuit of positive emotions which will restore our vibrational characteristics (photonic energy) of the cells to normalcy and improve health.

A scientific approach to improving our vibrational characteristics (photonic signature), or equivalently our emotional traits, must begin with the search for a measurement device. Unbeknownst to us, the human organism emits vibrational signals that are reflective of its state. The vibrational characteristics cannot be measured directly because the signals are too weak for ordinary human perception with the five senses and therefore, they must be stimulated and amplified. Computer Science and Electrical Engineering researchers at MIT realized this which helped them to develop a wireless device they call EQ (Emotional Quotient) Radio with funding from the National Science Foundation and the US Airforce, with additional support from major US corporations [3, 4]. The wireless device sends RF signals to the subject and captures and analyzes the reflected signals (see Figure 1) with a machine learning algorithm to determine the heart rate, heart rate variability (HRV), and respiration rate from which the subject's emotions are estimated, the researchers say at an accuracy of 87%.

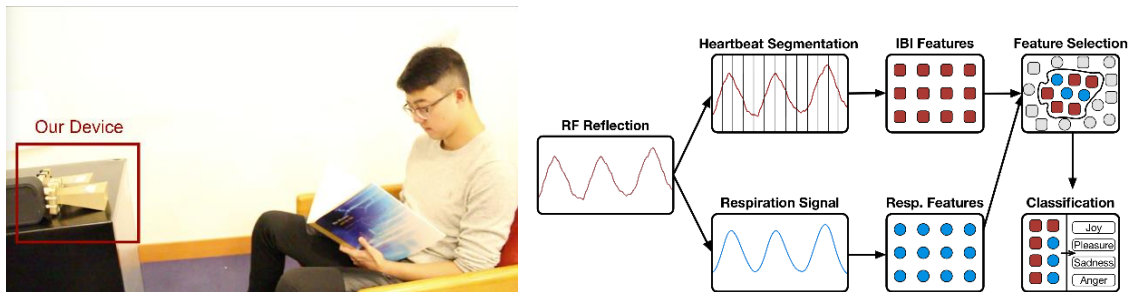


Figure 1. MIT's EQ Radio

While the MIT work is a breakthrough, a more direct measurement of our vibrational characteristics should be preferred as the photonic signature is the primary attribute of humans of which heart rate, HRV, and respiration rates are subsets. Using an electrical signal as the stimulus, in contrast to the Radio frequency signals in the MIT work, it is possible to estimate our photonic signature from which our emotional stress can be inferred. The method goes by the name, Gas Discharge Visualization (GDV) principle [5]. Here, a harmless electrical signal is applied to the fingers of both hands (one at a time), placed on the glass electrode of the GDV device connected to a digital computer with a USB cable as shown in Figure 2 [6, 10]. The finger's response to this stimulus is a burst of photons that are captured by the software. The light-energy characteristics of the photonic discharge (pixels - intensity, area) so

captured are compared with the data for tens of thousands of subjects to estimate the physiological and psychoemotional state of the subject at a high confidence level. The measurement is painless, noninvasive, and takes only a couple of minutes to complete. The GDV results are presented in several tabs: (1) Overall energy in Joules, (2) Emotional stress level, Joules (3) Energy of the seven chakras, Joules and the chakra alignment along the central vertical line, (4) Health status, Joules, and (5) Energy reserve, Joules.

Photonic energy is essential to life. It lies in the band of about 40 – 70 Joules for apparently healthy individuals throughout their lives and near the time of death, precipitously drops toward a minimum, settling at a very low value at the time of or a few days after death. These ideas are depicted in Figure 3. Thus, it is incumbent upon us to try to keep our photonic energy level up as late in life as possible.



Figure 2. GDV Device Setup

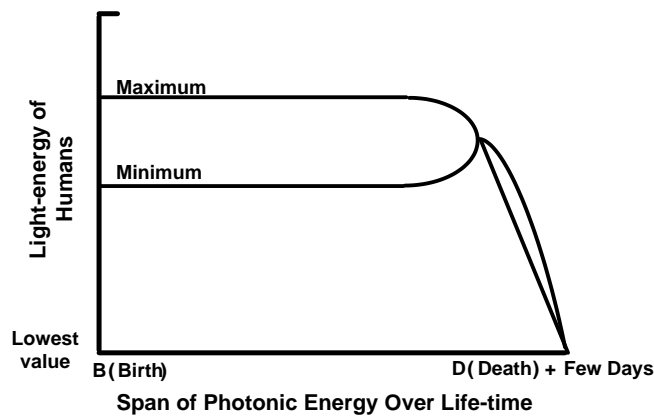


Figure 3. Photonic Energy Profile Ove Lifetime

As an illustration, Figure 3 depicts the glow of a finger for an apparently healthy individual, a severely unwell subject, and a person dying from natural causes [11]

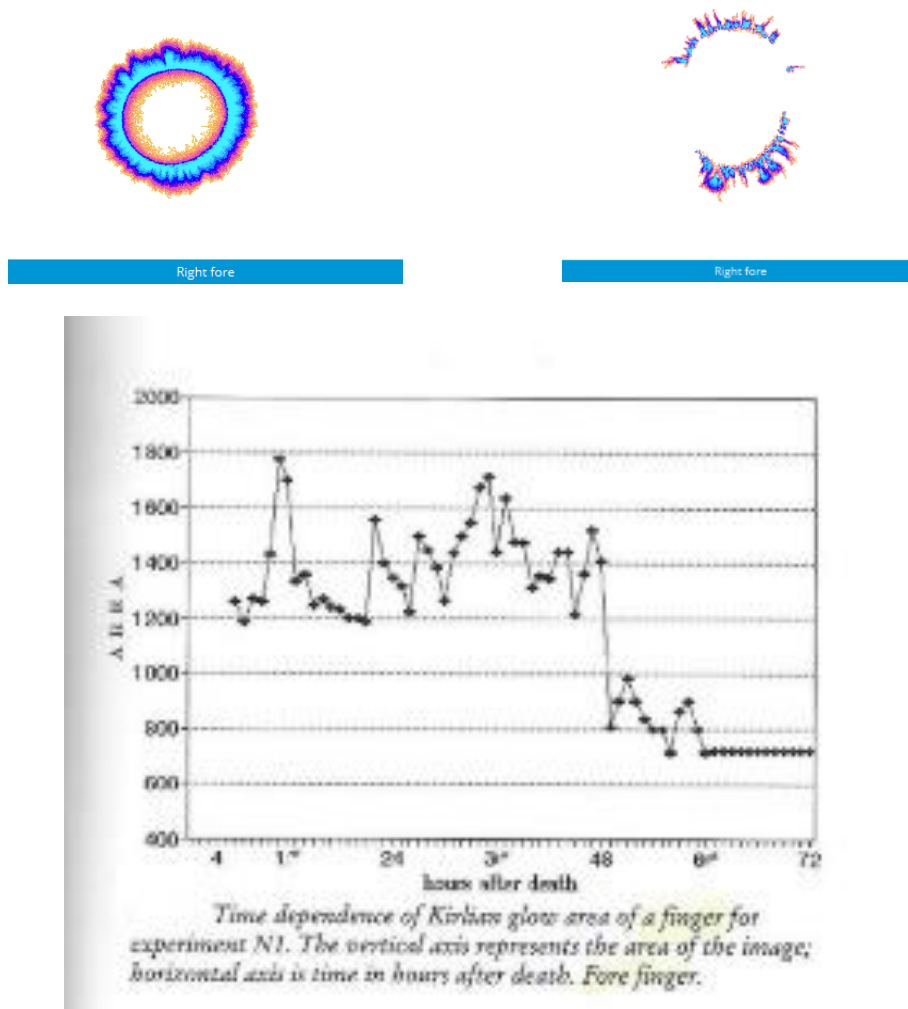


Figure 3. Glow of Finger of an Apparently Healthy Subject (Top Left), a Severely Unwell Subject (Top Right), and a Person Dying from Natural Causes (Bottom)

We have experimental evidence showing that the photonic energy field in some cases is compromised even when the subject apparently feels fine. A comparison of the data for such subjects with the subjects in healthy and unwell categories suggests that the data may offer predictive capabilities [10].

RESTORING PHOTONIC ENERGY TO NORMALCY

With the measurement system on hand, the next step is to a search for a process which can restore our photonic energy field towards normalcy. We have previously pointed out that our emotions are closely tied to the autonomous functions such as heart rate, respiration rate, HRV, etc. Thus, the process sought must have the capacity to impact our autonomous functions over which we have no direct control.

Meditation practices meet these criteria. Meditation has been around for thousands of years and here we are seeing its importance in the context of health and wellness. The medical community has widely investigated the benefits of meditation for such things as brain waves, cardiac functions, diseases, etc., and the availability of the measurement device now allows us to efficacy of efficacy of meditation practices in real-time [12].

Basically, there are three forms of meditation practices. Ones which focus on breath, those which utilize some mantra, a short-syllable phrase or phrases repeated over and over, and the third that use a combination of the two. Using these tools, an aspirant seeks to produce a favorable impact on his/her autonomous functions through the central nervous system (brain and the spine). Physical exercises and breathing exercises which go by name Pranayama are supportive of meditation practices as is proper diet. Sufficient details are now available with which to optimize the meditation practice.

Figure 4 depicts the before-and-after meditation results from the GDV device. The fist author has done experiments like these on himself for several years and the results are consistent with those depicted in Figure 4.

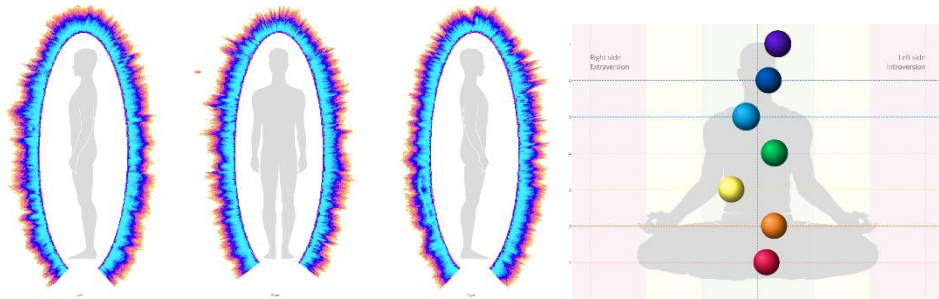


Figure 4(a) Photonic Energy Field at the Start Day 1 (Overall Energy, 66 J)

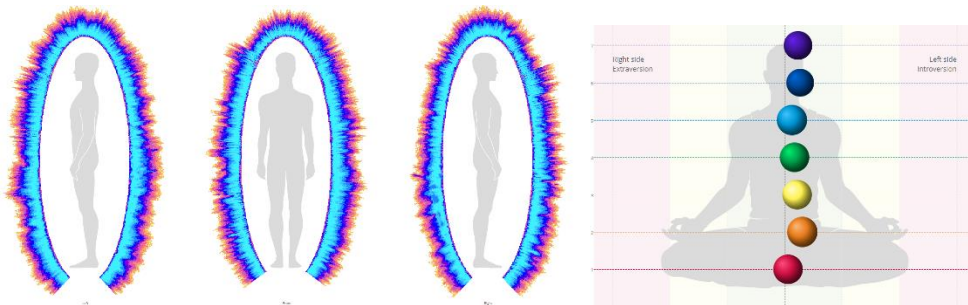


Figure 4(b) Photonic Energy Field at the End on Day 3 (Overall Energy, 70 Joules)

DISCUSSION AND CONCLUSIONS

While the focus in this paper is on health and wellness, restoring the photonic energy field brings numerous other benefits and the process is auditable. They include, improved performance, better leadership decisions & interpersonal relationships, and less discord & violence. These are components of internal excellence. Add to the science of internal excellence, the science of external excellence, and what

results is a scientific framework for transformation. The scientific framework for external excellence will teach medical students how to operate business processes and activities (such as hospitals) in the best possible manner producing the least defects and delighting customers. References [13 and 14] detail the framework for internal and external excellence and they are suitable as textbooks for a course in medical colleges.

We propose that the first line of attack for good health should be restore the photonic energy field towards normalcy. This is expected to lead to fewer ailments and a healthier life. This approach together with modern medicine is what we are calling integrative approach to health and wellness. Success with the suggested approach is predicated on open-mindedness and a commitment to diligently and regularly practice meditation. Organizations allocating time for the practices during office hours will find that the benefits for the participants far outweigh the costs of allocating time for the practice.

National Institutes of health has a Center for Complementary and Integrative Health (<https://nccih.nih.gov>). In this paper we have attempted to explain why integrative approach to health and wellness should be incorporated in medical curricula. The reader may also find the video clip of Indian Prime Minister Narendra Modi's commencement speech at the all Indian Institute of Medical Sciences in Delhi interesting [15].

REFERENCES

1. Epel, Elissa, et al., Accelerated Telomere Shortening in Response to Life Stress, PNAS, 101, 49, December 7, 2004 pp. 17312-17315.
2. Marchant, Jo, Can Meditation Really Slow Aging?, CNN Health, July 10, 2014.
3. <http://eqradio.csail.mit.edu>.
4. Hotz, Robert L., Researchers Use Wireless Signals to Recognize Emotions, The Wall Street Journal, September 20, 2016.
5. Pehek J. O., Kyler, H. J., and Foust, D. L., Image Modulation in Corona Discharge Photography, Science, October 1976, 194, p. 263.
6. Korotkov, Konstantin G., Human Energy Field: Study with GDV Bioelectrography, 2002, amazon.com.
7. Chez, Ronald A., Ed., Proceedings. Measuring the Human Energy Field – The State of the science, The Gerontology Research Center, National Institute on Aging, National Institute of Health, Baltimore, MD, April 17 2002.
8. Jakovleva E., Korotkov K., Electrophotonic Analysis in Medicine. GDV Bioelectrography research. 2013, Amazon.com, 2013.
9. Korotkov K.G., Matravers P, Orlov D.V. (2010, January), Williams B.O. Application of Electrophoton Capture (EPC) Analysis Based on Gas Discharge Visualization (GDV) Technique in Medicine: A Systematic Review. The J of Alternative and Complementary Medicine, 16, 1, p.13.
10. Deshpande, Pradeep B., Korotkov, Konstantin, and Kowall, James P., Bioenergy Measurements for Predictive Medical Diagnosis, Journal of Consciousness Exploration and Research, 7, 2, February 2016. pp. 126-136.

11. Korotkov, K., *Light After Life*, Backbone Publishing Company, Fair Lawn, NJ 1998 (available on amazon).
12. Deshpande, P. B., Aroskar, S. A., Bhavasar, S. N., and Kowall, J. P., *Six Sigma Unravels Science of Meditation*, *Journal of Consciousness Exploration and Research*, 8, 10, November 2017.
13. Deshpande, Pradeep B. and Kowall, James P., *The Nature of Ultimate Reality and How It Can Transform Our World: Evidence from Modern Physics; Wisdom of YODA*, SAC 2015 (available on amazon).
14. Deshpande, Pradeep B., *Six Sigma for Karma Capitalism*, SAC 2015 (available on amazon).
15. Prime Minister Narendra Modi's Commencement Speech at the All India Institute of Medical Sciences, New Delhi, India (<https://youtu.be/hW-eqrHqTM0>).